15437 - Linking the Jet, Inner Disk, and Outer Disk of HD 163296

Cycle: 25, Proposal Category: GO

(Availability Mode: AVAILABLE)

INVESTIGATORS

Name	*Institution*	*E-Mail*
Mr. Evan Rich (PI) (Contact)	**University of Oklahoma Norman Campus**	**erich66210@ou.edu**
Prof. John Tobin (CoI)	University of Oklahoma Norman Campus	jjtobin@ou.edu
Dr. John P. Wisniewski (CoI)	University of Oklahoma Norman Campus	wisniewski@ou.edu
Dr. Carol A. Grady (CoI)	Eureka Scientific Inc.	carol.a.grady@nasa.gov
Dr. Michael L. Sitko (CoI)	Space Science Institute	sitko@spacescience.org

VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) HD163296	STIS/CCD	1	09-Jul-2018 18:10:00.0	yes
02	(1) HD163296	STIS/CCD	1	09-Jul-2018 18:10:04.0	yes
03	(2) PSFSTAR-HD145570	STIS/CCD	1	09-Jul-2018 18:10:09.0	yes
04	(1) HD163296	STIS/CCD	1	09-Jul-2018 18:10:14.0	yes
05	(1) HD163296	STIS/CCD	1	09-Jul-2018 18:10:17.0	yes
06	(1) HD163296	STIS/CCD	1	09-Jul-2018 18:10:20.0	yes
07	(2) PSFSTAR-HD145570	STIS/CCD	1	09-Jul-2018 18:10:24.0	yes
08	(1) HD163296	STIS/CCD	1	09-Jul-2018 18:10:29.0	yes

8 Total Orbits Used

ABSTRACT

Young protoplanetary disks serve both as the birthplace of planets and help to guide the accretion of material onto forming stars. The HD 163296 protoplanetary disk system has revealed substantial and often unexpected variability in its accretion, inner disk structure, outer disk appearance, "dipper" extinction events, and periodic HH knot ejections. The Herbig-Haro (HH) knots for HD 163296 are ejected every 16 years, and the next ejection is predicted to occur in 2018. Concurrent observations of the jet, inner disk, and outer disk during a knot ejection provide a unique opportunity to constrain the interplay between these three regions. We propose to monitor HD 163296 with the VLA to detect the next knot ejection event. Then when an HH knot ejection is detected, we will schedule observations with Hubble to monitor how the ejection of the HH knot affects the outer disk. These observations will anchor our efforts to use pre-existing radiative transfer codes to construct a self-consistent picture of the system's circumstellar environment.

OBSERVING DESCRIPTION

We will use 8 orbits of STIS coronagraphic imagery to study the disk and HH knots of HD 163296 after the VLA has performed monthly montoring of the system's jet to search for evidence of a 17-yr periodic jet activity event. We will use the 6 roll/PSF template subtraction strategy that has been successfuly demonstrated in previous programs. We will obtain a sequence of short and long coronagraphic exposures at 6 different spacecraft roll angles using the wedge A0.6 and A1.0 coronagraphic apertures. The 8 orbits will be broken up into two sets of 4 orbits with each set containing 3 orbits with relative orientations of -30D to -15D, 0D, and +15-30D (with loose tolerance) from off-nominal rolls to observe HD 163296 (science target) and one orbit to observe the PSF star. The two sets are each scheduled (typically at different epochs) at nominal roll relative orientations differing by 90-150Dto fully sample 360D around the star.

VLA observations, which are scheduled ~every 3-4 weeks, will look for flux changes associated with the emission of an HH-knot, that is predicted based on a 17-yr periodic ejection timescale. Given the limited HST visibility windows, we a) only use the combination of Wedge A0.6 and A1.0 apertures, instead of BAR5 and Wedge A1.0 apertures, which will provide substantial increase in visibility window flexibility at nominal science impact; and b) be scheduled as close to the August/September 2018 time-frame as possible, such that our HST observations occur near the end of our VLA monitoring.

Visit

Proposal 15437, Visit 01, completed Mon Jul 09 22:10:31 GMT 2018

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; ORIENT -30D TO -15D FROM 02; BETWEEN 01-APR-2018:00:00:00 AND 22-SEP-2018:00:00:00

Comments: HD 163296

First of two sets of visits, each containing three visits of HD163296 at different relative orientations with one PSF calibration observation visit interleaved. This set of visits uses WedgeA.

This is the first HD163296 visit in the first set.

The four visits within each set MUST be executed sequentally in contiguous orbits interrupted only for Earth occultation.

Orientation: We have set the allowable orientation to range from -30 deg to -15 degrees from Visit 2, to allow a sufficiently large scheduling window.

Diagnostics

(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 01) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD163296	RA: 17 56 21.2880 (269.0887000d)	Proper Motion RA: -7.98 mas/yr	V=6.85	Reference Frame: ICRS
		Dec: -21 57 21.87 (-21.95607d)	Proper Motion Dec: -39.21 mas/yr	B-V=0.08	
		Equinox: J2000	Parallax: 0.00843"		
			Epoch of Position: 2000		

