17127 - Testing models of accretion onto the Young Planetary System PDS 70

Cycle: 30, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

INVESTIGATORS

Name	*Institution*
Dr. Yuhiko Aoyama (PI) (Contact)	**Peking University**
Dr. Gregory J. Herczeg (CoI) (CoPI) (Contact)	Peking University
Jun Hashimoto (CoI) (Contact)	National Astronomical Observatory of Japan (NAOJ)
Dr. Yifan Zhou (CoI) (AdminUSPI)	The University of Virginia
Dr. Tracy Beck (CoI)	Space Telescope Science Institute

VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(2) CD-40-8434	ACS/SBC	2	16-Sep-2024 11:00:17.0	yes
03	(2) CD-40-8434	ACS/SBC	2	16-Sep-2024 11:00:18.0	yes
02	(2) CD-40-8434	ACS/SBC	2	16-Sep-2024 11:00:19.0	yes
04	(2) CD-40-8434	ACS/SBC	2	16-Sep-2024 11:00:19.0	yes
05	(2) CD-40-8434	ACS/SBC	2	16-Sep-2024 11:00:20.0	yes
07	(2) CD-40-8434	ACS/SBC	2	16-Sep-2024 11:00:21.0	yes
09	(2) CD-40-8434	ACS/SBC	2	16-Sep-2024 11:00:21.0	yes
06	(2) CD-40-8434	ACS/SBC	2	16-Sep-2024 11:00:22.0	yes
08	(2) CD-40-8434	ACS/SBC	2	16-Sep-2024 11:00:22.0	yes

18 Total Orbits Used

ABSTRACT

Observations of the planet-forming regions have revolutionized our understanding of how planets formed in the past decade. Of the many advances, the PDS 70 system is unique -- a system hosting two giant plants that are still growing from proto-lunary disks. When trying to understand the mass assembly of giant planets, such as PDS 70 b and c, this growth rate is a fundamental property. Typically the accretion rate is estimated by measuring H-alpha and then converting the line luminosity into accretion luminosity. However, this conversion was developed for the case where H-alpha emission is produced in the magnetospheric accretion flow. For forming planets, the magnetospheric accretion flow may not be hot enough to emit hydrogen lines. If the H line emission is instead produced by the accretion shock, more than half of the energy would escape as Ly-alpha photons. This uncertain interpretation leads to large errors in estimates of accretion rates from the observed H-alpha line. In this proposal, we request deep HST/ACS SBC PR130L prism spectra of PDS 70b and c to confirm whether the magnetospheric accretion flow emits hydrogen lines. We will use H2 emission, photoexcited by Ly-alpha photons, to compare Ly-alpha emission to H line emission. In addition, we will measure the C IV line luminosity and place it in the context of accretion flows onto low-mass stars and brown dwarfs. These observations will allow us to understand accretion onto PDS70 b and c and prepare to apply these models to the characterization of future discoveries with JWST and the ELTs.

OBSERVING DESCRIPTION

Two 4-orbit observations of PDS 70 to attempt to measure FUV emission from the planets. The position angles are set through ORIENT so that in each case, the planet is far enough from the star to be visible. In each orbit, I offset the star by a little for better spatial resolution.

The target is acquired with the F150LP filter, with a count rate of ~1 cts/s, safe enough for a variable target.

The star itself has a STIS G140L+G230L spectrum (PI Skinner) for use in the ETC.

Visit

Proposal 17127, PDS66-1a (01), failed Mon Sep 16 15:00:23 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: ACS/SBC

Special Requirements: ORIENT 130D TO 170 D; ORIENT 310D TO 350 D

Diagnostics

(PDS66-1a (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(PDS66-1a (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

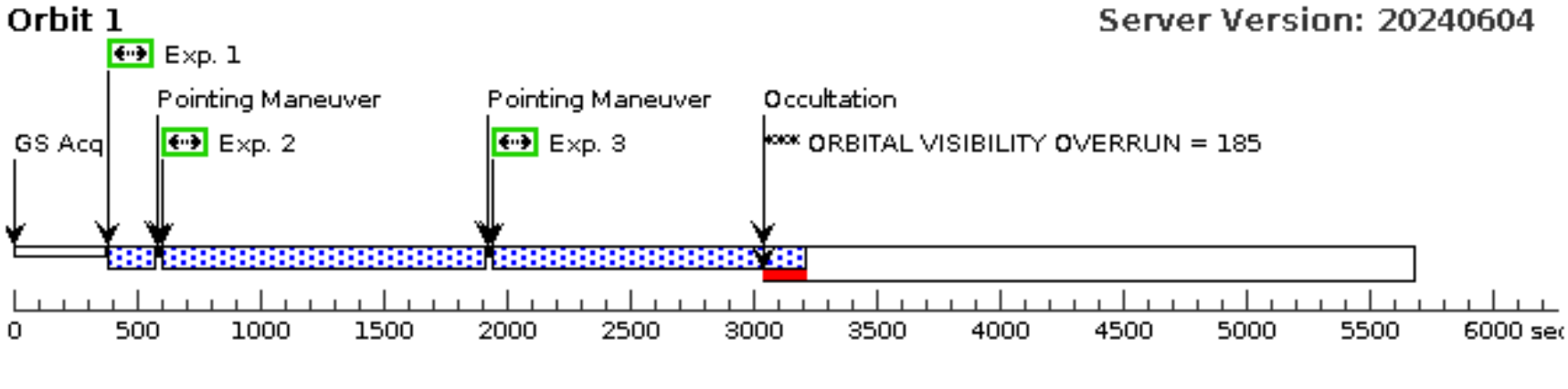
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	CD-40-8434	RA: 14 08 10.1136 (212.0421400d) Dec: -41 23 52.95 (-41.39804d) Equinox: J2000	Proper Motion RA: -0.0026392628918559184 sec of time/yr Proper Motion Dec: -0.02404100005151122 arcsec/yr Epoch of Position: 2015.5	V=12.18	Reference Frame: SIMBAD

