12291 - STIS coronagraphy of Spitzer-selected debris disks

Cycle: 18, 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) HD-377	STIS/CCD	1	10-Jul-2010 03:05:25.0	yes
02	(1) HD-377	STIS/CCD	1	10-Jul-2010 03:05:30.0	yes
03	(2) HD-7590	STIS/CCD	1	10-Jul-2010 03:05:34.0	yes
04	(2) HD-7590	STIS/CCD	1	10-Jul-2010 03:05:38.0	yes
05	(3) HD-202628	STIS/CCD	1	10-Jul-2010 03:05:41.0	yes
06	(3) HD-202628	STIS/CCD	1	10-Jul-2010 03:05:45.0	yes
07	(4) HD-73350	STIS/CCD	1	10-Jul-2010 03:05:48.0	yes
08	(4) HD-73350	STIS/CCD	1	10-Jul-2010 03:05:52.0	yes
09	(5) HD-135599	STIS/CCD	1	10-Jul-2010 03:05:57.0	yes
10	(5) HD-135599	STIS/CCD	1	10-Jul-2010 03:06:00.0	yes
11	(6) HD-145229	STIS/CCD	1	10-Jul-2010 03:06:04.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
12	(6) HD-145229	STIS/CCD	1	10-Jul-2010 03:06:07.0	yes
13	(7) HD-201219	STIS/CCD	1	10-Jul-2010 03:06:11.0	yes
14	(7) HD-201219	STIS/CCD	1	10-Jul-2010 03:06:14.0	yes
15	(8) HD-187897	STIS/CCD	1	10-Jul-2010 03:06:17.0	yes
16	(8) HD-187897	STIS/CCD	1	10-Jul-2010 03:06:21.0	yes
17	(9) HD-45184	STIS/CCD	1	10-Jul-2010 03:06:24.0	yes
18	(9) HD-45184	STIS/CCD	1	10-Jul-2010 03:06:27.0	yes
19	(10) HD-38858	STIS/CCD	1	10-Jul-2010 03:06:31.0	yes
20	(10) HD-38858	STIS/CCD	1	10-Jul-2010 03:06:34.0	yes

20 Total Orbits Used

ABSTRACT

Debris disks trace the structure, dynamic, and formation of exoplanetary systems. In the cases of Fomalhaut and HR 8799 exoplanets have been imaged at the locations expected from the disk structures. Fifteen percent of main sequence stars possess dusty circumstellar debris disks revealed by far-infrared photometry. These disks are signposts of planetary systems: collisions among larger, unseen parent bodies maintain the observed dust population against losses to radiation pressure and Poynting-Robertson drag. Images of debris disks at optical, infrared, and millimeter wavelengths have shown central holes, rings, radial gaps, warps, and azimuthal asymmetries which indicate the presence of planetary mass perturbers. Only twenty have been spatially resolved at any wavelength, and at wavelengths <10 microns (where subarcsec resolution is available), only fifteen. Imaging of dozens of other debris disk targets has been attempted with various HST cameras/coronagraphs and adaptive optics, but without success. The key property which renders a debris disk observable in scattered light is its dust optical depth. The sixteen disks imaged so far all have an infrared luminosity >~ 0.01% that of the central star; no disks with smaller optical depths have been detected. Most nearby, main-sequence stars known to meet this requirement have already been observed, so future progress in debris disk imaging depends on discovering additional stars with large infrared excess. The Spitzer Space Telescope provided the best opportunity in 20 years to identify new examples of high optical depth debris disk systems. We have conducted detailed imaging simulations of debris disks newly identified by Spitzer since 2007, including size, surface brightness, and contrast estimates. From these we have identified ten targets whose disks should be detectable with the STIS coronagraph in roll-subtracted images. In terms of their detectability and resolvability to HST, these are the best remaining targets to emerge from the now-complete Spitzer photometric surveys of nearby main sequence stars. Our goals are to obtain the first resolved images of these disks at ~3 AU resolution,

define the disk sizes and orientations,and uncover disk substructures indicative of planetary perturbations.

OBSERVING DESCRIPTION

We are using the STIS coronagraph to image circumstellar debris disks around 10 nearby stars. Each target is observed in two back-to-back orbits, with the two orbits separated by ~30 deg in telescope roll. The two rolls allow separation of the disk and instrumental components of the image using an interative algorithm. At the beginning of each orbit the usual STIS coronagraph acquisition is done. Then, a ~1900 sec exposure (split into 4 shorter CR-splits) is taken with the star located behind the coronagraphic wedge. Each orbit uses the same image sequence. As we know the position angle of the disk of HD 38858 from Spitzer, we set orietation constraints on those observations.

Visit

Proposal 12291, Visit 01, implementation Sat Jul 10 07:06:38 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

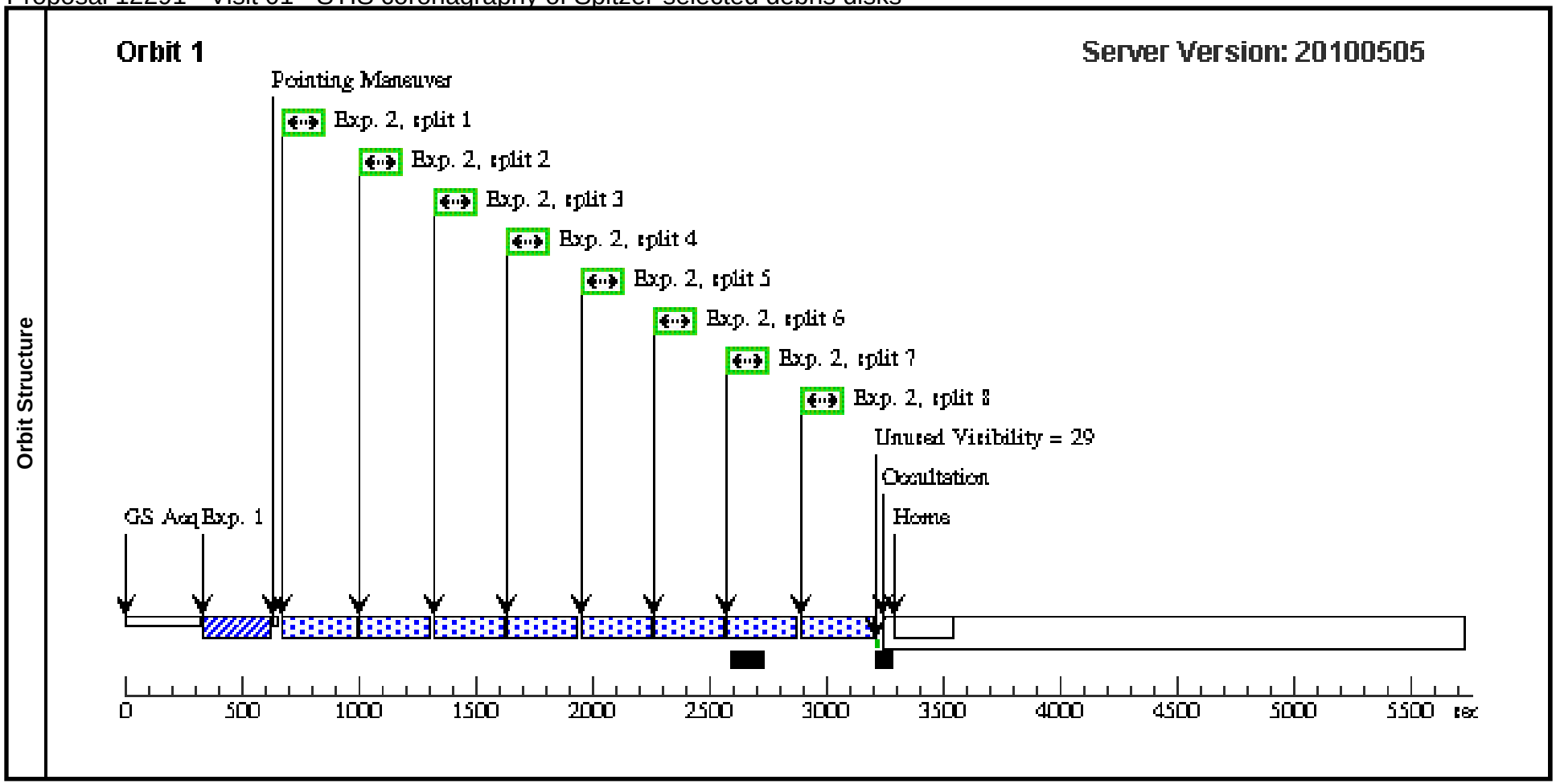
Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-377	RA: 00 08 25.7450 (2.1072708d) Dec: +06 37 0.50 (6.61681d) Equinox: J2000	Proper Motion RA: 0.0058s/yr Proper Motion Dec: -0.009"/yr Parallax: 0.02515" Epoch of Position: 2000	V=7.60+/-0.1	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) HD-377	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(1) HD-377	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			2160 Secs	
								[==>(Split 1)] *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***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Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 29
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 02, implementation Sat Jul 10 07:06:39 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: ORIENT 28D TO 30D FROM 01; AFTER 01 BY 0.8 Orbits TO 1.2 Orbits

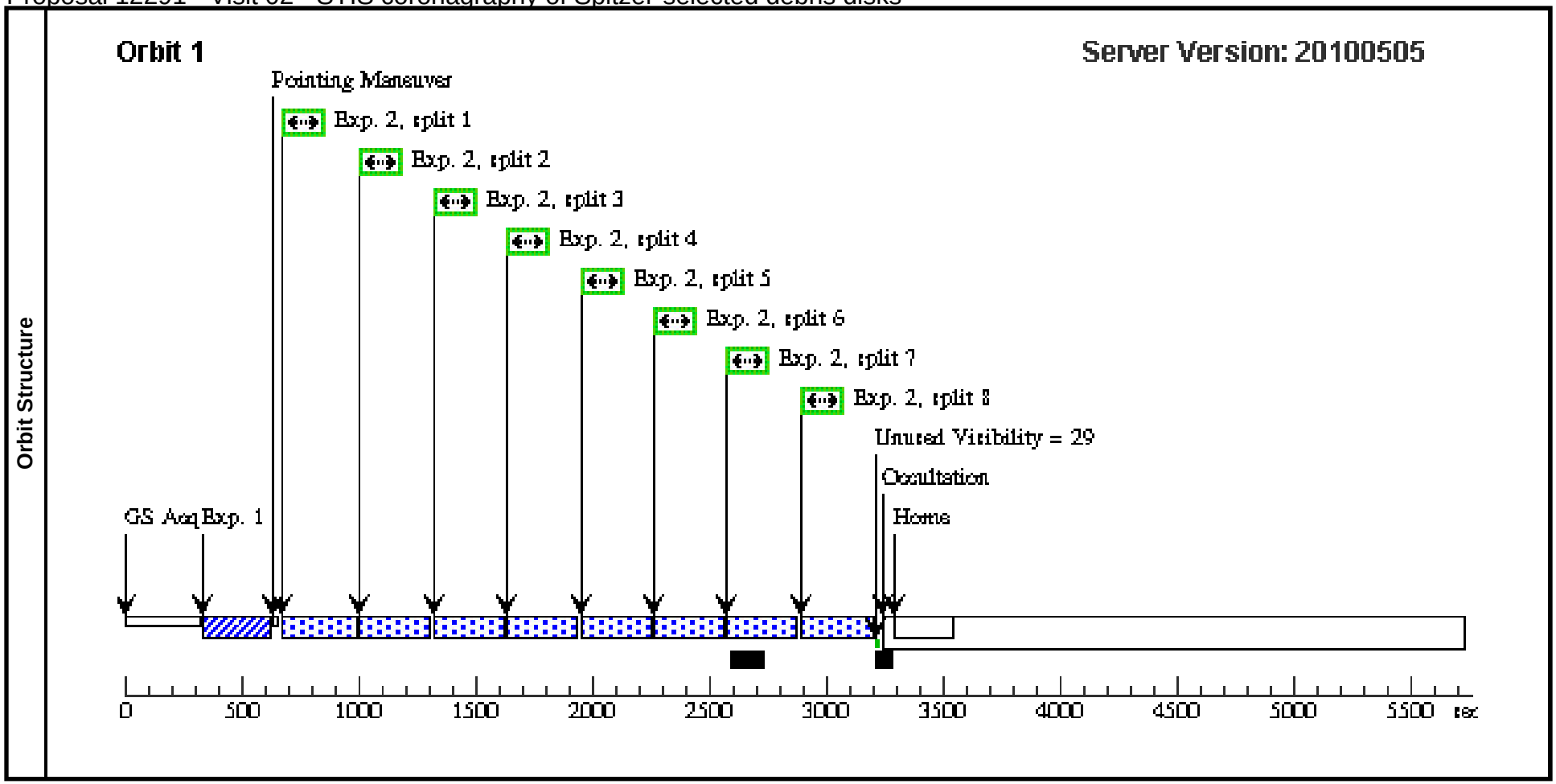
Comments: Use maximum roll offset possible (more than 30 deg if possible)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-377	RA: 00 08 25.7450 (2.1072708d) Dec: +06 37 0.50 (6.61681d) Equinox: J2000	Proper Motion RA: 0.0058s/yr Proper Motion Dec: -0.009"/yr Parallax: 0.02515" Epoch of Position: 2000	V=7.60+/-0.1	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) HD-377	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(1) HD-377	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			2160 Secs	
								[==>(Split 1)] *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 29
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 03, implementation Sat Jul 10 07:06:40 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