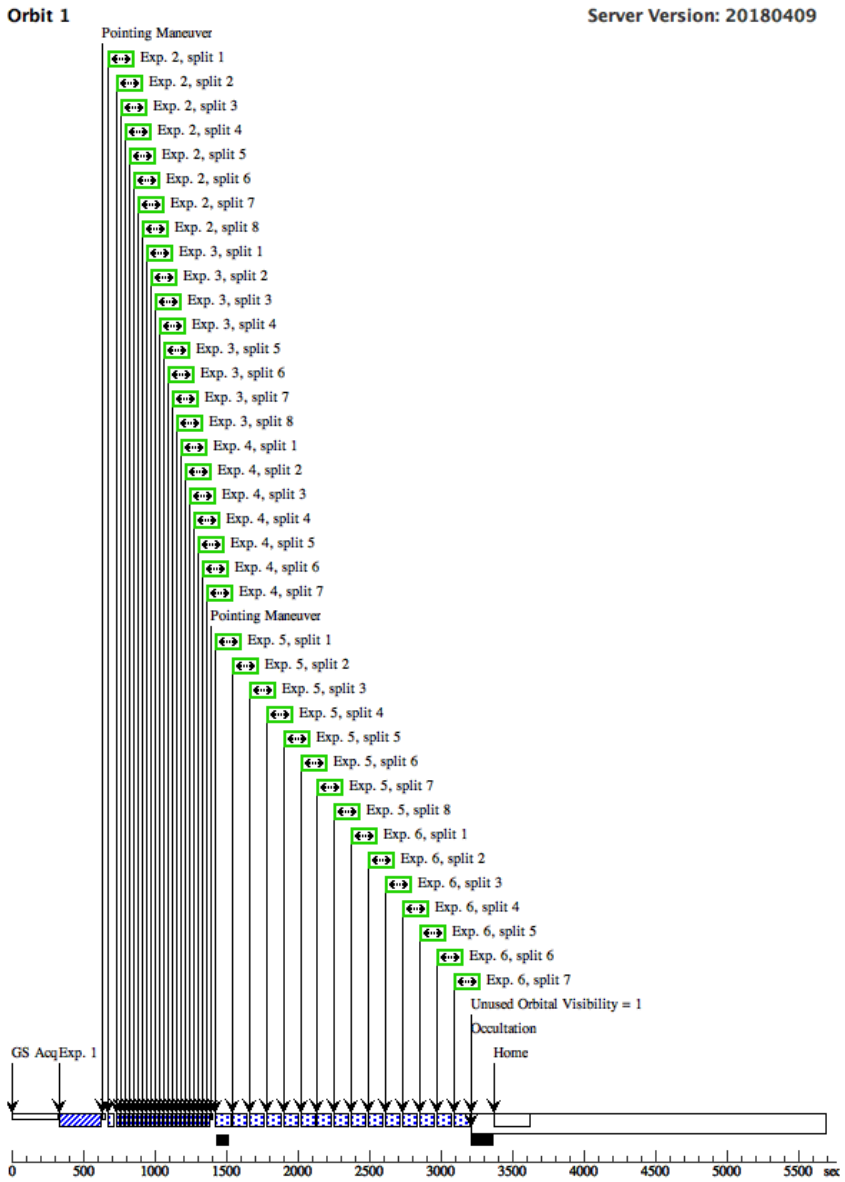
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[HERBIG AE/BE]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	163-ACQ	(1) HD163296	STIS/CCD, ACQ, F25ND3	MIRROR			Sequence 1-6 Non-Int in Visit 01	0.20 Secs (0.2 Secs) *[==>]*	 ***[1]***
Comments: SNR=100, A1V, V=6.85, rounded to nearest 0.1 magnitude									
2	163-SHORT	(1) HD163296	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	CR-SPLIT=8; SIZEAXIS2=137; GAIN=4		Sequence 1-6 Non-Int in Visit 01	64 Secs (64 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	 ***[1]***
Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position*									
3	163-SHORT	(1) HD163296	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	CR-SPLIT=8; SIZEAXIS2=137; GAIN=4		Sequence 1-6 Non-Int in Visit 01	64 Secs (64 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	 ***[1]***
Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position*									
4	163-SHORT	(1) HD163296	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	CR-SPLIT=7; SIZEAXIS2=137; GAIN=4		Sequence 1-6 Non-Int in Visit 01	56 Secs (56 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]*	 ***[1]***
Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 6 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position*									

	5	163-LONG	(1) HD163296	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	SIZEAXIS2=427; GAIN=4; CR-SPLIT=8	Sequence 1-6 Non-Int in Visit 01	720 Secs (720 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***
	Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target* *to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the* *Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.*								
	6	163-LONG	(1) HD163296	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	SIZEAXIS2=427; GAIN=4; CR-SPLIT=7	Sequence 1-6 Non-Int in Visit 01	630 Secs (630 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]*	***[1]***
	Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target* *to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the* *Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.*								

Orbit Structure



Visit

Proposal 15437, Visit 02, completed Mon Jul 09 22:10:32 GMT 2018

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; AFTER 01 BY 0.5 Orbits TO 1.2 Orbits; BETWEEN 01-APR-2018:00:00:00 AND 22-SEP-2018:00:00:00

Comments: HD 163296

First of two sets of visits, each containing three visits of HD163296 at different relative orientations with one PSF calibration observation visit interleaved. This set of visits uses WedgeA.

This is the second HD163296 visit in the first set.

The four visits within each set MUST be executed sequentally in contiguous orbits interrupted only for Earth occultation.

Orientation: This visit has NO orient constraints.
Timing requirements: This visit MUST be executed in the subsequent orbit to visit #1.

Diagnostics

(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 02) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD163296	RA: 17 56 21.2880 (269.0887000d) Dec: -21 57 21.87 (-21.95607d) Equinox: J2000	Proper Motion RA: -7.98 mas/yr Proper Motion Dec: -39.21 mas/yr Parallax: 0.00843" Epoch of Position: 2000	V=6.85 B-V=0.08	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[HERBIG AE/BE]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	163-ACQ	(1) HD163296	STIS/CCD, ACQ, F25ND3	MIRROR			Sequence 1-6 Non-Int in Visit 02	0.20 Secs (0.2 Secs) *[==>]*	 ***[1]***

Comments: SNR=100, A1V, V=6.85, rounded to nearest 0.1 magnitude

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
2	163-SHORT	(1) HD163296	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	CR-SPLIT=8; SIZEAXIS2=137; GAIN=4		Sequence 1-6 Non-Int in Visit 02	64 Secs (64 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	 ***[1]***

Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4.

SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")
For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
3	163-SHORT	(1) HD163296	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	CR-SPLIT=8; SIZEAXIS2=137; GAIN=4		Sequence 1-6 Non-Int in Visit 02	64 Secs (64 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	 ***[1]***

Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4.

SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")
For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position