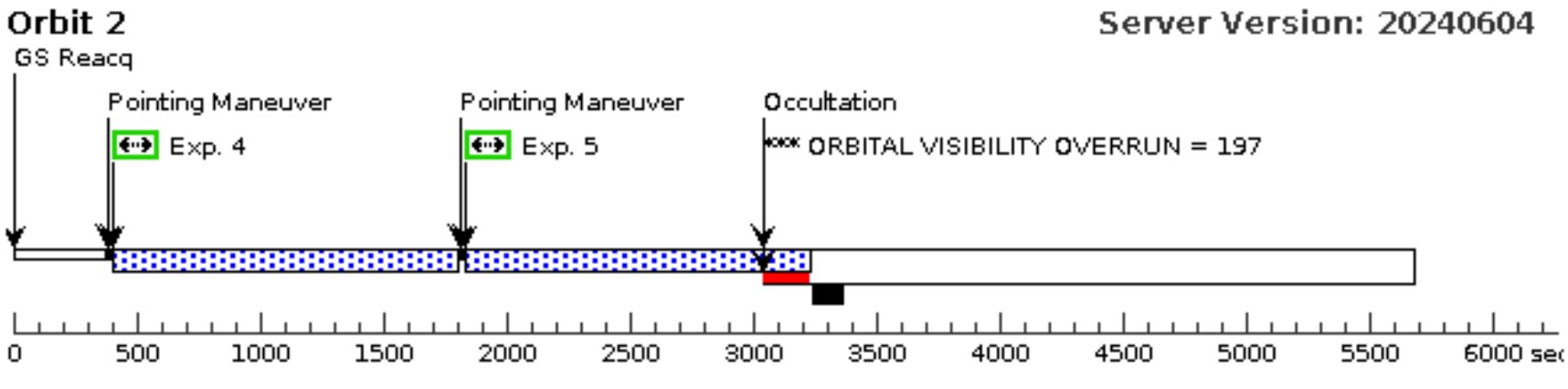
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=EXT-STAR
Description=[T TAURI STAR]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	PDS66 (1810459)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	F150LP				120 Secs (120 Secs) *[==>]*	 ***[1]***
Comments: count rate for detector: 16 cts/s count rate for peak pixel: 0.96 cts/s									
2	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0.0,0.00 75		1247 Secs (1247 Secs) *[==>]*	 ***[1]***
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									
3	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0.0,0.00		1247 Secs (1247 Secs) *[==>]*	 ***[1]***
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									
4	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG null,-0.0 075		1373 Secs (1373 Secs) *[==>]*	 ***[2]***
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									
5	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG null,-0.0 15		1373 Secs (1373 Secs) *[==>]*	 ***[2]***
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									

Orbit Structure





Visit

Proposal 17127, PDS66a-1b (03), failed Mon Sep 16 15:00:23 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: ACS/SBC

Special Requirements: ORIENT -5D TO 5D FROM 01

Diagnostics

(PDS66a-1b (03)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(PDS66a-1b (03)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

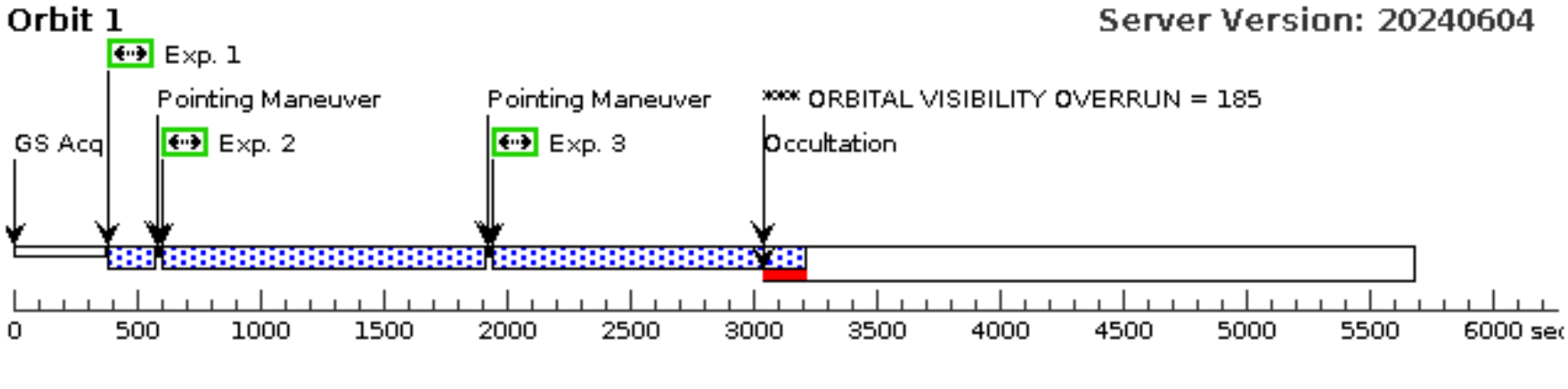
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	CD-40-8434	RA: 14 08 10.1136 (212.0421400d) Dec: -41 23 52.95 (-41.39804d) Equinox: J2000	Proper Motion RA: -0.0026392628918559184 sec of time/yr Proper Motion Dec: -0.02404100005151122 arcsec/yr Epoch of Position: 2015.5	V=12.18	Reference Frame: SIMBAD

