16202 - Revealing Structure in the HD 53143 Debris Disk

Cycle: 28, 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-53143	STIS/CCD	1	12-Oct-2021 16:00:33.0	yes
02	(1) HD-53143	STIS/CCD	1	12-Oct-2021 16:00:34.0	yes
03	(2) HD-58895-CALIB	STIS/CCD	1	12-Oct-2021 16:00:35.0	yes
04	(1) HD-53143	STIS/CCD	1	12-Oct-2021 16:00:35.0	yes
05	(1) HD-53143	STIS/CCD	1	12-Oct-2021 16:00:36.0	yes
06	(1) HD-53143	STIS/CCD	1	12-Oct-2021 16:00:37.0	yes
07	(1) HD-53143	STIS/CCD	1	12-Oct-2021 16:00:37.0	yes
08	(2) HD-58895-CALIB	STIS/CCD	1	12-Oct-2021 16:00:38.0	yes
09	(1) HD-53143	STIS/CCD	1	12-Oct-2021 16:00:39.0	yes
10	(1) HD-53143	STIS/CCD	1	12-Oct-2021 16:00:40.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
11	(1) HD-53143	STIS/CCD	1	12-Oct-2021 16:00:40.0	yes
12	(1) HD-53143	STIS/CCD	1	12-Oct-2021 16:00:41.0	yes
13	(2) HD-58895-CALIB	STIS/CCD	1	12-Oct-2021 16:00:42.0	yes
14	(1) HD-53143	STIS/CCD	1	12-Oct-2021 16:00:43.0	yes
15	(1) HD-53143	STIS/CCD	1	12-Oct-2021 16:00:43.0	yes

15 Total Orbits Used

ABSTRACT

The solar analog star HD 53143 hosts a tenuous disk of cold material analogous to a more massive version of our solar system's Kuiper Belt. Puzzlingly, unlike every other debris disk observed thus far, existing low-S/N visible wavelength images of HD 53143 show that the micron-sized dust around HD 53143 does not resemble a circumstellar ring--rather, it looks like two isolated clumps of material. New ALMA observations show that the underlying distribution of larger planetesimals is indeed ring-like, but very eccentric and mis-aligned with the visible wavelength clumps. Further, the ALMA observations reveal 5-sigma excesses just interior to the circumstellar ring, suggesting structure in the planetesimal population that may be connected to the visible wavelength clumps. We propose high-S/N coronagraphic imaging of HD 53143 using HST STIS to reveal the peculiar nature of this unique debris disk and search for signs of planet-induced disk structure or collisional activity. In addition to revealing the structure of the disk, these high-S/N images will allow us to measure the optical properties of the debris disk dust to constrain its composition, size distribution, and provide critical measurements of debris disk properties that will inform future exoplanet-imaging missions.

OBSERVING DESCRIPTION

----- Summary -----

We will be observing one science target, HD 53143, and one PSF reference star, HD 58895, using the STIS WedgeA1.8 coronagraphic mask. Our goal is to maximize the SNR of two "clumps" of circumstellar debris around HD 53143, which are at a PA of 145 deg E of N and 325 deg E of N, while obtaining decent roll angle coverage. We desire to maximize exposure time on the clumps by minimizing coronagraphic occultation of the clumps. This requires an absolute orientation of the WedgeA1.8 mask as well as a small total roll coverage. Total roll angle coverage is desired to be ~16 deg, with the WedgeA1.8 mask oriented perpendicular to the clumps. This observing program requires a total of 15 orbits.

----- Targets -----
Science Target:
HD 53143
G9V star, V=6.8, B-V=0.8

PSF reference
HD 58895
G3IV star, V=6.5, B-V=0.7

Previous program GO 12228 adopted HD 59780 (B-V=0.95) as the reference star, but this may have a color mis-match that resulted in unsubtracted PSF residuals. Our adopted star above is a better color match (and the mis-match that exists has the opposite sign compared to HD 59780) and is only at 6 deg separation.

We note that an alternative PSF reference star is HD 53706, which has an *excellent* color and magnitude match. However, this star is at 18 deg separation and has a 1-mag brighter (V=5.2) companion at 20".

----- Schedulability & Timing -----
We split our 15 orbits into 3 groups of 5 orbits to improve schedulability. Each group consists of a non-interruptible sequence of 5 visits with the first 2 visits on the science target, the middle visit on the PSF reference star, and the last two on the science target. All 5 visits within a group are linked by a "Timing/After Visit" requirement to sequence observations.

----- Orientation -----
We require that the WedgeA mask be placed roughly perpendicular to the celestial PA of the "clumps" we are observing. Given the clumps are at a PA of 145 and 325 deg E of N, this means an orientaton of 100 or 280 deg (this was determined by using Aladin to visualize the 52x2 STIS slit aperture, which is oriented parallel to Wedge A). Given our ~16 deg spread in roll angles, we therefore require the first visit to have an absolute orientation of 100+16/2=108 deg or 280+16/2=288 deg. We allow for +/- 1 deg about this angle, such that allowable absolute orientations are 107-

109 deg or 287-289 deg.

Every subsequent science target visit is decreased in orientation by 1.5 deg, all benchmarked to the first visit.

There are no orientation constraints on the PSF reference star.

----- Exposure Times -----

Target Acq: times were calculated using the STIS Exposure Time Calculator assuming a K0V star with V mag = 6.8, suitable for both science target and PSF reference star, and reflect the time to achieve an SNR>=100.

Science Exposures: We used the 300 second GO12228 WedgeA1.0 observations of HD 53143 to estimate exposure times. Full well with gain = 4 is 34,000 counts. We aim for exposure times that achieve <80% of full well, or <27,000 counts to avoid saturation issues. Interior to 1", the GO 12228 observations are saturated. We fit the total counts vs separation beyond 1", where all pixel counts were <27,000, using a 2nd order polynomial and extrapolated it inward to a separation of 0.9" (at the edge of our proposed WedgeA1.8 observations) to find an expected total counts of 34,000. Scaling this down to 27,000 would require shortening the exposure time from 300 s to 240 s to avoid all saturation in our exposures. In the end, we deemed the extra read noise not worth pushing the useful IWA from 1" to 0.9"--1" should be more than sufficient to test whether the azimuthally symmetric halo observed in GO12228 is real. Thus, we stick with 300 sec subexposures achieved with 2400 s exposures and CR-SPLIT=8.

We choose NAXIS2 = 427 to achieve the same large FOV as GO12228 (+/-11"). Decreasing this to 310 would cover +/-8" and be adequate for imaging the HD 53143 clumps. However, the small increase in useful science time is not worth losing the potential discovery space of a faint extended halo given the depth of our observations.

To obtain equal well depth with the reference star (V=6.581), we must reduce exposure times by a factor of 10^(-0.4*(6.803-6.581)) = 0.815. Thus we require 245 sec sub-exposures for the PSF reference star. To maximize use of the orbit while achieving this sub-exposure, we split PSF reference expoures into 2 exposures.

Visit

Proposal 16202, Science Target Set 1/Roll 1 (01), implementation Tue Oct 12 20:00:44 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; ORIENT 107D TO 109 D; ORIENT 287D TO 289 D

Comments: HD 53143 (V=6.81, B-V = +0.80).

First of three groups of visits, each containing four visits of HD 53143 at different relative orientations with one PSF calibration observation interleaved.

The five visits within each group must be executed sequentially in contiguous orbits interrupted only for Earth occultation.

Orientation: We wish to schedule this visit at an absolute orientation of 63-65 or 243-245 degrees.

Relative Timing: The next visit should execute immediately following this visit, uninterrupted.

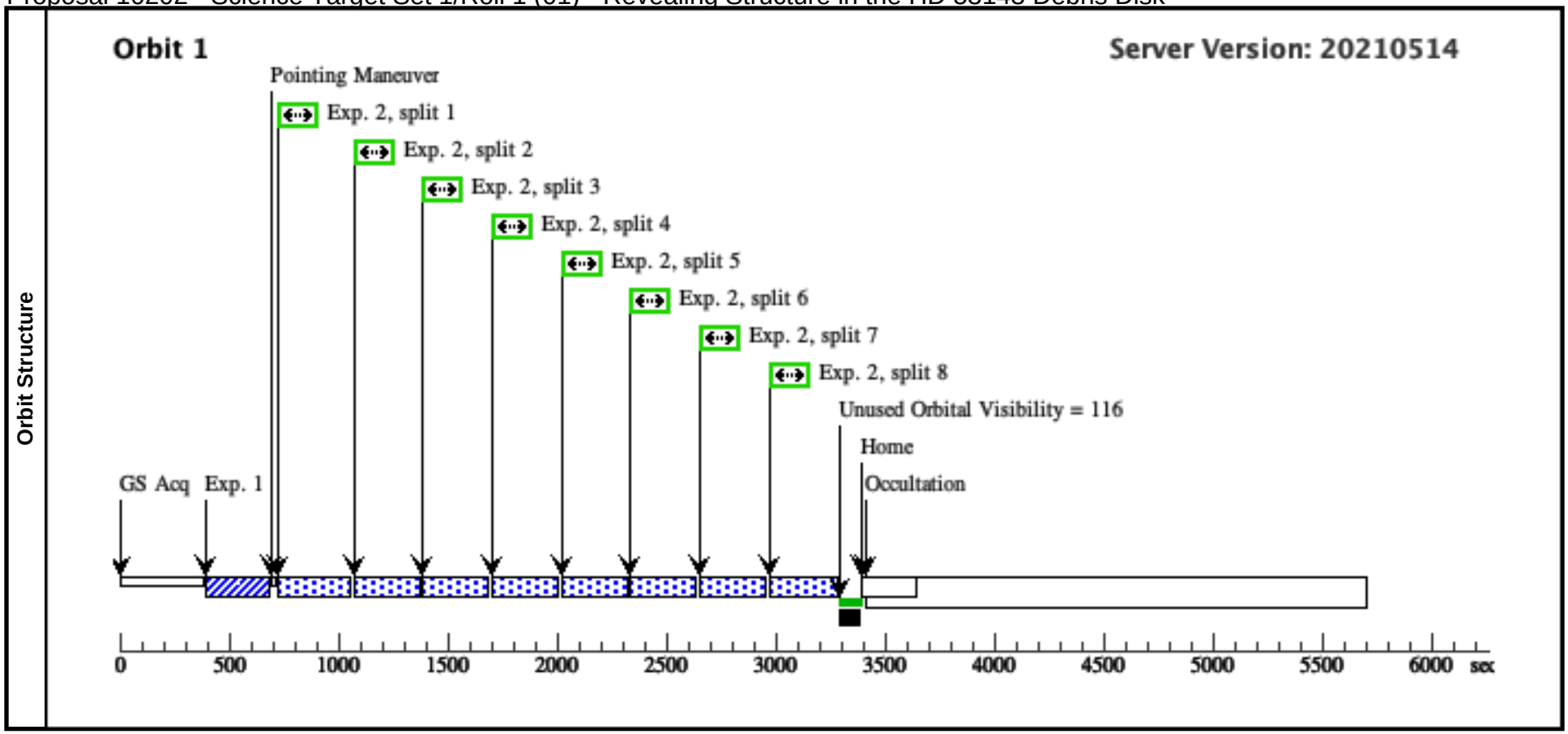
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-53143	RA: 06 59 59.6555 (104.9985646d) Dec: -61 20 10.25 (-61.33618d) Equinox: J2000	Proper Motion RA: -161.890 mas/yr Proper Motion Dec: 264.872 mas/yr Parallax: 0.0544655" Epoch of Position: 2000	V=6.803	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[CIRCUMSTELLAR MATTER, DISK, G V-IV]

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	HD53143_ACQ (STIS.ta.1450636)	(1) HD-53143	STIS/CCD, ACQ, F25ND3	MIRROR				0.2 Secs (0.2 Secs) *[==>]*	 ***[1]***
Comments: SNR = 100, V = 6.81, sp = G9V, Exptime rounded to nearest 0.1 second									
2	HD53143_ACCUM	(1) HD-53143	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	SIZEAXIS2=427; CR-SPLIT=8; GAIN=4			2300 Secs (2300 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20210514
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 Orbital Visibility = 116
Home
Occultation
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16202, Science Target Set 1/Roll 2 (02), implementation Tue Oct 12 20:00:44 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; ORIENT -1.5D TO -1.5D FROM 01; AFTER 01 BY 0.5 Orbits TO 1.5 Orbits

Comments: HD 53143 (V=6.81, B-V = +0.80).

