



12662 - Hypervelocity Stars as Unique Probes of the Galactic Center and Outer Halo

Cycle: 19, Proposal Category: GO
(Availability Mode: SUPPORTED)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
Dr. Oleg Y. Gnedin (PI) (Contact)	University of Michigan	ognedin@umich.edu
Dr. Jay Anderson (CoI)	Space Telescope Science Institute	jayander@stsci.edu
Dr. Howard E. Bond (CoI)	Space Telescope Science Institute	bond@stsci.edu
Dr. Warren R. Brown (CoI)	Smithsonian Institution Astrophysical Observatory	wbrown@cfa.harvard.edu
Dr. Margaret Geller (CoI)	Smithsonian Institution Astrophysical Observatory	mjg@cfa.harvard.edu
Dr. Andrew Gould (CoI)	The Ohio State University	gould@astronomy.ohio-state.edu
Dr. Scott J. Kenyon (CoI)	Smithsonian Institution Astrophysical Observatory	kenyon@cfa.harvard.edu
Dr. Juna A. Kollmeier (CoI)	Carnegie Institution of Washington	jak@obs.carnegiescience.edu
Dr. Michael J. Kurtz (CoI)	Smithsonian Institution Astrophysical Observatory	mkurtz@cfa.harvard.edu
Dr. Mario Livio (CoI)	Space Telescope Science Institute	mlivio@stsci.edu
Dr. Edmund Nelan (CoI)	Space Telescope Science Institute	nelan@stsci.edu

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) SDSSJ110557.45+093439.5	WFC3/UVIS	1	19-Oct-2012 21:03:32.0	yes
02	(2) SDSSJ113312.12+010824.9	WFC3/UVIS	1	19-Oct-2012 21:03:41.0	yes
03	(3) SDSSJ094214.04+200322.1	WFC3/UVIS	1	19-Oct-2012 21:03:50.0	yes
04	(4) SDSSJ102137.08-005234.8	WFC3/UVIS	1	19-Oct-2012 21:03:58.0	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>
05	(5) SDSSJ120337.86+180250.4	WFC3/UVIS	1	19-Oct-2012 21:04:04.0	yes
06	(6) SDSSJ105009.60+031550.7	WFC3/UVIS	1	19-Oct-2012 21:04:09.0	yes
07	(7) SDSSJ105248.31-000133.9	WFC3/UVIS	1	19-Oct-2012 21:04:14.0	yes
08	(8) SDSSJ144955.58+310351.4	WFC3/UVIS	1	19-Oct-2012 21:04:21.0	yes
09	(9) SDSSJ101018.83+302028.2	WFC3/UVIS	1	19-Oct-2012 21:04:28.0	yes
10	(10) SDSSJ110224.37+025002.8	WFC3/UVIS	1	19-Oct-2012 21:04:35.0	yes
11	(11) SDSSJ142001.94+124404.8	WFC3/UVIS	1	19-Oct-2012 21:04:45.0	yes

11 Total Orbits Used

ABSTRACT

We propose to obtain high-resolution images of 11 new hypervelocity stars in the Galactic halo in order to establish the first-epoch astrometric frame, as a part of a long-term program to measure precise proper motions in an absolute inertial frame. The origin of these recently discovered stars with extremely large positive radial velocities, in excess of the escape speed from the Galaxy, is consistent only with being ejected from the deep potential well of the massive black hole at the Galactic center. Reconstructing the full three-dimensional space motion of the hypervelocity stars, through astrometric proper motions, provides a unique opportunity to measure the shape and orientation of the triaxial dark matter halo. The hypervelocity stars allow determination of the Galactic potential out to 120 kpc, independently of and at larger distances than is afforded by tidal streams of satellite galaxies such as the Sagittarius dSph galaxy. Proper motions of the full set of hypervelocity stars will provide unique constraints on massive star formation in the environment of the Galactic center and on the history of stellar ejection by the supermassive black hole. We request one orbit with WFC3 for each of the 11 hypervelocity stars to establish their current positions relative to background galaxies. We request a repeated observation of these stars in Cycle 19, which will conclusively measure the astrometric proper motions.

OBSERVING DESCRIPTION

These are second-epoch observations, being made in order to determine absolute proper motions with respect to background galaxies for 11 hypervelocity stars.

We will obtain dithered WFC3/UVIS F606W exposures of each of the 11 targets, with the target star placed near the center of the UVIS1 chip. For the

fainter targets, we take a series of full-field exposures. For the brighter ones, due to buffer management, we alternate short (unsaturated) and long (saturated) exposures, with some of the short exposures taken in a 2kx2k subarray.