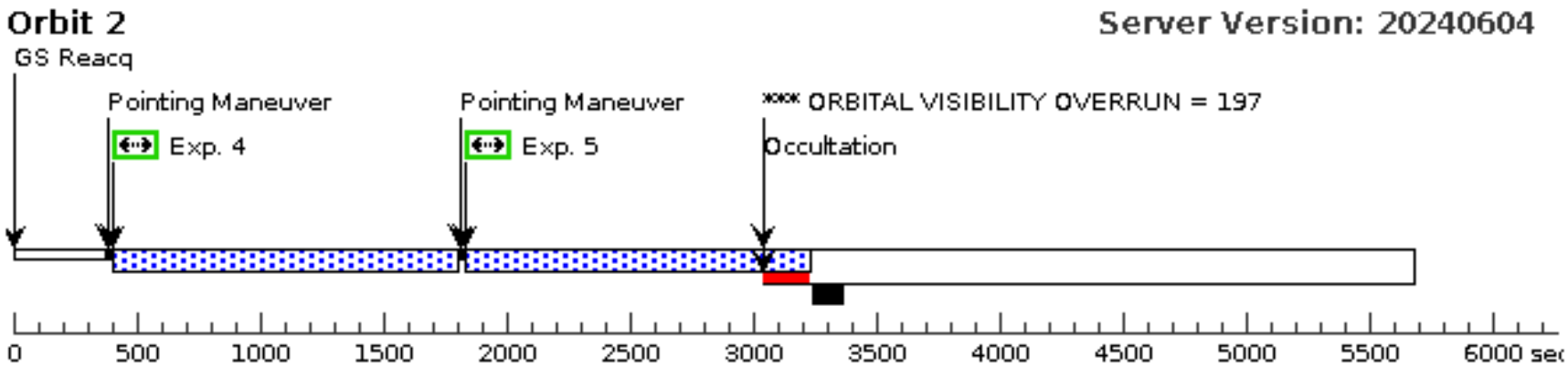
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=EXT-STAR
Description=[T TAURI STAR]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	PDS66 (1810459)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	F150LP				120 Secs (120 Secs) *[==>]*	 ***[1]***
	Comments: count rate for detector: 16 cts/s *count rate for peak pixel: 0.96 cts/s*								
2	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0,0.0075		1247 Secs (1247 Secs) *[==>]*	 ***[1]***
	Comments: Brightest Pixel at 1550.03: 0.604 *Count rate entire detector: 8,249.240*								
3	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0,0		1247 Secs (1247 Secs) *[==>]*	 ***[1]***
	Comments: Brightest Pixel at 1550.03: 0.604 *Count rate entire detector: 8,249.240*								
4	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0,-0.0075		1373 Secs (1373 Secs) *[==>]*	 ***[2]***
	Comments: Brightest Pixel at 1550.03: 0.604 *Count rate entire detector: 8,249.240*								
5	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0,-0.015		1373 Secs (1373 Secs) *[==>]*	 ***[2]***
	Comments: Brightest Pixel at 1550.03: 0.604 *Count rate entire detector: 8,249.240*								

Orbit Structure





Visit

Proposal 17127, PDS66a-2a (02), completed Mon Sep 16 15:00:23 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: ACS/SBC

Special Requirements: ORIENT 263D TO 303 D; ORIENT 83D TO 123 D

Diagnostics

(PDS66a-2a (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(PDS66a-2a (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

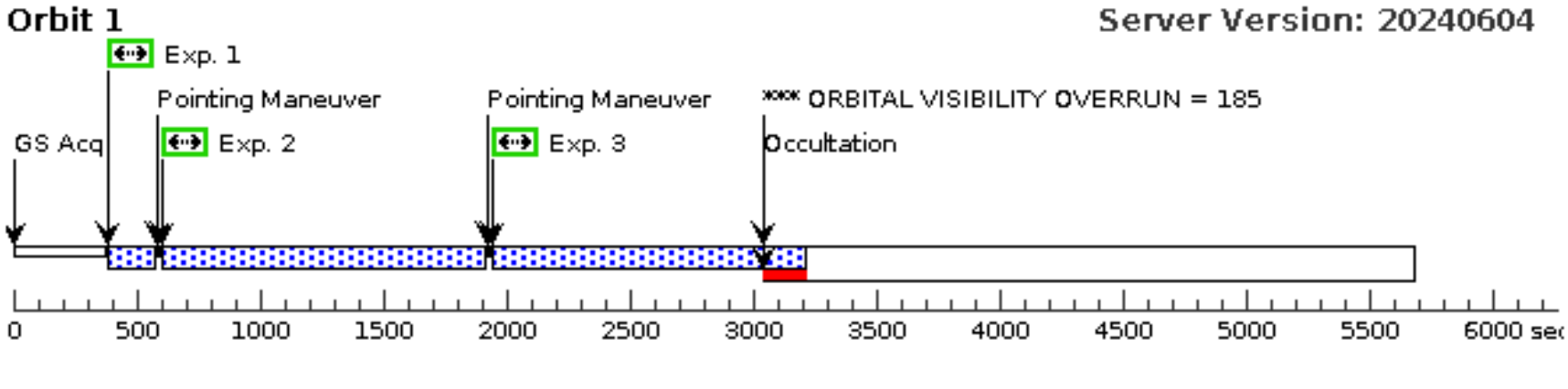
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	CD-40-8434	RA: 14 08 10.1136 (212.0421400d) Dec: -41 23 52.95 (-41.39804d) Equinox: J2000	Proper Motion RA: -0.0026392628918559184 sec of time/yr Proper Motion Dec: -0.02404100005151122 arcsec/yr Epoch of Position: 2015.5	V=12.18	Reference Frame: SIMBAD

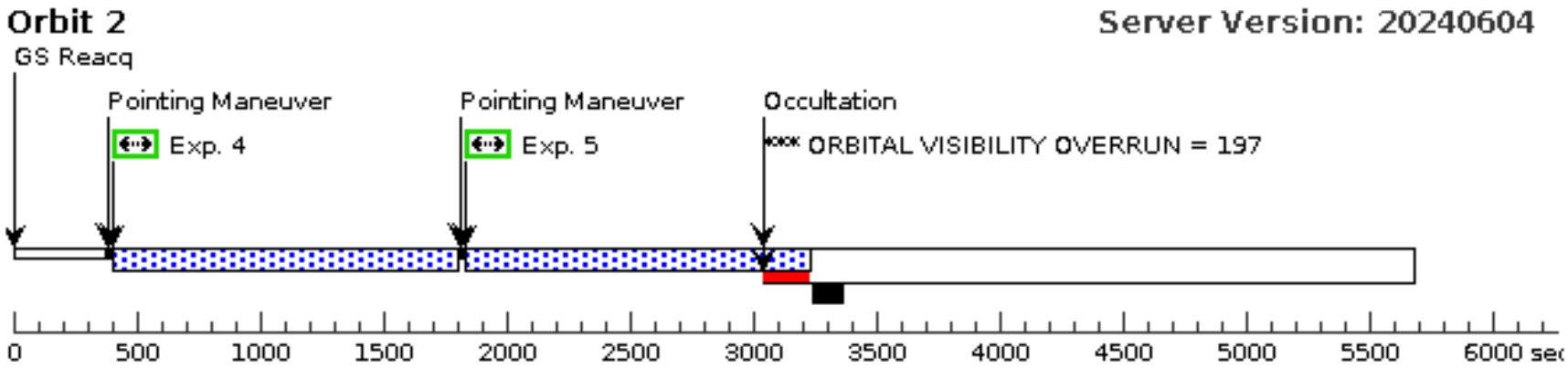
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=EXT-STAR
Description=[T TAURI STAR]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	PDS66 (1810459)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	F150LP		POS TARG null,0.0075		120 Secs (120 Secs) *[==>]*	 ***[1]***
	Comments: count rate for detector: 16 cts/s *count rate for peak pixel: 0.96 cts/s*								
2	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0.35,0.35		1247 Secs (1247 Secs) *[==>]*	 ***[1]***
	Comments: Brightest Pixel at 1550.03: 0.604 *Count rate entire detector: 8,249.240*								
3	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0.0,0.0		1247 Secs (1247 Secs) *[==>]*	 ***[1]***
	Comments: Brightest Pixel at 1550.03: 0.604 *Count rate entire detector: 8,249.240*								
4	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0,-0.075		1373 Secs (1373 Secs) *[==>]*	 ***[2]***
	Comments: Brightest Pixel at 1550.03: 0.604 *Count rate entire detector: 8,249.240*								
5	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0,-0.015		1373 Secs (1373 Secs) *[==>]*	 ***[2]***
	Comments: Brightest Pixel at 1550.03: 0.604 *Count rate entire detector: 8,249.240*								