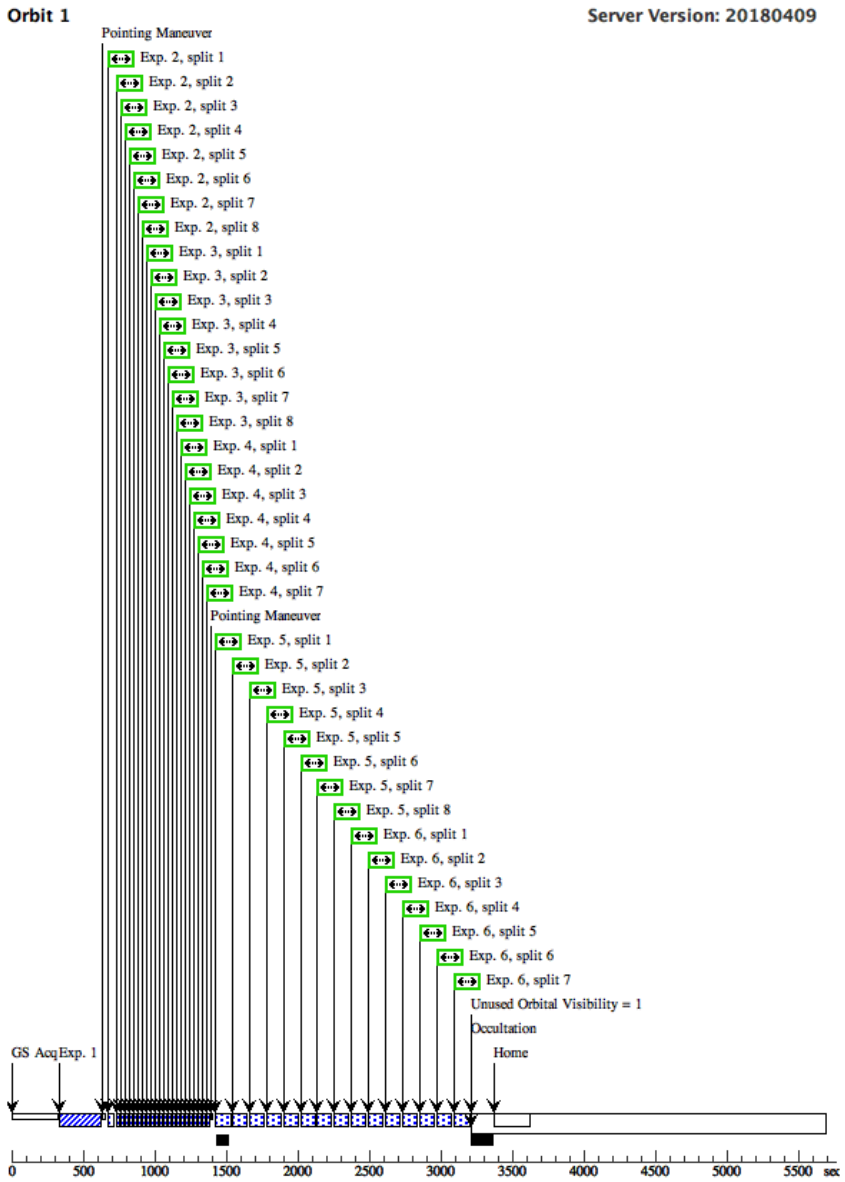
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
4	163-SHORT	(1) HD163296	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	CR-SPLIT=7; SIZEAXIS2=137; GAIN=4		Sequence 1-6 Non-Int in Visit 02	56 Secs (56 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]*	 ***[1]***

Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 6 CR Splits and gain-4.

SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")
For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position

	5	163-LONG	(1) HD163296	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	SIZEAXIS2=427; GAIN=4; CR-SPLIT=8	Sequence 1-6 Non-Int in Visit 02	720 Secs (720 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***
	Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target* *to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the* *Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.*								
	6	163-LONG	(1) HD163296	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	SIZEAXIS2=427; GAIN=4; CR-SPLIT=7	Sequence 1-6 Non-Int in Visit 02	630 Secs (630 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]*	***[1]***
	Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target* *to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the* *Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.*								

Orbit Structure



Visit	**Proposal 15437, Visit 03, completed** Mon Jul 09 22:10:32 GMT 2018 **Diagnostic Status: Warning** Scientific Instruments: STIS/CCD Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; AFTER 02 BY 0.5 Orbits TO 1.2 Orbits; BETWEEN 01-APR-2018:00:00:00 AND 22-SEP-2018:00:00:00 *Comments: HD 145570* *First of two sets of visits, each containing three visits of HD163296 at different relative orientations with one PSF calibration observation visit interleaved. This set of visits uses WedgeA.* *This is the PSF star visit in the first set.* *The four visits within each set MUST be executed sequentally in contiguous orbits interrupted only for Earth occultation.* *Orientation: This visit has NO orient constraints.* *Timing requirements: This visit MUST be executed in the subsequent orbit to visit #2.*
Diagnostics	(Visit 03) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR (Visit 03) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	PSFSTAR-HD145570	RA: 16 11 59.9885 (242.9999521d) Dec: -10 03 51.27 (-10.06424d) Equinox: J2000	Proper Motion RA: -21.98 mas/yr Proper Motion Dec: -23.74 mas/yr Parallax: 0.02096" Epoch of Position: 2000	V=4.928+/-0.009 B-V=0.101	Reference Frame: ICRS

Comments:
Category=STAR
Description=[A0-A3 V-IV]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	PSF-ACQ	(2) PSFSTAR-HD145570	STIS/CCD, ACQ, F25ND5	MIRROR			Sequence 1-9 Non-Int in Visit 03	8 Secs (8 Secs) *[==>]*	***[1]***
Comments: SNR=100; A1V; V=4.928; using F25ND5 filter									
2	PSF-SHORT	(2) PSFSTAR-HD145570	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	SIZEAXIS2=137; GAIN=4; CR-SPLIT=8		Sequence 1-9 Non-Int in Visit 03	11.2 Secs (11.2 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***
Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position*								
3	PSF-SHORT	(2) PSFSTAR-HD145570	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	SIZEAXIS2=137; GAIN=4; CR-SPLIT=8		Sequence 1-9 Non-Int in Visit 03	11.2 Secs (11.2 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***
Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position*								
4	PSF-SHORT	(2) PSFSTAR-HD145570	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	SIZEAXIS2=137; GAIN=4; CR-SPLIT=8		Sequence 1-9 Non-Int in Visit 03	11.2 Secs (11.2 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***
Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position*								

5	PSF-SHORT	(2) PSFSTAR-HD145570	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	SIZEAXIS2=137; GAIN=4; CR-SPLIT=8	Sequence 1-9 Non-Int in Visit 03	11.2 Secs (11.2 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***

Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4.

SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")
For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position

6	PSF-LONG	(2) PSFSTAR-HD145570	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	SIZEAXIS2=427; GAIN=4; CR-SPLIT=8	Sequence 1-9 Non-Int in Visit 03	112 Secs (112 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***

Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4.

SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")
For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.

7	PSF-LONG	(2) PSFSTAR-HD145570	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	SIZEAXIS2=427; GAIN=4; CR-SPLIT=8	Sequence 1-9 Non-Int in Visit 03	112 Secs (112 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***

Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4.

SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")
For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.

8	PSF-LONG	(2) PSFSTAR-HD14 5570	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	SIZEAXIS2=427; GAIN=4; CR-SPLIT=8	Sequence 1-9 Non-Int in Visit 03	112 Secs (112 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***

Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4.