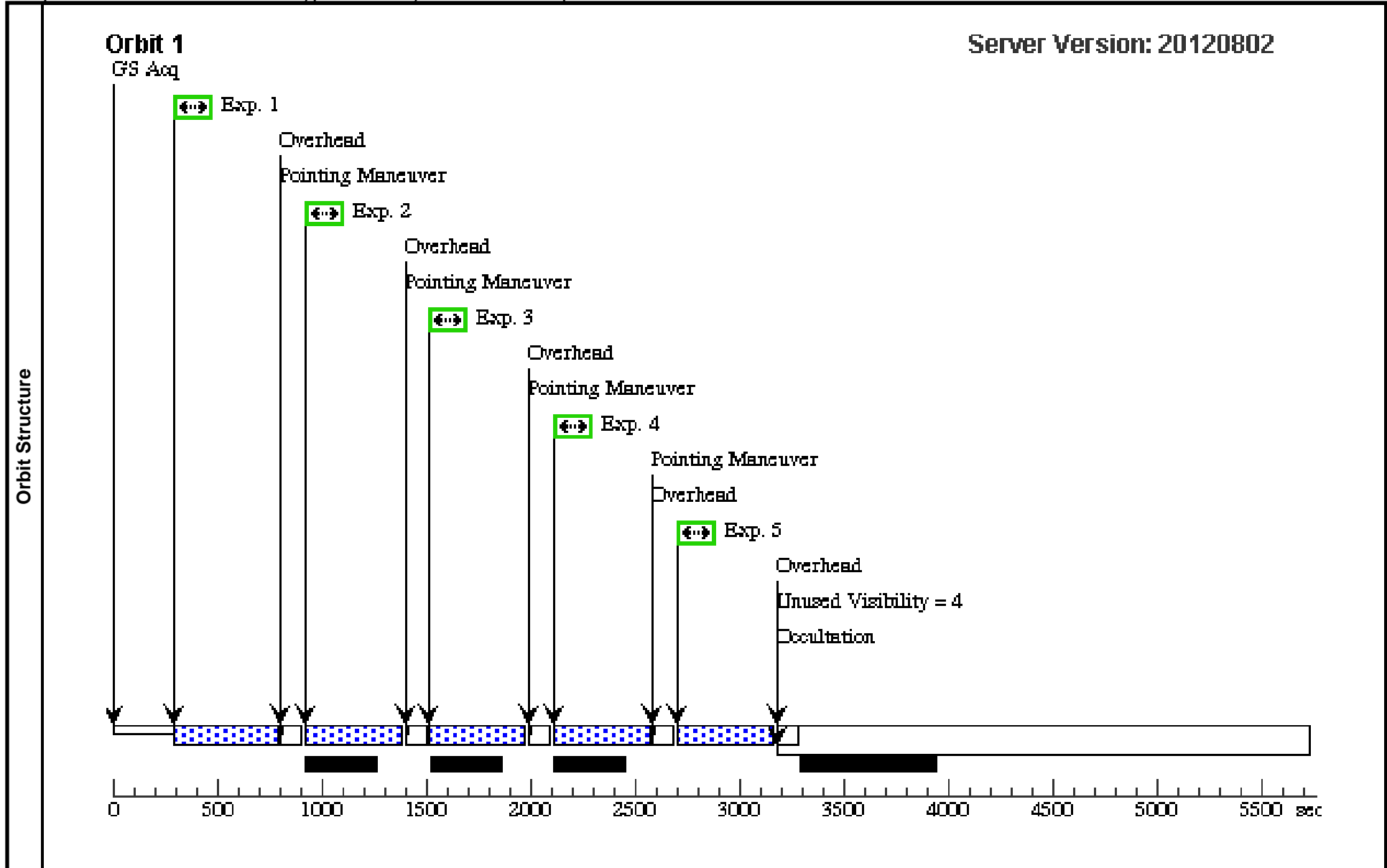
These are the 2nd-epoch observations of the 11 stars, for which the 1st epoch was in Cycle 17 (program 11589). We are essentially repeating the identical exposures from Cycle 17, except that we have added ORIENT requirements to each observation so as to exactly repeat the orientations used for the first epoch. We are also putting in AFTER date requirements so as to get a minimum 3-year time baseline after the 1st-epoch frames (which will actually push many of the observations nominally into Cycle 20).

Proposal 12662 - Visit 01 - Hypervelocity Stars as Unique Probes of the Galactic Center and Outer Halo

Sat Oct 20 01:04:52 GMT 2012

Fixed Targets	#		Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)		SDSSJ110557.45+093439.5	RA: 11 05 57.4500 (166.4893750d) Dec: +09 34 39.47 (9.57763d) Equinox: J2000		V=19.1+/-0.2	Reference Frame: ICRS

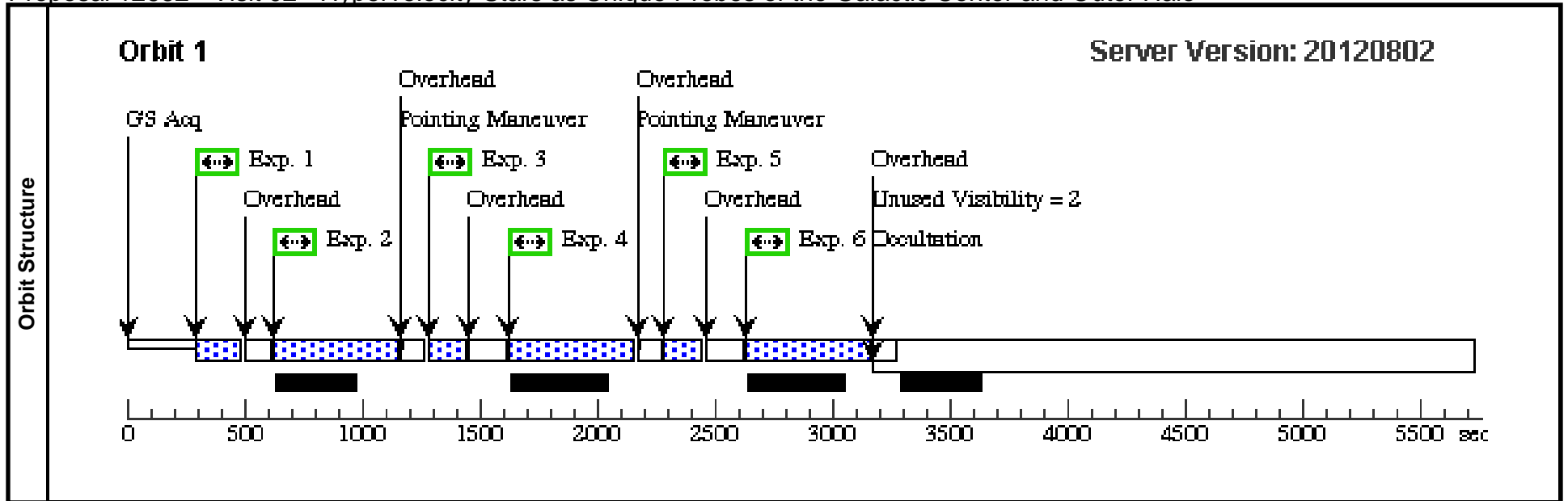
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) SDSSJ110557.45+093439.5	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG -0.3950 4,-0.10622		477 Secs [=>466.0 Secs]	[1]
	2		(1) SDSSJ110557.45+093439.5	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG -0.2370 2,0.38951		477 Secs [=>466.0 Secs]	[1]
	3		(1) SDSSJ110557.45+093439.5	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG -0.0790 1,-0.37235		477 Secs [=>466.0 Secs]	[1]
	4		(1) SDSSJ110557.45+093439.5	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 0.09876, 0.08551		477 Secs [=>466.0 Secs]	[1]
	5		(1) SDSSJ110557.45+093439.5	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 0.25677, -0.20476		477 Secs [=>466.0 Secs]	[1]



Proposal 12662 - Visit 02 - Hypervelocity Stars as Unique Probes of the Galactic Center and Outer Halo