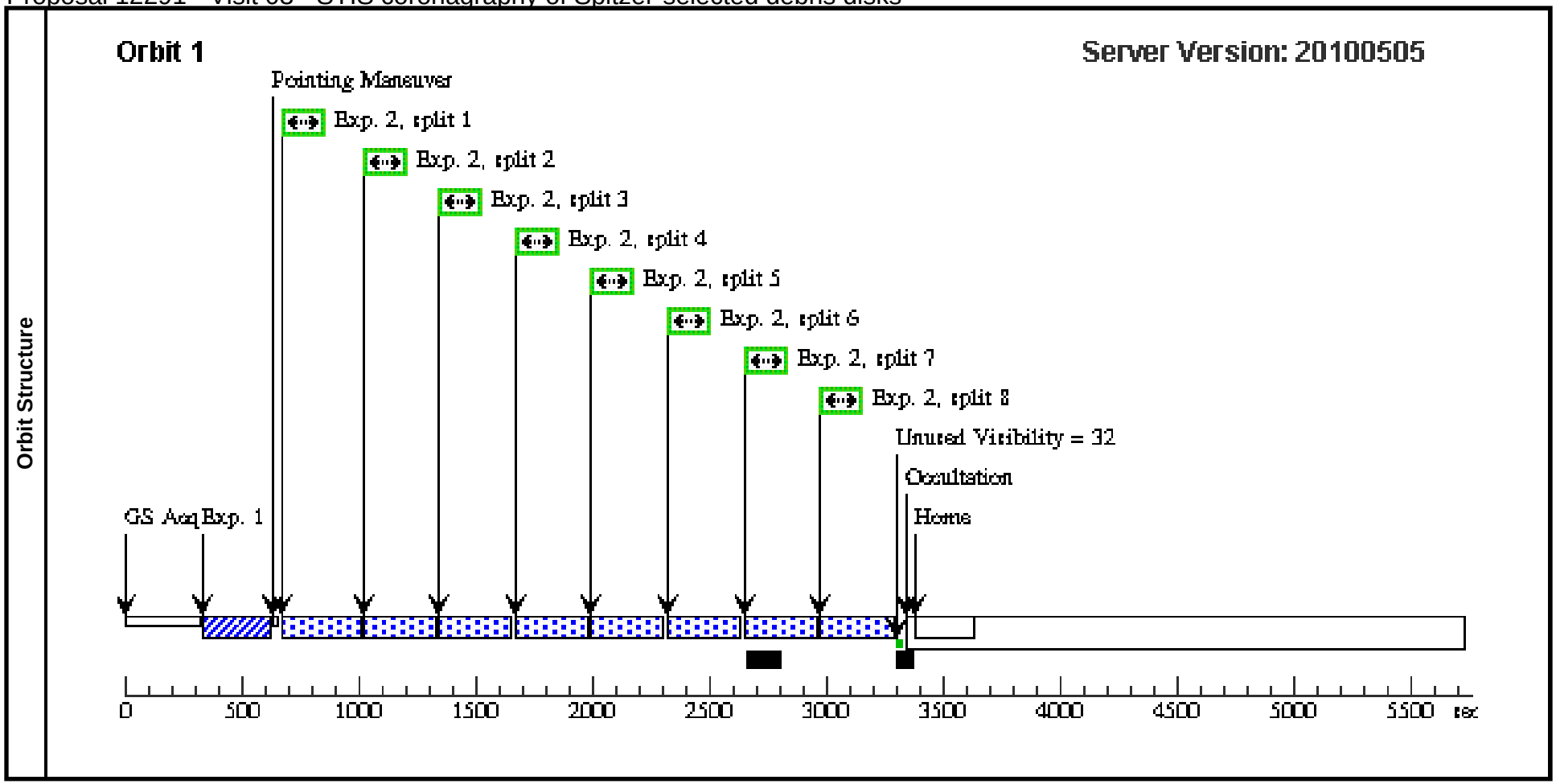
Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	HD-7590	RA: 01 16 29.2530 (19.1218875d) Dec: +42 56 21.91 (42.93942d) Equinox: J2000	Proper Motion RA: -0.0100s/yr Proper Motion Dec: -0.026"/yr Parallax: 0.04230" Epoch of Position: 2000	V=6.61	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(2) HD-7590	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(2) HD-7590	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			2256 Secs	
								[==>(Split 1)] *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***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Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 32
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 04, implementation Sat Jul 10 07:06:40 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: ORIENT 28D TO 30D FROM 03; AFTER 03 BY 0.8 Orbits TO 1.2 Orbits

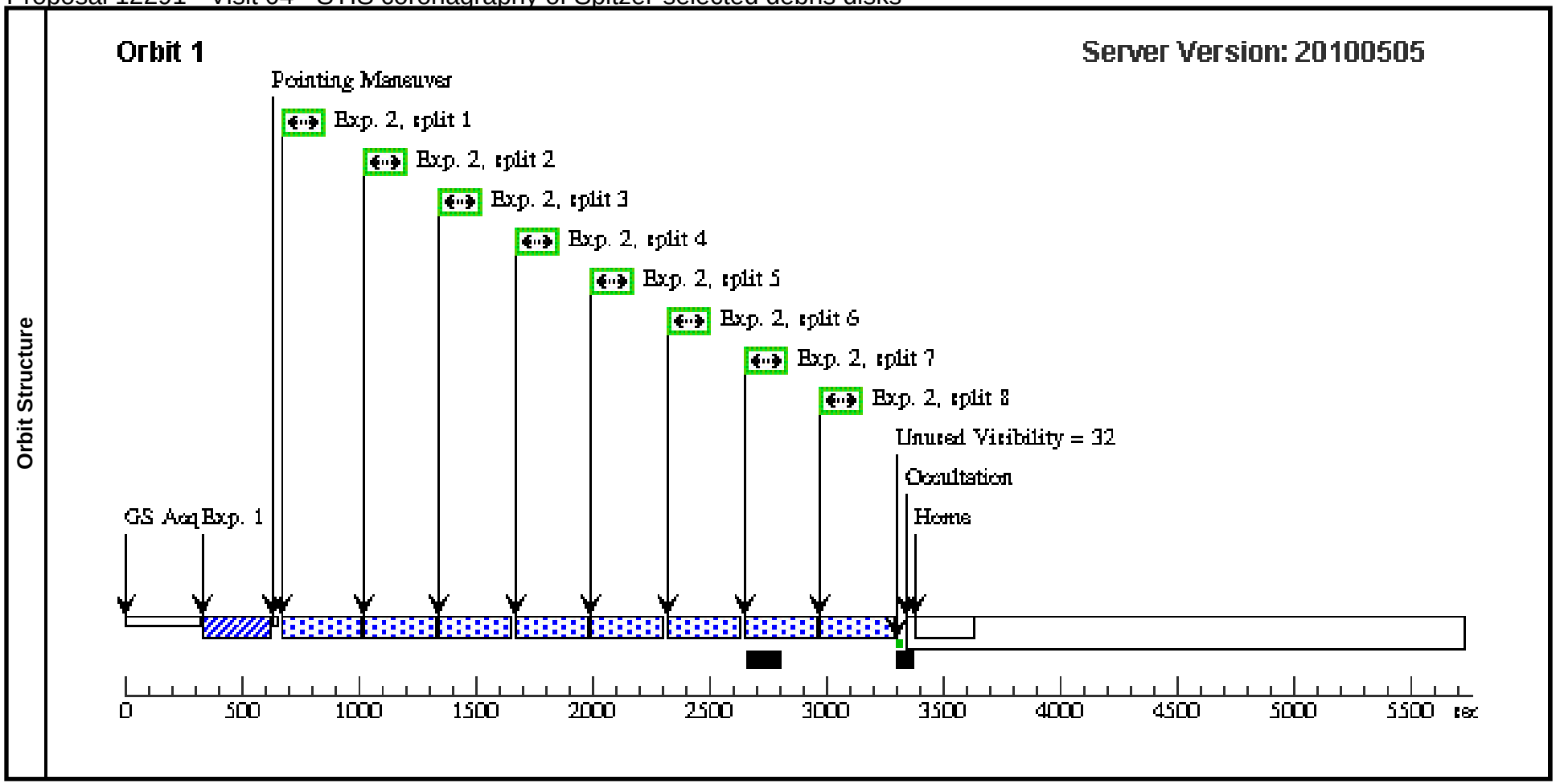
Comments: Use maximum roll offset possible (more than 30 deg if possible)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	HD-7590	RA: 01 16 29.2530 (19.1218875d) Dec: +42 56 21.91 (42.93942d) Equinox: J2000	Proper Motion RA: -0.0100s/yr Proper Motion Dec: -0.026"/yr Parallax: 0.04230" Epoch of Position: 2000	V=6.61	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(2) HD-7590	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(2) HD-7590	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			2256 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
								[==>(Split 8)]	


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 32
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 05, implementation Sat Jul 10 07:06:40 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