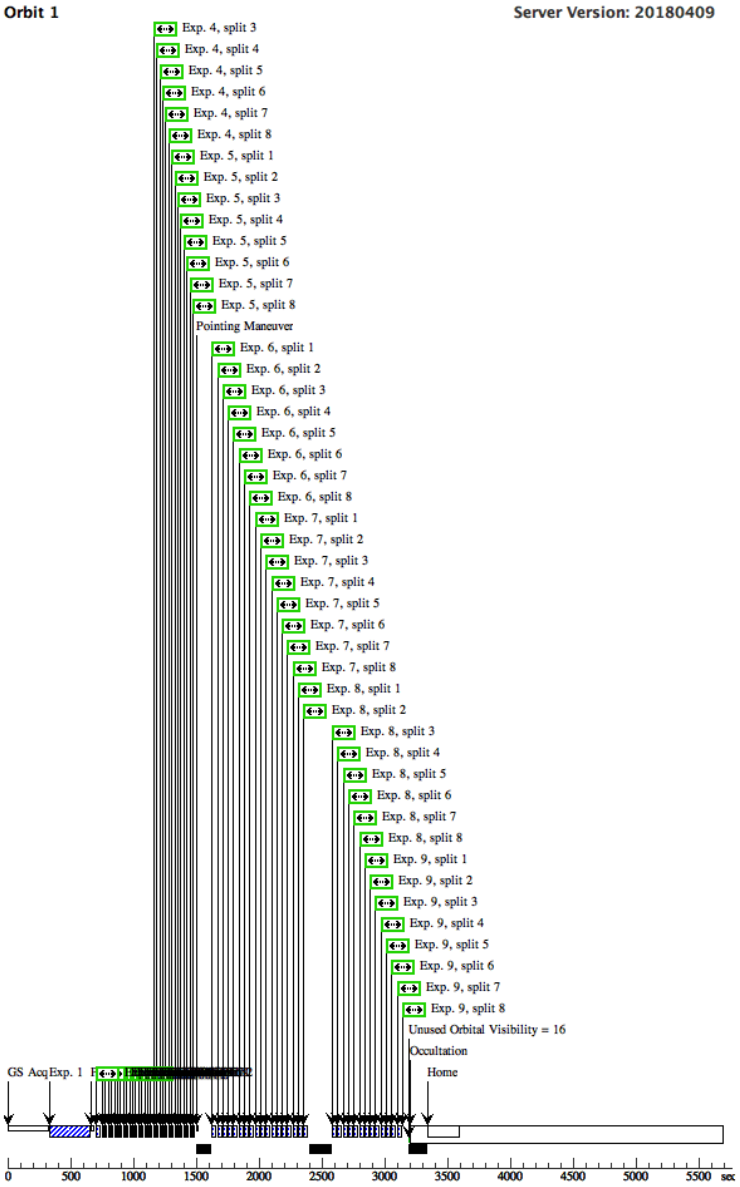
SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")
For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target
to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the
Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.

9	PSF-LONG	(2) PSFSTAR-HD14 5570	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	SIZEAXIS2=427; GAIN=4; CR-SPLIT=8	Sequence 1-9 Non-Int in Visit 03	112 Secs (112 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***

Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4.

SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")
For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target
to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the
Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.

Orbit Structure



Visit

Proposal 15437, Visit 04, completed Mon Jul 09 22:10:32 GMT 2018

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; ORIENT 15D TO 30D FROM 02; AFTER 03 BY 0.5 Orbits TO 1.2 Orbits; BETWEEN 01-APR-2018:00:00:00 AND 22-SEP-2018:00:00:00

Comments: HD 163296

First of two sets of visits, each containing three visits of HD163296 at different relative orientations with one PSF calibration observation visit interleaved. This set of visits uses WedgeA.

This is the third and final HD163296 visit in the first set.

The four visits within each set MUST be executed sequentally in contiguous orbits interrupted only for Earth occultation.

Orientation: This visit should be oriented 15 degrees to 30 degrees from visit#2
Timing requirements: This visit MUST be executed in the subsequent orbit to visit #3.

Diagnostics

(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 04) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD163296	RA: 17 56 21.2880 (269.0887000d)	Proper Motion RA: -7.98 mas/yr	V=6.85	Reference Frame: ICRS
		Dec: -21 57 21.87 (-21.95607d)	Proper Motion Dec: -39.21 mas/yr	B-V=0.08	
		Equinox: J2000	Parallax: 0.00843"		
			Epoch of Position: 2000		

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[HERBIG AE/BE]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	163-ACQ	(1) HD163296	STIS/CCD, ACQ, F25ND3	MIRROR			Sequence 1-6 Non-Int in Visit 04	0.20 Secs (0.2 Secs) *[==>]*	 ***[1]***

Comments: SNR=100, A1V, V=6.85, rounded to nearest 0.1 magnitude

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
2	163-SHORT	(1) HD163296	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	CR-SPLIT=8; SIZEAXIS2=137; GAIN=4		Sequence 1-6 Non-Int in Visit 04	64 Secs (64 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	 ***[1]***

Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4.

SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")
For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
3	163-SHORT	(1) HD163296	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	CR-SPLIT=8; SIZEAXIS2=137; GAIN=4		Sequence 1-6 Non-Int in Visit 04	64 Secs (64 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	 ***[1]***

Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4.

SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")
For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position