Sat Oct 20 01:04:54 GMT 2012

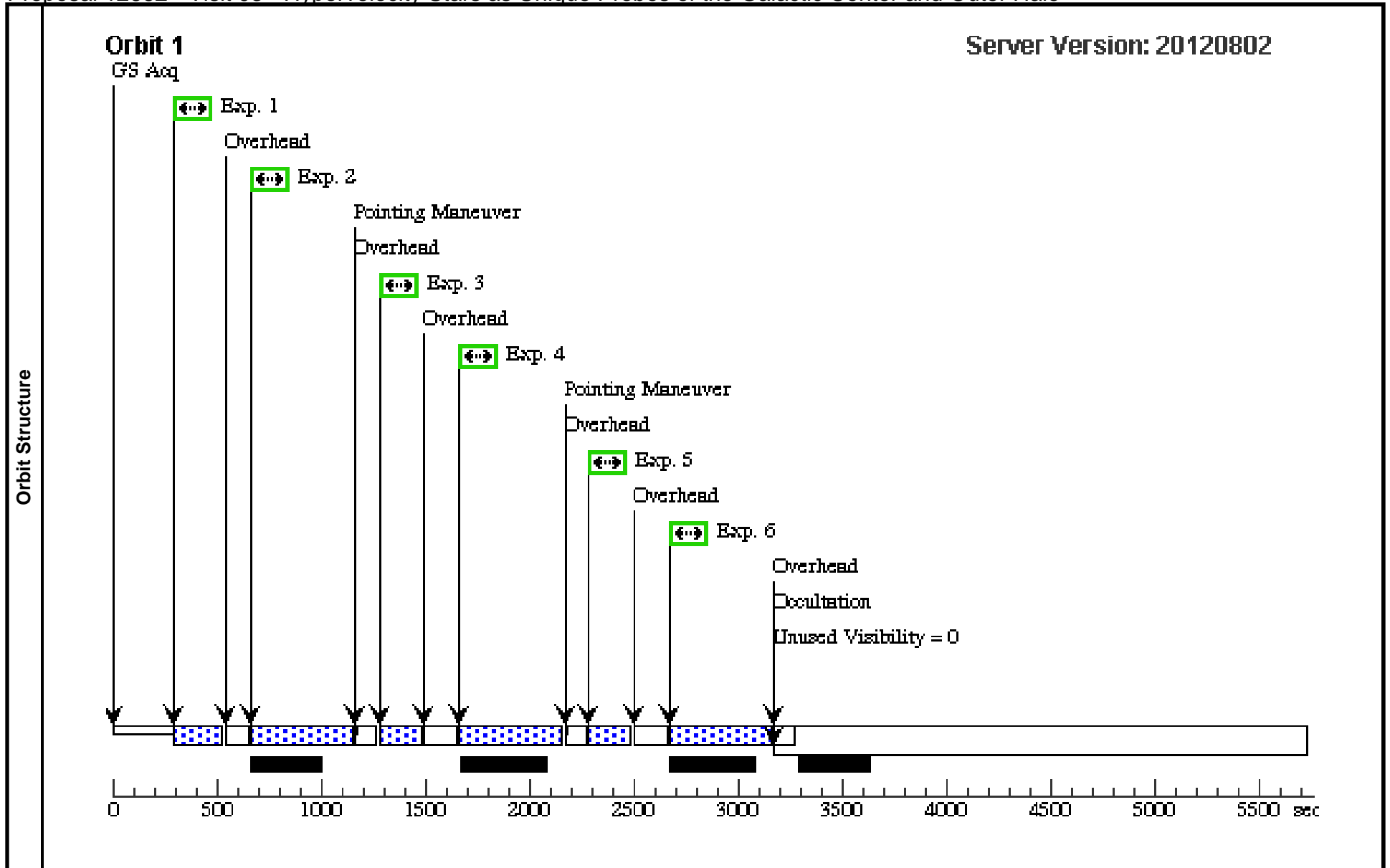
Visit	Proposal 12662, Visit 02, implementation Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: SCHED 40%: ORIENT 292.971703D TO 292.971703 D: AFTER 04-DEC-2012									
	(Visit 02) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE (Visit 02) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE									
Diagnosics										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	SDSSJ113312.12+010824.9	RA: 11 33 12.1230 (173.3005125d) Dec: +01 08 24.87 (1.14024d) Equinox: J2000		V=17.7+/-0.2	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(2) SDSSJ113312.12+010824.9	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO; FLASH=6	SAME POS AS 2		160 Secs [==>]	[1]
	2		(2) SDSSJ113312.12+010824.9	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 3.17776, -0.00069		435 Secs [==>531.0 Secs]	[1]
	3		(2) SDSSJ113312.12+010824.9	WFC3/UVIS, ACCUM, UVIS1-2K2B-SUB	F606W	CR-SPLIT=NO; FLASH=6	SAME POS AS 4		160 Secs [==>]	[1]
	4		(2) SDSSJ113312.12+010824.9	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 3.00000, 0.17355		435 Secs [==>531.0 Secs]	[1]
	5		(2) SDSSJ113312.12+010824.9	WFC3/UVIS, ACCUM, UVIS1-2K2B-SUB	F606W	CR-SPLIT=NO; FLASH=6	SAME POS AS 6		160 Secs [==>]	[1]
	6		(2) SDSSJ113312.12+010824.9	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 3.39503, -0.17217		435 Secs [==>531.0 Secs]	[1]



Proposal 12662 - Visit 03 - Hypervelocity Stars as Unique Probes of the Galactic Center and Outer Halo