Orbit Structure





Visit

Proposal 17127, PDS66a-2b (04), completed Mon Sep 16 15:00:23 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: ACS/SBC

Special Requirements: ORIENT -5D TO +5D FROM 03

Diagnostics

(PDS66a-2b (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(PDS66a-2b (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

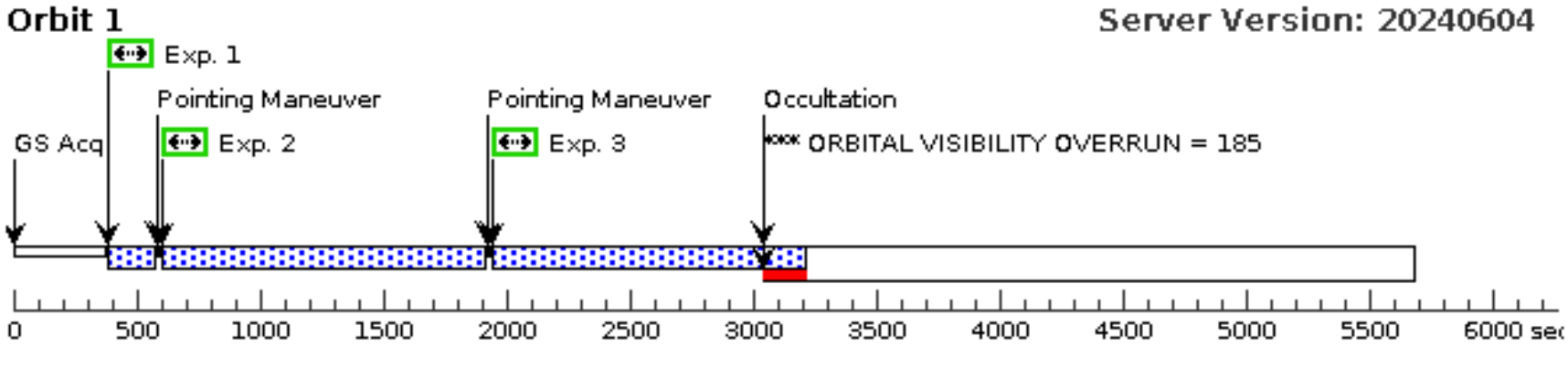
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	CD-40-8434	RA: 14 08 10.1136 (212.0421400d) Dec: -41 23 52.95 (-41.39804d) Equinox: J2000	Proper Motion RA: -0.0026392628918559184 sec of time/yr Proper Motion Dec: -0.02404100005151122 arcsec/yr Epoch of Position: 2015.5	V=12.18	Reference Frame: SIMBAD

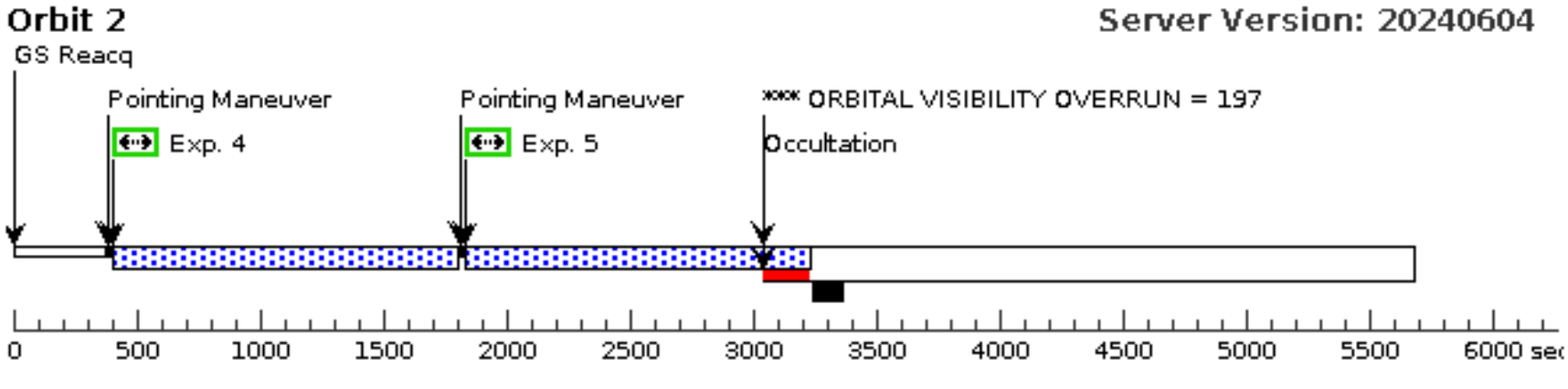
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=EXT-STAR
Description=[T TAURI STAR]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	PDS66 (1810459)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	F150LP				120 Secs (120 Secs) *[==>]*	 ***[1]***
Comments: count rate for detector: 16 cts/s count rate for peak pixel: 0.96 cts/s									
2	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0.0,0.075		1247 Secs (1247 Secs) *[==>]*	 ***[1]***
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									
3	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0,0.		1247 Secs (1247 Secs) *[==>]*	 ***[1]***
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									
4	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0,-0.075		1373 Secs (1373 Secs) *[==>]*	 ***[2]***
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									
5	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0,-0.015		1373 Secs (1373 Secs) *[==>]*	 ***[2]***
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									