First of three sets of visits, each containing four visits of HD 53143 at different relative orientations with one PSF calibration observation interleaved.

The five visits within each set must be executed sequentially in contiguous orbits interrupted only for Earth occultation.

Orientation: We wish to schedule this visit at -1.5 deg relative to visit 1.

Relative Timing: The next visit should execute immediately following this visit, uninterrupted.

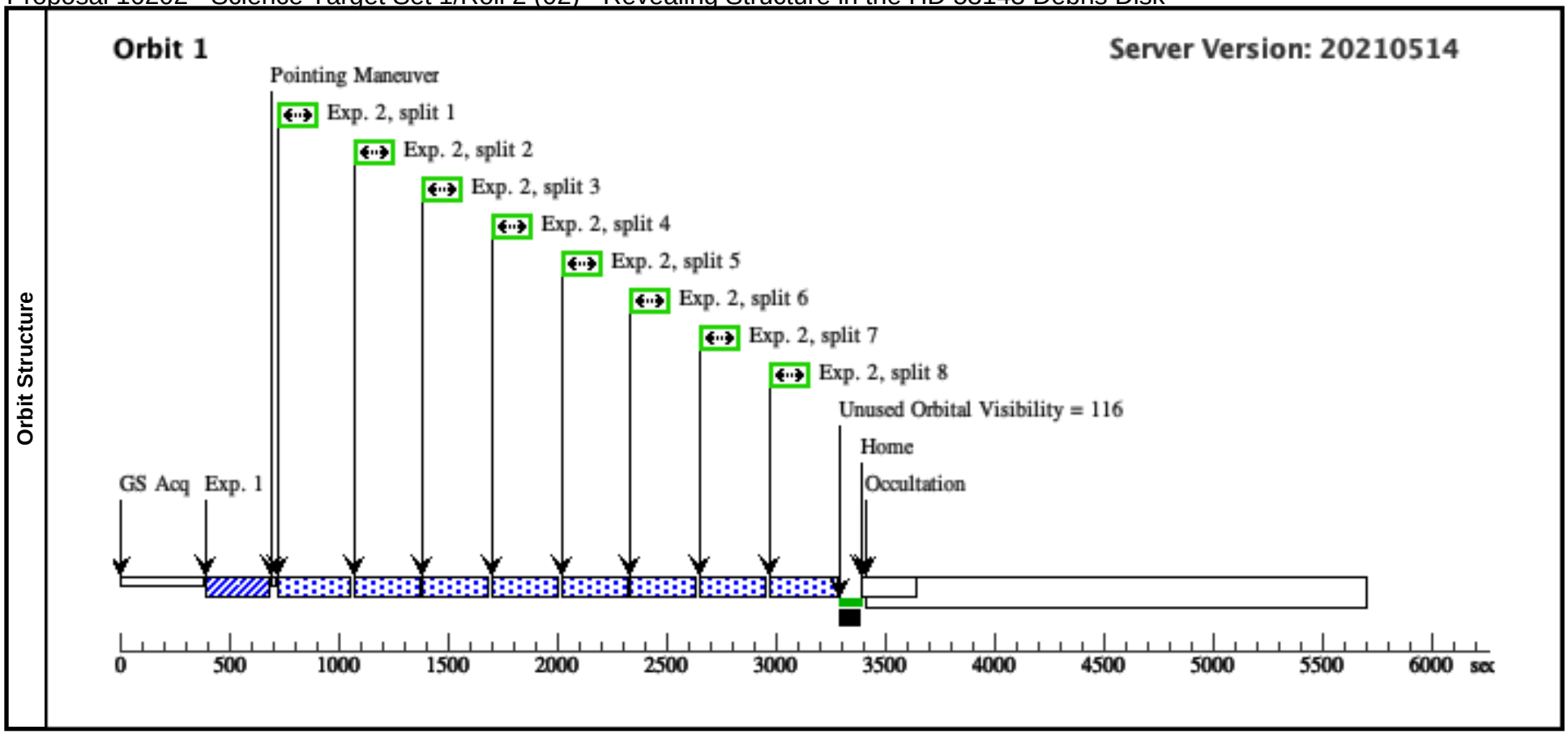
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-53143	RA: 06 59 59.6555 (104.9985646d) Dec: -61 20 10.25 (-61.33618d) Equinox: J2000	Proper Motion RA: -161.890 mas/yr Proper Motion Dec: 264.872 mas/yr Parallax: 0.0544655" Epoch of Position: 2000	V=6.803	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[CIRCUMSTELLAR MATTER, DISK, G V-IV]

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	HD53143_ACQ (STIS.ta.1450636)	(1) HD-53143	STIS/CCD, ACQ, F25ND3	MIRROR				0.2 Secs (0.2 Secs) *[==>]*	***[1]***
Comments: SNR = 100, V = 6.81, sp = G9V, Exptime rounded to nearest 0.1 second									
2	HD53143_ACCUM	(1) HD-53143	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	SIZEAXIS2=427; CR-SPLIT=8; GAIN=4			2300 Secs (2300 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20210514
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 Orbital Visibility = 116
Home
Occultation
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16202, PSF Reference Set 1 (03), implementation Tue Oct 12 20:00:44 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; AFTER 02 BY 0.5 Orbits TO 1.5 Orbits

Comments: HD 53706 (V=6.8, B-V = +0.80).

First of three sets of visits, each containing four visits of HD 53143 at different relative orientations with one PSF calibration observation interleaved.

The five visits within each set must be executed sequentially in contiguous orbits interrupted only for Earth occultation.

Orientation: No constraints

Relative Timing: The next visit should execute immediately following this visit, uninterrupted.

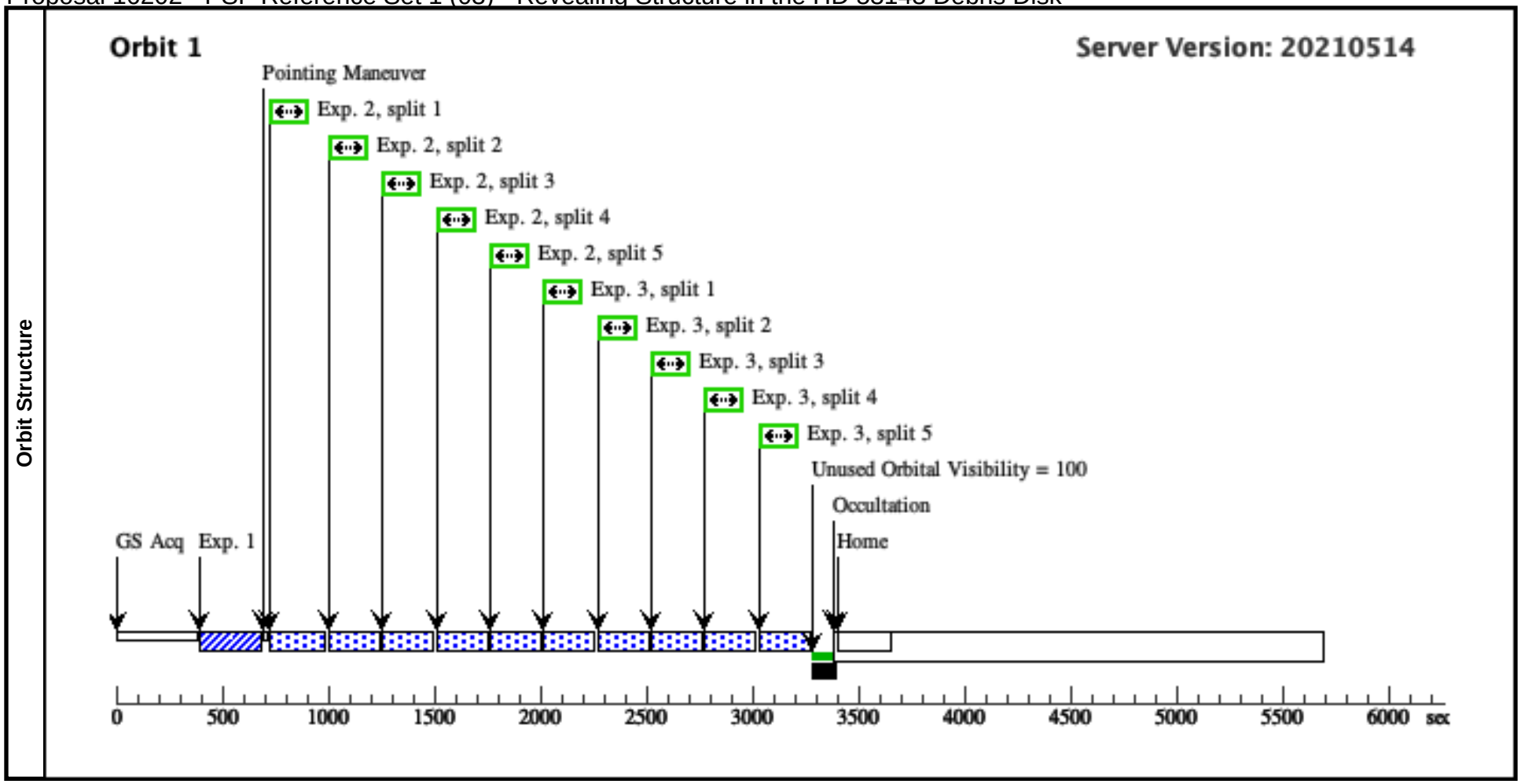
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	HD-58895-CALIB	RA: 07 24 9.3857 (111.0391071d) Dec: -58 29 31.01 (-58.49195d) Equinox: J2000	Proper Motion RA: -87.780 mas/yr Proper Motion Dec: 137.647 mas/yr Parallax: 0.0200302" Epoch of Position: 2000	V=6.581	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[G V-IV]

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	PSF-REF_ACQ (STIS.ta.1450636)	(2) HD-58895-CALIB	STIS/CCD, ACQ, F25ND3	MIRROR				0.2 Secs (0.2 Secs) *[==>]*	***[1]***
Comments: SNR = 100, V = 6.81, sp = G9V, Exptime rounded to nearest 0.1 second									
2	PSF-REF_ACCUM	(2) HD-58895-CALIB	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	SIZEAXIS2=427; CR-SPLIT=5; GAIN=4			1120 Secs (1120 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]*	***[1]***
3	PSF-REF_ACCUM	(2) HD-58895-CALIB	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	SIZEAXIS2=427; CR-SPLIT=5; GAIN=4			1120 Secs (1120 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20210514
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 3, split 1
Exp. 3, split 2
Exp. 3, split 3
Exp. 3, split 4
Exp. 3, split 5
Unused Orbital Visibility = 100
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16202, Science Target Set 1/Roll 3 (04), implementation Tue Oct 12 20:00:44 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; ORIENT -3D TO -3D FROM 01; AFTER 03 BY 0.5 Orbits TO 1.5 Orbits

Comments: HD 53143 (V=6.81, B-V = +0.80).