Sat Oct 20 01:04:56 GMT 2012

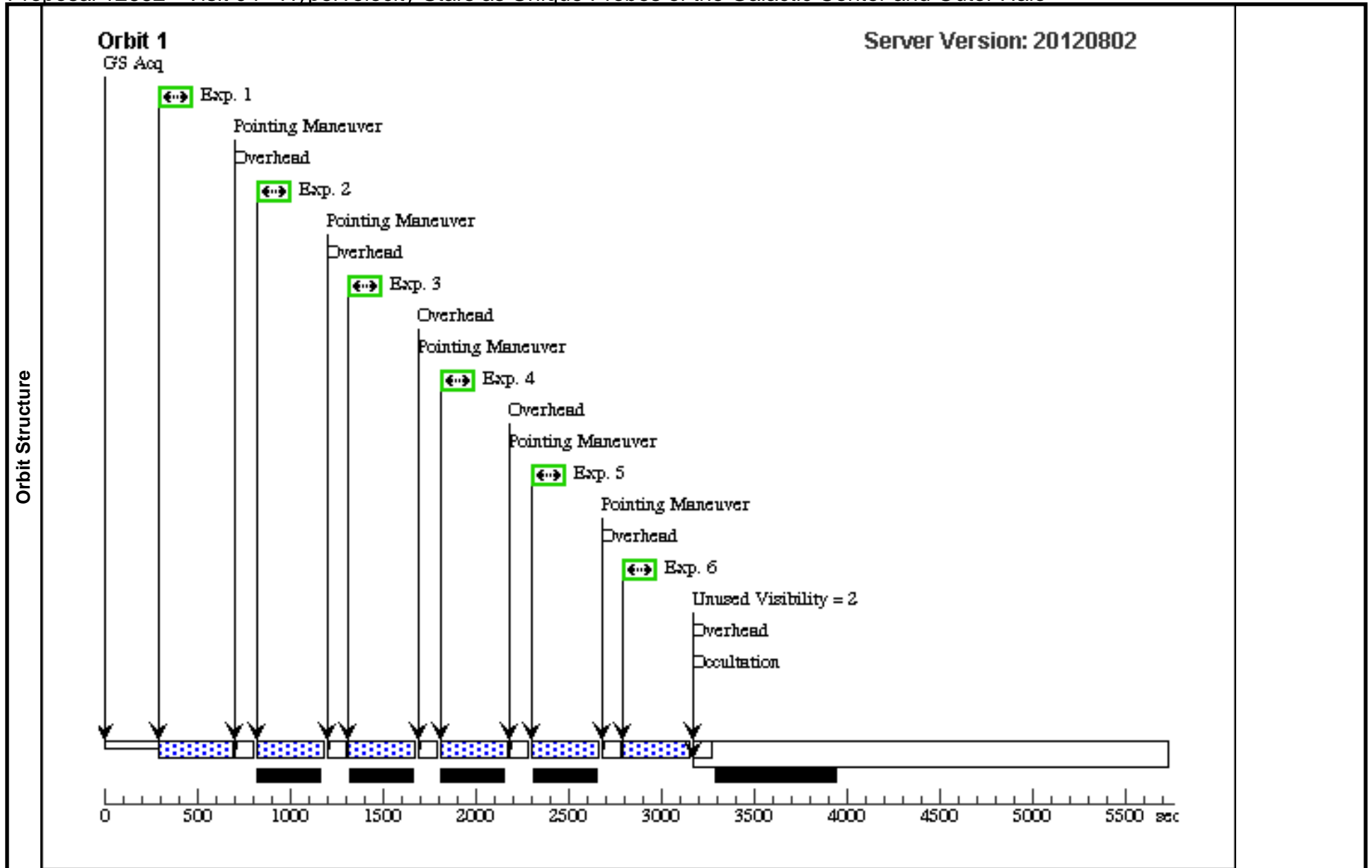
Visit	Proposal 12662, Visit 03, implementation Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: SCHED 50%: ORIENT 274D TO 274 D; AFTER 17-NOV-2012									
	(Visit 03) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE (Visit 03) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	SDSSJ094214.04+20032.1	RA: 09 42 14.0380 (145.5584917d) Dec: +20 03 22.07 (20.05613d) Equinox: J2000		V=18.1+/-0.2	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(3) SDSSJ094214.04+200322.1	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO; FLASH=6	SAME POS AS 2		200 Secs [==>]	[1]
	2		(3) SDSSJ094214.04+200322.1	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 3.17776, -0.00069		435 Secs [==>494.0 Secs]	[1]
	3		(3) SDSSJ094214.04+200322.1	WFC3/UVIS, ACCUM, UVIS1-2K2B-SUB	F606W	CR-SPLIT=NO; FLASH=6	SAME POS AS 4		200 Secs [==>]	[1]
	4		(3) SDSSJ094214.04+200322.1	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 3.00000, 0.17355		435 Secs [==>494.0 Secs]	[1]
	5		(3) SDSSJ094214.04+200322.1	WFC3/UVIS, ACCUM, UVIS1-2K2B-SUB	F606W	CR-SPLIT=NO; FLASH=6	SAME POS AS 6		200 Secs [==>]	[1]
	6		(3) SDSSJ094214.04+200322.1	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 3.39503, -0.17217		435 Secs [==>494.0 Secs]	[1]



Proposal 12662 - Visit 04 - Hypervelocity Stars as Unique Probes of the Galactic Center and Outer Halo

Sat Oct 20 01:04:57 GMT 2012

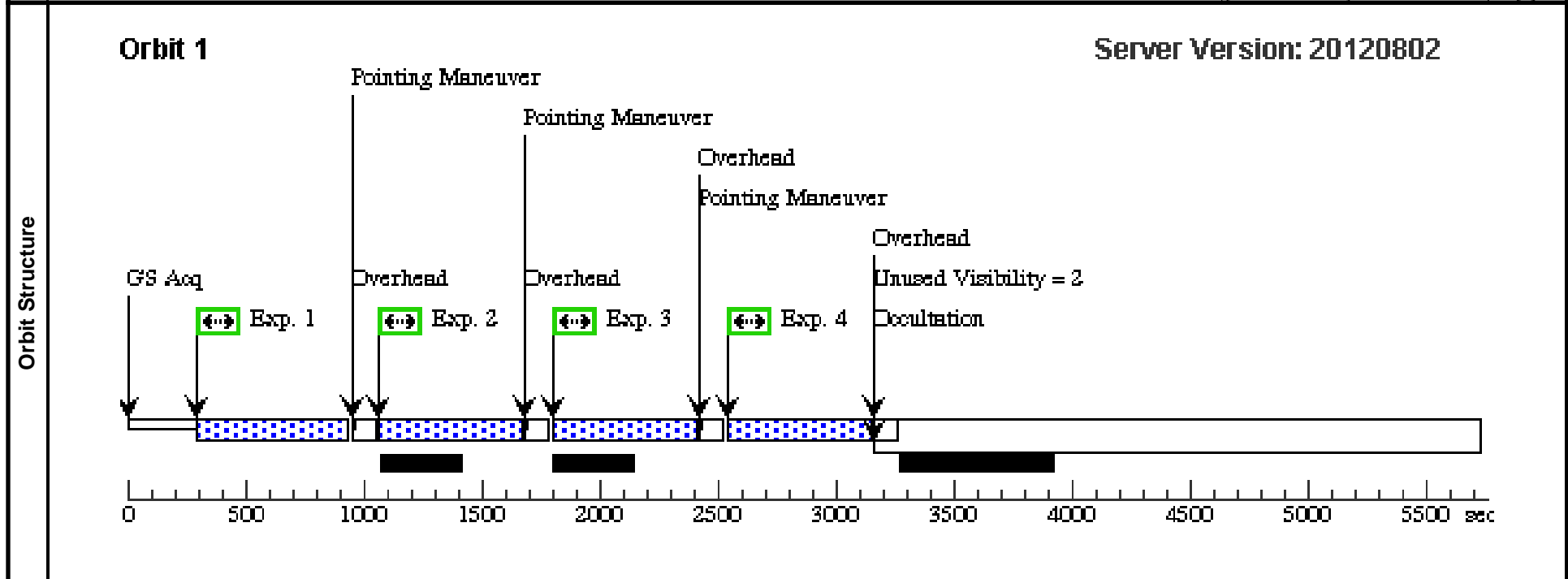
Fixed Targets	Visit									
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	Proposal 12662, Visit 04, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: SCHED 40%; ORIENT 287.286903D TO 287.286903 D; AFTER 07-NOV-2012									
	(4)	SDSSJ102137.08-005234.8	RA: 10 21 37.0800 (155.4045000d) Dec: -00 52 34.77 (-.87633d) Equinox: J2000		V=18.8+/-0.2	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(4) SDSSJ102137.08-005234.8	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG -0.3950 4,-0.10622		376 Secs [==>366.0 Secs]	[1]
	2		(4) SDSSJ102137.08-005234.8	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG -0.2370 2,0.38951		376 Secs [==>366.0 Secs]	[1]
	3		(4) SDSSJ102137.08-005234.8	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG -0.0790 1,-0.37235		376 Secs [==>366.0 Secs]	[1]
	4		(4) SDSSJ102137.08-005234.8	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 0.09876, 0.08551		376 Secs [==>366.0 Secs]	[1]
	5		(4) SDSSJ102137.08-005234.8	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 0.25677, -0.20476		376 Secs [==>366.0 Secs]	[1]
	6		(4) SDSSJ102137.08-005234.8	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 0.41479, 0.29098		376 Secs [==>366.0 Secs]	[1]