Orbit Structure





Visit

Proposal 17127, PDS66-1a Visit 1 - copy (05), failed Mon Sep 16 15:00:23 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: ACS/SBC

Special Requirements: ORIENT 130D TO 170 D; ORIENT 310D TO 350 D

Diagnostics

(PDS66-1a Visit 1 - copy (05)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(PDS66-1a Visit 1 - copy (05)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

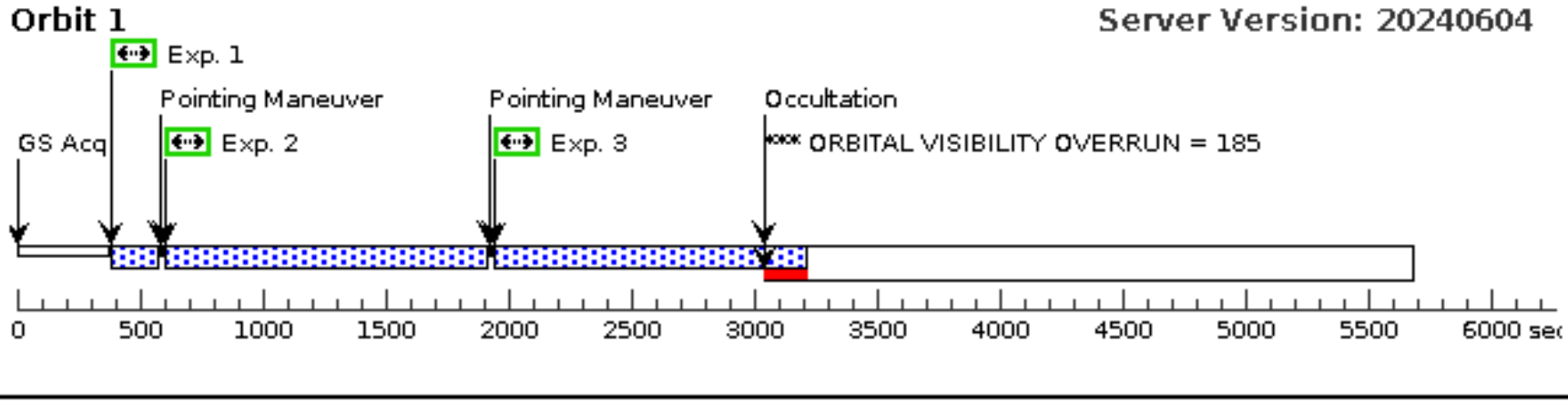
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	CD-40-8434	RA: 14 08 10.1136 (212.0421400d) Dec: -41 23 52.95 (-41.39804d) Equinox: J2000	Proper Motion RA: -0.0026392628918559184 sec of time/yr Proper Motion Dec: -0.02404100005151122 arcsec/yr Epoch of Position: 2015.5	V=12.18	Reference Frame: SIMBAD

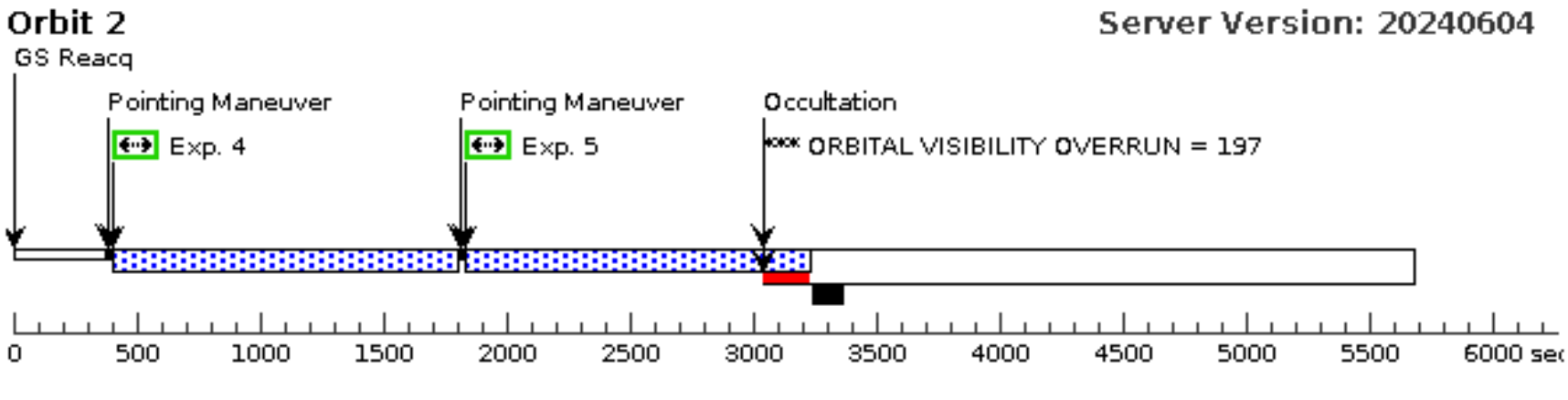
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=EXT-STAR
Description=[T TAURI STAR]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	PDS66 (1810459)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	F150LP				120 Secs (120 Secs) *[==>]*	*[1]*
Comments: count rate for detector: 16 cts/s count rate for peak pixel: 0.96 cts/s									
2	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0.0,0.00 75		1247 Secs (1247 Secs) *[==>]*	*[1]*
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									
3	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0.0,0.00		1247 Secs (1247 Secs) *[==>]*	*[1]*
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									
4	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG null,-0.0 075		1373 Secs (1373 Secs) *[==>]*	*[2]*
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									
5	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG null,-0.0 15		1373 Secs (1373 Secs) *[==>]*	*[2]*
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									

Orbit Structure





Visit

Proposal 17127, PDS66-1a Visit 1 - copy (07), failed Mon Sep 16 15:00:23 GMT 2024

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: ORIENT 130D TO 170 D; ORIENT 310D TO 350 D