First of three sets of visits, each containing four visits of HD 53143 at different relative orientations with one PSF calibration observation interleaved.

The five visits within each set must be executed sequentially in contiguous orbits interrupted only for Earth occultation.

Orientation: We wish to schedule this visit at -3 deg relative to visit 1.

Relative Timing: The next visit should execute immediately following this visit, uninterrupted.

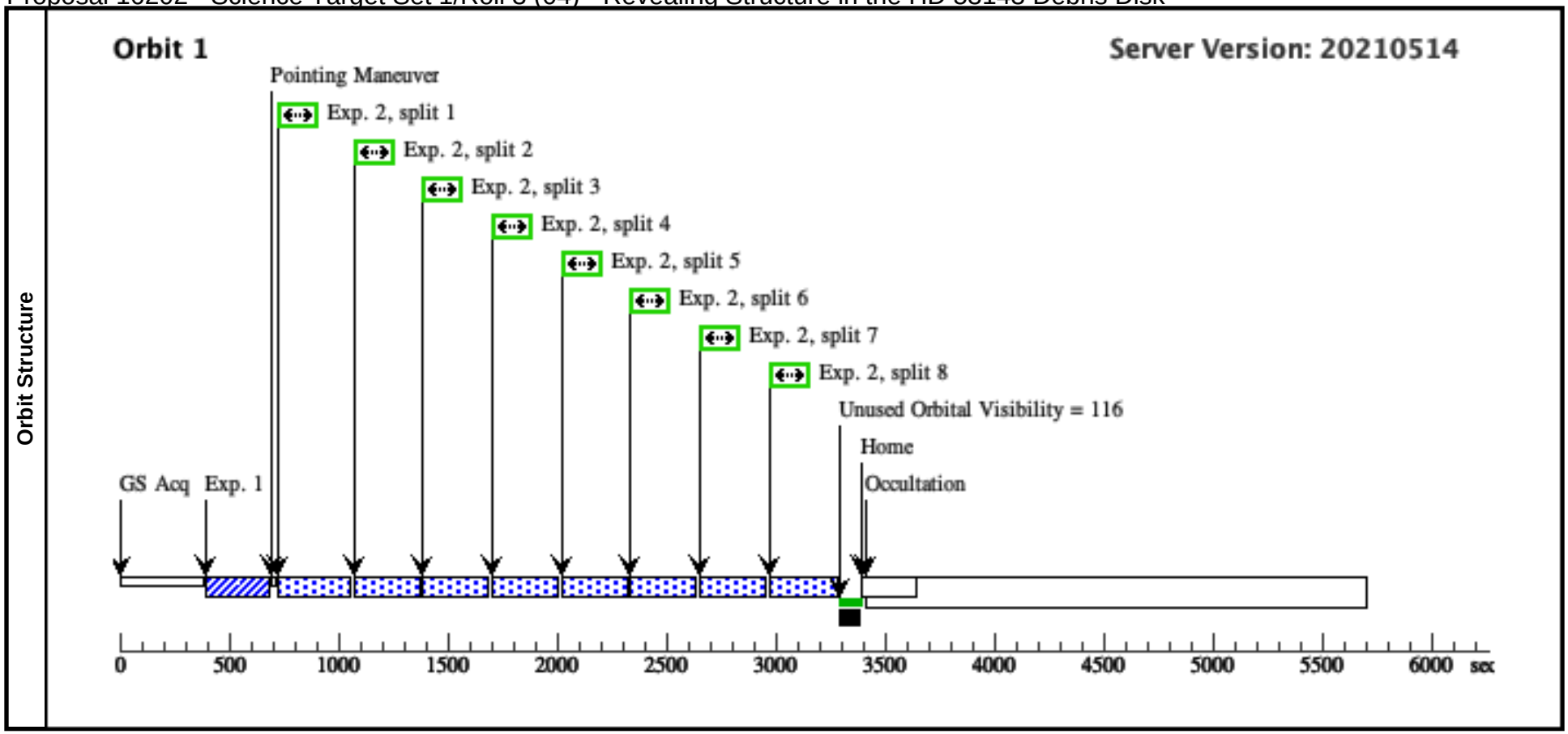
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-53143	RA: 06 59 59.6555 (104.9985646d) Dec: -61 20 10.25 (-61.33618d) Equinox: J2000	Proper Motion RA: -161.890 mas/yr Proper Motion Dec: 264.872 mas/yr Parallax: 0.0544655" Epoch of Position: 2000	V=6.803	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[CIRCUMSTELLAR MATTER, DISK, G V-IV]

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	HD53143_ACQ (STIS.ta.1450636)	(1) HD-53143	STIS/CCD, ACQ, F25ND3	MIRROR				0.2 Secs (0.2 Secs) *[==>]*	***[1]***
Comments: SNR = 100, V = 6.81, sp = G9V, Exptime rounded to nearest 0.1 second									
2	HD53143_ACCUM	(1) HD-53143	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	SIZEAXIS2=427; CR-SPLIT=8; GAIN=4			2300 Secs (2300 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20210514
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 Orbital Visibility = 116
Home
Occultation
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16202, Science Target Set 1/Roll 4 (05), implementation Tue Oct 12 20:00:44 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; ORIENT -4.5D TO -4.5D FROM 01; AFTER 04 BY 0.5 Orbits TO 1.5 Orbits

Comments: HD 53143 (V=6.81, B-V = +0.80).

First of three sets of visits, each containing four visits of HD 53143 at different relative orientations with one PSF calibration observation interleaved.

The five visits within each set must be executed sequentially in contiguous orbits interrupted only for Earth occultation.

Orientation: We wish to schedule this visit at -4.5 deg relative to visit 1.

Relative Timing: This visit should execute immediately following the previous, and marks the last in a 5-visit non-interruptible sequence.

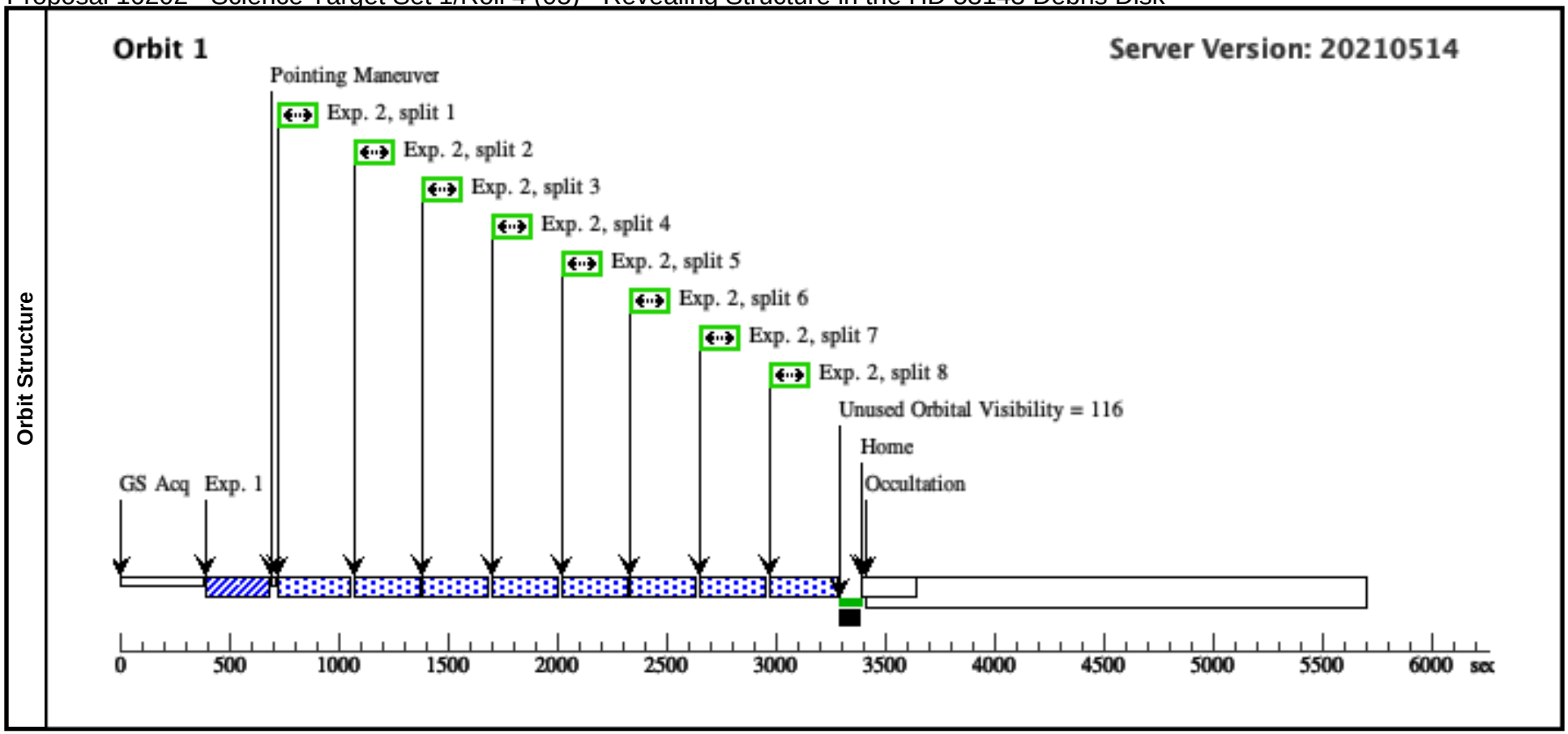
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-53143	RA: 06 59 59.6555 (104.9985646d) Dec: -61 20 10.25 (-61.33618d) Equinox: J2000	Proper Motion RA: -161.890 mas/yr Proper Motion Dec: 264.872 mas/yr Parallax: 0.0544655" Epoch of Position: 2000	V=6.803	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[CIRCUMSTELLAR MATTER, DISK, G V-IV]

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	HD53143_ACQ (STIS.ta.1450636)	(1) HD-53143	STIS/CCD, ACQ, F25ND3	MIRROR				0.2 Secs (0.2 Secs) *[==>]*	 ***[1]***
Comments: SNR = 100, V = 6.81, sp = G9V, Exptime rounded to nearest 0.1 second									
2	HD53143_ACCUM	(1) HD-53143	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	SIZEAXIS2=427; CR-SPLIT=8; GAIN=4			2300 Secs (2300 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20210514
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 Orbital Visibility = 116
Home
Occultation
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16202, Science Target Set 2/Roll 5 (06), scheduled Tue Oct 12 20:00:44 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; ORIENT -6D TO -6D FROM 01

Comments: HD 53143 (V=6.81, B-V = +0.80).