Visit	Proposal 12662, Visit 05, implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFC3/UVIS				
	Special Requirements: SCHED 50%; ORIENT 238.5D TO 238.5 D; AFTER 17-FEB-2013				

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(5)	SDSSJ120337.86+180250.4	RA: 12 03 37.8550 (180.9077292d) Dec: +18 02 50.35 (18.04732d) Equinox: J2000		V=19.3+/-0.2	Reference Frame: ICRS

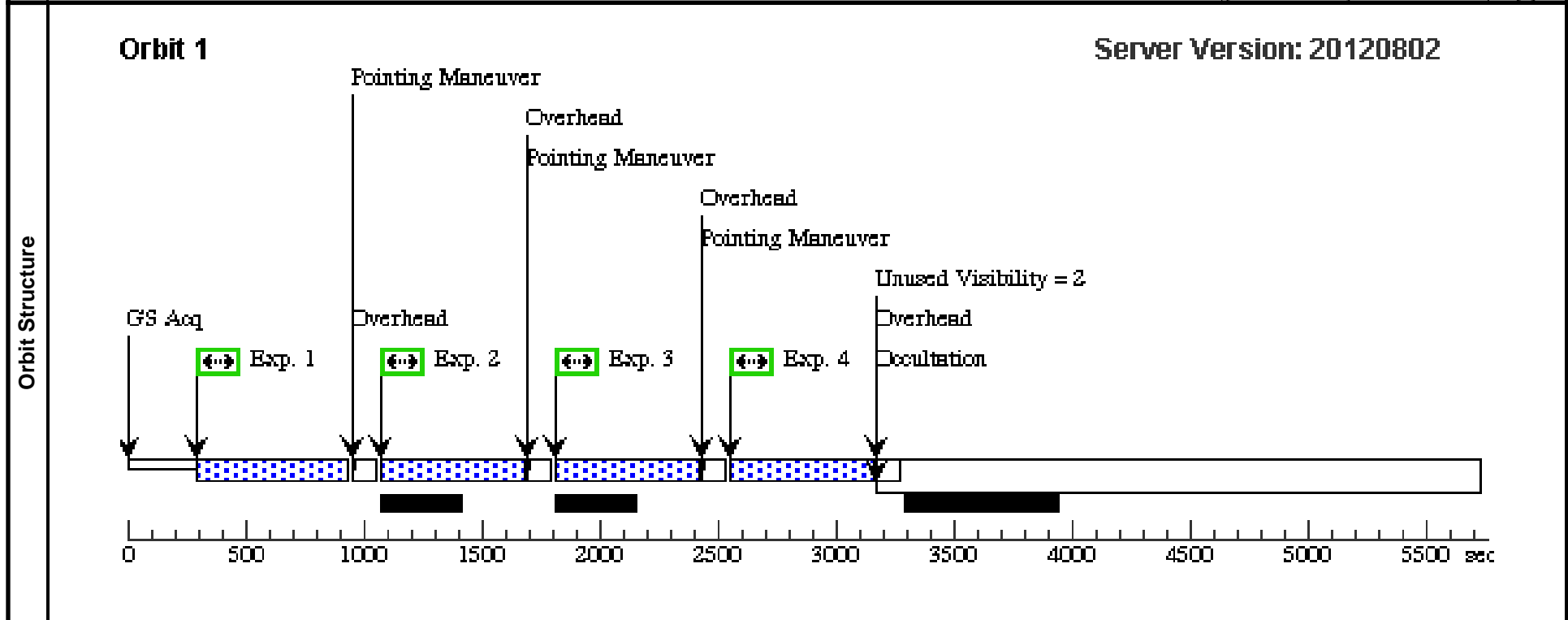
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(5) SDSSJ120337.86+180250.4	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG -0.2370 2,-0.13447		629 Secs [=>609.0 Secs]	[1]
	2		(5) SDSSJ120337.86+180250.4	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 0.11851, -0.20786		629 Secs [=>609.0 Secs]	[1]
	3		(5) SDSSJ120337.86+180250.4	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 0.25677, 0.13586		629 Secs [=>609.0 Secs]	[1]
	4		(5) SDSSJ120337.86+180250.4	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG -0.0987 6,0.24854		629 Secs [=>609.0 Secs]	[1]



Visit	Proposal 12662, Visit 06, implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFC3/UVIS				
	Special Requirements: SCHED 40%; ORIENT 290.412804D TO 290.412804 D; AFTER 08-NOV-2012				

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(6)	SDSSJ105009.60+031550.7	RA: 10 50 9.5950 (162.5399792d) Dec: +03 15 50.67 (3.26408d) Equinox: J2000		V=19.8+/-0.2	Reference Frame: ICRS