Comments: copy of 5

Fixed Targets

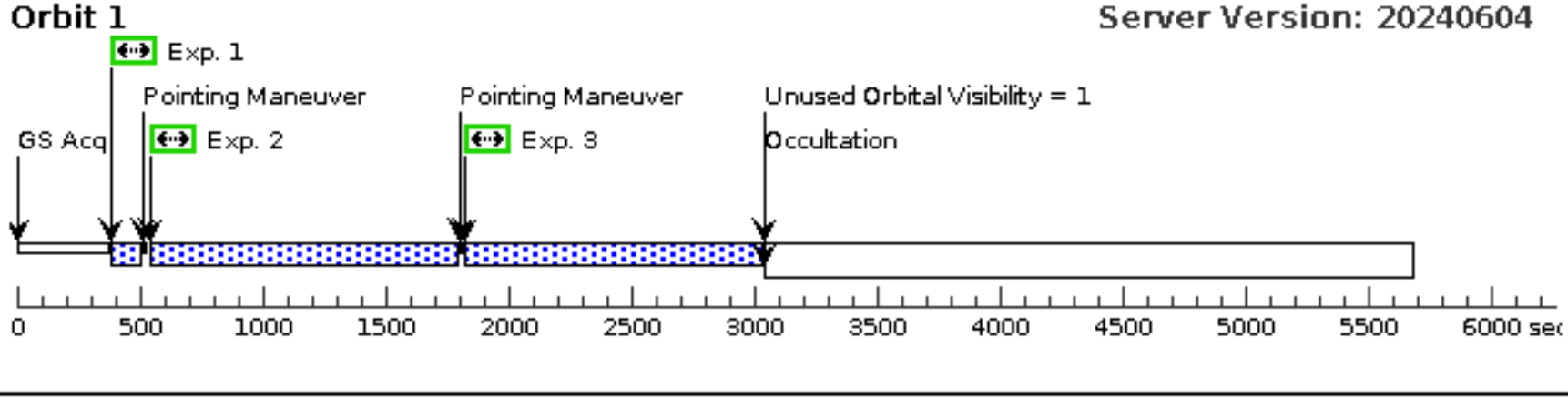
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	CD-40-8434	RA: 14 08 10.1136 (212.0421400d) Dec: -41 23 52.95 (-41.39804d) Equinox: J2000	Proper Motion RA: -0.0026392628918559184 sec of time/yr Proper Motion Dec: -0.02404100005151122 arcsec/yr Epoch of Position: 2015.5	V=12.18	Reference Frame: SIMBAD

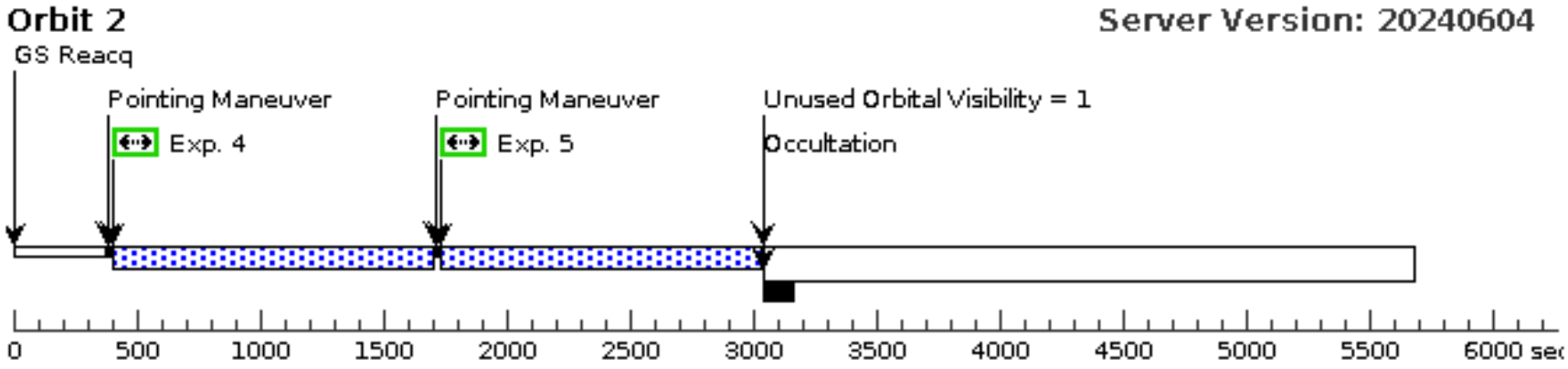
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=EXT-STAR
Description=[T TAURI STAR]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	PDS66 (1810459)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	F150LP				120 Secs (58 Secs) *[==>58.0 Secs]*	 ***[1]***
	Comments: count rate for detector: 16 cts/s *count rate for peak pixel: 0.96 cts/s*								
2	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0.0,0.00 75		1247 Secs (1185 Secs) *[==>1185.0 Secs]*	 ***[1]***
	Comments: Brightest Pixel at 1550.03: 0.604 *Count rate entire detector: 8,249.240*								
3	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0.0,0.00		1247 Secs (1185 Secs) *[==>1185.0 Secs]*	 ***[1]***
	Comments: Brightest Pixel at 1550.03: 0.604 *Count rate entire detector: 8,249.240*								
4	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG null,-0.0 075		1373 Secs (1274 Secs) *[==>1274.0 Secs]*	 ***[2]***
	Comments: Brightest Pixel at 1550.03: 0.604 *Count rate entire detector: 8,249.240*								
5	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG null,-0.0 15		1373 Secs (1274 Secs) *[==>1274.0 Secs]*	 ***[2]***
	Comments: Brightest Pixel at 1550.03: 0.604 *Count rate entire detector: 8,249.240*								

Orbit Structure





Visit

Proposal 17127, PDS66-1a Visit 1 - copy (09) Mon Sep 16 15:00:23 GMT 2024

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: ORIENT 130D TO 170 D; ORIENT 310D TO 350 D