Second of three sets of visits, each containing four visits of HD 53143 at different relative orientations with one PSF calibration observation interleaved.

The five visits within each set must be executed sequentially in contiguous orbits interrupted only for Earth occultation.

Orientation: We wish to schedule this visit at -6 deg relative to visit 1.

Relative Timing: The next visit should execute immediately following this visit, uninterrupted.

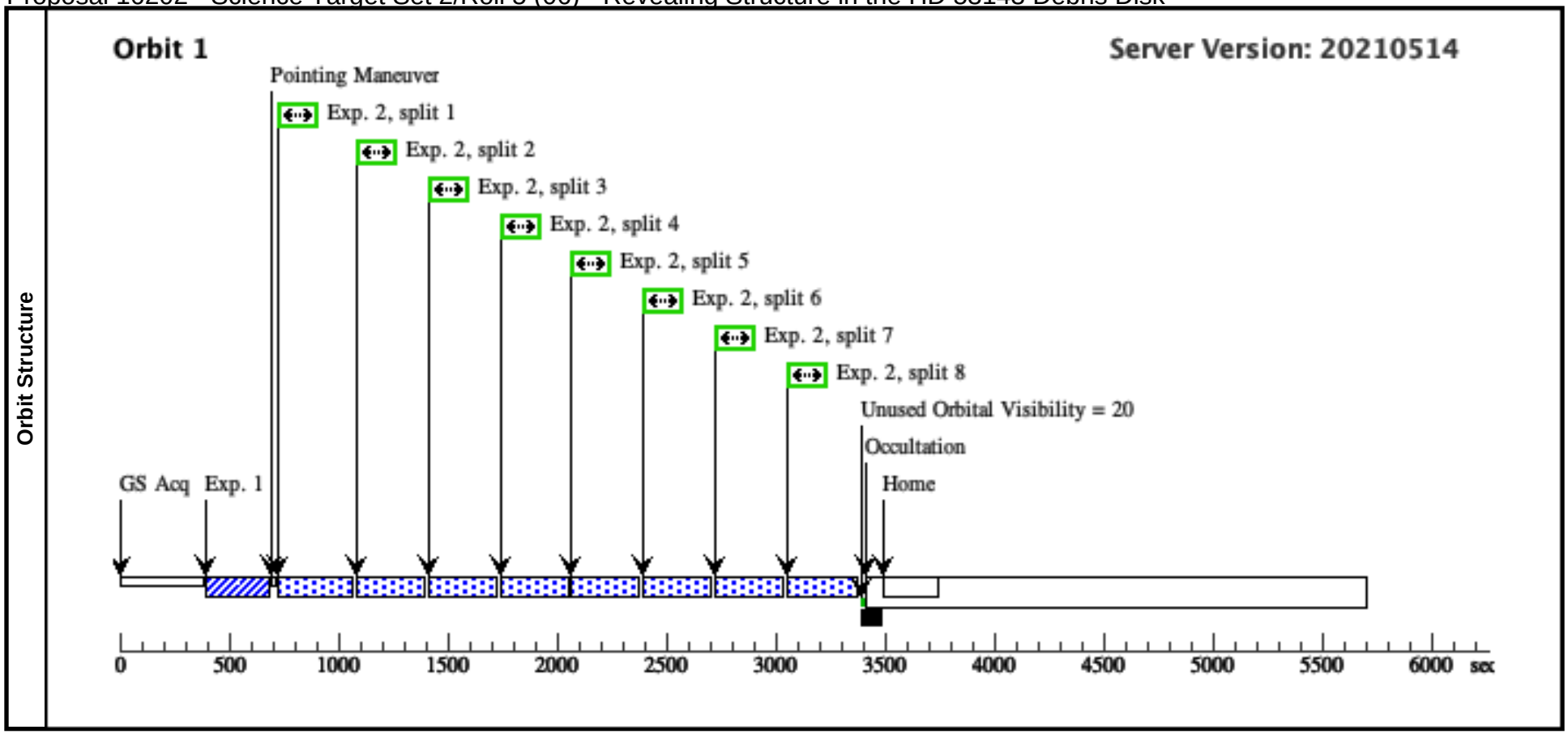
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-53143	RA: 06 59 59.6555 (104.9985646d) Dec: -61 20 10.25 (-61.33618d) Equinox: J2000	Proper Motion RA: -161.890 mas/yr Proper Motion Dec: 264.872 mas/yr Parallax: 0.0544655" Epoch of Position: 2000	V=6.803	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[CIRCUMSTELLAR MATTER, DISK, G V-IV]

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	HD53143_ACQ (STIS.ta.1450636)	(1) HD-53143	STIS/CCD, ACQ, F25ND3	MIRROR				0.2 Secs (0.2 Secs) *[==>]*	 ***[1]***
Comments: SNR = 100, V = 6.81, sp = G9V, Exptime rounded to nearest 0.1 second									
2	HD53143_ACCUM	(1) HD-53143	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	SIZEAXIS2=427; CR-SPLIT=8; GAIN=4			2400 Secs (2400 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20210514
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 Orbital Visibility = 20
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16202, Science Target Set 2/Roll 6 (07), scheduled Tue Oct 12 20:00:44 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; ORIENT -7.5D TO -7.5D FROM 01; AFTER 06 BY 0.5 Orbits TO 1.5 Orbits

Comments: HD 53143 (V=6.81, B-V = +0.80).

Second of three sets of visits, each containing four visits of HD 53143 at different relative orientations with one PSF calibration observation interleaved.

The five visits within each set must be executed sequentially in contiguous orbits interrupted only for Earth occultation.

Orientation: We wish to schedule this visit at -7.5 deg relative to visit 1.

Relative Timing: The next visit should execute immediately following this visit, uninterrupted.

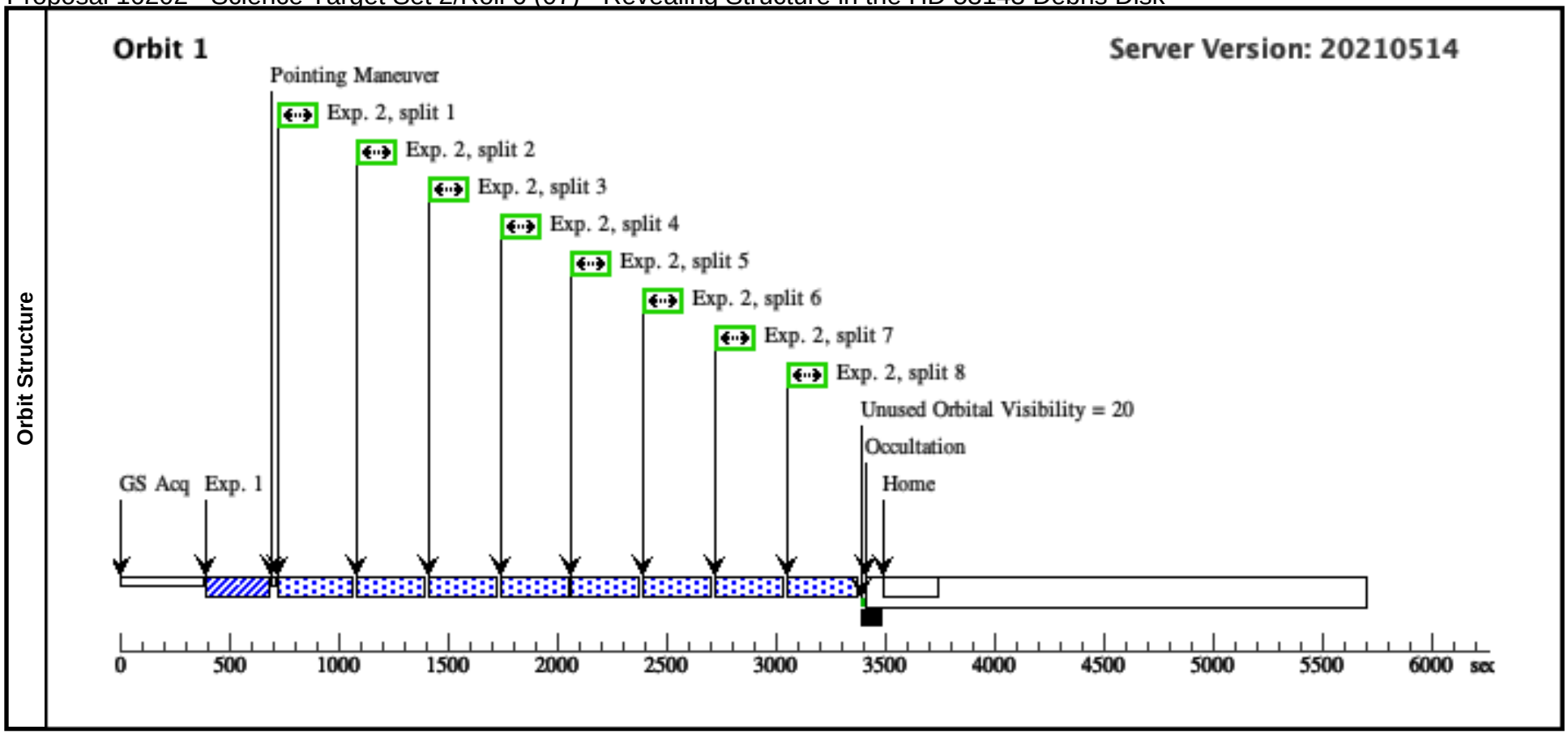
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-53143	RA: 06 59 59.6555 (104.9985646d) Dec: -61 20 10.25 (-61.33618d) Equinox: J2000	Proper Motion RA: -161.890 mas/yr Proper Motion Dec: 264.872 mas/yr Parallax: 0.0544655" Epoch of Position: 2000	V=6.803	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[CIRCUMSTELLAR MATTER, DISK, G V-IV]

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	HD53143_ACQ (STIS.ta.1450636)	(1) HD-53143	STIS/CCD, ACQ, F25ND3	MIRROR				0.2 Secs (0.2 Secs) *[==>]*	***[1]***
Comments: SNR = 100, V = 6.81, sp = G9V, Exptime rounded to nearest 0.1 second									
2	HD53143_ACCUM	(1) HD-53143	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	SIZEAXIS2=427; CR-SPLIT=8; GAIN=4			2400 Secs (2400 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20210514
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 Orbital Visibility = 20
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16202, PSF Reference Set 2 (08), scheduled Tue Oct 12 20:00:44 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; AFTER 07 BY 0.5 Orbits TO 1.5 Orbits

Comments: HD 53706 (V=6.8, B-V = +0.80).