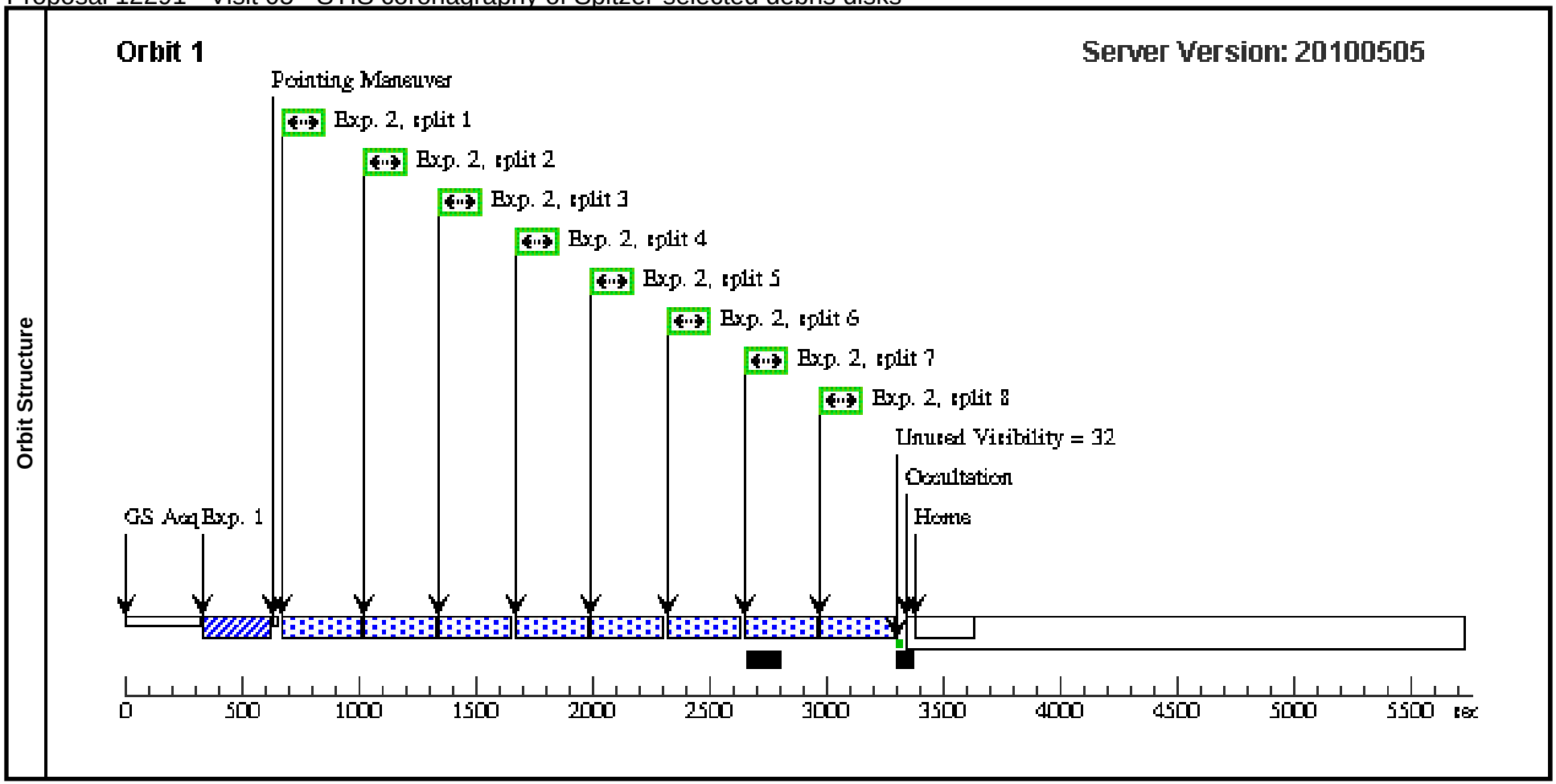
Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	HD-202628	RA: 21 18 27.2700 (319.6136250d) Dec: -43 20 4.74 (-43.33465d) Equinox: J2000	Proper Motion RA: 0.0232s/yr Proper Motion Dec: 0.018"/yr Parallax: 0.04204" Epoch of Position: 2000	V=6.75	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(3) HD-202628	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(3) HD-202628	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			2256 Secs	
								[==>(Split 1)] *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
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Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 32
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 06, implementation Sat Jul 10 07:06:41 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: ORIENT 28D TO 30D FROM 05; AFTER 05 BY 0.8 Orbits TO 1.2 Orbits

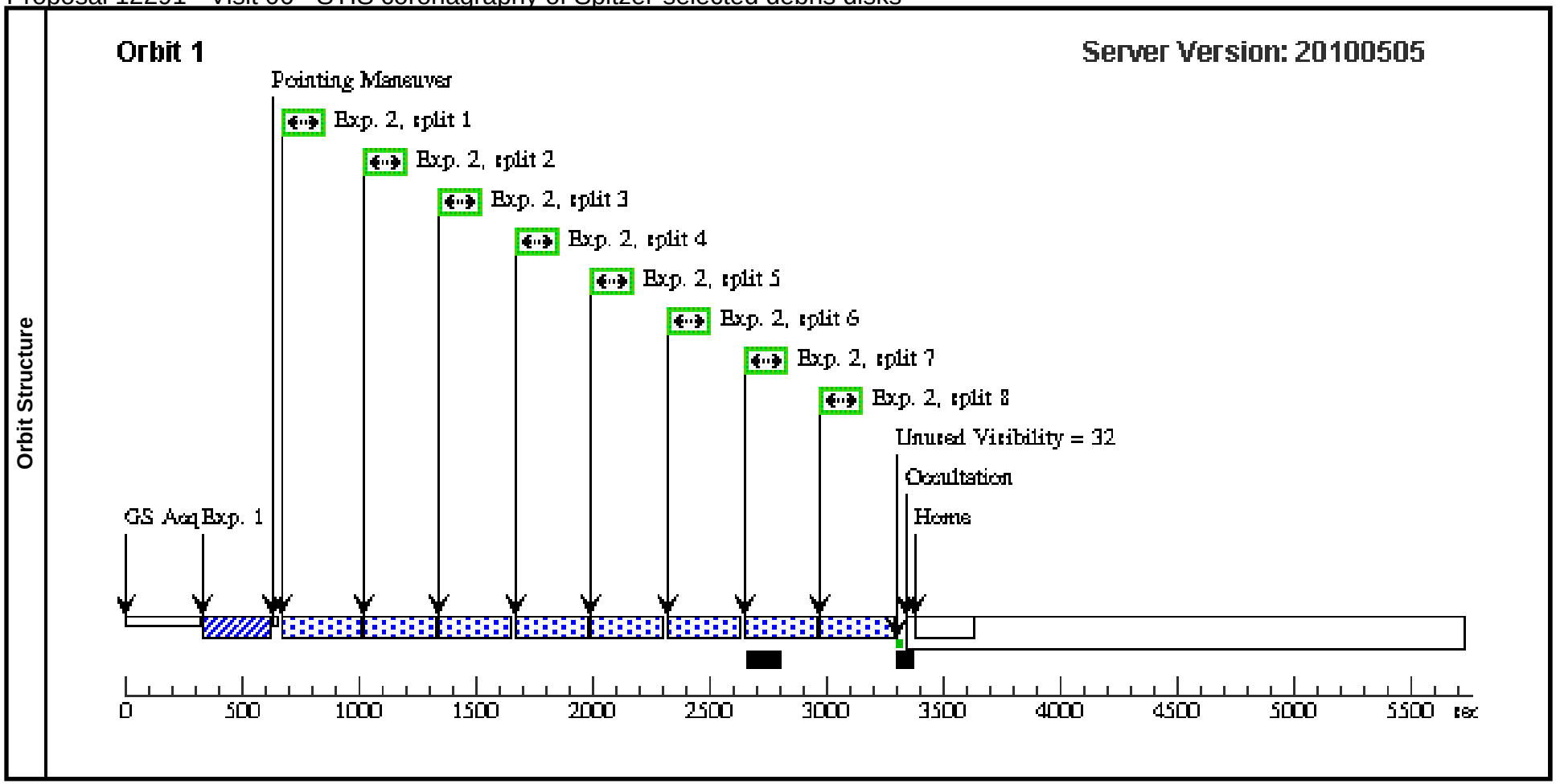
Comments: Use maximum roll offset possible (more than 30 deg if possible)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	HD-202628	RA: 21 18 27.2700 (319.6136250d) Dec: -43 20 4.74 (-43.33465d) Equinox: J2000	Proper Motion RA: 0.0232s/yr Proper Motion Dec: 0.018"/yr Parallax: 0.04204" Epoch of Position: 2000	V=6.75	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(3) HD-202628	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(3) HD-202628	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			2256 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
								[==>(Split 8)]	


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 32
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 07, implementation Sat Jul 10 07:06:41 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

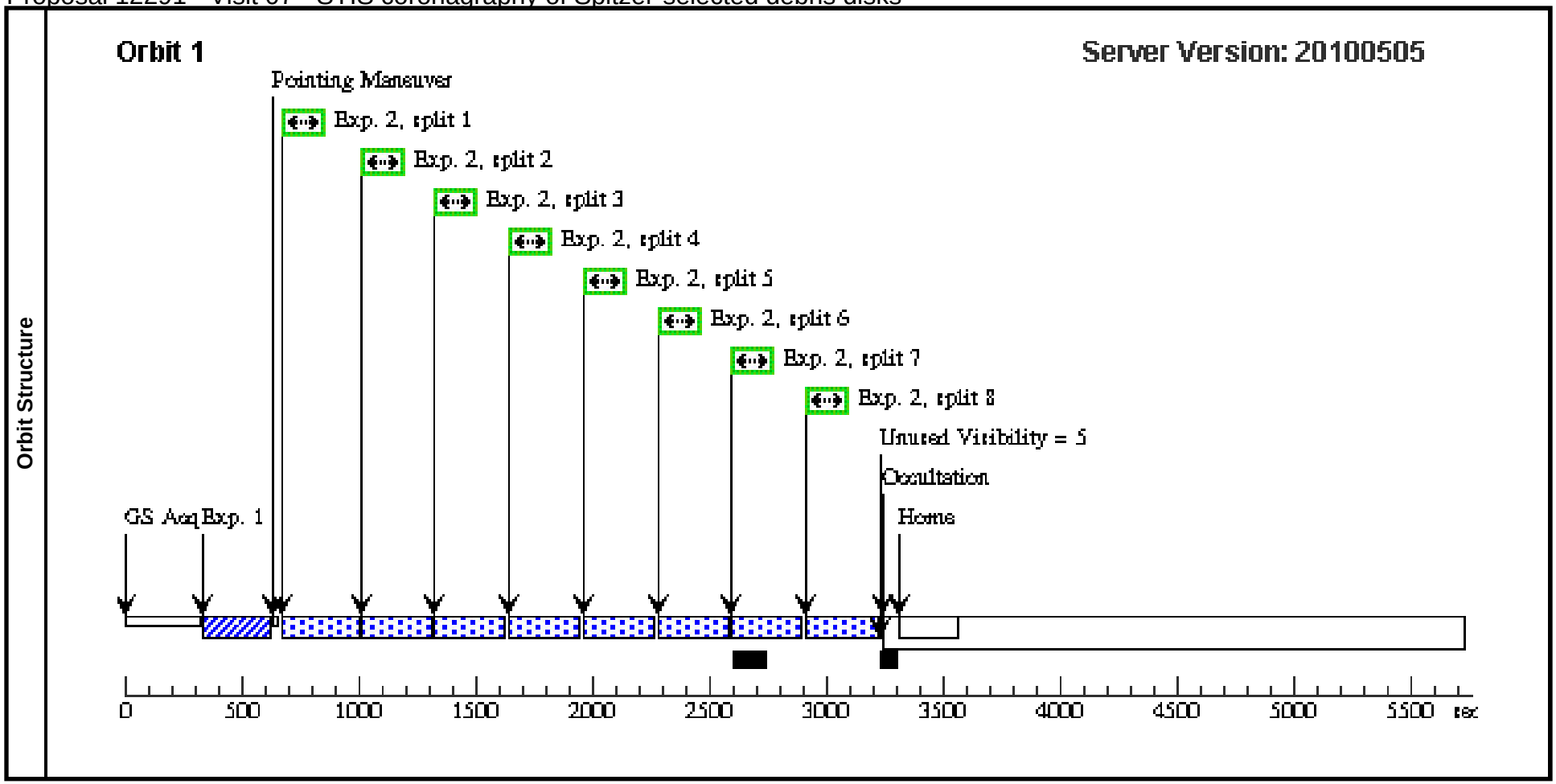
Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	HD-73350	RA: 08 37 50.2930 (129.4595542d) Dec: -06 48 24.79 (-6.80689d) Equinox: J2000	Proper Motion RA: -0.0197s/yr Proper Motion Dec: 0.042"/yr Parallax: 0.04232" Epoch of Position: 2000	V=6.73	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(4) HD-73350	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(4) HD-73350	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			2180 Secs	
								[==>(Split 1)] *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***