Comments: copy of 7

Fixed Targets

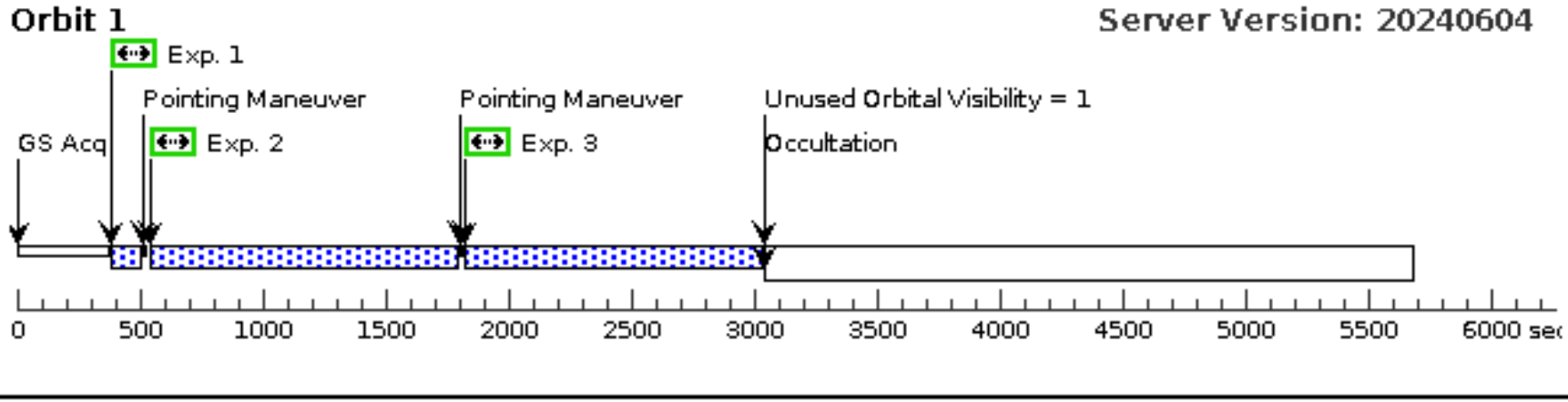
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	CD-40-8434	RA: 14 08 10.1136 (212.0421400d) Dec: -41 23 52.95 (-41.39804d) Equinox: J2000	Proper Motion RA: -0.0026392628918559184 sec of time/yr Proper Motion Dec: -0.02404100005151122 arcsec/yr Epoch of Position: 2015.5	V=12.18	Reference Frame: SIMBAD

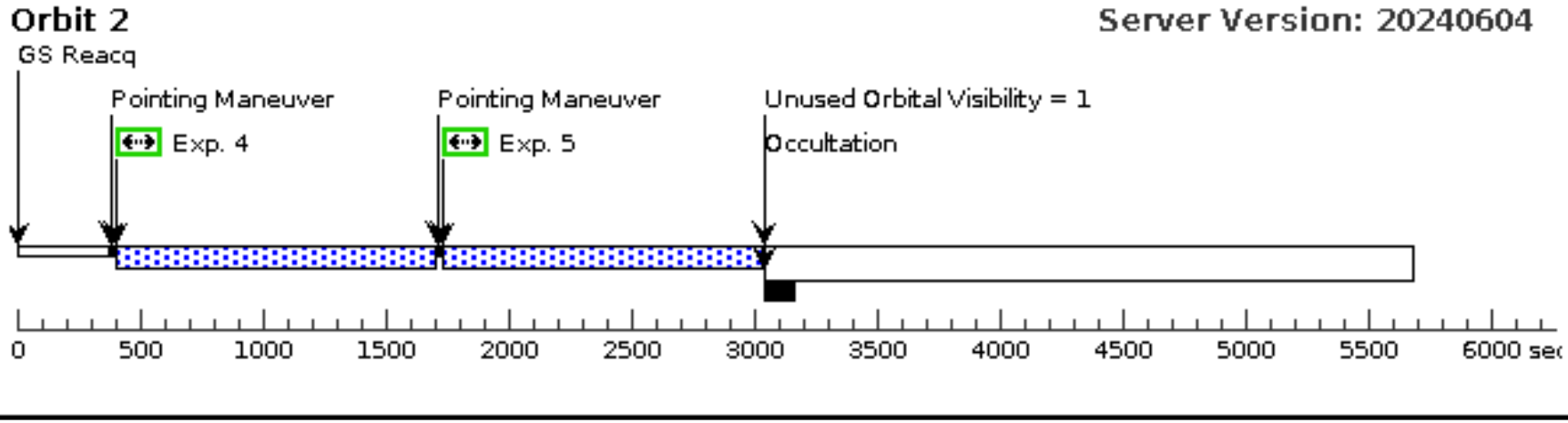
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=EXT-STAR
Description=[T TAURI STAR]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	PDS66 (1810459)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	F150LP				120 Secs (58 Secs) *[==>58.0 Secs]*	 ***[1]***
	Comments: count rate for detector: 16 cts/s *count rate for peak pixel: 0.96 cts/s*								
2	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0.0,0.00 75		1247 Secs (1185 Secs) *[==>1185.0 Secs]*	 ***[1]***
	Comments: Brightest Pixel at 1550.03: 0.604 *Count rate entire detector: 8,249.240*								
3	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0.0,0.00		1247 Secs (1185 Secs) *[==>1185.0 Secs]*	 ***[1]***
	Comments: Brightest Pixel at 1550.03: 0.604 *Count rate entire detector: 8,249.240*								
4	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG null,-0.0 075		1373 Secs (1274 Secs) *[==>1274.0 Secs]*	 ***[2]***
	Comments: Brightest Pixel at 1550.03: 0.604 *Count rate entire detector: 8,249.240*								
5	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG null,-0.0 15		1373 Secs (1274 Secs) *[==>1274.0 Secs]*	 ***[2]***
	Comments: Brightest Pixel at 1550.03: 0.604 *Count rate entire detector: 8,249.240*								

Orbit Structure





Visit

Proposal 17127, PDS66a-1b Visit 3 copy (06), failed Mon Sep 16 15:00:23 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: ACS/SBC

Special Requirements: ORIENT -5D TO 5D FROM 01

Diagnostics

(PDS66a-1b Visit 3 copy (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(PDS66a-1b Visit 3 copy (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