Second of three sets of visits, each containing four visits of HD 53143 at different relative orientations with one PSF calibration observation interleaved.

The five visits within each set must be executed sequentially in contiguous orbits interrupted only for Earth occultation.

Orientation: No constraints

Relative Timing: The next visit should execute immediately following this visit, uninterrupted.

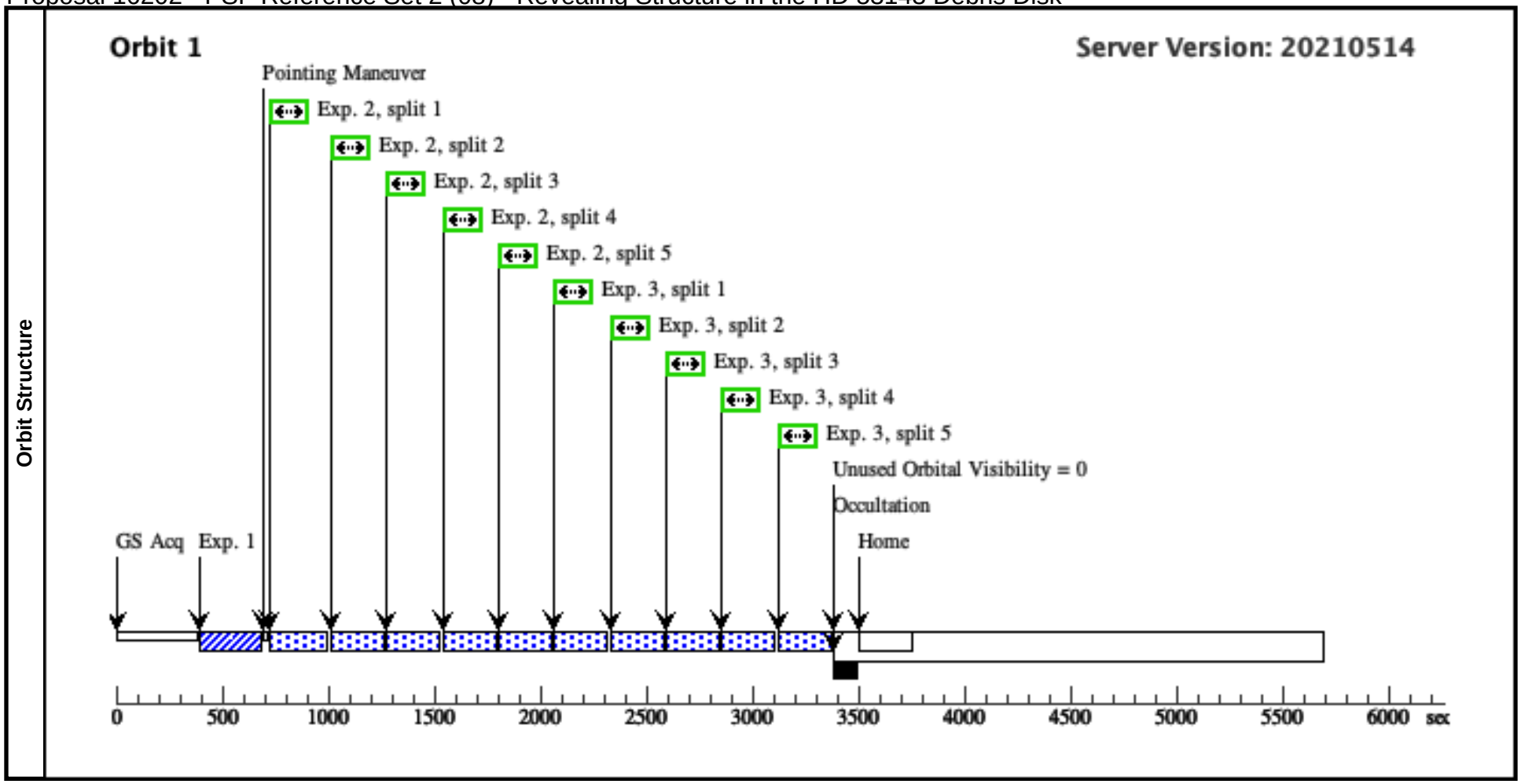
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	HD-58895-CALIB	RA: 07 24 9.3857 (111.0391071d) Dec: -58 29 31.01 (-58.49195d) Equinox: J2000	Proper Motion RA: -87.780 mas/yr Proper Motion Dec: 137.647 mas/yr Parallax: 0.0200302" Epoch of Position: 2000	V=6.581	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[G V-IV]

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	PSF-REF_ACQ (STIS.ta.1450636)	(2) HD-58895-CALIB	STIS/CCD, ACQ, F25ND3	MIRROR				0.2 Secs (0.2 Secs) *[==>]*	***[1]***
Comments: SNR = 100, V = 6.81, sp = G9V, Exptime rounded to nearest 0.1 second									
2	PSF-REF_ACCUM	(2) HD-58895-CALIB	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	SIZEAXIS2=427; CR-SPLIT=5; GAIN=4			1170 Secs (1170 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]*	***[1]***
3	PSF-REF_ACCUM	(2) HD-58895-CALIB	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	SIZEAXIS2=427; CR-SPLIT=5; GAIN=4			1170 Secs (1170 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20210514
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 3, split 1
Exp. 3, split 2
Exp. 3, split 3
Exp. 3, split 4
Exp. 3, split 5
Unused Orbital Visibility = 0
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16202, Science Target Set 2/Roll 7 (09), scheduled Tue Oct 12 20:00:44 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; ORIENT -9D TO -9D FROM 01; AFTER 08 BY 0.5 Orbits TO 1.5 Orbits

Comments: HD 53143 (V=6.81, B-V = +0.80).

Second of three sets of visits, each containing four visits of HD 53143 at different relative orientations with one PSF calibration observation interleaved.

The five visits within each set must be executed sequentially in contiguous orbits interrupted only for Earth occultation.

Orientation: We wish to schedule this visit at -9 deg relative to visit 1.

Relative Timing: The next visit should execute immediately following this visit, uninterrupted.

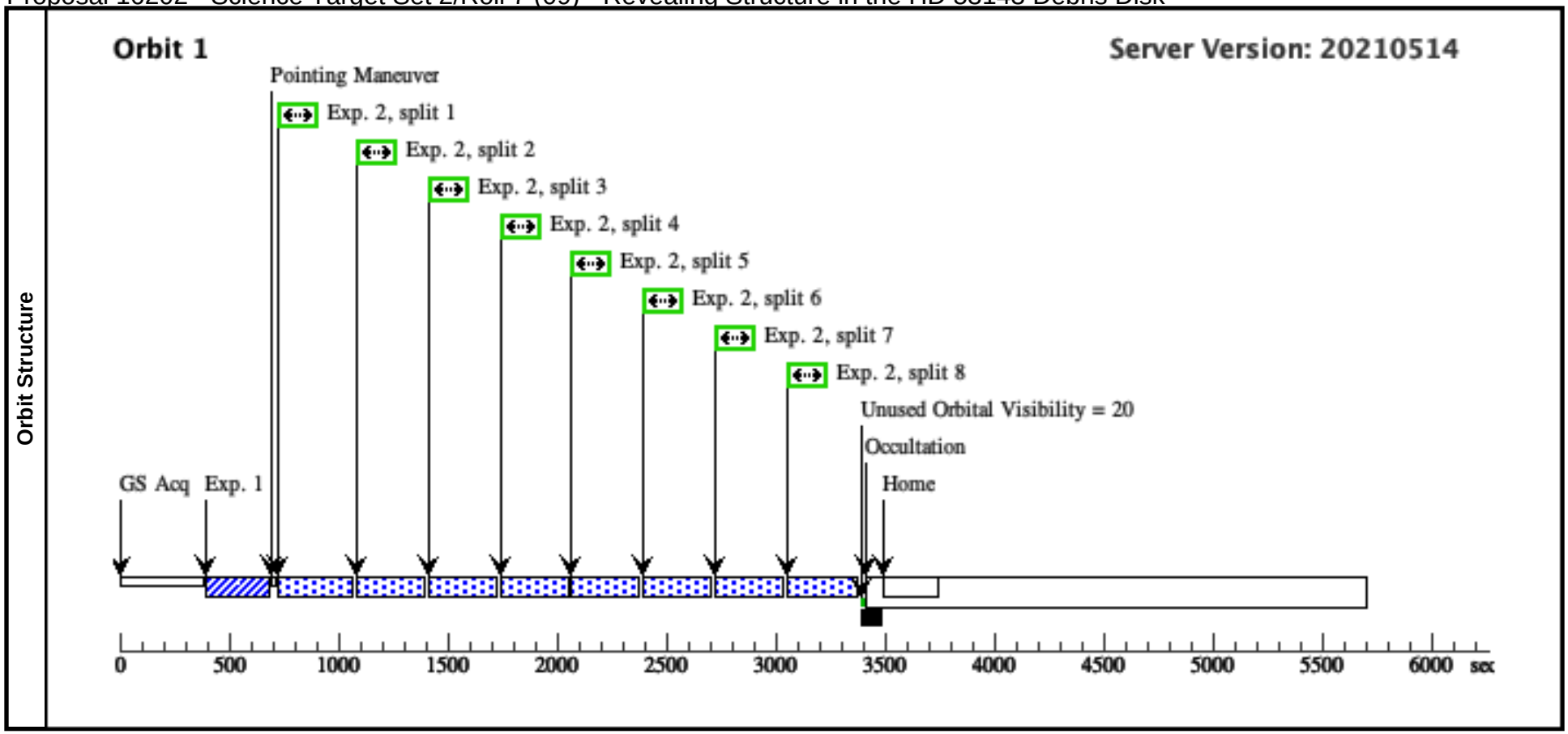
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-53143	RA: 06 59 59.6555 (104.9985646d) Dec: -61 20 10.25 (-61.33618d) Equinox: J2000	Proper Motion RA: -161.890 mas/yr Proper Motion Dec: 264.872 mas/yr Parallax: 0.0544655" Epoch of Position: 2000	V=6.803	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[CIRCUMSTELLAR MATTER, DISK, G V-IV]

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	HD53143_ACQ (STIS.ta.1450636)	(1) HD-53143	STIS/CCD, ACQ, F25ND3	MIRROR				0.2 Secs (0.2 Secs) *[==>]*	***[1]***
Comments: SNR = 100, V = 6.81, sp = G9V, Exptime rounded to nearest 0.1 second									
2	HD53143_ACCUM	(1) HD-53143	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	SIZEAXIS2=427; CR-SPLIT=8; GAIN=4			2400 Secs (2400 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20210514
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 Orbital Visibility = 20
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16202, Science Target Set 2/Roll 8 (10), scheduled Tue Oct 12 20:00:44 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; ORIENT -10.5D TO -10.5D FROM 01; AFTER 09 BY 0.5 Orbits TO 1.5 Orbits

Comments: HD 53143 (V=6.81, B-V = +0.80).