Orbit Structure
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Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 5
Occultation
GS Acq
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 08, implementation Sat Jul 10 07:06:42 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: ORIENT 28D TO 30D FROM 07; AFTER 07 BY 0.8 Orbits TO 1.2 Orbits

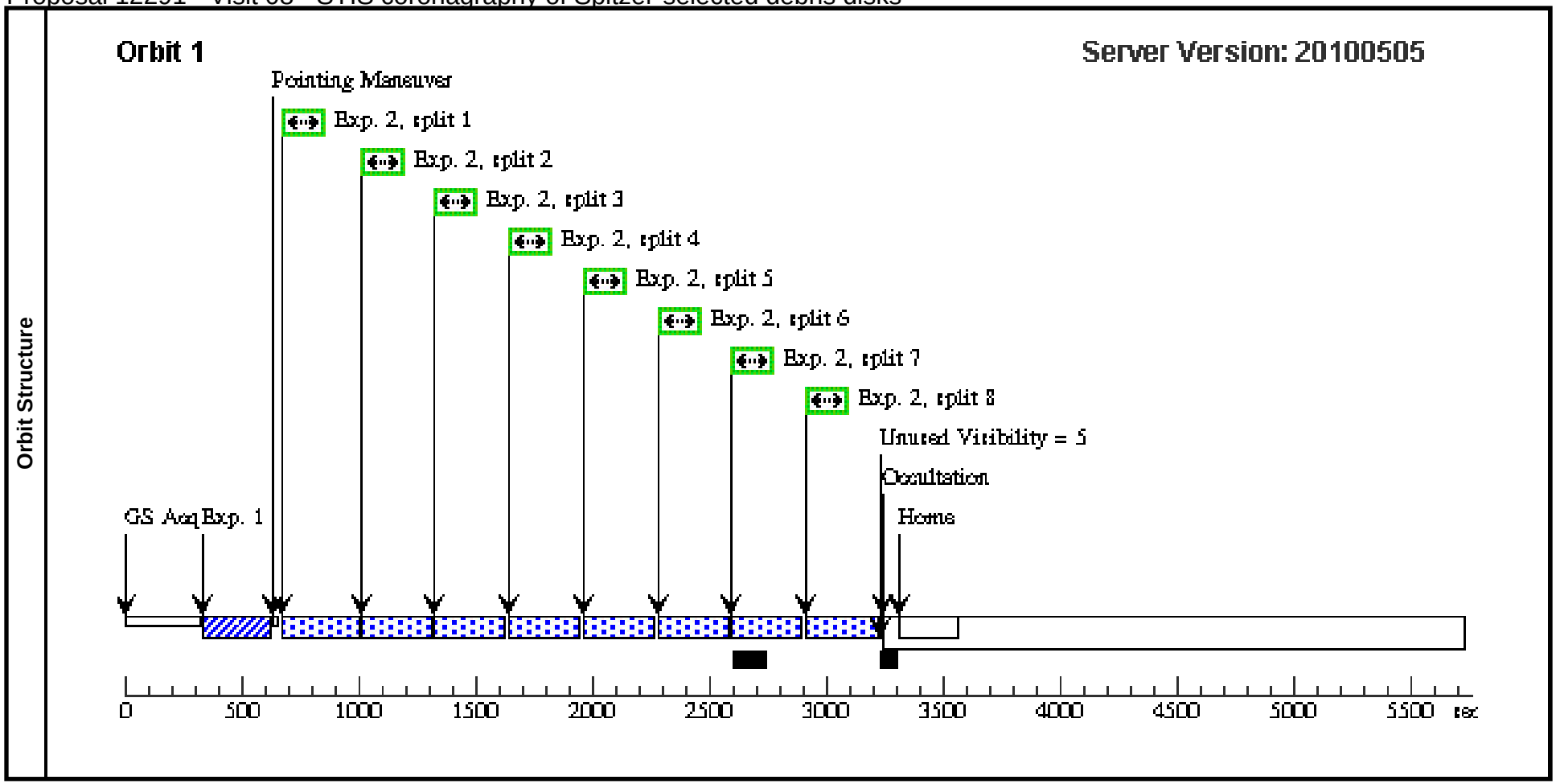
Comments: Use maximum roll offset possible (more than 30 deg if possible)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	HD-73350	RA: 08 37 50.2930 (129.4595542d) Dec: -06 48 24.79 (-6.80689d) Equinox: J2000	Proper Motion RA: -0.0197s/yr Proper Motion Dec: 0.042"/yr Parallax: 0.04232" Epoch of Position: 2000	V=6.73	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(4) HD-73350	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(4) HD-73350	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			2180 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
								[==>(Split 8)]	


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 5
Occultation
GS Acq
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 09, implementation Sat Jul 10 07:06:42 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

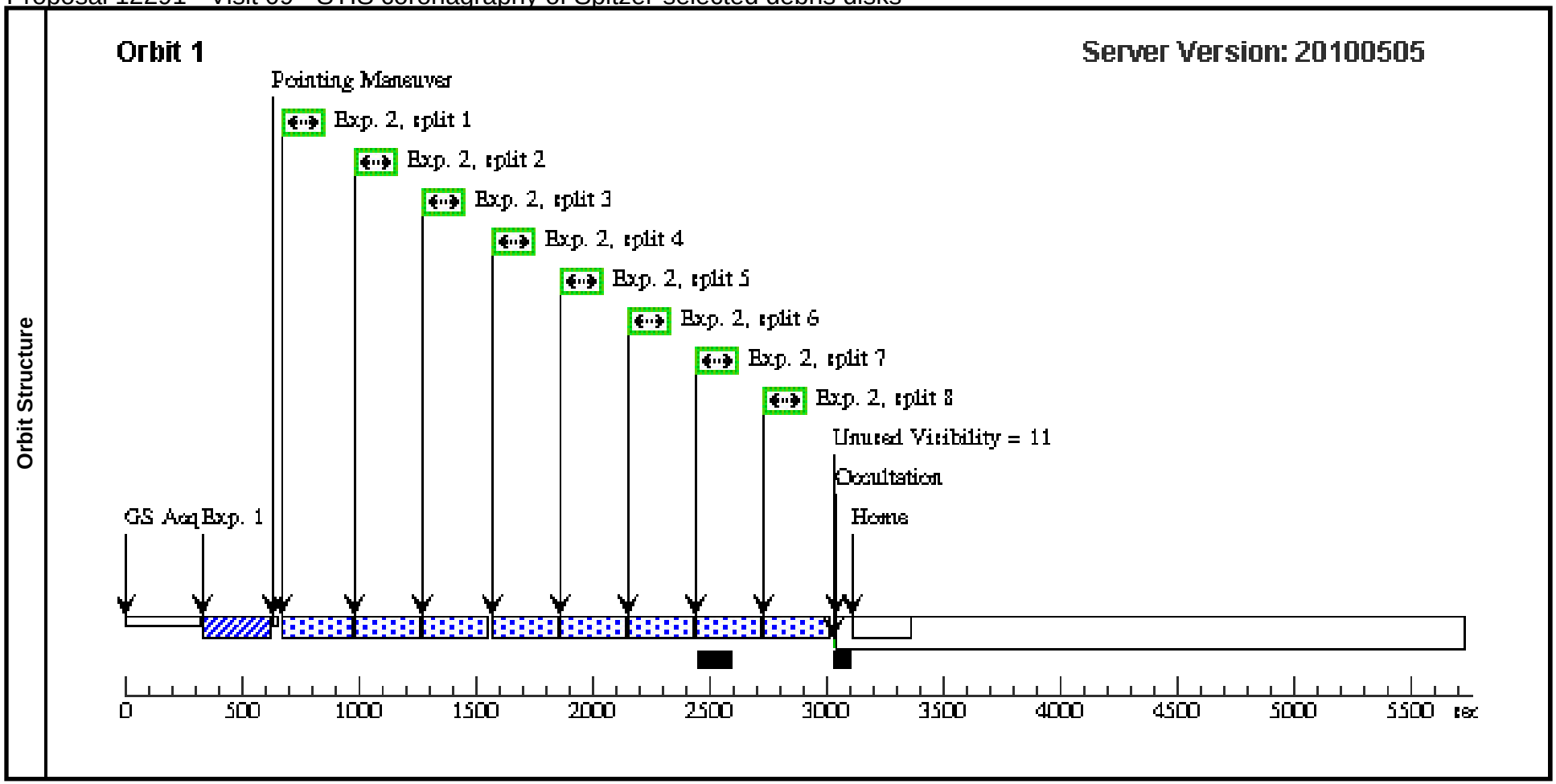
Special Requirements: SCHED 80%

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	HD-135599	RA: 15 15 59.1670 (228.9965292d) Dec: +00 47 46.91 (.79636d) Equinox: J2000	Proper Motion RA: 0.0115s/yr Proper Motion Dec: -0.137"/yr Parallax: 0.06419" Epoch of Position: 2000	V=6.931	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(5) HD-135599	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(5) HD-135599	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			1980 Secs	
								[==>(Split 1)] *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 11
Occultation
GS Acq
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 10, implementation Sat Jul 10 07:06:42 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: SCHED 80%; ORIENT 28D TO 30D FROM 09; AFTER 09 BY 0.8 Orbits TO 1.2 Orbits

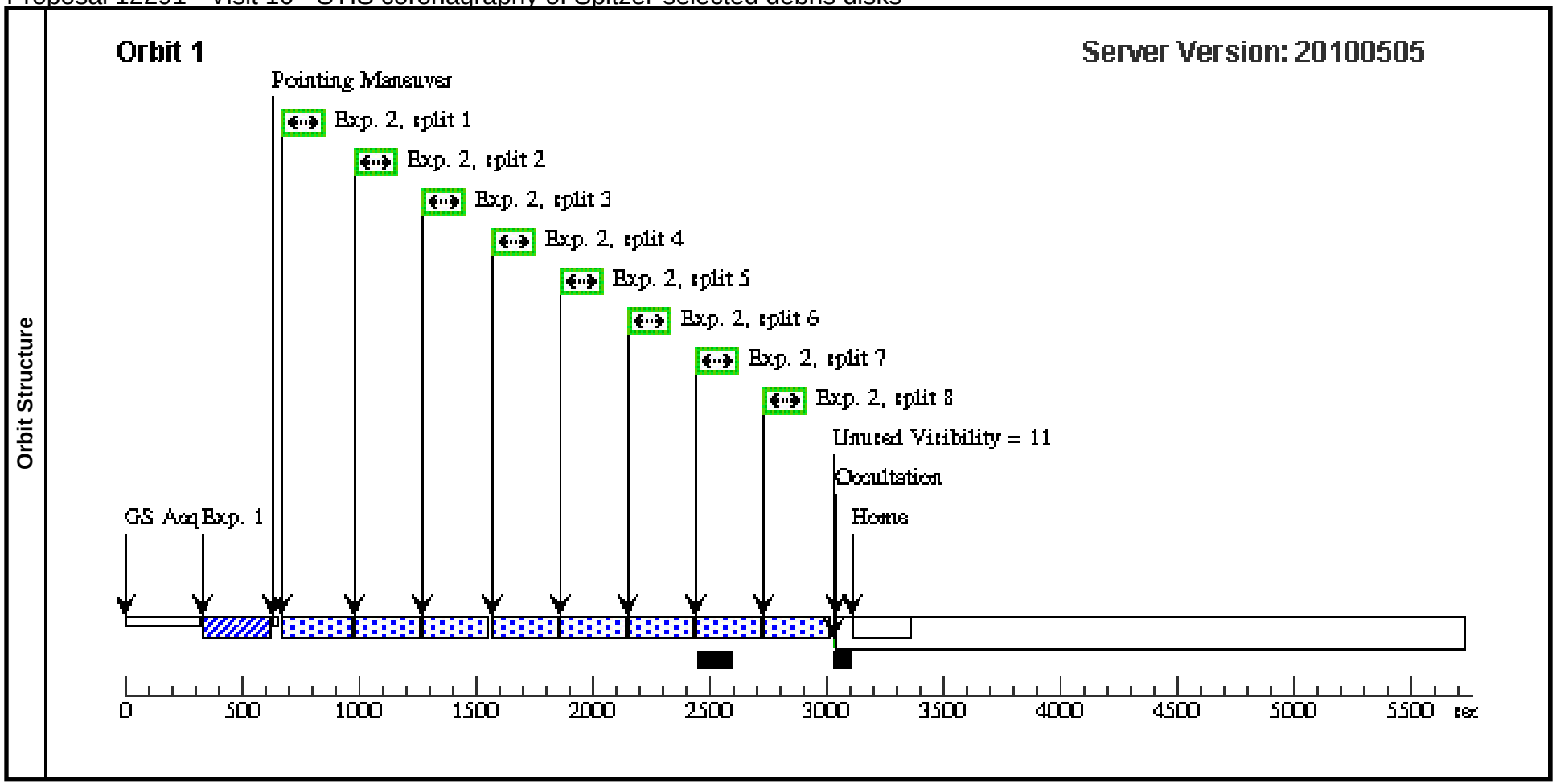
Comments: Use maximum roll offset possible (more than 30 deg if possible)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	HD-135599	RA: 15 15 59.1670 (228.9965292d) Dec: +00 47 46.91 (.79636d) Equinox: J2000	Proper Motion RA: 0.0115s/yr Proper Motion Dec: -0.137"/yr Parallax: 0.06419" Epoch of Position: 2000	V=6.931	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(5) HD-135599	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(5) HD-135599	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			1980 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
								[==>(Split 8)]	