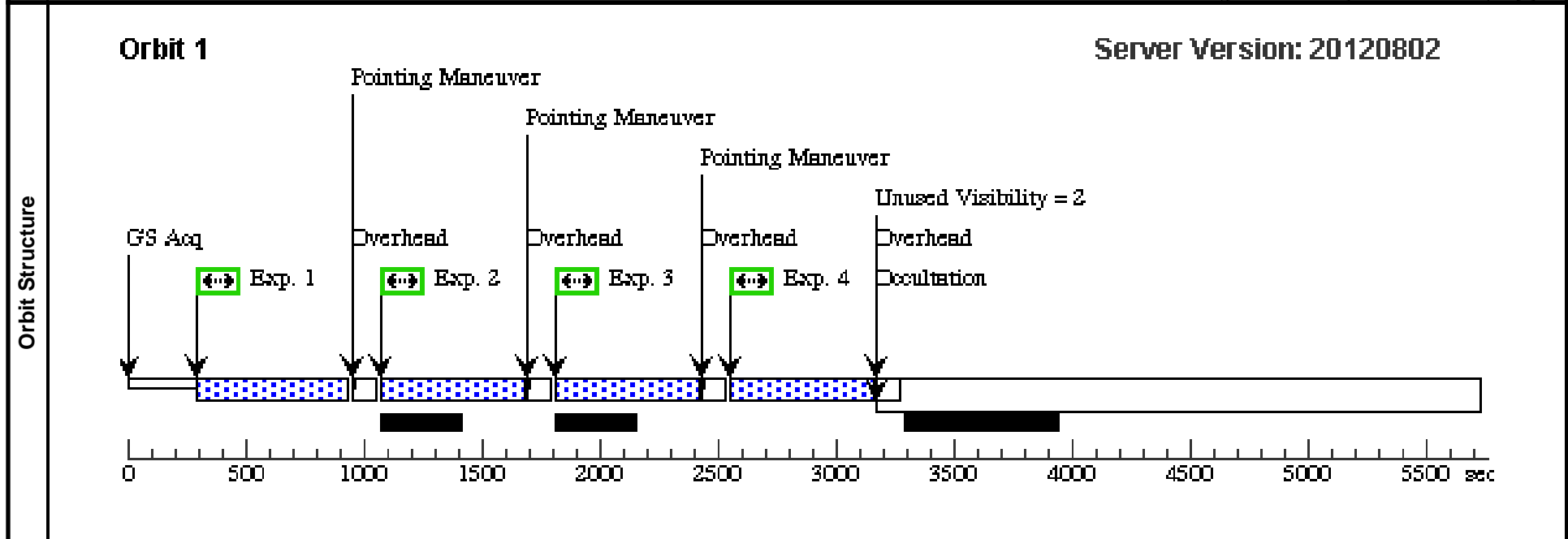
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(6) SDSSJ105009.60+031550.7	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG -0.2370 2,-0.13447		600 Secs [=>613.0 Secs]	[1]
	2		(6) SDSSJ105009.60+031550.7	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 0.11851, -0.20786		600 Secs [=>613.0 Secs]	[1]
	3		(6) SDSSJ105009.60+031550.7	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 0.25677, 0.13586		600 Secs [=>613.0 Secs]	[1]
	4		(6) SDSSJ105009.60+031550.7	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG -0.0987 6,0.24854		600 Secs [=>613.0 Secs]	[1]



Visit	Proposal 12662, Visit 07, implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFC3/UVIS				
	Special Requirements: SCHED 40%: ORIENT 289.640701D TO 289.640701 D: AFTER 13-NOV-2012				

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(7)	SDSSJ105248.31-000133.9	RA: 10 52 48.3060 (163.2012750d) Dec: -00 01 33.94 (-.02609d) Equinox: J2000		V=20.2+/-0.2	Reference Frame: ICRS

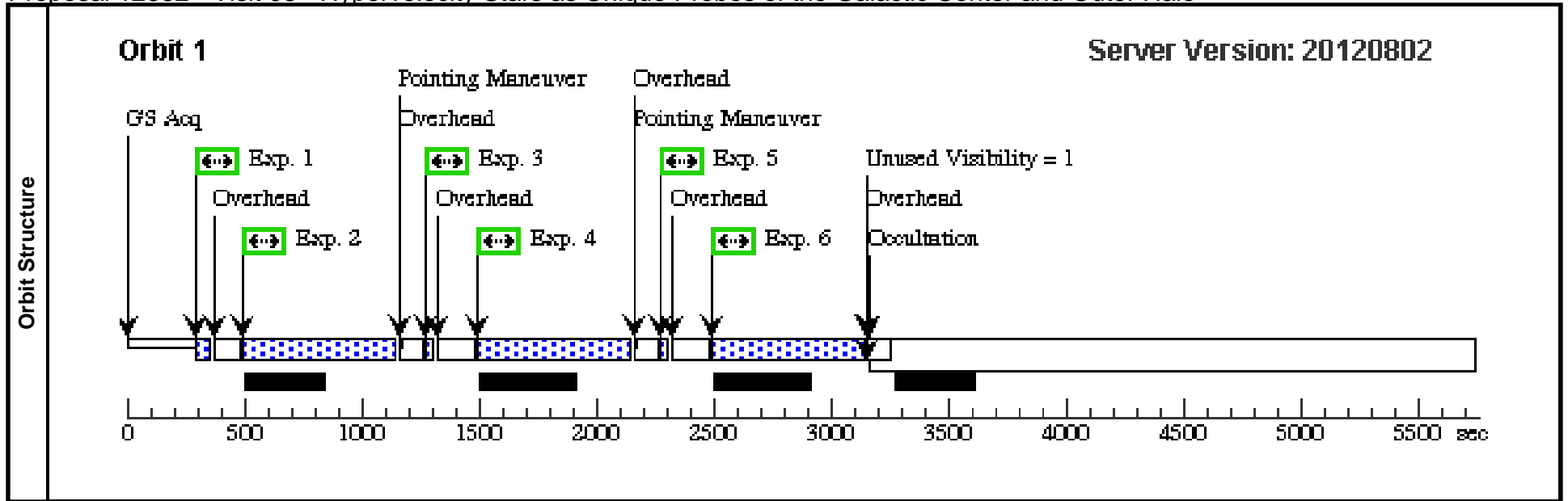
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(7) SDSSJ105248.31-000133.9	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG -0.2370 2,-0.13447; GS ACQ SCENARI O BASE1B3		600 Secs [=>613.0 Secs]	[1]
	2		(7) SDSSJ105248.31-000133.9	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 0.11851, -0.20786		600 Secs [=>613.0 Secs]	[1]
	3		(7) SDSSJ105248.31-000133.9	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 0.25677, 0.13586		600 Secs [=>613.0 Secs]	[1]
	4		(7) SDSSJ105248.31-000133.9	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG -0.0987 6,0.24854		600 Secs [=>613.0 Secs]	[1]



Proposal 12662 - Visit 08 - Hypervelocity Stars as Unique Probes of the Galactic Center and Outer Halo