Second of three sets of visits, each containing four visits of HD 53143 at different relative orientations with one PSF calibration observation interleaved.

The five visits within each set must be executed sequentially in contiguous orbits interrupted only for Earth occultation.

Orientation: We wish to schedule this visit at -10.5 deg relative to visit 1.

Relative Timing: This visit should execute immediately following the previous, and marks the last in a 5-visit non-interruptible sequence.

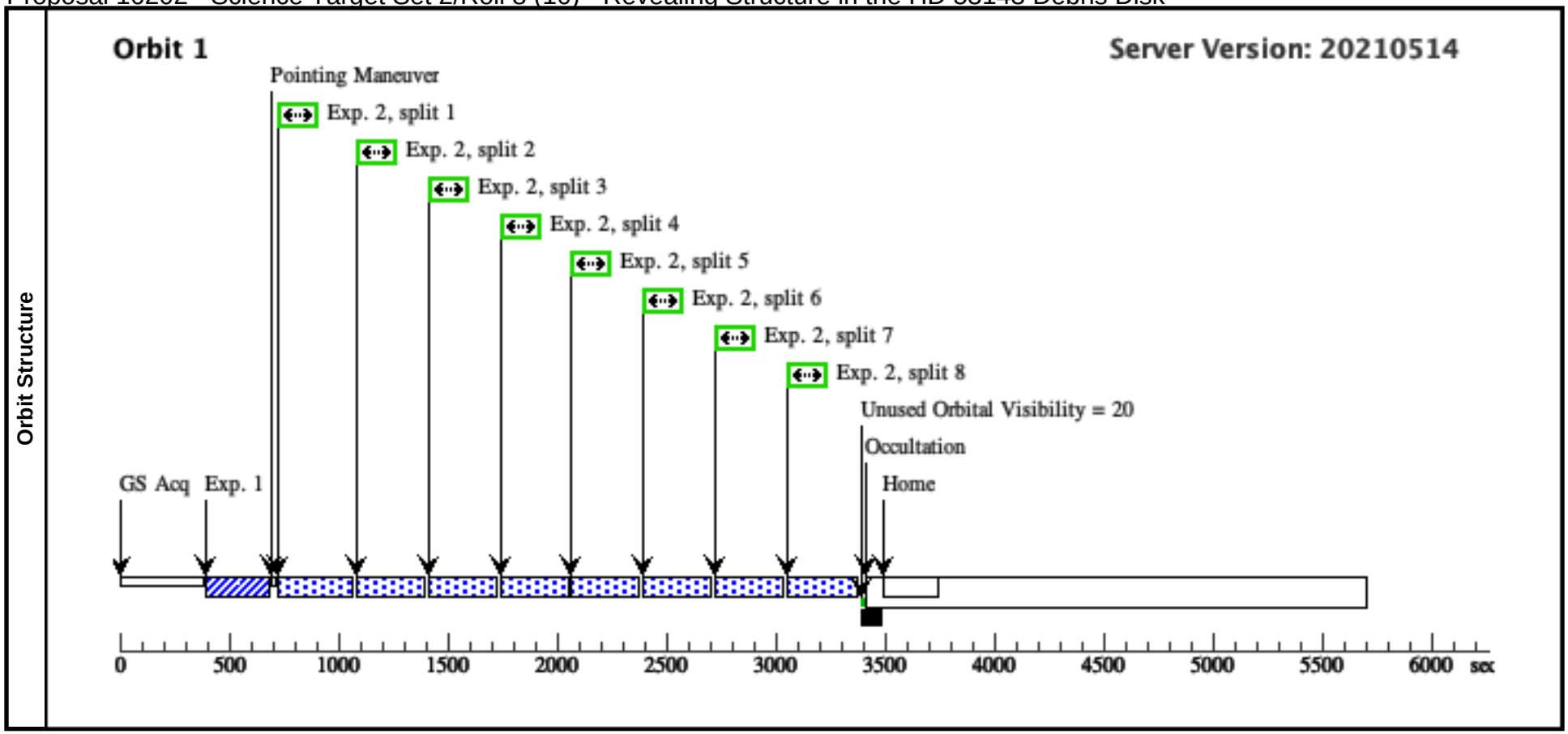
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-53143	RA: 06 59 59.6555 (104.9985646d) Dec: -61 20 10.25 (-61.33618d) Equinox: J2000	Proper Motion RA: -161.890 mas/yr Proper Motion Dec: 264.872 mas/yr Parallax: 0.0544655" Epoch of Position: 2000	V=6.803	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[CIRCUMSTELLAR MATTER, DISK, G V-IV]

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	HD53143_ACQ (STIS.ta.1450636)	(1) HD-53143	STIS/CCD, ACQ, F25ND3	MIRROR				0.2 Secs (0.2 Secs) *[==>]*	***[1]***
Comments: SNR = 100, V = 6.81, sp = G9V, Exptime rounded to nearest 0.1 second									
2	HD53143_ACCUM	(1) HD-53143	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	SIZEAXIS2=427; CR-SPLIT=8; GAIN=4			2400 Secs (2400 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20210514
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 Orbital Visibility = 20
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16202, Science Target Set 3/Roll 9 (11), completed Tue Oct 12 20:00:45 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; ORIENT -12D TO -12D FROM 01

Comments: HD 53143 (V=6.81, B-V = +0.80).

Third of three sets of visits, each containing four visits of HD 53143 at different relative orientations with one PSF calibration observation interleaved.

The five visits within each set must be executed sequentially in contiguous orbits interrupted only for Earth occultation.

Orientation: We wish to schedule this visit at -12 deg relative to visit 1.

Relative Timing: The next visit should execute immediately following this visit, uninterrupted.

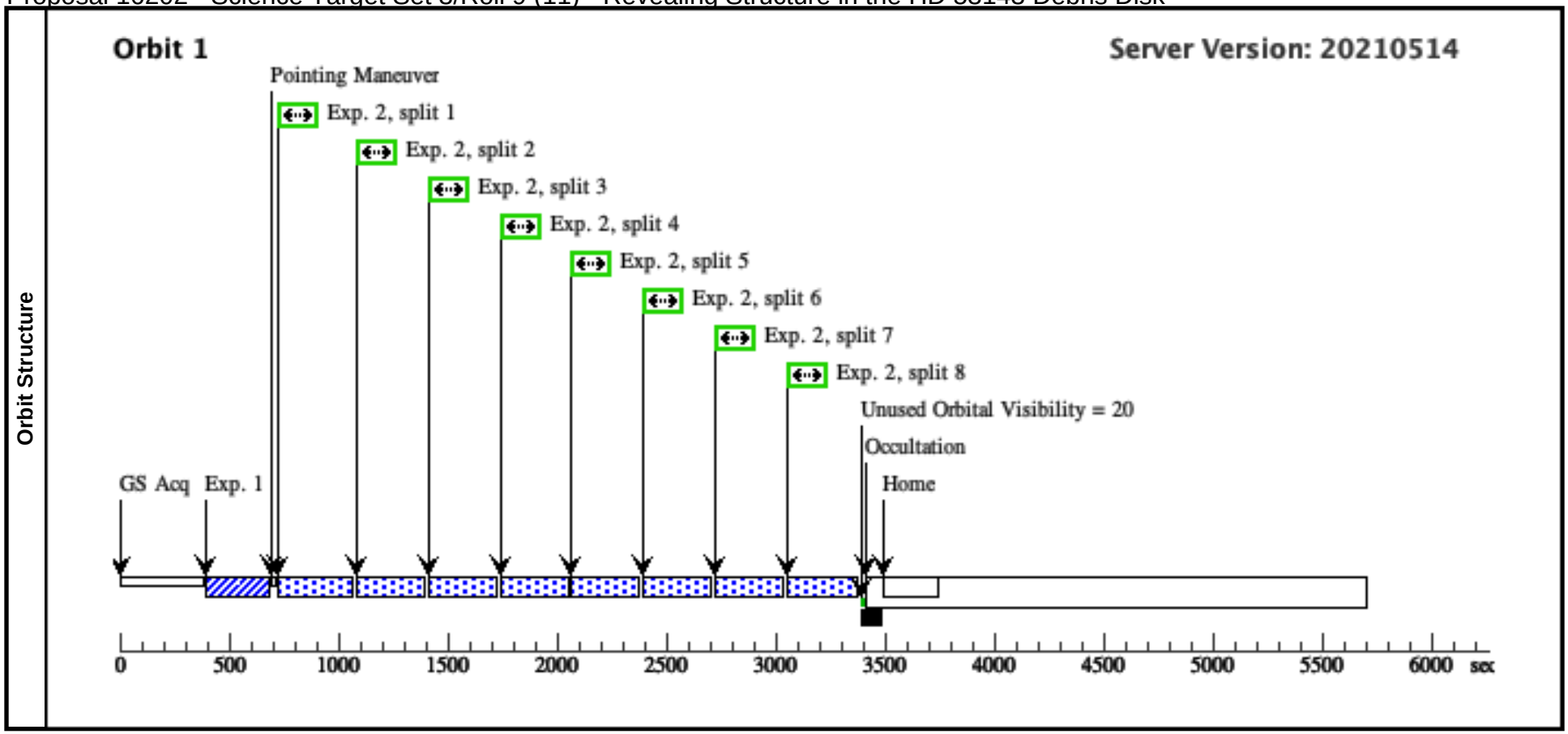
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-53143	RA: 06 59 59.6555 (104.9985646d) Dec: -61 20 10.25 (-61.33618d) Equinox: J2000	Proper Motion RA: -161.890 mas/yr Proper Motion Dec: 264.872 mas/yr Parallax: 0.0544655" Epoch of Position: 2000	V=6.803	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[CIRCUMSTELLAR MATTER, DISK, G V-IV]

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	HD53143_ACQ (STIS.ta.1450636)	(1) HD-53143	STIS/CCD, ACQ, F25ND3	MIRROR				0.2 Secs (0.2 Secs) *[==>]*	 ***[1]***
Comments: SNR = 100, V = 6.81, sp = G9V, Exptime rounded to nearest 0.1 second									
2	HD53143_ACCUM	(1) HD-53143	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	SIZEAXIS2=427; CR-SPLIT=8; GAIN=4			2400 Secs (2400 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20210514
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 Orbital Visibility = 20
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16202, Science Target Set 3/Roll 10 (12), completed Tue Oct 12 20:00:45 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; ORIENT -13.5D TO -13.5D FROM 01; AFTER 11 BY 0.5 Orbits TO 1.5 Orbits

Comments: HD 53143 (V=6.81, B-V = +0.80).