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 11
Occultation
GS Acq
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 11, implementation Sat Jul 10 07:06:43 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

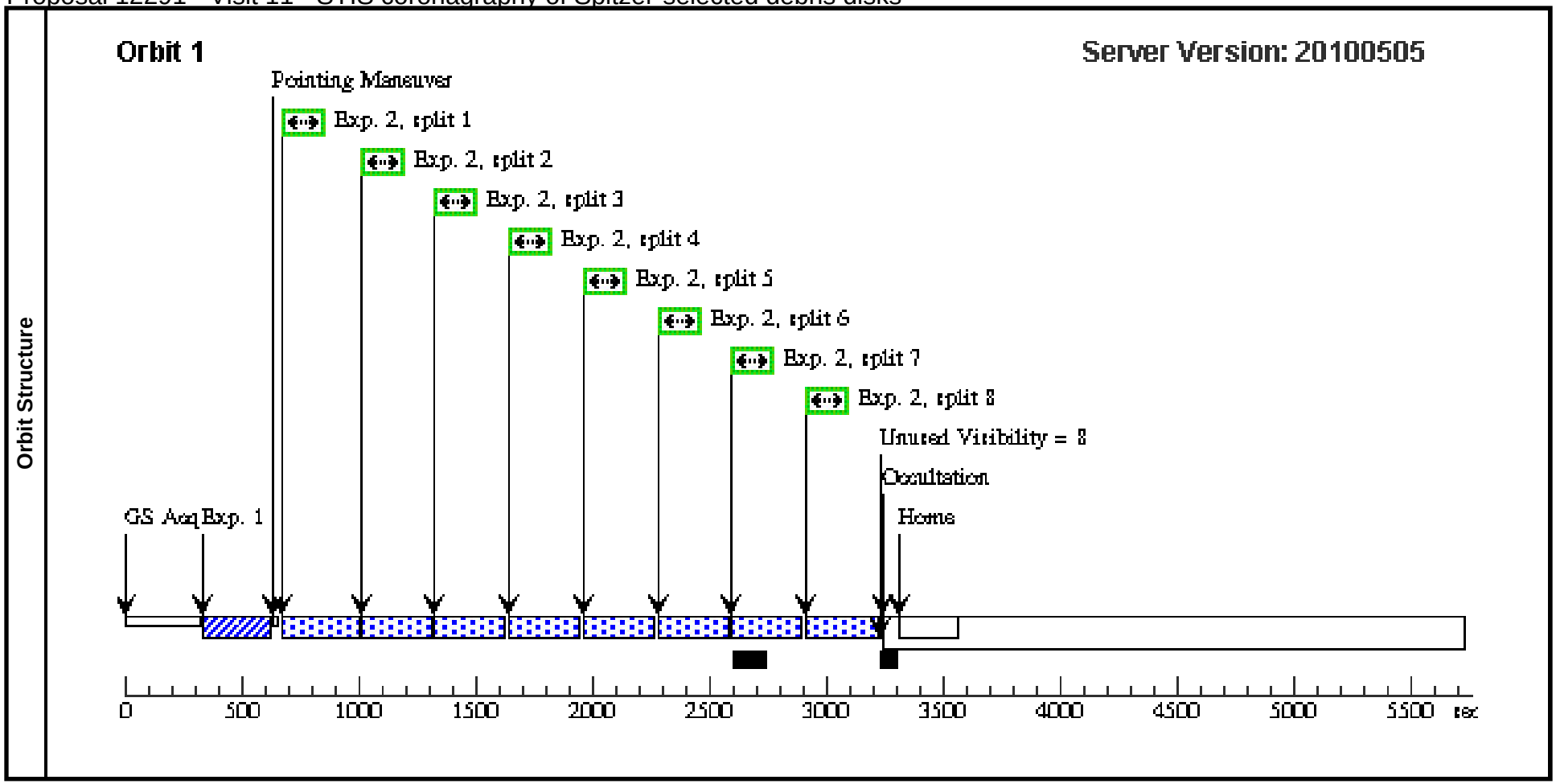
Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	HD-145229	RA: 16 09 26.6280 (242.3609500d) Dec: +11 34 28.05 (11.57446d) Equinox: J2000	Proper Motion RA: -0.0066s/yr Proper Motion Dec: 0.097"/yr Parallax: 0.0329" Epoch of Position: 2000	V=7.46	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(6) HD-145229	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(6) HD-145229	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			2180 Secs	
								[==>(Split 1)] *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 8
Occultation
GS Acq
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 12, implementation Sat Jul 10 07:06:43 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: ORIENT 28D TO 30D FROM 11; AFTER 11 BY 0.8 Orbits TO 1.2 Orbits

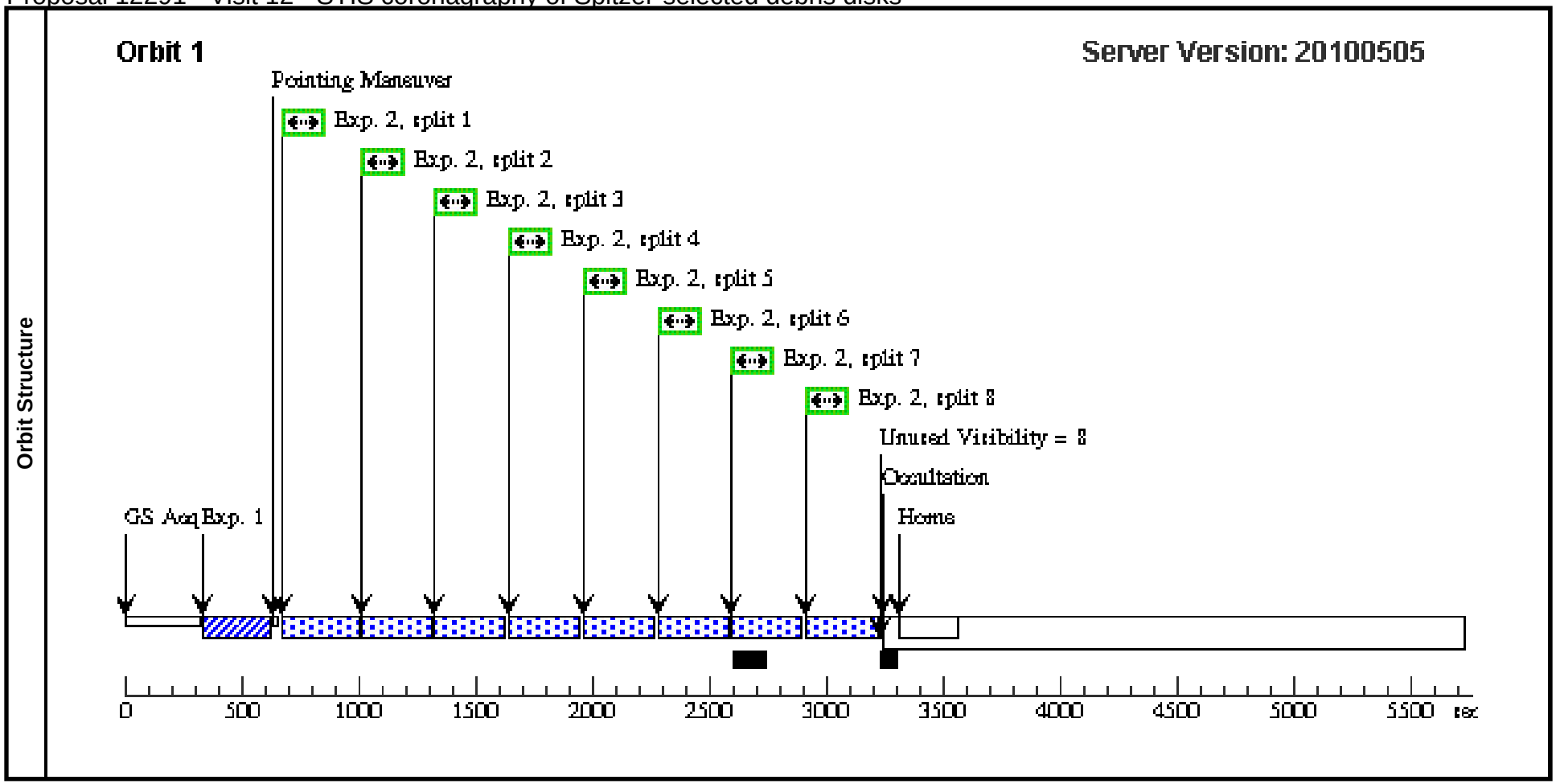
Comments: Use maximum roll offset possible (more than 30 deg if possible)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	HD-145229	RA: 16 09 26.6280 (242.3609500d) Dec: +11 34 28.05 (11.57446d) Equinox: J2000	Proper Motion RA: -0.0066s/yr Proper Motion Dec: 0.097"/yr Parallax: 0.0329" Epoch of Position: 2000	V=7.46	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(6) HD-145229	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(6) HD-145229	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			2180 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
								[==>(Split 8)]	


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 8
Occultation
GS Acq
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 13, implementation Sat Jul 10 07:06:43 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