Sat Oct 20 01:05:01 GMT 2012

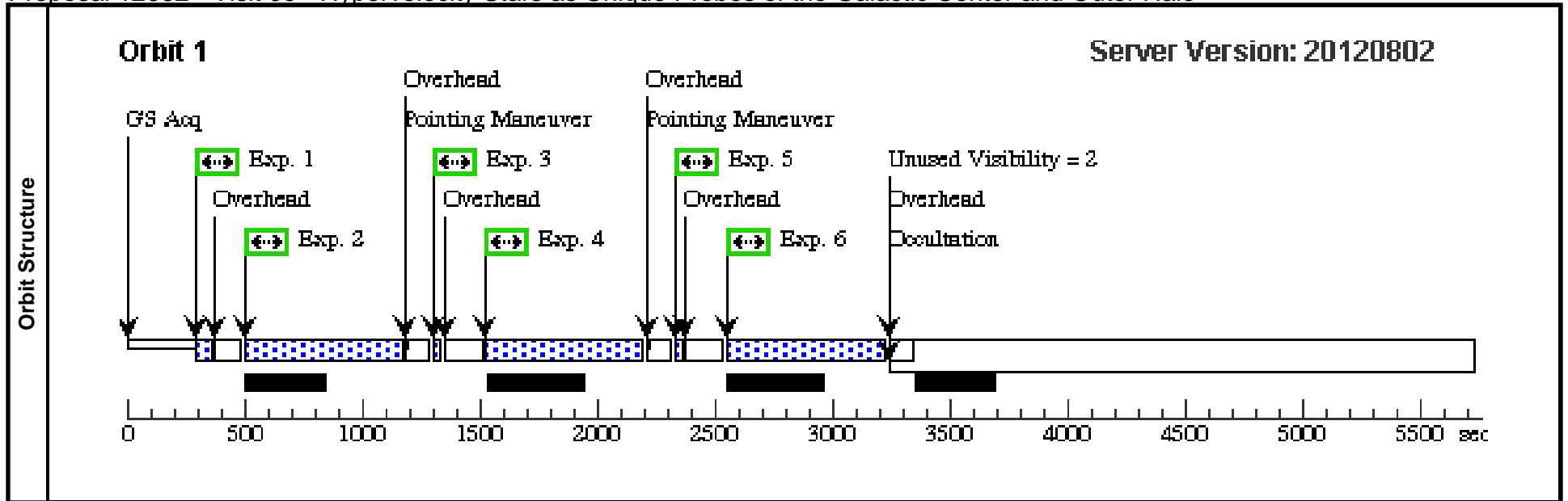
Visit	Proposal 12662, Visit 08, implementation Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: SCHED 60%: ORIENT 321.8806D TO 321.8806 D; AFTER 06-DEC-2012									
	Diagnostics	(Visit 08) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE (Visit 08) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE								
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(8)	SDSSJ144955.58+310351.4	RA: 14 49 55.5800 (222.4815833d) Dec: +31 03 51.37 (31.06427d) Equinox: J2000		V=15.8+/-0.2	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(8) SDSSJ144955.58+310351.4	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO; FLASH=12	SAME POS AS 2; GS ACQ SCENARI O BASE1B3		30 Secs [==>]	[1]
	2		(8) SDSSJ144955.58+310351.4	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 3.17776, -0.00069		550 Secs [==>653.0 Secs]	[1]
	3		(8) SDSSJ144955.58+310351.4	WFC3/UVIS, ACCUM, UVIS1-2K2B-SUB	F606W	CR-SPLIT=NO; FLASH=12	SAME POS AS 4		30 Secs [==>]	[1]
	4		(8) SDSSJ144955.58+310351.4	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 3.00000, 0.17355		550 Secs [==>653.0 Secs]	[1]
	5		(8) SDSSJ144955.58+310351.4	WFC3/UVIS, ACCUM, UVIS1-2K2B-SUB	F606W	CR-SPLIT=NO; FLASH=12	SAME POS AS 6		30 Secs [==>]	[1]
	6		(8) SDSSJ144955.58+310351.4	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 3.39503, -0.17217		550 Secs [==>653.0 Secs]	[1]



Proposal 12662 - Visit 09 - Hypervelocity Stars as Unique Probes of the Galactic Center and Outer Halo