Third of three sets of visits, each containing four visits of HD 53143 at different relative orientations with one PSF calibration observation interleaved.

The five visits within each set must be executed sequentially in contiguous orbits interrupted only for Earth occultation.

Orientation: We wish to schedule this visit at -13.5 deg relative to visit 1.

Relative Timing: The next visit should execute immediately following this visit, uninterrupted.

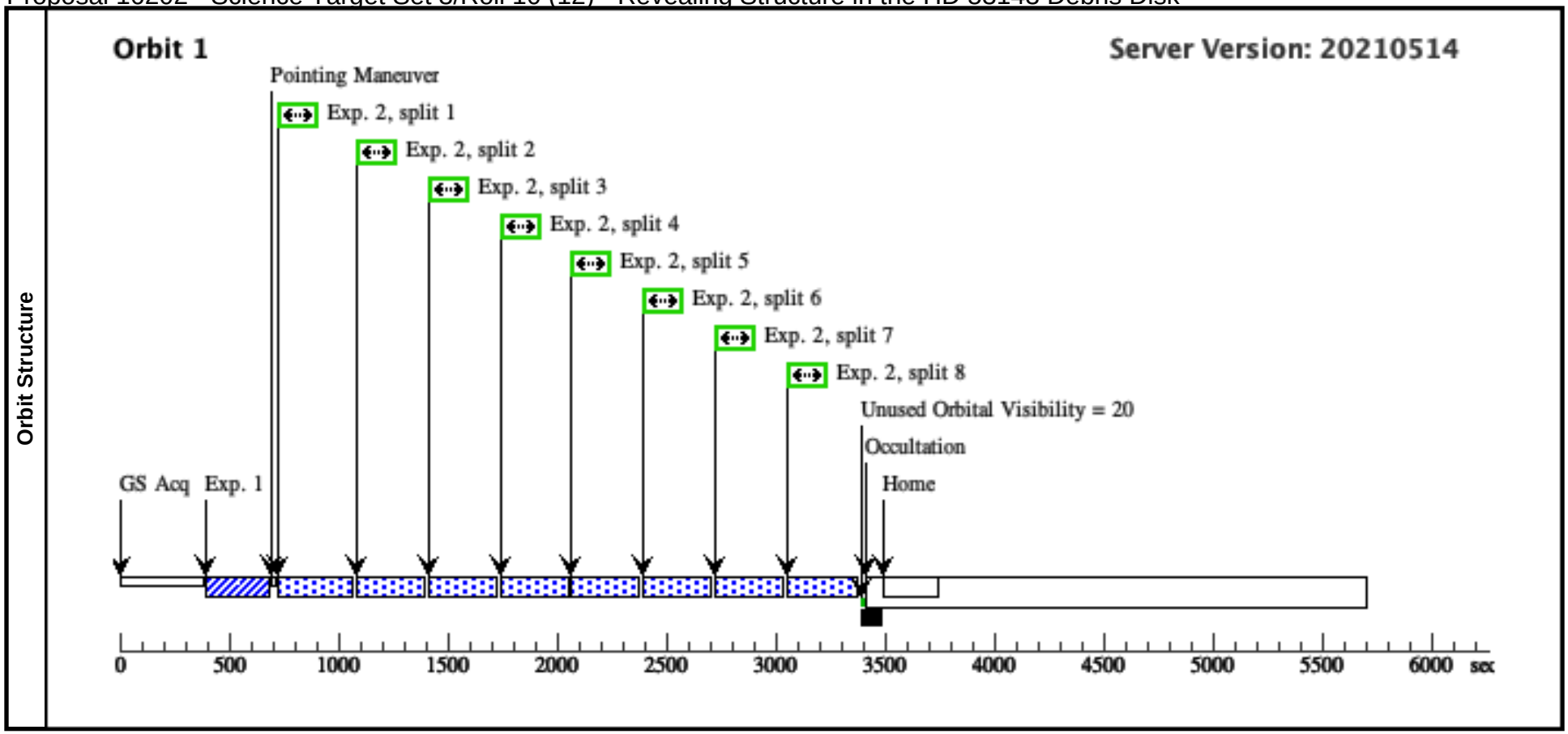
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-53143	RA: 06 59 59.6555 (104.9985646d) Dec: -61 20 10.25 (-61.33618d) Equinox: J2000	Proper Motion RA: -161.890 mas/yr Proper Motion Dec: 264.872 mas/yr Parallax: 0.0544655" Epoch of Position: 2000	V=6.803	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[CIRCUMSTELLAR MATTER, DISK, G V-IV]

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	HD53143_ACQ (STIS.ta.1450636)	(1) HD-53143	STIS/CCD, ACQ, F25ND3	MIRROR				0.2 Secs (0.2 Secs) *[==>]*	***[1]***
Comments: SNR = 100, V = 6.81, sp = G9V, Exptime rounded to nearest 0.1 second									
2	HD53143_ACCUM	(1) HD-53143	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	SIZEAXIS2=427; CR-SPLIT=8; GAIN=4			2400 Secs (2400 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20210514
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 Orbital Visibility = 20
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16202, PSF Reference Set 3 (13), completed Tue Oct 12 20:00:45 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; AFTER 12 BY 0.5 Orbits TO 1.5 Orbits

Comments: HD 53706 (V=6.8, B-V = +0.80).

Third of three sets of visits, each containing four visits of HD 53143 at different relative orientations with one PSF calibration observation interleaved.

The five visits within each set must be executed sequentially in contiguous orbits interrupted only for Earth occultation.

Orientation: No constraints

Relative Timing: The next visit should execute immediately following this visit, uninterrupted.

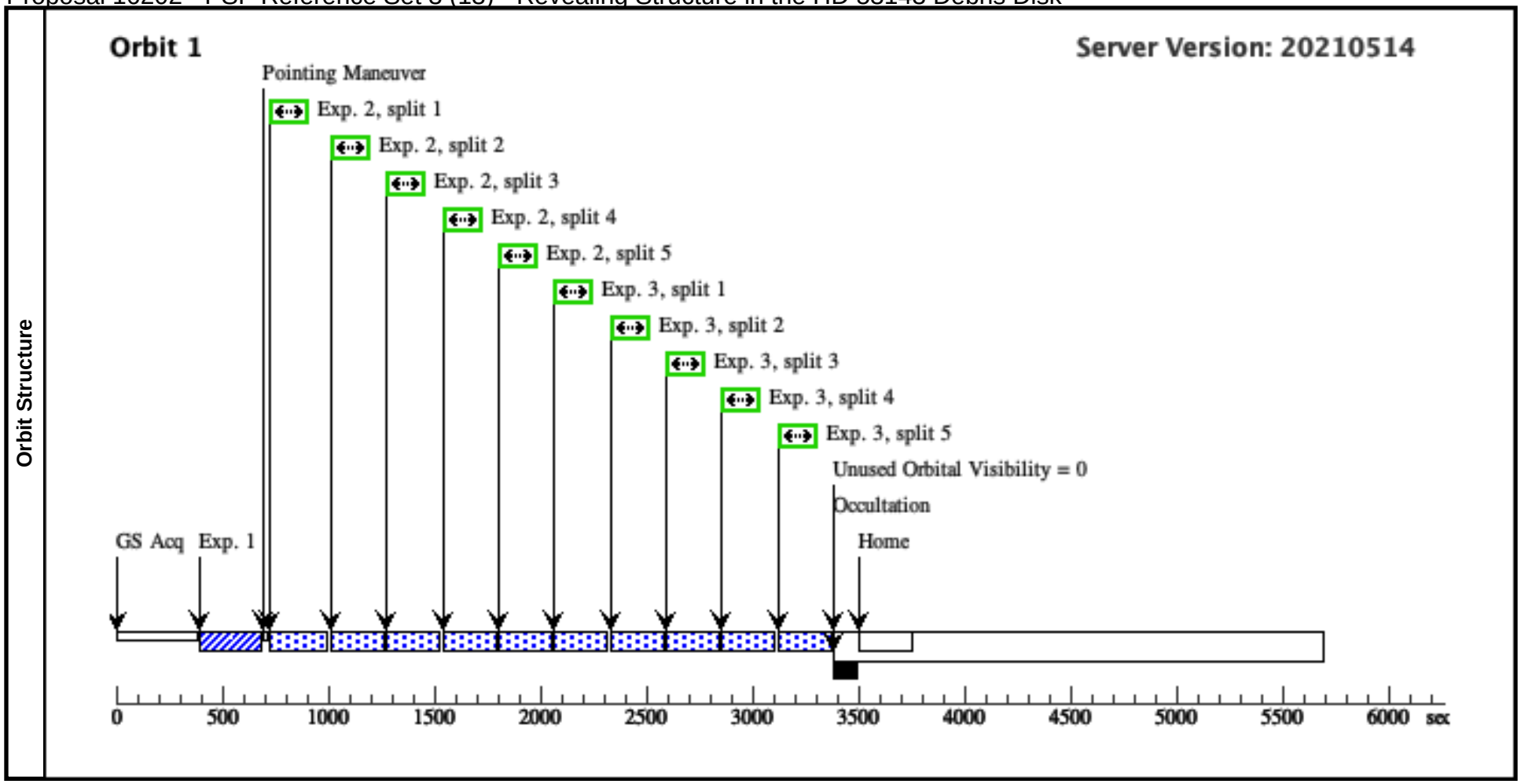
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	HD-58895-CALIB	RA: 07 24 9.3857 (111.0391071d) Dec: -58 29 31.01 (-58.49195d) Equinox: J2000	Proper Motion RA: -87.780 mas/yr Proper Motion Dec: 137.647 mas/yr Parallax: 0.0200302" Epoch of Position: 2000	V=6.581	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[G V-IV]

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	PSF-REF_ACQ (STIS.ta.1450636)	(2) HD-58895-CALIB	STIS/CCD, ACQ, F25ND3	MIRROR				0.2 Secs (0.2 Secs) *[==>]*	***[1]***
Comments: SNR = 100, V = 6.81, sp = G9V, Exptime rounded to nearest 0.1 second									
2	PSF-REF_ACCUM	(2) HD-58895-CALIB	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	SIZEAXIS2=427; CR-SPLIT=5; GAIN=4			1170 Secs (1170 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]*	***[1]***
3	PSF-REF_ACCUM	(2) HD-58895-CALIB	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	SIZEAXIS2=427; CR-SPLIT=5; GAIN=4			1170 Secs (1170 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20210514
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 3, split 1
Exp. 3, split 2
Exp. 3, split 3
Exp. 3, split 4
Exp. 3, split 5
Unused Orbital Visibility = 0
Occultation
GS Acq
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16202, Science Target Set 3/Roll 11 (14), completed Tue Oct 12 20:00:45 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; ORIENT -15D TO -15D FROM 01; AFTER 13 BY 0.5 Orbits TO 1.5 Orbits

Comments: HD 53143 (V=6.81, B-V = +0.80).