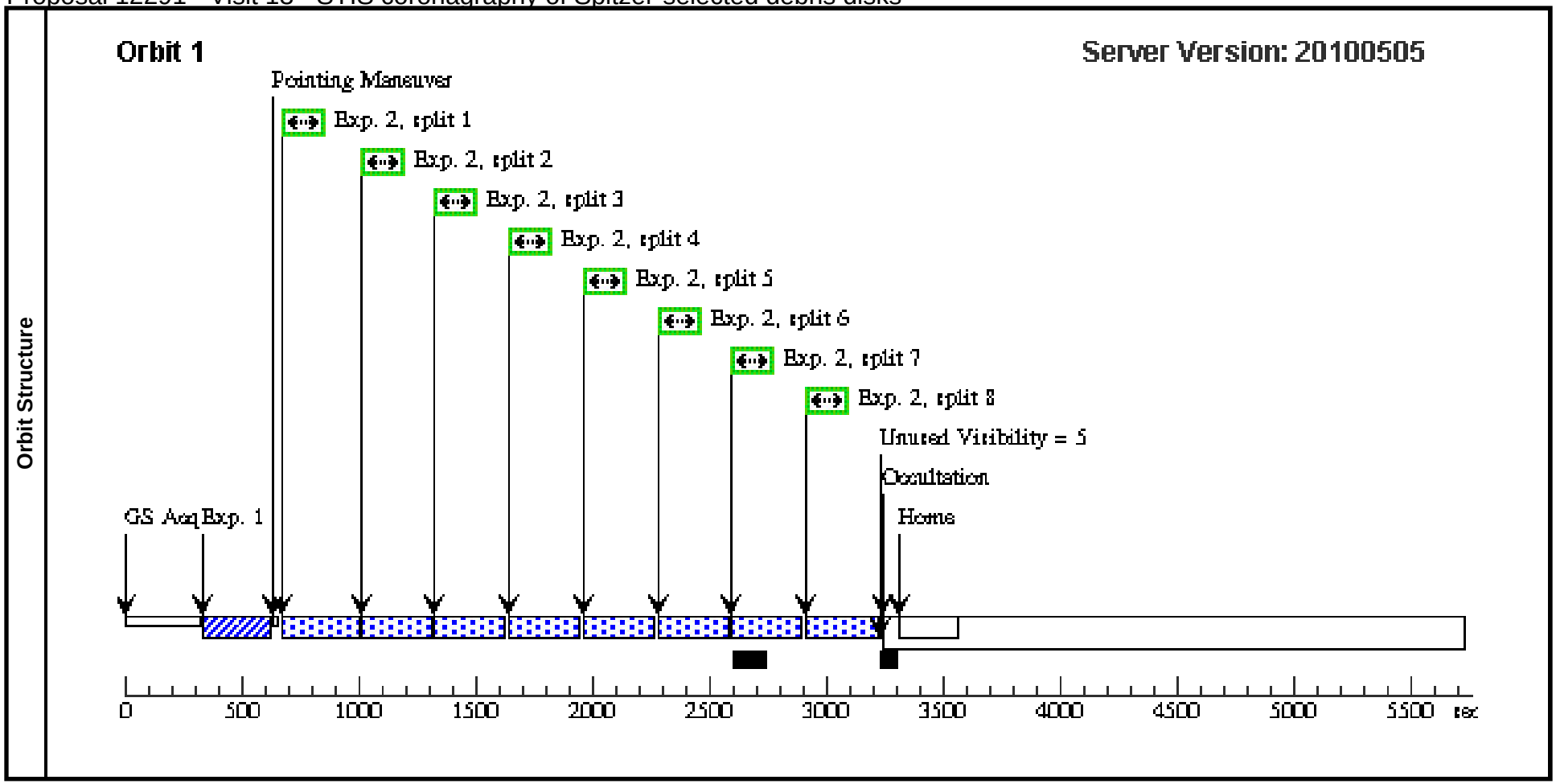
Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	HD-201219	RA: 21 07 56.5210 (316.9855042d) Dec: +07 25 58.59 (7.43294d) Equinox: J2000	Proper Motion RA: 0.0126s/yr Proper Motion Dec: -0.013"/yr Parallax: 0.02786" Epoch of Position: 2000	V=7.998	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(7) HD-201219	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(7) HD-201219	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			2180 Secs	
								[==>(Split 1)] *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 5
Occultation
GS Acq
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 14, implementation Sat Jul 10 07:06:44 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: ORIENT 28D TO 30D FROM 13; AFTER 13 BY 0.8 Orbits TO 1.2 Orbits

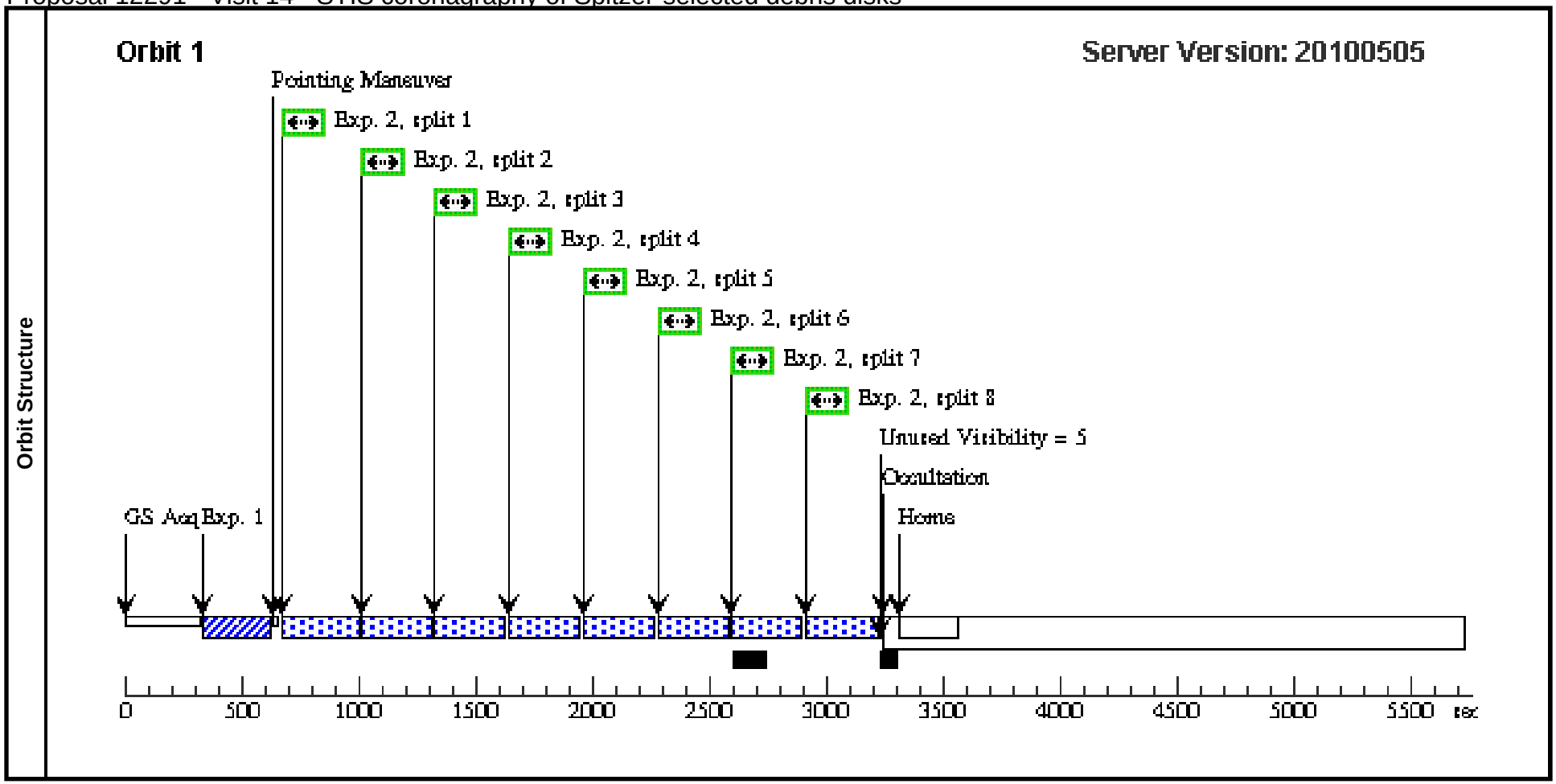
Comments: Use maximum roll offset possible (more than 30 deg if possible)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	HD-201219	RA: 21 07 56.5210 (316.9855042d) Dec: +07 25 58.59 (7.43294d) Equinox: J2000	Proper Motion RA: 0.0126s/yr Proper Motion Dec: -0.013"/yr Parallax: 0.02786" Epoch of Position: 2000	V=7.998	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(7) HD-201219	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(7) HD-201219	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			2180 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
								[==>(Split 8)]	


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 5
Occultation
GS Acq
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 15, implementation Sat Jul 10 07:06:44 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

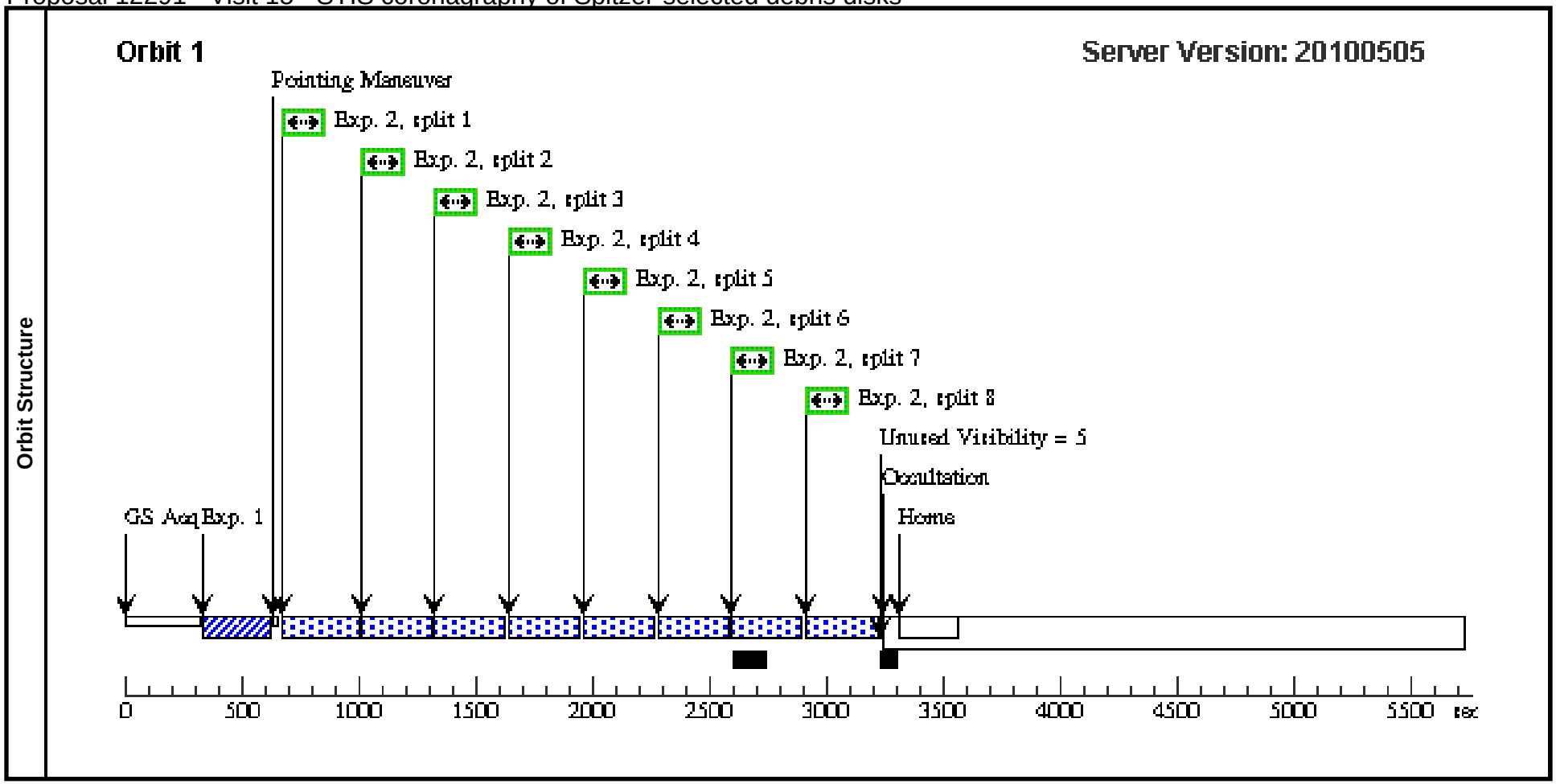
Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	HD-187897	RA: 19 52 9.3860 (298.0391083d) Dec: +07 27 36.14 (7.46004d) Equinox: J2000	Proper Motion RA: 0.0092s/yr Proper Motion Dec: 0.074"/yr Parallax: 0.02991" Epoch of Position: 2000	V=7.143	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(8) HD-187897	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(8) HD-187897	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			2180 Secs	
								[==>(Split 1)] *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 5
Occultation
GS Acq
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 16, implementation Sat Jul 10 07:06:44 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: ORIENT 28D TO 30D FROM 15; AFTER 15 BY 0.8 Orbits TO 1.2 Orbits

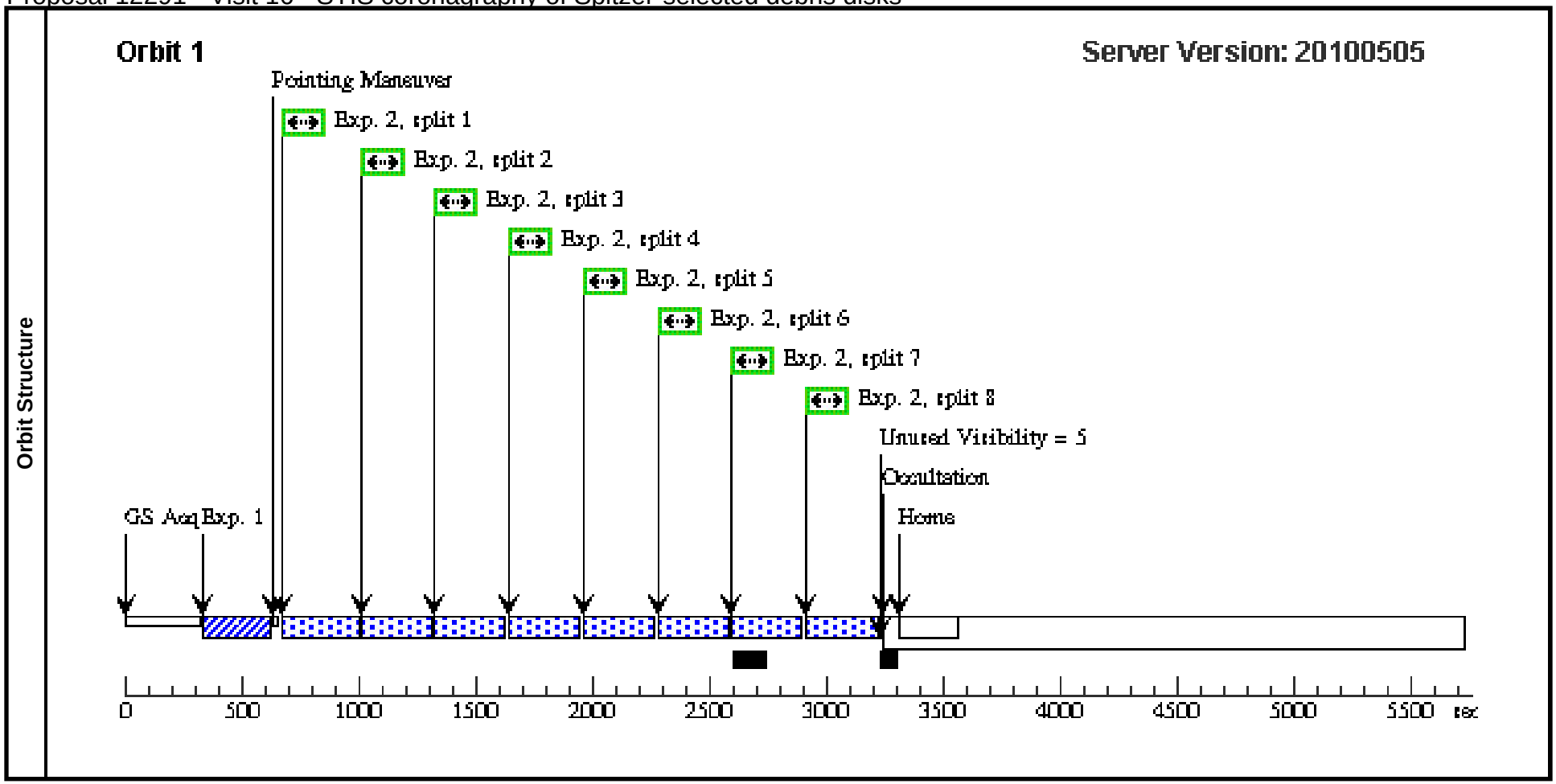
Comments: Use maximum roll offset possible (more than 30 deg if possible)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	HD-187897	RA: 19 52 9.3860 (298.0391083d) Dec: +07 27 36.14 (7.46004d) Equinox: J2000	Proper Motion RA: 0.0092s/yr Proper Motion Dec: 0.074"/yr Parallax: 0.02991" Epoch of Position: 2000	V=7.143	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(8) HD-187897	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(8) HD-187897	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			2180 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
								[==>(Split 8)]	


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 5
Occultation
GS Acq
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 17, implementation Sat Jul 10 07:06:45 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

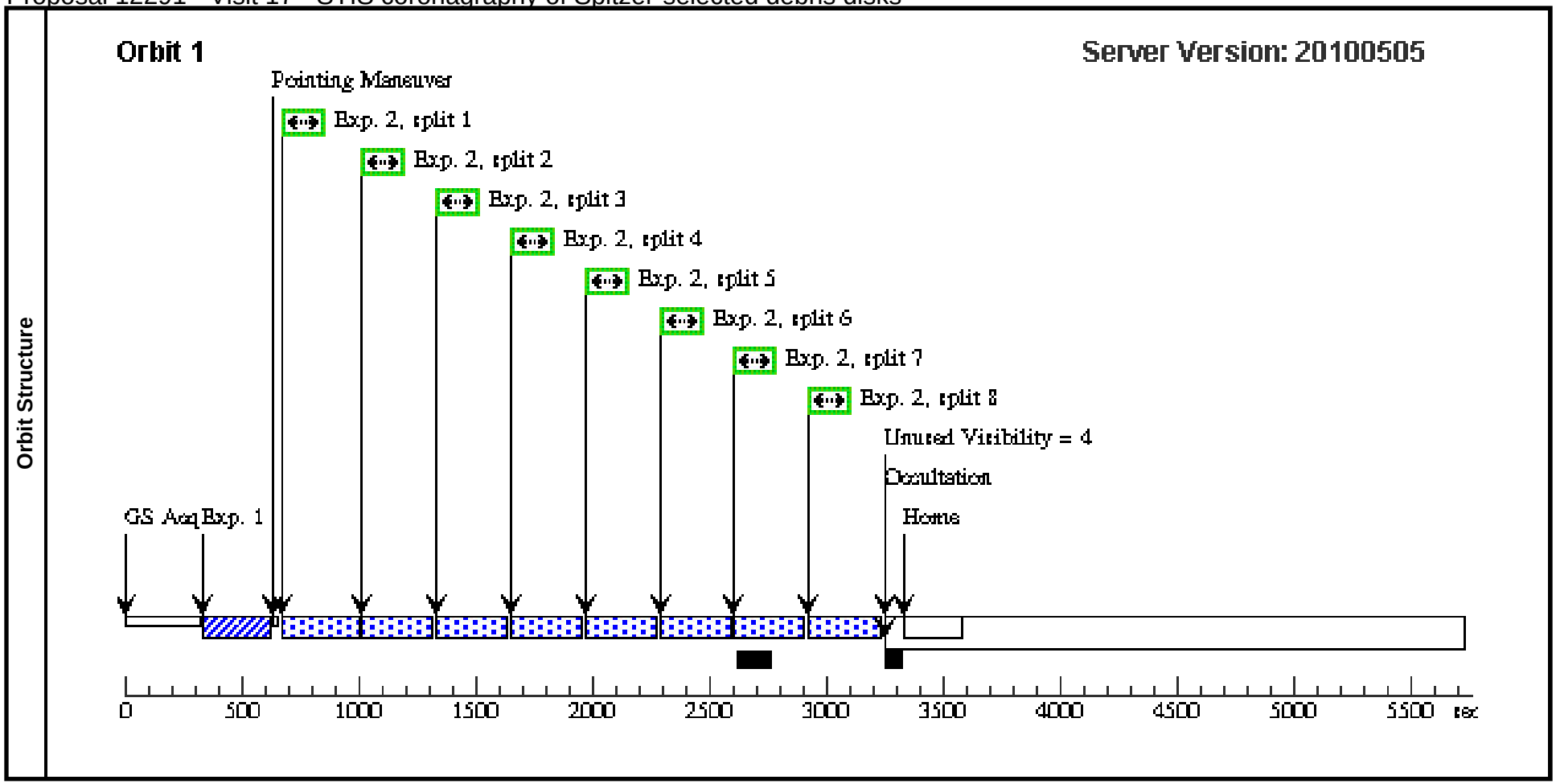
Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(9)	HD-45184	RA: 06 24 43.8800 (96.1828333d) Dec: -28 46 48.40 (-28.78011d) Equinox: J2000	Proper Motion RA: -0.0126s/yr Proper Motion Dec: -0.118"/yr Parallax: 0.04538" Epoch of Position: 2000	V=6.37	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(9) HD-45184	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(9) HD-45184	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			2200 Secs	
								[==>(Split 1)] *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 4
Occultation
GS Acq
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 18, implementation Sat Jul 10 07:06:45 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: ORIENT 28D TO 30D FROM 17; AFTER 17 BY 0.8 Orbits TO 1.2 Orbits