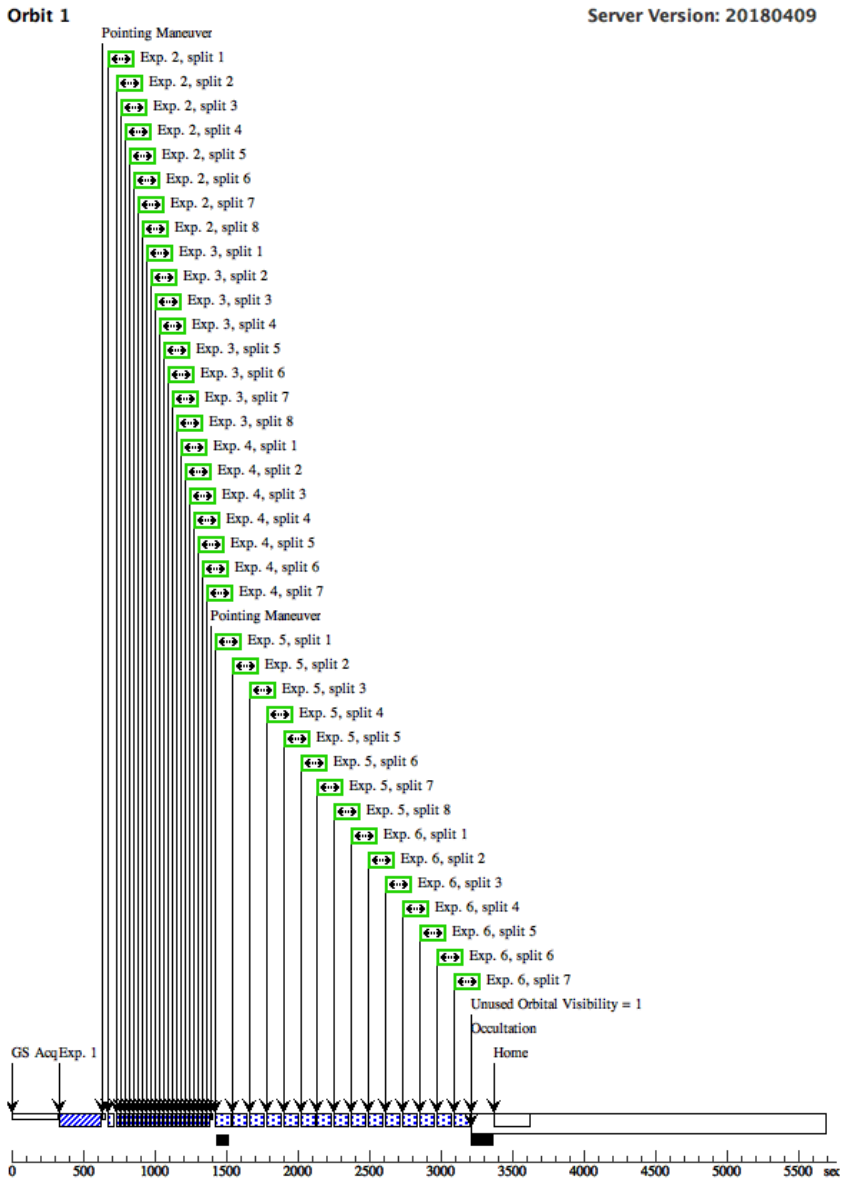
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
4	163-SHORT	(1) HD163296	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	CR-SPLIT=7; SIZEAXIS2=137; GAIN=4		Sequence 1-6 Non-Int in Visit 04	56 Secs (56 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]*	 ***[1]***

Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 6 CR Splits and gain-4.

SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")
For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position

	5	163-LONG	(1) HD163296	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	SIZEAXIS2=427; GAIN=4; CR-SPLIT=8	Sequence 1-6 Non-Int in Visit 04	720 Secs (720 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***
	Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target* *to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the* *Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.*								
	6	163-LONG	(1) HD163296	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	SIZEAXIS2=427; GAIN=4; CR-SPLIT=7	Sequence 1-6 Non-Int in Visit 04	630 Secs (630 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]*	***[1]***
	Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target* *to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the* *Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.*								

Orbit Structure



Visit

Proposal 15437, Visit 05, scheduling Mon Jul 09 22:10:32 GMT 2018

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; ORIENT -135D TO -55D FROM 01; BETWEEN 01-APR-2018:00:00:00 AND 22-SEP-2018:00:00:00

Comments: HD 163296

Second of two sets of visits, each containing three visits of HD163296 at different relative orientations with one PSF calibration observation visit interleaved. This set of visits uses WedgeA.

This is the first HD163296 visit in the second set.

The four visits within each set MUST be executed sequentally in contiguous orbits interrupted only for Earth occultation.

Orientation: We have set the allowable orientation to range from -135 deg to -55 degrees from Visit 1, to allow a sufficiently large scheduling window.

Diagnostics

(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 05) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD163296	RA: 17 56 21.2880 (269.0887000d)	Proper Motion RA: -7.98 mas/yr	V=6.85	Reference Frame: ICRS
		Dec: -21 57 21.87 (-21.95607d)	Proper Motion Dec: -39.21 mas/yr	B-V=0.08	
		Equinox: J2000	Parallax: 0.00843"		
			Epoch of Position: 2000		

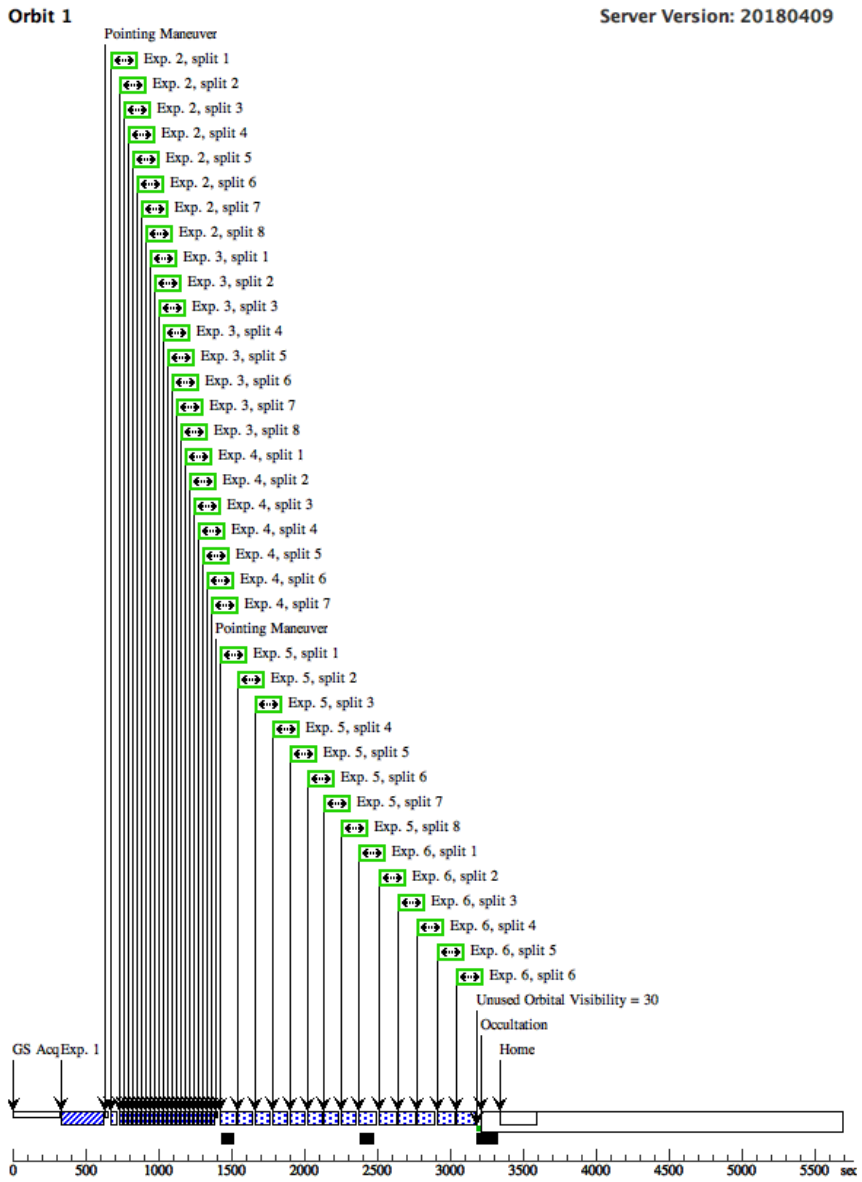
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[HERBIG AE/BE]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	163-ACQ	(1) HD163296	STIS/CCD, ACQ, F25ND3	MIRROR			Sequence 1-6 Non-Int in Visit 05	0.20 Secs (0.2 Secs) *[==>]*	 ***[1]***
Comments: SNR=100, A1V, V=6.85, rounded to nearest 0.1 magnitude									
2	163-SHORT	(1) HD163296	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	CR-SPLIT=8; SIZEAXIS2=137; GAIN=4		Sequence 1-6 Non-Int in Visit 05	64 Secs (64 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	 ***[1]***
Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position*									
3	163-SHORT	(1) HD163296	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	CR-SPLIT=8; SIZEAXIS2=137; GAIN=4		Sequence 1-6 Non-Int in Visit 05	64 Secs (64 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	 ***[1]***
Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position*									
4	163-SHORT	(1) HD163296	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	CR-SPLIT=7; SIZEAXIS2=137; GAIN=4		Sequence 1-6 Non-Int in Visit 05	56 Secs (56 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]*	 ***[1]***
Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 6 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position*									