Third of three sets of visits, each containing four visits of HD 53143 at different relative orientations with one PSF calibration observation interleaved.

The five visits within each set must be executed sequentially in contiguous orbits interrupted only for Earth occultation.

Orientation: We wish to schedule this visit at -15 deg relative to visit 1.

Relative Timing: The next visit should execute immediately following this visit, uninterrupted.

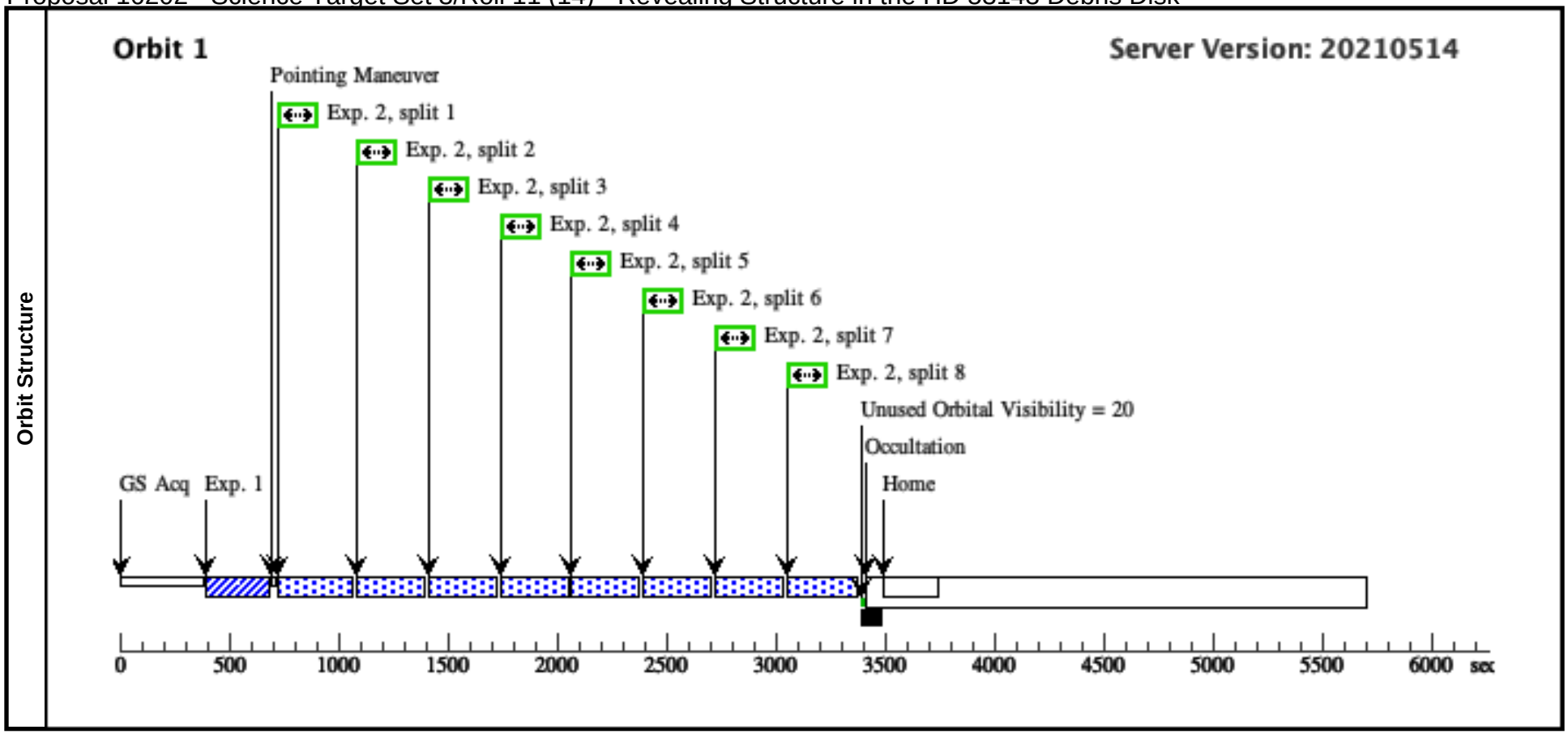
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-53143	RA: 06 59 59.6555 (104.9985646d) Dec: -61 20 10.25 (-61.33618d) Equinox: J2000	Proper Motion RA: -161.890 mas/yr Proper Motion Dec: 264.872 mas/yr Parallax: 0.0544655" Epoch of Position: 2000	V=6.803	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[CIRCUMSTELLAR MATTER, DISK, G V-IV]

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	HD53143_ACQ (STIS.ta.1450636)	(1) HD-53143	STIS/CCD, ACQ, F25ND3	MIRROR				0.2 Secs (0.2 Secs) *[==>]*	 ***[1]***
Comments: SNR = 100, V = 6.81, sp = G9V, Exptime rounded to nearest 0.1 second									
2	HD53143_ACCUM	(1) HD-53143	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	SIZEAXIS2=427; CR-SPLIT=8; GAIN=4			2400 Secs (2400 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20210514
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 Orbital Visibility = 20
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16202, Science Target Set 3/Roll 12 (15), completed Tue Oct 12 20:00:45 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; ORIENT -16.5D TO -16.5D FROM 01; AFTER 14 BY 0.5 Orbits TO 1.5 Orbits

Comments: HD 53143 (V=6.81, B-V = +0.80).

Third of three sets of visits, each containing four visits of HD 53143 at different relative orientations with one PSF calibration observation interleaved.

The five visits within each set must be executed sequentially in contiguous orbits interrupted only for Earth occultation.

Orientation: We wish to schedule this visit at -16.5 deg relative to visit 1.

Relative Timing: The next visit should execute immediately following this visit, uninterrupted.

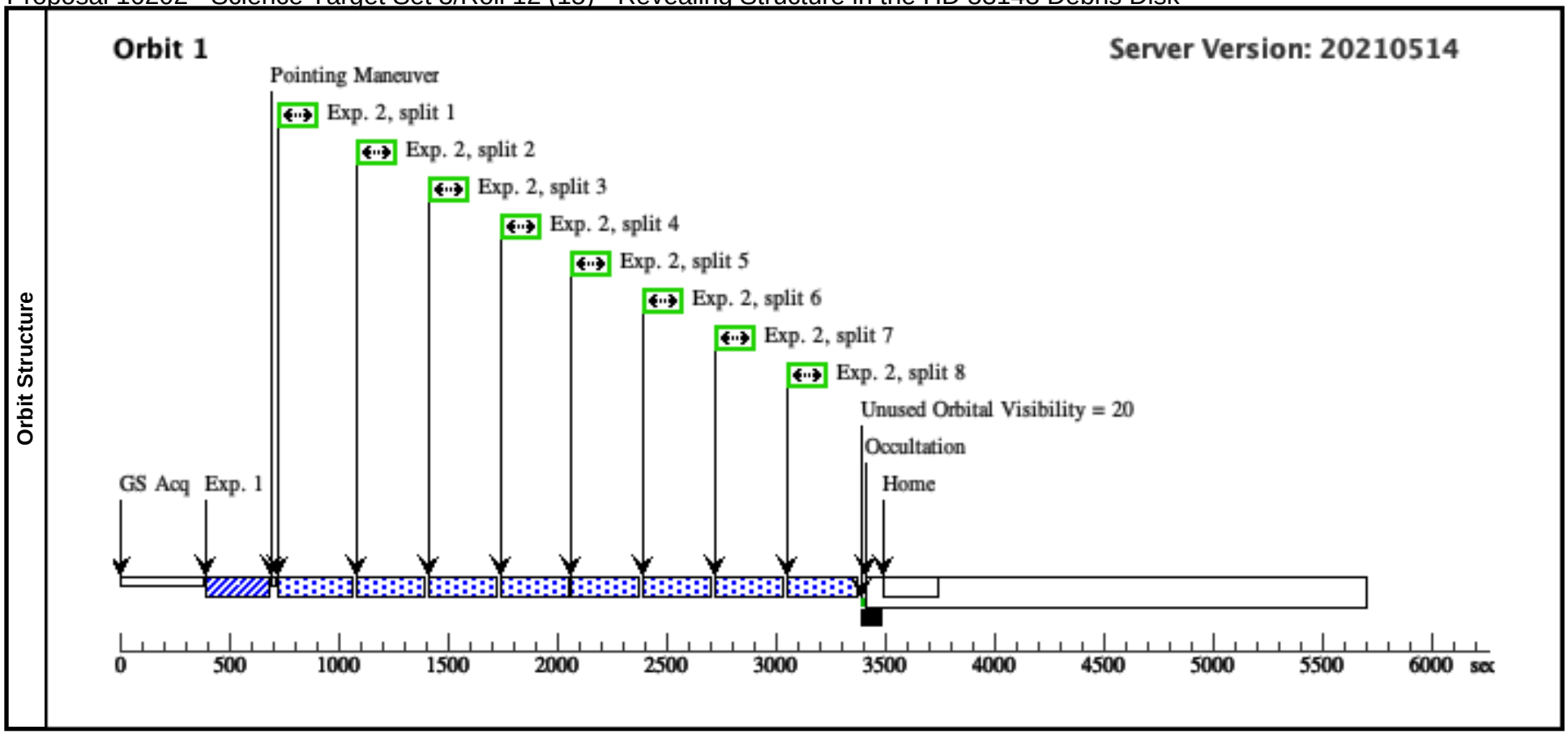
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-53143	RA: 06 59 59.6555 (104.9985646d) Dec: -61 20 10.25 (-61.33618d) Equinox: J2000	Proper Motion RA: -161.890 mas/yr Proper Motion Dec: 264.872 mas/yr Parallax: 0.0544655" Epoch of Position: 2000	V=6.803	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[CIRCUMSTELLAR MATTER, DISK, G V-IV]

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	HD53143_ACQ (STIS.ta.1450636)	(1) HD-53143	STIS/CCD, ACQ, F25ND3	MIRROR				0.2 Secs (0.2 Secs) *[==>]*	 ***[1]***
Comments: SNR = 100, V = 6.81, sp = G9V, Exptime rounded to nearest 0.1 second									
2	HD53143_ACCUM	(1) HD-53143	STIS/CCD, ACCUM, WEDGEA1.8	MIRROR	SIZEAXIS2=427; CR-SPLIT=8; GAIN=4			2400 Secs (2400 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20210514
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 Orbital Visibility = 20
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec