17188 - Cosmic Beacons Towards a Theory of Massive Star Formation - A NIR View of the Most Luminous Protostars

Cycle: 30, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) GAL-305.20+00.21	WFC3/IR	1	05-Dec-2022 14:00:23.0	yes
02	(2) GAL-309.92+00.48	WFC3/IR	1	05-Dec-2022 14:00:25.0	yes
03	(3) G049.27-00.34	WFC3/IR	1	05-Dec-2022 14:00:26.0	yes
R3	(3) G049.27-00.34	WFC3/IR	1	05-Dec-2022 14:00:26.0	yes
04	(4) G035.58+00.03	WFC3/IR	1	05-Dec-2022 14:00:27.0	yes
05	(5) G045.47+00.05	WFC3/IR	1	05-Dec-2022 14:00:28.0	yes
06	(6) IRAS-20126+4104	WFC3/IR	1	05-Dec-2022 14:00:29.0	yes
07	(7) NAME-CEPHEUS-A	WFC3/IR	1	05-Dec-2022 14:00:31.0	yes
08	(8) G025.40-00.14	WFC3/IR	1	05-Dec-2022 14:00:32.0	yes
09	(9) G033.91+0.11	WFC3/IR	1	05-Dec-2022 14:00:33.0	yes
10	(10) G045.12+00.13	WFC3/IR	1	05-Dec-2022 14:00:34.0	yes

11 Total Orbits Used

ABSTRACT

Massive stars have dramatic impacts throughout the universe, but their birth, deep within dusty molecular clouds, is literally shrouded in uncertainty. However, during this process, powerful outflows blast open low density cavities and NIR light shines out from the forming star, beamed as if from a lighthouse through turbulent storm clouds. This light carries crucial information that can guide us to a deeper understanding of massive star formation. We propose WFC3/IR observations of 10 high-luminosity protostars, selected to already have well-studied properties via MIR-FIR data. The sources, along with 5 others with archival HST images, form a sample to be analyzed uniformly with the following goals: 1) Characterize J & H band continuum emission from massive protostars, including faint, extended emission. Radiative transfer simulations show such NIR emission is mostly scattered light emerging from outflow cavities, thus enabling measurement of their structure, radiation fields & dust content; 2) Detect Pa-beta & [FeII] emission tracing shock- & photo-ionized regions, important diagnostics of the protostars and their outflows; 3) Search for low-mass stars that may be clustered around the massive protostars, as predicted in Competitive Accretion models, with the observations especially probing in the low extinction outflow cavities. WFC3/IR's sensitivity, angular resolution and field of view are essential for this study. The project allows a first exploration of correlations of outflow and cluster environment properties with basic protostellar parameters, e.g., mass, luminosity & evolutionary

stage, and thus enables groundbreaking tests of massive star formation theories.

OBSERVING DESCRIPTION

This is very straight forward program.

10 visits, each of them of one orbit, each of them on one of 10 independent targets.

For each orbit, the target is observed with WFC3/IR imaging in 4 filters.

Visit

Proposal 17188, G305.20+00.21 visit (01), completed Mon Dec 05 19:00:35 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: (none)

Fixed Targets

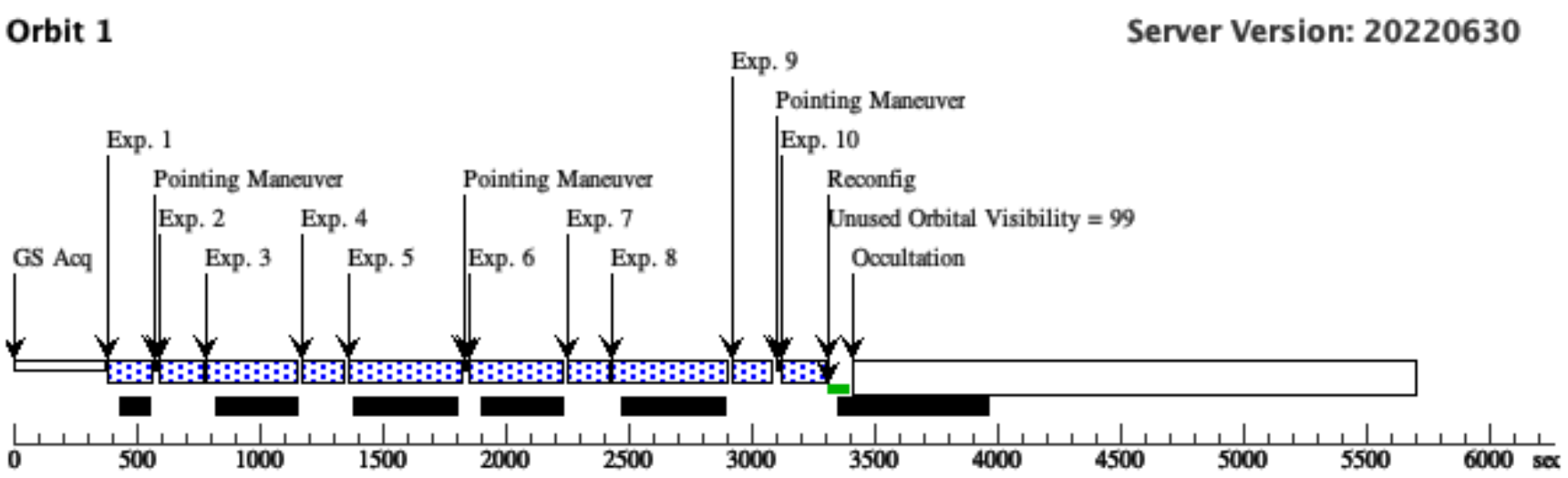
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	GAL-305.20+00.21	RA: 13 11 11.7000 (197.7987500d) Dec: -62 34 44.00 (-62.57889d) Equinox: J2000	Epoch of Position: 2015.5	V=(?) J=14.24;H=11.72	Reference Frame: ICRS

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

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F110W	(1) GAL-305.20+00.21	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.288,0.288		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
2	F110W	(1) GAL-305.20+00.21	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
3	F128N-a	(1) GAL-305.20+00.21	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0,0		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
4	F160W	(1) GAL-305.20+00.21	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
5	F164N-a	(1) GAL-305.20+00.21	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0,0		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
6	F128N-b	(1) GAL-305.20+00.21	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
7	F110W	(1) GAL-305.20+00.21	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
8	F164N-b	(1) GAL-305.20+00.21	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
9	F160W	(1) GAL-305.20+00.21	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
10	F160W	(1) GAL-305.20+00.21	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.288,0.288		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17188, G309.92+00.48 visit (02), completed Mon Dec 05 19:00:35 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: (none)

Fixed Targets

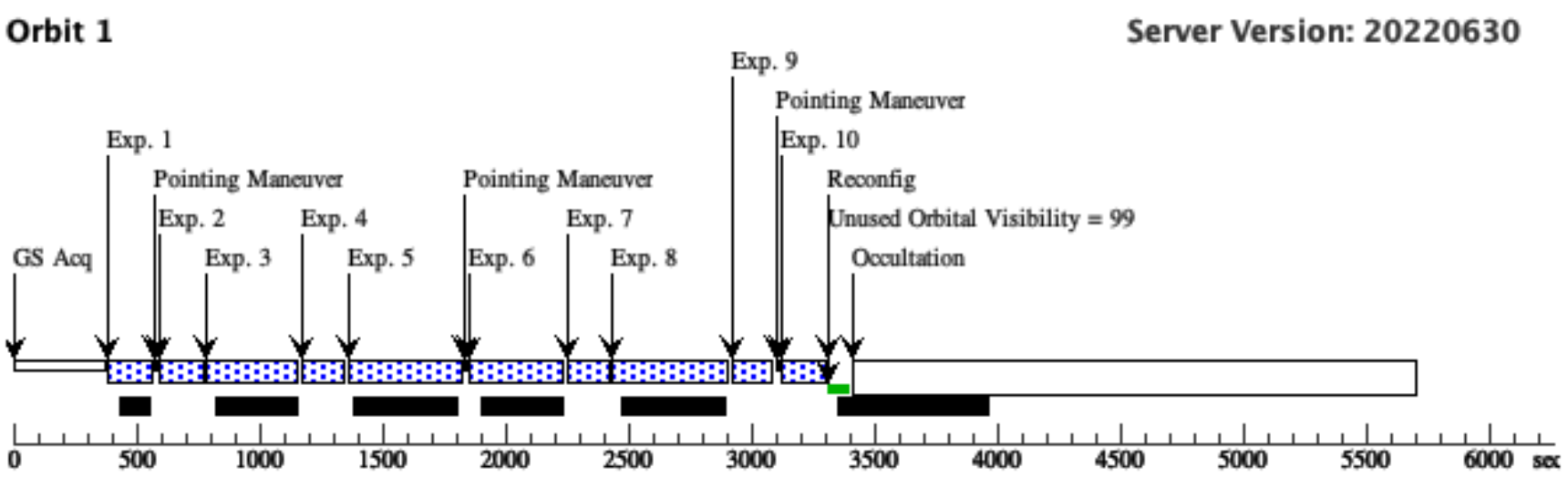
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	GAL-309.92+00.48	RA: 13 50 42.0000 (207.6750000d) Dec: -61 35 9.00 (-61.58583d) Equinox: J2000	Epoch of Position: 2015.5	V=(?) J=15.09;12.66	Reference Frame: ICRS