	5	163-LONG	(1) HD163296	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	SIZEAXIS2=427; GAIN=4; CR-SPLIT=8	Sequence 1-6 Non-Int in Visit 05	720 Secs (720 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***
	Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target* *to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the* *Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.*								
	6	163-LONG	(1) HD163296	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	GAIN=4; CR-SPLIT=6	Sequence 1-6 Non-Int in Visit 05	540 Secs (540 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]*	***[1]***
	Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target* *to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the* *Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.*								

Orbit Structure



Visit

Proposal 15437, Visit 06, scheduling Mon Jul 09 22:10:32 GMT 2018

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; ORIENT -30D TO -15D FROM 05; AFTER 05 BY 0.5 Orbits TO 1.2 Orbits; BETWEEN 01-APR-2018:00:00:00 AND 22-SEP-2018:00:00:00

Comments: HD 163296

Second of two sets of visits, each containing three visits of HD163296 at different relative orientations with one PSF calibration observation visit interleaved. This set of visits uses WedgeA.

This is the second HD163296 visit in the second set.

The four visits within each set MUST be executed sequentally in contiguous orbits interrupted only for Earth occultation.

Orientation: We have set the allowable orientation to range from -30 deg to -15 degrees from Visit#5, to allow a sufficiently large scheduling window.
Timing requirements: This visit MUST be executed in the subsequent orbit to visit #5.

Diagnostics

(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 06) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD163296	RA: 17 56 21.2880 (269.0887000d)	Proper Motion RA: -7.98 mas/yr	V=6.85	Reference Frame: ICRS
		Dec: -21 57 21.87 (-21.95607d)	Proper Motion Dec: -39.21 mas/yr	B-V=0.08	
		Equinox: J2000	Parallax: 0.00843"		
			Epoch of Position: 2000		

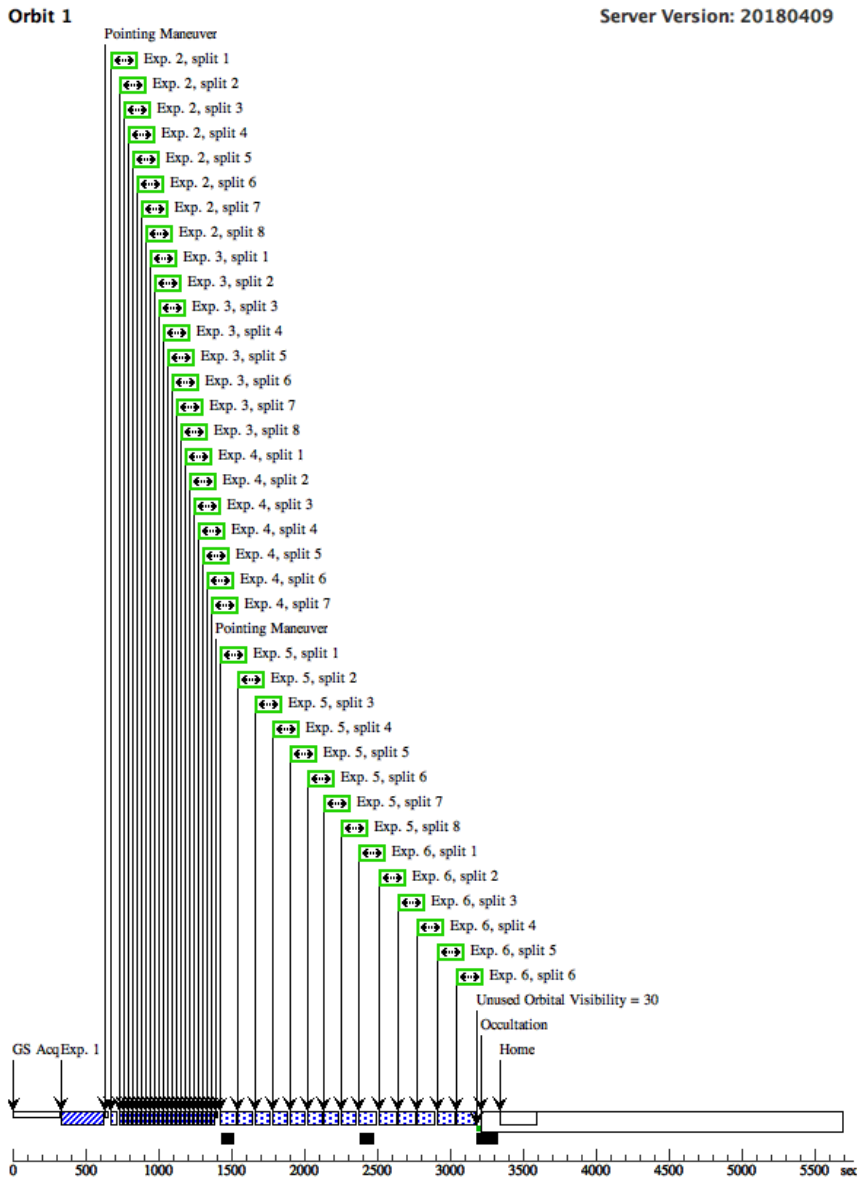
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[HERBIG AE/BE]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	163-ACQ	(1) HD163296	STIS/CCD, ACQ, F25ND3	MIRROR			Sequence 1-6 Non-Int in Visit 06	0.20 Secs (0.2 Secs) *[==>]*	 ***[1]***
Comments: SNR=100, A1V, V=6.85, rounded to nearest 0.1 magnitude									
2	163-SHORT	(1) HD163296	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	CR-SPLIT=8; SIZEAXIS2=137; GAIN=4		Sequence 1-6 Non-Int in Visit 06	64 Secs (64 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	 ***[1]***
Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position*									
3	163-SHORT	(1) HD163296	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	CR-SPLIT=8; SIZEAXIS2=137; GAIN=4		Sequence 1-6 Non-Int in Visit 06	64 Secs (64 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	 ***[1]***
Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position*									
4	163-SHORT	(1) HD163296	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	CR-SPLIT=7; SIZEAXIS2=137; GAIN=4		Sequence 1-6 Non-Int in Visit 06	56 Secs (56 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]*	 ***[1]***
Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 6 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position*									

	5	163-LONG	(1) HD163296	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	SIZEAXIS2=427; GAIN=4; CR-SPLIT=8	Sequence 1-6 Non-Int in Visit 06	720 Secs (720 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***
	Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target* *to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the* *Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.*								
	6	163-LONG	(1) HD163296	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	GAIN=4; CR-SPLIT=6	Sequence 1-6 Non-Int in Visit 06	540 Secs (540 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]*	***[1]***
	Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target* *to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the* *Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.*								

Orbit Structure



Visit

Proposal 15437, Visit 07, scheduling Mon Jul 09 22:10:33 GMT 2018

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; AFTER 06 BY 0.5 Orbits TO 1.2 Orbits; BETWEEN 01-APR-2018:00:00:00 AND 22-SEP-2018:00:00:00

Comments: HD 145570

Second of two sets of visits, each containing three visits of HD163296 at different relative orientations with one PSF calibration observation visit interleaved. This set of visits uses WedgeA.

This is the PSF star visit in the second set.

The four visits within each set MUST be executed sequentally in contiguous orbits interrupted only for Earth occultation.

Orientation: This visit has NO orient constraints.
Timing requirements: This visit MUST be executed in the subsequent orbit to visit #6.

Diagnostics

(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 07) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	PSFSTAR-HD145570	RA: 16 11 59.9885 (242.9999521d) Dec: -10 03 51.27 (-10.06424d) Equinox: J2000	Proper Motion RA: -21.98 mas/yr Proper Motion Dec: -23.74 mas/yr Parallax: 0.02096" Epoch of Position: 2000	V=4.928+/-0.009 B-V=0.101	Reference Frame: ICRS

Comments:
Category=STAR
Description=[A0-A3 V-IV]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	PSF-ACQ	(2) PSFSTAR-HD145570	STIS/CCD, ACQ, F25ND5	MIRROR			Sequence 1-9 Non-Int in Visit 07	8 Secs (8 Secs) *[==>]*	*[1]*
Comments: SNR=100; A1V; V=4.928; using F25ND5 filter									
2	PSF-SHORT	(2) PSFSTAR-HD145570	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	SIZEAXIS2=137; GAIN=4; CR-SPLIT=8		Sequence 1-9 Non-Int in Visit 07	11.2 Secs (11.2 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	*[1]*
Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position*								
3	PSF-SHORT	(2) PSFSTAR-HD145570	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	SIZEAXIS2=137; GAIN=4; CR-SPLIT=8		Sequence 1-9 Non-Int in Visit 07	11.2 Secs (11.2 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	*[1]*
Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position*								
4	PSF-SHORT	(2) PSFSTAR-HD145570	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	SIZEAXIS2=137; GAIN=4; CR-SPLIT=8		Sequence 1-9 Non-Int in Visit 07	11.2 Secs (11.2 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	*[1]*
Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position*								

5	PSF-SHORT	(2) PSFSTAR-HD145570	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	SIZEAXIS2=137; GAIN=4; CR-SPLIT=8	Sequence 1-9 Non-Int in Visit 07	11.2 Secs (11.2 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***

Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4.

SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")
For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position

6	PSF-LONG	(2) PSFSTAR-HD145570	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	SIZEAXIS2=427; GAIN=4; CR-SPLIT=8	Sequence 1-9 Non-Int in Visit 07	112 Secs (112 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***

Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4.

SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")
For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.

7	PSF-LONG	(2) PSFSTAR-HD145570	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	SIZEAXIS2=427; GAIN=4; CR-SPLIT=8	Sequence 1-9 Non-Int in Visit 07	112 Secs (112 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***

Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4.

SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")
For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.

8	PSF-LONG	(2) PSFSTAR-HD14 5570	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	SIZEAXIS2=427; GAIN=4; CR-SPLIT=8	Sequence 1-9 Non-Int in Visit 07	112 Secs (112 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***

Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4.