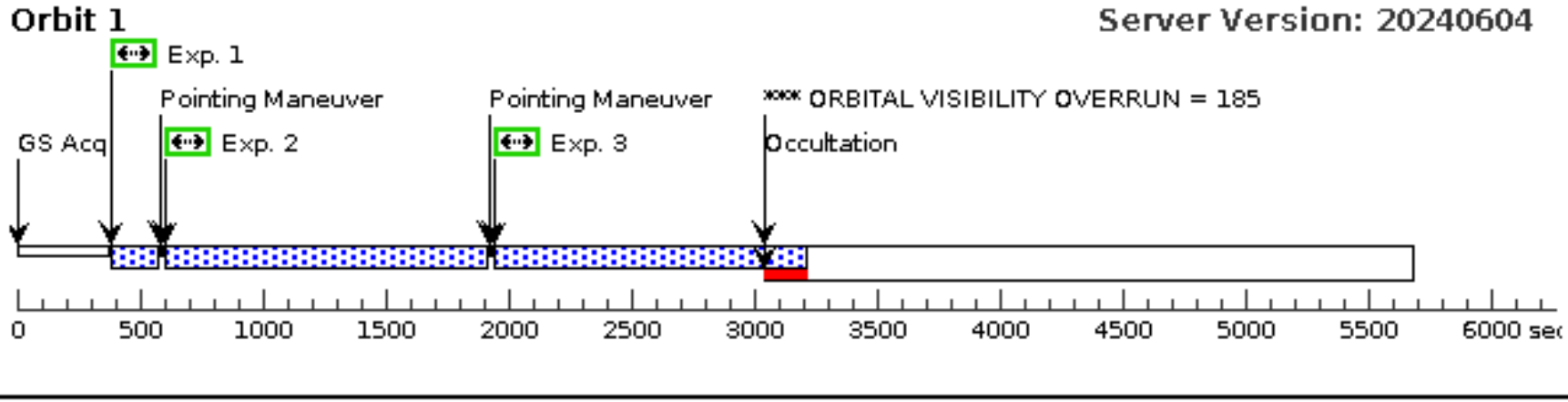
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	CD-40-8434	RA: 14 08 10.1136 (212.0421400d) Dec: -41 23 52.95 (-41.39804d) Equinox: J2000	Proper Motion RA: -0.0026392628918559184 sec of time/yr Proper Motion Dec: -0.02404100005151122 arcsec/yr Epoch of Position: 2015.5	V=12.18	Reference Frame: SIMBAD

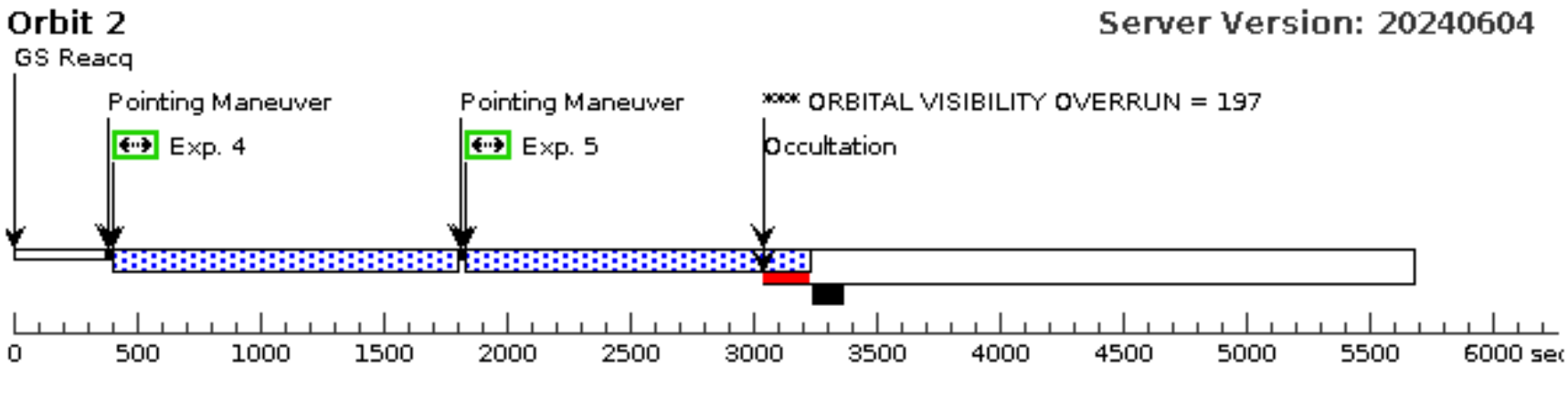
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=EXT-STAR
Description=[T TAURI STAR]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	PDS66 (1810459)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	F150LP				120 Secs (120 Secs) *[==>]*	 ***[1]***
Comments: count rate for detector: 16 cts/s count rate for peak pixel: 0.96 cts/s									
2	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0,0.0075		1247 Secs (1247 Secs) *[==>]*	 ***[1]***
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									
3	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0,0		1247 Secs (1247 Secs) *[==>]*	 ***[1]***
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									
4	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0,-0.0075		1373 Secs (1373 Secs) *[==>]*	 ***[2]***
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									
5	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0,-0.015		1373 Secs (1373 Secs) *[==>]*	 ***[2]***
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									

Orbit Structure





Visit

Proposal 17127, PDS66a-1b Visit 3 copy (08), scheduling Mon Sep 16 15:00:23 GMT 2024

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: ORIENT -5D TO 5D FROM 01

Comments: copy of 6

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	CD-40-8434	RA: 14 08 10.1136 (212.0421400d) Dec: -41 23 52.95 (-41.39804d) Equinox: J2000	Proper Motion RA: -0.0026392628918559184 sec of time/yr Proper Motion Dec: -0.02404100005151122 arcsec/yr Epoch of Position: 2015.5	V=12.18	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=EXT-STAR
Description=[T TAURI STAR]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	PDS66 (1810459)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	F150LP				120 Secs (58 Secs) *[==>58.0 Secs]*	 ***[1]***
Comments: count rate for detector: 16 cts/s count rate for peak pixel: 0.96 cts/s									
2	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0,0.0075		1247 Secs (1185 Secs) *[==>1185.0 Secs]*	 ***[1]***
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									
3	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0,0		1247 Secs (1185 Secs) *[==>1185.0 Secs]*	 ***[1]***
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									
4	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0,-0.0075		1373 Secs (1274 Secs) *[==>1274.0 Secs]*	 ***[2]***
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									
5	(1810463)	(2) CD-40-8434	ACS/SBC, ACCUM, SBC	PR130L		POS TARG 0,-0.015		1373 Secs (1274 Secs) *[==>1274.0 Secs]*	 ***[2]***
Comments: Brightest Pixel at 1550.03: 0.604 Count rate entire detector: 8,249.240									

Orbit Structure