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

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F110W	(2) GAL-309.92+00.48	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.288,0.288		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
2	F110W	(2) GAL-309.92+00.48	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
3	F128N-a	(2) GAL-309.92+00.48	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0,0		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
4	F160W	(2) GAL-309.92+00.48	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
5	F164N-a	(2) GAL-309.92+00.48	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0,0		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
6	F128N-b	(2) GAL-309.92+00.48	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
7	F110W	(2) GAL-309.92+00.48	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
8	F164N-b	(2) GAL-309.92+00.48	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
9	F160W	(2) GAL-309.92+00.48	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
10	F160W	(2) GAL-309.92+00.48	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.288,0.288		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17188, G049.27-00.34 visit (03), failed Mon Dec 05 19:00:35 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: (none)

Fixed Targets

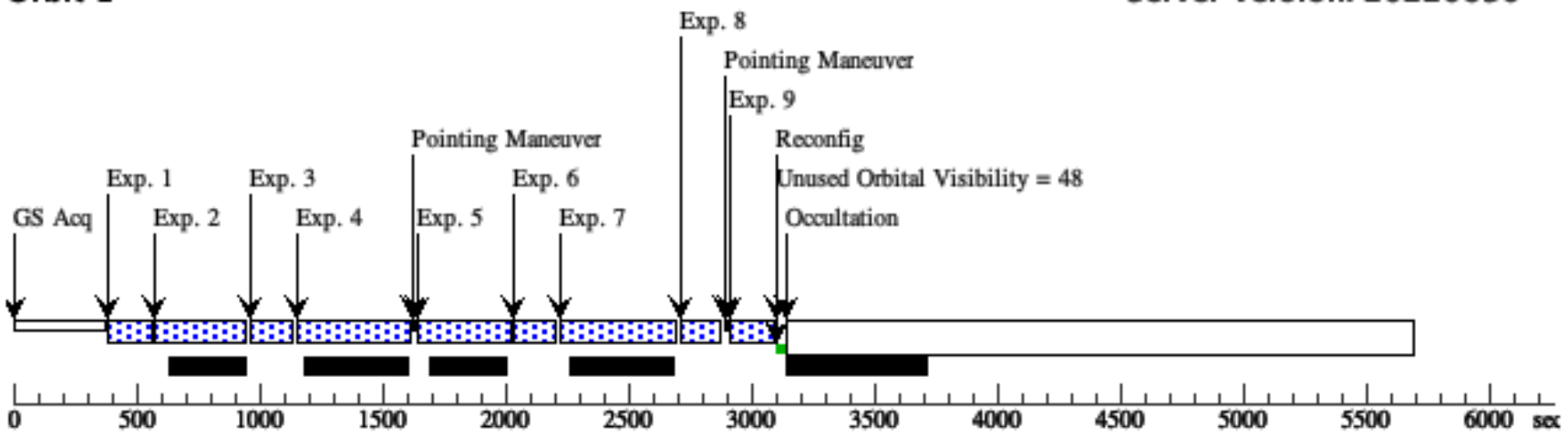
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	G049.27-00.34	RA: 19 23 7.0000 (290.7791667d) Dec: +14 20 15.70 (14.33769d) Equinox: J2000		V=(?) J=16.90;H=16.01	Reference Frame: ICRS

Comments:
Category=STAR
Description=[YSO]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F110W	(3) G049.27-00.34	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
2	F128N-a	(3) G049.27-00.34	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0,0		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
3	F160W	(3) G049.27-00.34	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
4	F164N-a	(3) G049.27-00.34	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0,0		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
5	F128N-b	(3) G049.27-00.34	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
6	F110W	(3) G049.27-00.34	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
7	F164N-b	(3) G049.27-00.34	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
8	F160W	(3) G049.27-00.34	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
9	F160W	(3) G049.27-00.34	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.288,0.288		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17188, G049.27-00.34 visit repeat F110W (R3) Mon Dec 05 19:00:35 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: (none)

Fixed Targets

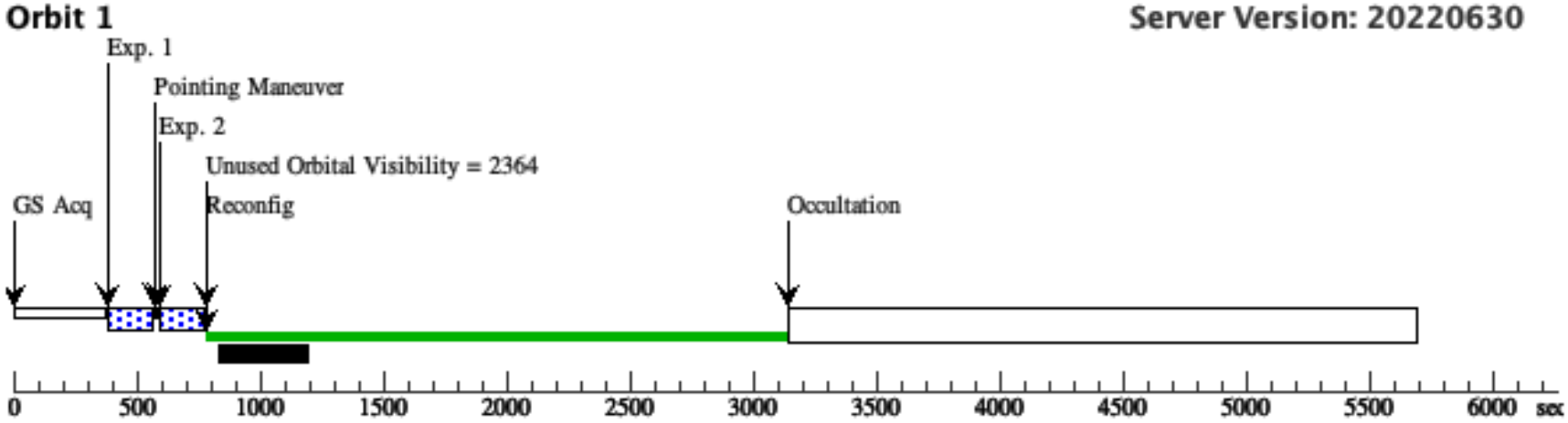
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	G049.27-00.34	RA: 19 23 7.0000 (290.7791667d) Dec: +14 20 15.70 (14.33769d) Equinox: J2000		V=(?) J=16.90;H=16.01	Reference Frame: ICRS

Comments:
Category=STAR
Description=[YSO]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F110W	(3) G049.27-00.34	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	 *[1]*
2	F110W	(3) G049.27-00.34	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	 *[1]*

Orbit Structure



Visit

Proposal 17188, G035.58+00.03 visit (04), scheduling Mon Dec 05 19:00:35 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: (none)

Fixed Targets

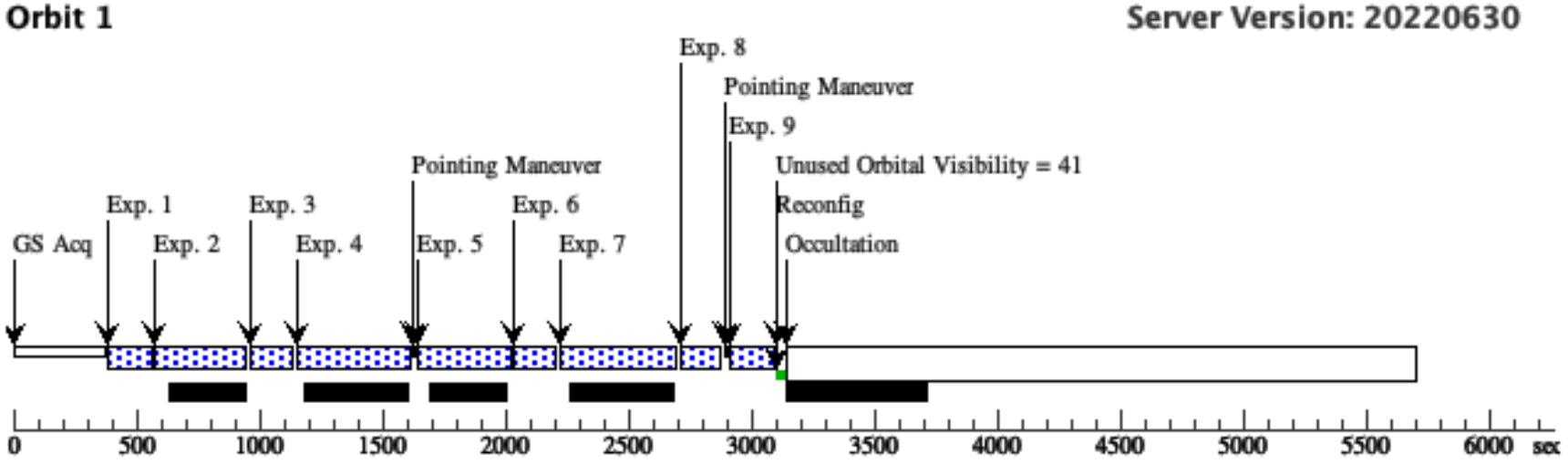
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	G035.58+00.03	RA: 18 56 22.6100 (284.0942083d) Dec: +02 20 27.00 (2.34083d) Equinox: J2000		V=(?) J=19.00;H=16.46	Reference Frame: ICRS

Comments:
Category=STAR
Description=[YSO]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F110W	(4) G035.58+00.03	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
2	F128N-a	(4) G035.58+00.03	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0,0		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
3	F160W	(4) G035.58+00.03	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
4	F164N-a	(4) G035.58+00.03	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0,0		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
5	F128N-b	(4) G035.58+00.03	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
6	F110W	(4) G035.58+00.03	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
7	F164N-b	(4) G035.58+00.03	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
8	F160W	(4) G035.58+00.03	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
9	F160W	(4) G035.58+00.03	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.288,0.288		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17188, G045.47+00.05 visit (05), completed Mon Dec 05 19:00:35 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: (none)

Fixed Targets

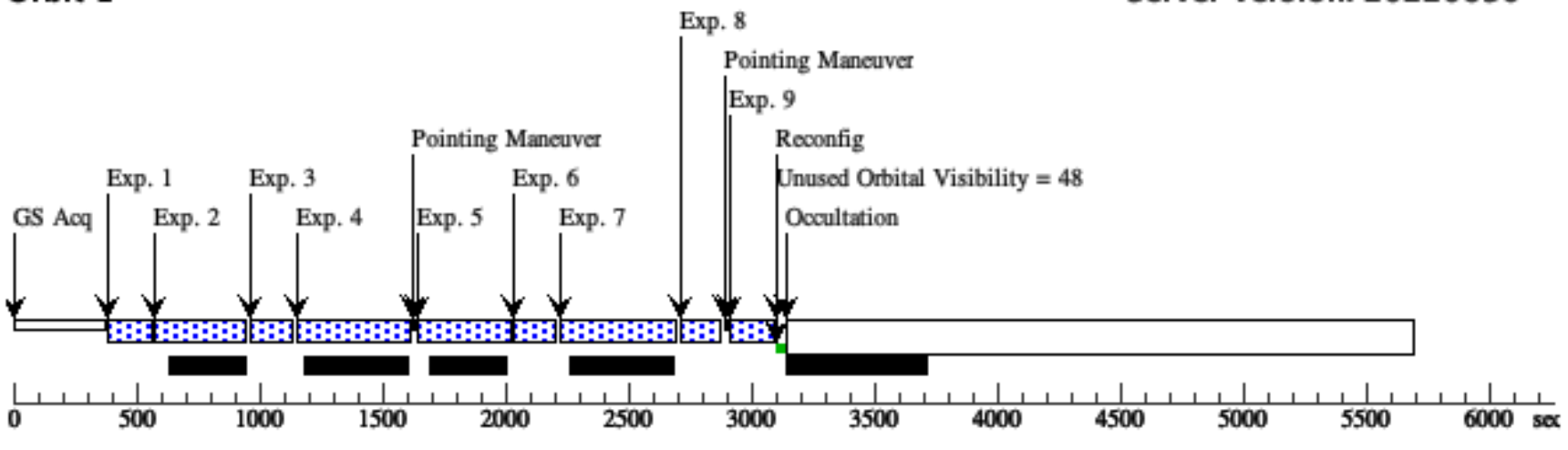
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	G045.47+00.05	RA: 19 14 25.7400 (288.6072500d) Dec: +11 09 25.90 (11.15719d) Equinox: J2000		V=(?) J=18.49; H=17.29	Reference Frame: ICRS

Comments:
Category=STAR
Description=[YSO]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F110W	(5) G045.47+00.05	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
2	F128N-a	(5) G045.47+00.05	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0,0		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
3	F160W	(5) G045.47+00.05	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
4	F164N-a	(5) G045.47+00.05	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0,0		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
5	F128N-b	(5) G045.47+00.05	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
6	F110W	(5) G045.47+00.05	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
7	F164N-b	(5) G045.47+00.05	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
8	F160W	(5) G045.47+00.05	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
9	F160W	(5) G045.47+00.05	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.288,0.288		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17188, IRAS20126+4104 visit (06), completed Mon Dec 05 19:00:35 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: (none)

Fixed Targets

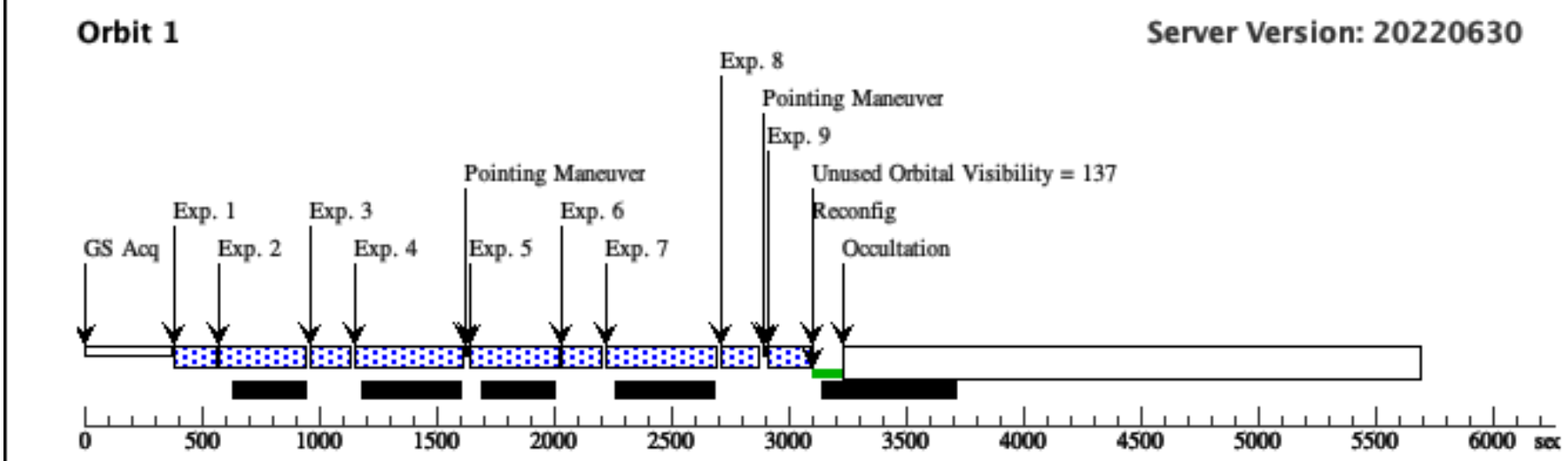
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	IRAS-20126+4104	RA: 20 14 25.8762 (303.6078175d) Dec: +41 13 36.80 (41.22689d) Equinox: J2000	Proper Motion RA: -3.4684840632141035E-4 sec of time/yr Proper Motion Dec: -0.004578000084620726 arcsec/yr Epoch of Position: 2015.5	V=(?) J=13.24;H=11.59	Reference Frame: ICRS

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

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F110W	(6) IRAS-20126+4104	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
2	F128N-a	(6) IRAS-20126+4104	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0,0		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
3	F160W	(6) IRAS-20126+4104	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
4	F164N-a	(6) IRAS-20126+4104	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0,0		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
5	F128N-b	(6) IRAS-20126+4104	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
6	F110W	(6) IRAS-20126+4104	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
7	F164N-b	(6) IRAS-20126+4104	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
8	F160W	(6) IRAS-20126+4104	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
9	F160W	(6) IRAS-20126+4104	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.288,0.288		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17188, CEPA visit (07), completed Mon Dec 05 19:00:35 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: (none)

Fixed Targets

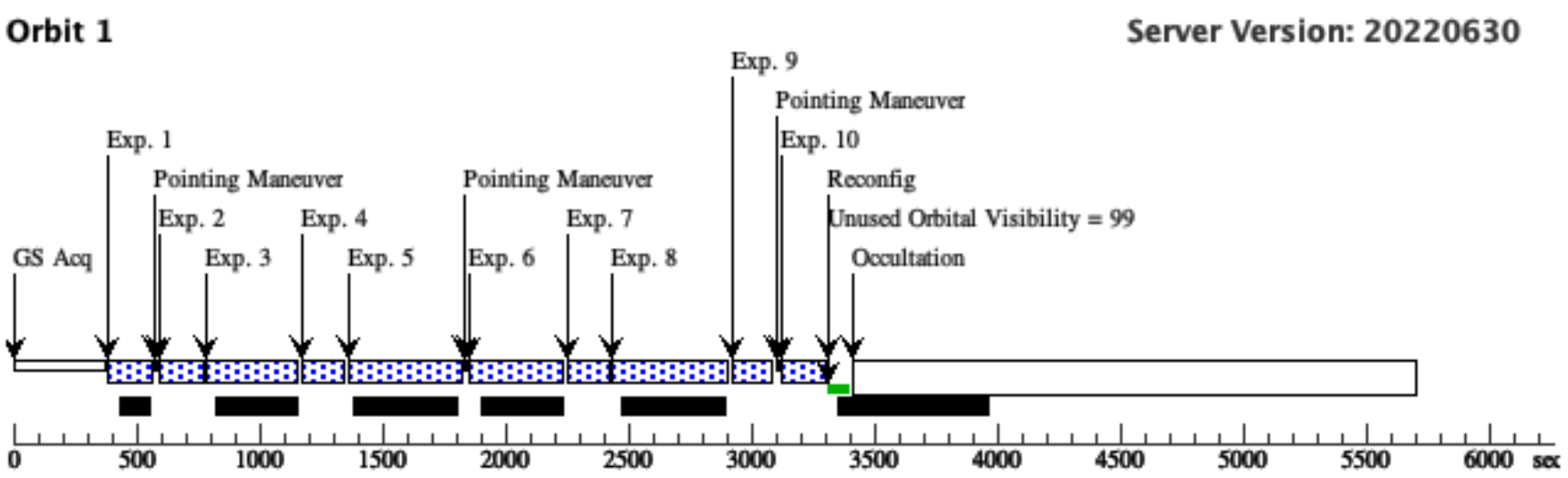
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	NAME-CEPHEUS-A	RA: 22 56 17.9000 (344.0745833d) Dec: +62 01 49.00 (62.03028d) Equinox: J2000	Epoch of Position: 2015.5	V=(?) J=14.79;H=10.93	Reference Frame: ICRS

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

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F110W	(7) NAME-CEPHEUS-A	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.288,0.288		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
2	F110W	(7) NAME-CEPHEUS-A	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
3	F128N-a	(7) NAME-CEPHEUS-A	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0,0		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
4	F160W	(7) NAME-CEPHEUS-A	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
5	F164N-a	(7) NAME-CEPHEUS-A	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0,0		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
6	F128N-b	(7) NAME-CEPHEUS-A	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
7	F110W	(7) NAME-CEPHEUS-A	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
8	F164N-b	(7) NAME-CEPHEUS-A	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
9	F160W	(7) NAME-CEPHEUS-A	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
10	F160W	(7) NAME-CEPHEUS-A	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.288,0.288		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17188, G025.40-00.14 visit (08), completed Mon Dec 05 19:00:35 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: (none)

Fixed Targets

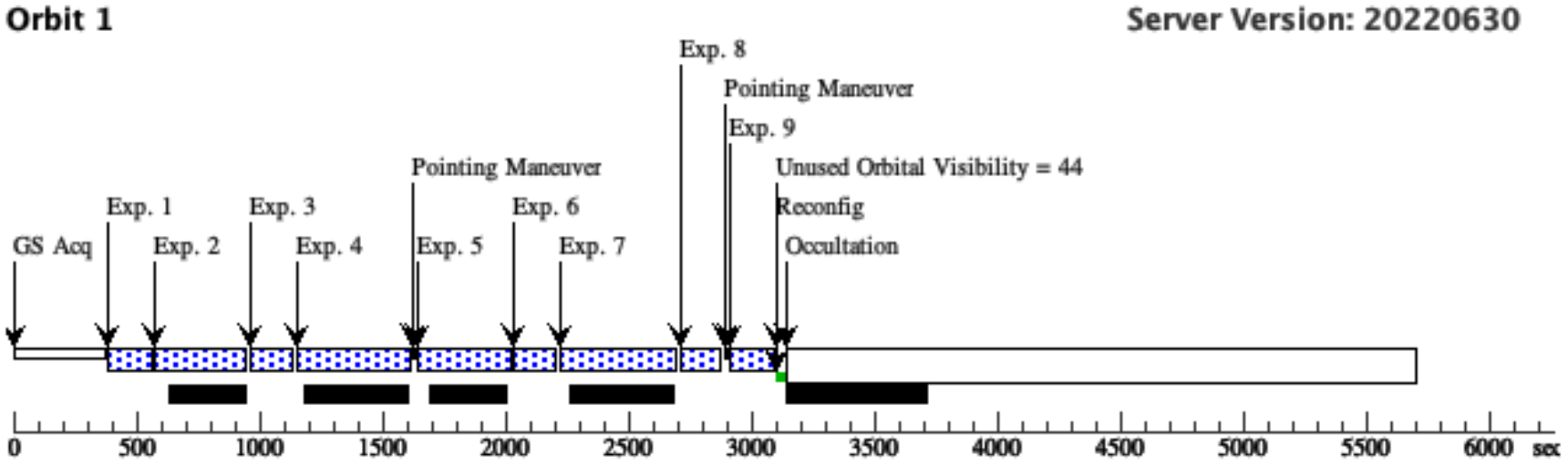
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	G025.40-00.14	RA: 18 38 8.2700 (279.5344583d) Dec: -06 45 58.16 (-6.76616d) Equinox: J2000	Epoch of Position: 2015.5	V=(?) J17.40;H=15.50	Reference Frame: ICRS

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

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F110W	(8) G025.40-00.14	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
2	F128N-a	(8) G025.40-00.14	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0,0		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
3	F160W	(8) G025.40-00.14	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
4	F164N-a	(8) G025.40-00.14	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0,0		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
5	F128N-b	(8) G025.40-00.14	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
6	F110W	(8) G025.40-00.14	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
7	F164N-b	(8) G025.40-00.14	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
8	F160W	(8) G025.40-00.14	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
9	F160W	(8) G025.40-00.14	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.288,0.288		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17188, G033.91+0.11 visit (09), completed Mon Dec 05 19:00:35 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: (none)

Fixed Targets

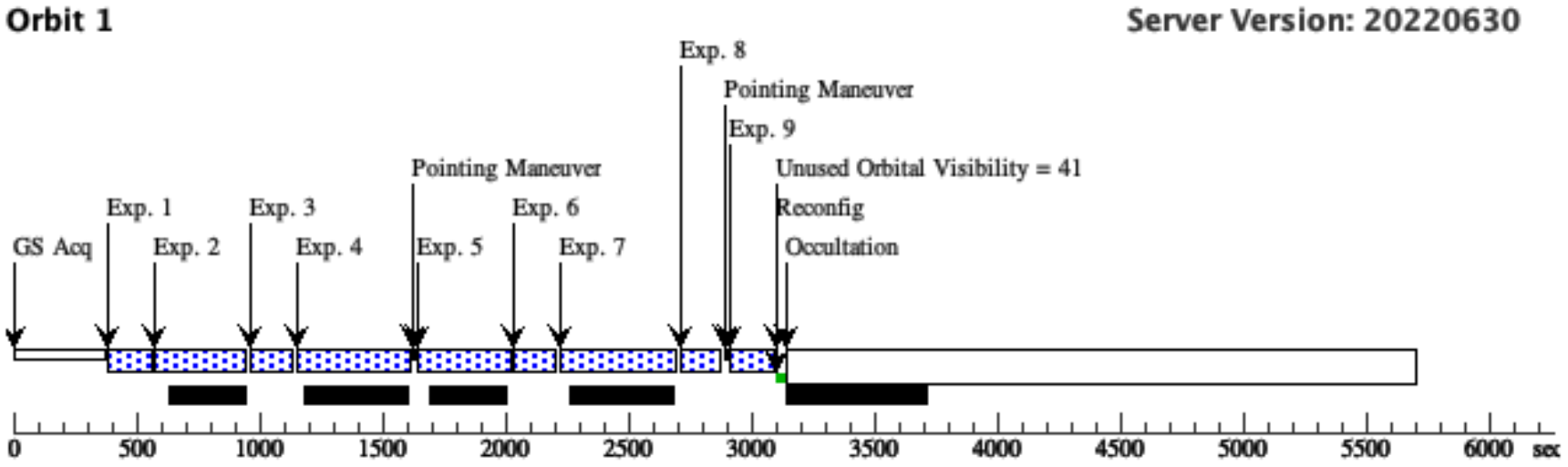
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(9)	G033.91+0.11	RA: 18 52 50.4300 (283.2101250d) Dec: +00 55 28.68 (.92463d) Equinox: J2000	Epoch of Position: 2015.5	V=(?) J=16.15;H=13.41	Reference Frame: ICRS

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

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F110W	(9) G033.91+0.11	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
2	F128N-a	(9) G033.91+0.11	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0,0		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
3	F160W	(9) G033.91+0.11	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
4	F164N-a	(9) G033.91+0.11	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0,0		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
5	F128N-b	(9) G033.91+0.11	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
6	F110W	(9) G033.91+0.11	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
7	F164N-b	(9) G033.91+0.11	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
8	F160W	(9) G033.91+0.11	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
9	F160W	(9) G033.91+0.11	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.288,0.288		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17188, G045.12+00.13 visit (10), completed Mon Dec 05 19:00:35 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(10)	G045.12+00.13	RA: 19 13 27.8450 (288.3660208d) Dec: +10 53 36.74 (10.89354d) Equinox: J2000	Epoch of Position: 2015.5	V=(?) J=12.69;H=11.07	Reference Frame: ICRS

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

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F110W	(10) G045.12+00.13	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
2	F128N-a	(10) G045.12+00.13	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0,0		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
3	F160W	(10) G045.12+00.13	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0,0		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
4	F164N-a	(10) G045.12+00.13	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0,0		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
5	F128N-b	(10) G045.12+00.13	WFC3/IR, MULTIACCUM, IR	F128N	NSAMP=12; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		349.232932 Secs (349.233 Secs) *[==>]*	*[1]*
6	F110W	(10) G045.12+00.13	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
7	F164N-b	(10) G045.12+00.13	WFC3/IR, MULTIACCUM, IR	F164N	NSAMP=14; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		449.233834 Secs (449.234 Secs) *[==>]*	*[1]*
8	F160W	(10) G045.12+00.13	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.474,0.424		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*
9	F160W	(10) G045.12+00.13	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=8; SAMP-SEQ=STEP50	POS TARG 0.288,0.288		149.231128 Secs (149.231 Secs) *[==>]*	*[1]*

Orbit Structure