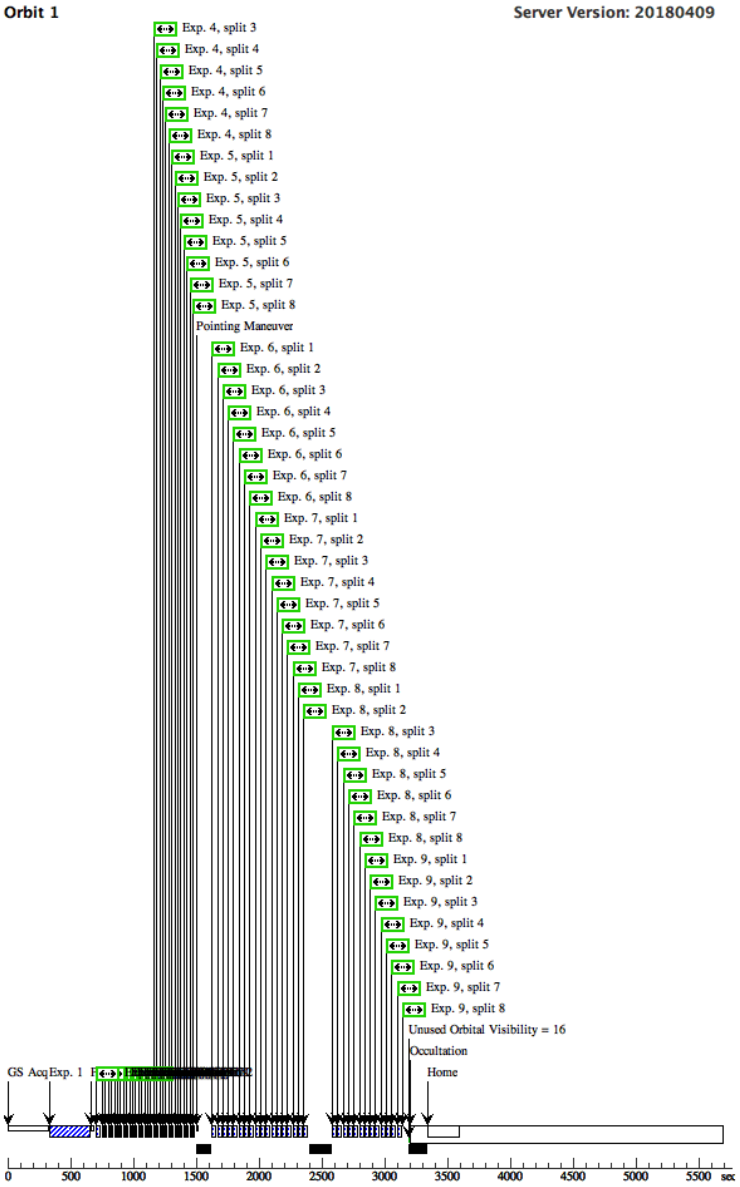
SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")
For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target
to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the
Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.

9	PSF-LONG	(2) PSFSTAR-HD14 5570	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	SIZEAXIS2=427; GAIN=4; CR-SPLIT=8	Sequence 1-9 Non-Int in Visit 07	112 Secs (112 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***

Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4.

SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")
For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target
to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the
Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.

Orbit Structure



Visit

Proposal 15437, Visit 08, scheduling Mon Jul 09 22:10:33 GMT 2018

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD; ORIENT -60D TO -45D FROM 05; AFTER 07 BY 0.5 Orbits TO 1.2 Orbits; BETWEEN 01-APR-2018:00:00:00 AND 22-SEP-2018:00:00:00

Comments: HD 163296

Second of two sets of visits, each containing three visits of HD163296 at different relative orientations with one PSF calibration observation visit interleaved. This set of visits uses WedgeA.

This is the third and final HD163296 visit in the second set.

The four visits within each set MUST be executed sequentally in contiguous orbits interrupted only for Earth occultation.

Orientation: We have set the allowable orientation to range from -60 deg to -45 degrees from Visit#5, to allow a sufficiently large scheduling window.
Timing requirements: This visit MUST be executed in the subsequent orbit to visit #7.

Diagnostics

(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR
(Visit 08) Warning (Orbit Planner): SUBARRAY OFF OF DETECTOR

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD163296	RA: 17 56 21.2880 (269.0887000d)	Proper Motion RA: -7.98 mas/yr	V=6.85	Reference Frame: ICRS
		Dec: -21 57 21.87 (-21.95607d)	Proper Motion Dec: -39.21 mas/yr	B-V=0.08	
		Equinox: J2000	Parallax: 0.00843"		
			Epoch of Position: 2000		

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[HERBIG AE/BE]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	163-ACQ	(1) HD163296	STIS/CCD, ACQ, F25ND3	MIRROR			Sequence 1-6 Non-Int in Visit 08	0.20 Secs (0.2 Secs) *[==>]*	 ***[1]***
Comments: SNR=100, A1V, V=6.85, rounded to nearest 0.1 magnitude									
2	163-SHORT	(1) HD163296	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	CR-SPLIT=8; SIZEAXIS2=137; GAIN=4		Sequence 1-6 Non-Int in Visit 08	64 Secs (64 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	 ***[1]***
Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position*									
3	163-SHORT	(1) HD163296	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	CR-SPLIT=8; SIZEAXIS2=137; GAIN=4		Sequence 1-6 Non-Int in Visit 08	64 Secs (64 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	 ***[1]***
Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position*									
4	163-SHORT	(1) HD163296	STIS/CCD, ACCUM, WEDGEA0.6	MIRROR	CR-SPLIT=7; SIZEAXIS2=137; GAIN=4		Sequence 1-6 Non-Int in Visit 08	56 Secs (56 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]*	 ***[1]***
Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "short" exposures, using 6 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "short" exposures we will image perpendicular to the wedge (symmetrically) centered on the target to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 137, appropriate for the WedgeA0.6 position*									

	5	163-LONG	(1) HD163296	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	SIZEAXIS2=427; GAIN=4; CR-SPLIT=8	Sequence 1-6 Non-Int in Visit 08	720 Secs (720 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]* *[==>(Split 7)]* *[==>(Split 8)]*	***[1]***
	Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target* *to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the* *Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.*								
	6	163-LONG	(1) HD163296	STIS/CCD, ACCUM, WEDGEA1.0	MIRROR	GAIN=4; CR-SPLIT=6	Sequence 1-6 Non-Int in Visit 08	540 Secs (540 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]* *[==>(Split 6)]*	***[1]***
	Comments: Exposure times scaled from 90% full well depth for GO-15219 WedgeA0.6 observations of AU Mic, HD198939, & HD191849. Use this for the "long" exposures, using 8 CR Splits and gain-4. *SCALABLE PARAMETER FOR SUB-ARRAY Readout: SIZEAXIS2 = 20 is 1" in full extent (r = 0.5")* *For these "long" exposures we will image perpendicular to the wedge (symmetrically) centered on the target* *to the maximum extent permitted by the limits of the FOV (edge of the detector) on the "small" side of the* *Wedge A taper. Thus, for these short exposures we use SIZEAXIS12 = 427, appropriate for the WedgeA1.0 position.*								

Orbit Structure