Sat Oct 20 01:05:02 GMT 2012

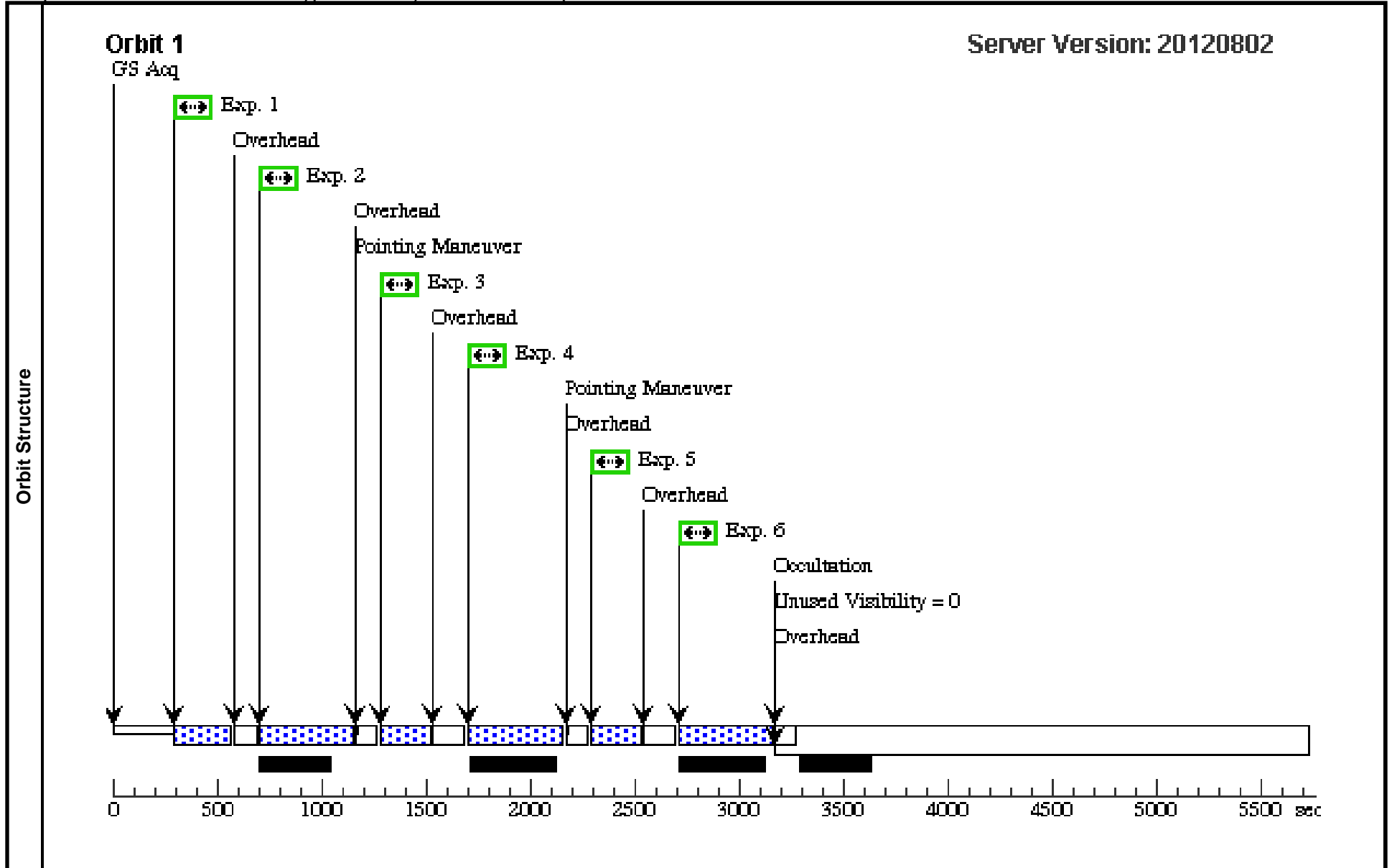
Visit	Proposal 12662, Visit 09, implementation Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: SCHED 40%: ORIENT 283D TO 283 D; AFTER 30-OCT-2012									
	(Visit 09) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE (Visit 09) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(9)	SDSSJ101018.83+302028.2	RA: 10 10 18.8290 (152.5784542d) Dec: +30 20 28.22 (30.34117d) Equinox: J2000		V=16.2+/-0.2	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(9) SDSSJ101018.83+302028.2	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO; FLASH=12	SAME POS AS 2; GS ACQ SCENARI O BASE1B3		35 Secs [==>]	[1]
	2		(9) SDSSJ101018.83+302028.2	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 3.17776, -0.00069		550 Secs [==>675.0 Secs]	[1]
	3		(9) SDSSJ101018.83+302028.2	WFC3/UVIS, ACCUM, UVIS1-2K2B-SUB	F606W	CR-SPLIT=NO; FLASH=12	SAME POS AS 4		35 Secs [==>]	[1]
	4		(9) SDSSJ101018.83+302028.2	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 3.00000, 0.17355		550 Secs [==>675.0 Secs]	[1]
	5		(9) SDSSJ101018.83+302028.2	WFC3/UVIS, ACCUM, UVIS1-2K2B-SUB	F606W	CR-SPLIT=NO; FLASH=12	SAME POS AS 6		35 Secs [==>]	[1]
	6		(9) SDSSJ101018.83+302028.2	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 3.39503, -0.17217		550 Secs [==>675.0 Secs]	[1]



Proposal 12662 - Visit 10 - Hypervelocity Stars as Unique Probes of the Galactic Center and Outer Halo

Sat Oct 20 01:05:04 GMT 2012

Visit	Proposal 12662, Visit 10, implementation Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: SCHED 40%: ORIENT 290.785202D TO 290.785202 D: AFTER 06-NOV-2012									
	Diagnostics	(Visit 10) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE (Visit 10) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE								
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(10)	SDSSJ110224.37+025002.8	RA: 11 02 24.3740 (165.6015583d) Dec: +02 50 2.77 (2.83410d) Equinox: J2000		V=18.1+/-0.2	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(10) SDSSJ110224.37+025002.8	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO; FLASH=4	SAME POS AS 2		240 Secs [==>]	[1]
	2		(10) SDSSJ110224.37+025002.8	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 3.17776, -0.00069		440 Secs [==>456.0 Secs]	[1]
	3		(10) SDSSJ110224.37+025002.8	WFC3/UVIS, ACCUM, UVIS1-2K2B-SUB	F606W	CR-SPLIT=NO; FLASH=4	SAME POS AS 4		240 Secs [==>]	[1]
	4		(10) SDSSJ110224.37+025002.8	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 3.00000, 0.17355		440 Secs [==>456.0 Secs]	[1]
	5		(10) SDSSJ110224.37+025002.8	WFC3/UVIS, ACCUM, UVIS1-2K2B-SUB	F606W	CR-SPLIT=NO; FLASH=4	SAME POS AS 6		240 Secs [==>]	[1]
	6		(10) SDSSJ110224.37+025002.8	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 3.39503, -0.17217		440 Secs [==>456.0 Secs]	[1]



Proposal 12662 - Visit 11 - Hypervelocity Stars as Unique Probes of the Galactic Center and Outer Halo

Sat Oct 20 01:05:05 GMT 2012

Visit	Proposal 12662, Visit 11, implementation Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: SCHED 50%: ORIENT 305.963997D TO 305.963997 D: AFTER 09-DEC-2012									
	Diagnostics	(Visit 11) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE (Visit 11) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE								
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(11)	SDSSJ142001.94+124404.8	RA: 14 20 1.9390 (215.0080792d) Dec: +12 44 4.77 (12.73466d) Equinox: J2000		V=17.0+/-0.2	Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(11) SDSSJ142001.94+124404.8	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO; FLASH=9	SAME POS AS 2; GS ACQ SCENARI O BASE1B3		75 Secs [==>]	[1]
	2		(11) SDSSJ142001.94+124404.8	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 3.17776, -0.00069		520 Secs [==>608.0 Secs]	[1]
	3		(11) SDSSJ142001.94+124404.8	WFC3/UVIS, ACCUM, UVIS1-2K2B-SUB	F606W	CR-SPLIT=NO; FLASH=9	SAME POS AS 4		75 Secs [==>]	[1]
	4		(11) SDSSJ142001.94+124404.8	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 3.00000, 0.17355		520 Secs [==>608.0 Secs]	[1]
	5		(11) SDSSJ142001.94+124404.8	WFC3/UVIS, ACCUM, UVIS1-2K2B-SUB	F606W	CR-SPLIT=NO; FLASH=9	SAME POS AS 6		75 Secs [==>]	[1]
	6		(11) SDSSJ142001.94+124404.8	WFC3/UVIS, ACCUM, UVIS1	F606W	CR-SPLIT=NO	POS TARG 3.39503, -0.17217		520 Secs [==>608.0 Secs]	[1]