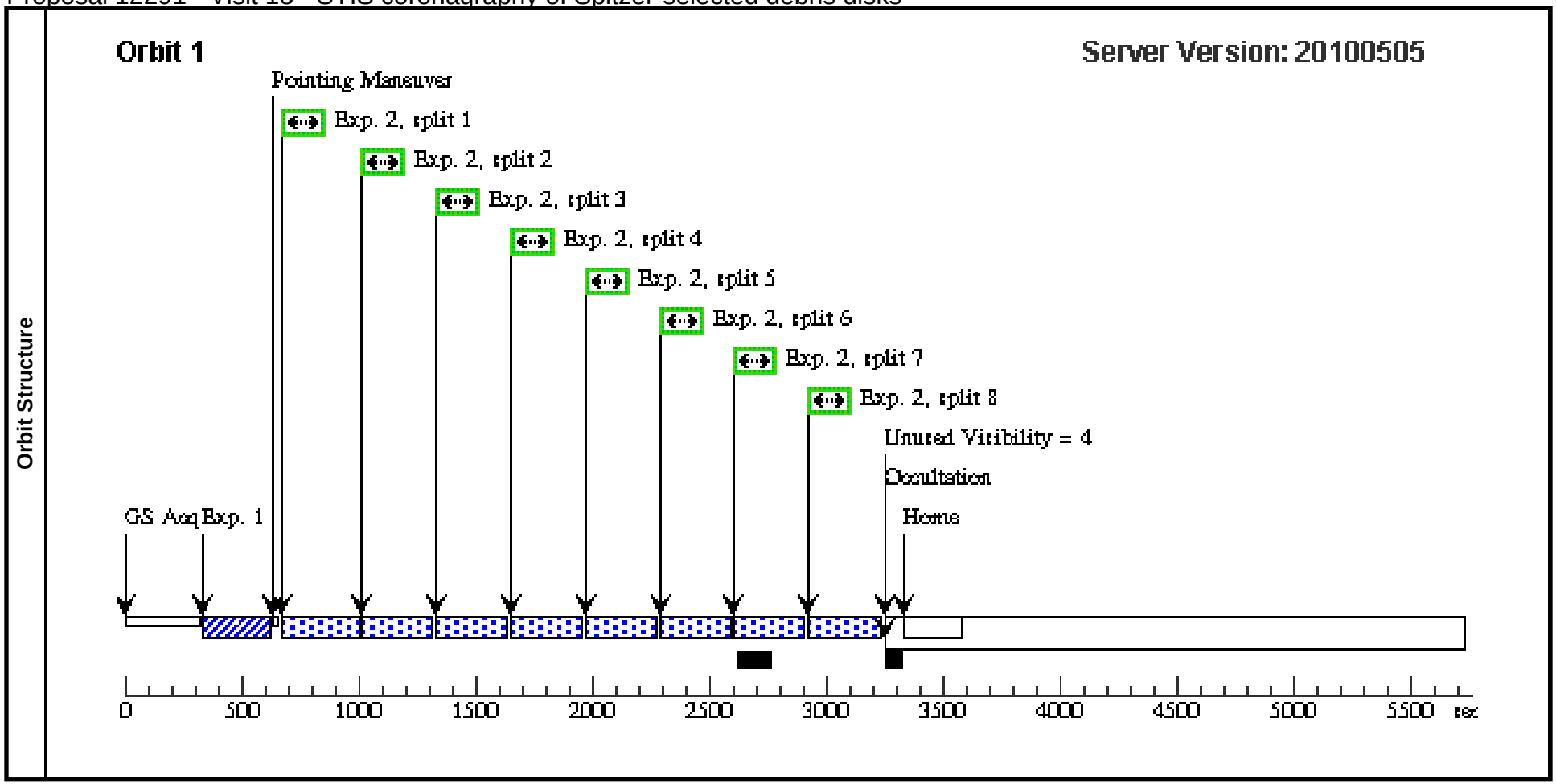
Comments: Use maximum roll offset possible (more than 30 deg if possible)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(9)	HD-45184	RA: 06 24 43.8800 (96.1828333d) Dec: -28 46 48.40 (-28.78011d) Equinox: J2000	Proper Motion RA: -0.0126s/yr Proper Motion Dec: -0.118"/yr Parallax: 0.04538" Epoch of Position: 2000	V=6.37	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(9) HD-45184	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(9) HD-45184	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			2200 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
								[==>(Split 8)]	


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 4
Occultation
GS Acq
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 19, implementation Sat Jul 10 07:06:46 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

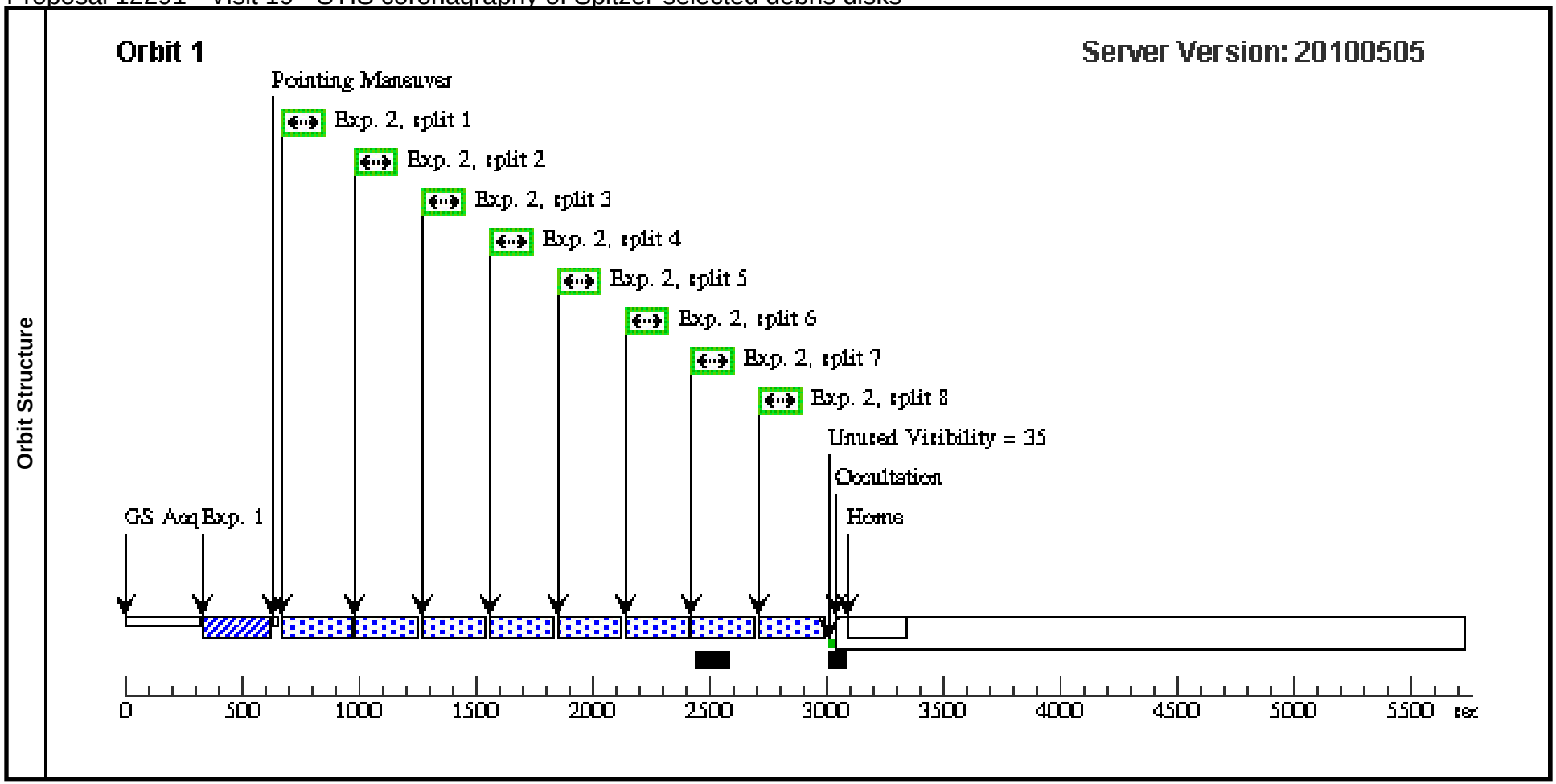
Special Requirements: SCHED 80%; ORIENT 9D TO 13 D

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(10)	HD-38858	RA: 05 48 34.9410 (87.1455875d) Dec: -04 05 40.73 (-4.09465d) Equinox: J2000	Proper Motion RA: 0.0041s/yr Proper Motion Dec: -0.225"/yr Parallax: 0.06425" Epoch of Position: 2000	V=5.97	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(10) HD-38858	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(10) HD-38858	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			1960 Secs	
								[==>(Split 1)] *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 35
Occultation
GS Acq
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12291, Visit 20, implementation Sat Jul 10 07:06:46 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: SCHED 80%; ORIENT 28D TO 30D FROM 19; AFTER 19 BY 0.8 Orbits TO 1.2 Orbits

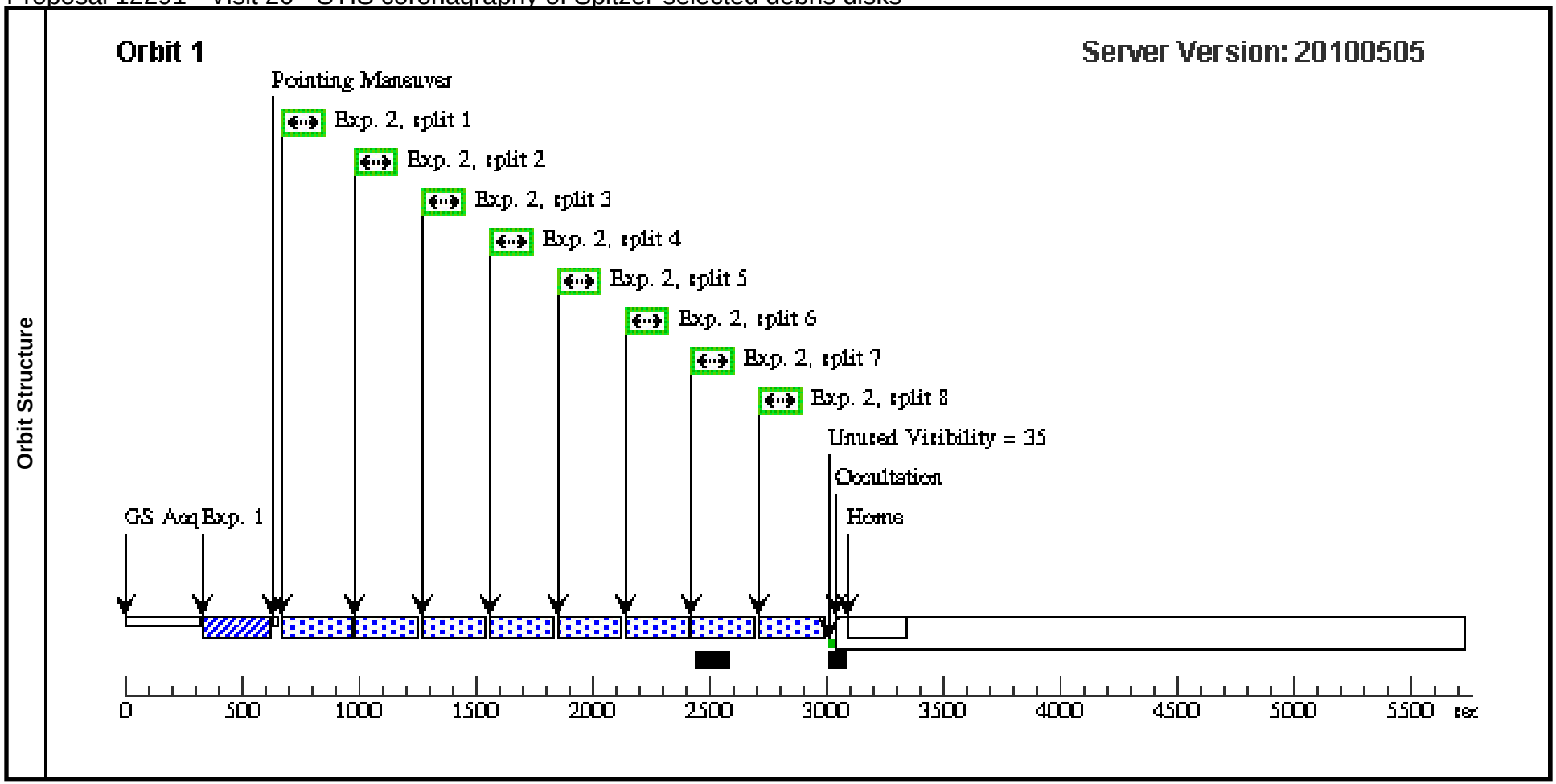
Comments: Use maximum roll offset possible (more than 30 deg if possible)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(10)	HD-38858	RA: 05 48 34.9410 (87.1455875d) Dec: -04 05 40.73 (-4.09465d) Equinox: J2000	Proper Motion RA: 0.0041s/yr Proper Motion Dec: -0.225"/yr Parallax: 0.06425" Epoch of Position: 2000	V=5.97	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(10) HD-38858	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
								[==>]	***[1]***
2		(10) HD-38858	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	CR-SPLIT=8			1960 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
								[==>(Split 8)]	


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Exp. 2, split 8
Unused Visibility = 35
Occultation
GS Acq
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec