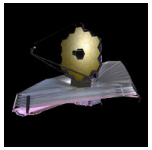

1274 - Extrasolar Planet Science with JWST

Cycle: 1, Proposal Category: GTO

INVESTIGATORS

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OBSERVATIONS

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
Observation Folder				
	1	HD189_F322W2	NIRCam Grism Time Series	(1) HD189733
	2	HD209_F322W2	NIRCam Grism Time Series	(2) HD209458
	3	HD209_F444W	NIRCam Grism Time Series	(2) HD209458
	4	HD149_F322W2	NIRCam Grism Time Series	(3) HD149026
	5	HD149_F444W	NIRCam Grism Time Series	(3) HD149026
	9	W19_PRISM	NIRSpec Bright Object Time Series	(10) WASP-19
	10	W77_G395	NIRSpec Bright Object Time Series	(4) WASP-77A
GJ1132_MIRI				
	12	eclipse	MIRI Low Resolution Spectroscopy	(8) GJ1132
	13	background	MIRI Low Resolution Spectroscopy	(8) GJ1132

ABSTRACT

We will observe secondary eclipses of four hot Jupiters using NIRCam to meaasure their thermal emission spectra.

OBSERVING DESCRIPTION

Time series secondary eclipse spectroscopy of transiting hot Jupiters using the NIRCam slitless grism mode. We use both filters for the longwave grism for all targets except HD189733b, which we only target with the F322W2 filter. Integration times are chosen to keep the counts near 55% the full well depth. We plan 15 minutes of burn in to let the detectors settle and do two hours before and after eclipse to establish the baseline and enable decorrelation of systematics. Simultaneous photometry with the shortwave channel is also obtained.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	HD189733	RA: 20 00 43.7128 (300.1821367d) Dec: +22 42 39.07 (22.71085d) Equinox: J2000	Proper Motion RA: -3.123 mas/yr Proper Motion Dec: -250.359 mas/yr Parallax: 0.05040" Epoch of Position: 2000.0	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *Category=Star* *Description=[Exoplanet Systems, K dwarfs]* *Extended=NO*				
(2)	HD209458	RA: 22 03 10.7728 (330.7948867d) Dec: +18 53 3.55 (18.88432d) Equinox: J2000	Proper Motion RA: 29.725 mas/yr Proper Motion Dec: -18.025 mas/yr Parallax: 0.02047" Epoch of Position: 2000.0	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *Category=Star* *Description=[Exoplanet Systems, G dwarfs]*				
(3)	HD149026	RA: 16 30 29.6185 (247.6234104d) Dec: +38 20 50.31 (38.34731d) Equinox: J2000	Proper Motion RA: -77.9 mas/yr Proper Motion Dec: 52.694 mas/yr Parallax: 0.01304" Epoch of Position: 2000.0	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *Category=Star* *Description=[Exoplanet Systems, G dwarfs]*				
(4)	WASP-77A	RA: 02 28 37.2266 (37.1551108d) Dec: -07 03 38.37 (-7.06066d) Equinox: J2000	Proper Motion RA: 94.884 mas/yr Proper Motion Dec: -2.371 mas/yr Parallax: 0.01" Epoch of Position: 2000.0	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *Category=Star* *Description=[Exoplanet Systems, G dwarfs]*				
(5)	HD189-ACQ	RA: 20 00 42.9700 (300.1790417d) Dec: +22 42 34.20 (22.70950d) Equinox: J2000	Proper Motion RA: -3.123 mas/yr Proper Motion Dec: -250.359 mas/yr Parallax: 0.05040" Epoch of Position: 2000.0	
Comments: *Category=Star* *Description=[M dwarfs]* *Extended=NO*				
(6)	HD149-ACQ	RA: 16 30 28.2030 (247.6175125d) Dec: +38 21 2.15 (38.35060d) Equinox: J2000		
Comments: *Category=Star* *Description=[G stars]* *Extended=NO*				

(7)	HD209-ACQ	RA: 22 03 10.9680 (330.7957000d) Dec: +18 53 36.59 (18.89350d) Equinox: J2000	
Comments: *Category=Star* *Description=[G dwarfs]* *Extended=NO*			
(8)	GJ1132	RA: 10 14 50.1767 (153.7090696d) Dec: -47 09 17.77 (-47.15494d) Equinox: J2000	Proper Motion RA: -0.10332851021288136 sec of time/yr Proper Motion Dec: 0.4143 arcsec/yr Parallax: 0.0792543" Epoch of Position: 2015.5
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *Category=Star* *Description=[Exoplanet Systems, M dwarfs]* *Extended=NO*			
(9)	TA-WASP19	RA: 09 53 37.9913 (148.4082971d) Dec: -45 39 35.85 (-45.65996d) Equinox: J2000	Proper Motion RA: -5.404 mas/yr Proper Motion Dec: 5.008 mas/yr Epoch of Position: 2015.5
Comments: This object was generated by the targetselector and retrieved from the 2MASS database. Proper motions are from GAIA DR2. 2MASS magnitudes are J=14.924, H=14.642, K-14.374 *Category=Star* *Description=[G stars]* *Extended=NO*			
(10)	WASP-19	RA: 09 53 40.0241 (148.4167671d) Dec: -45 39 32.79 (-45.65911d) Equinox: J2000	Proper Motion RA: -0.0033772774282762063 sec of time/yr Proper Motion Dec: 0.017288 arcsec/yr Epoch of Position: 2015.5
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *Category=Star* *Description=[Exoplanet Systems, G stars]*			
(11)	TA-WASP77	RA: 02 28 39.0430 (37.1626792d) Dec: -07 04 38.72 (-7.07742d) Equinox: J2000	Proper Motion RA: 1.039 mas/yr Proper Motion Dec: -2.346 mas/yr Epoch of Position: 2015.5
Comments: This object was generated by the targetselector and retrieved from the 2MASS database. Proper motions are from GAIA DR2. 2MASS magnitudes are J=15.594, H=15.236, K=15.668. *Category=Star* *Description=[F stars]* *Extended=NO*			

Observation

Proposal 1274, Observation 1: HD189_F322W2 Wed Feb 01 17:00:27 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Diagnostics

(HD189_F322W2 (Obs 1)) Warning (Form): Exposure Duration exceeds the limit of 10000.0 seconds. Above this limit it is possible that a High Gain Antenna move may occur during the exposure.

(Visit 1:1) Warning (Form): Data Excess over lower threshold

(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	HD189733	RA: 20 00 43.7128 (300.1821367d) Dec: +22 42 39.07 (22.71085d) Equinox: J2000	Proper Motion RA: -3.123 mas/yr Proper Motion Dec: -250.359 mas/yr Parallax: 0.05040" Epoch of Position: 2000.0	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=Star
Description=[Exoplanet Systems, K dwarfs]
Extended=NO

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	5 HD189-ACQ	SUB32TATSGRISM	F335M	RAPID	9	1	1	0.152	11869.8

Template

Subarray	No. of Output Channels
SUBGRISM64	4

Spectral Elements

#	Short Pupil+Filter	Long Pupil+Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	CLEAR+WLP4	GRISMR+F322W2	BRIGHT2	2	11752	1	11752	20074.414	

Special Requirements

Phase 0.43122 to 0.45003 with period 2.21857567 Days and zero-phase 2454279.436714 HJD
Aperture PA Range 82.221332 to 94.221332 Degrees (V3 81.96883655 to 93.96883655)
Aperture PA Range 111.221332 to 127.221332 Degrees (V3 110.96883655 to 126.96883655)
Aperture PA Range 214.221332 to 227.221332 Degrees (V3 213.96883655 to 226.96883655)
Aperture PA Range 246.221332 to 253.221332 Degrees (V3 245.96883655 to 252.96883655)
Time Series Observation
No Parallel Attachments

Observation

Proposal 1274, Observation 2: HD209_F322W2

Wed Feb 01 17:00:27 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Diagnostics

(HD209_F322W2 (Obs 2)) Warning (Form): Exposure Duration exceeds the limit of 10000.0 seconds. Above this limit it is possible that a High Gain Antenna move may occur during the exposure.

(Visit 2:1) Warning (Form): Data Excess over lower threshold

(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(2)	HD209458	RA: 22 03 10.7728 (330.7948867d) Dec: +18 53 3.55 (18.88432d) Equinox: J2000	Proper Motion RA: 29.725 mas/yr Proper Motion Dec: -18.025 mas/yr Parallax: 0.02047" Epoch of Position: 2000.0	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=Star
Description=[Exoplanet Systems, G dwarfs]

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	SUB32TATSGRISM	F335M	RAPID	3	1	1	0.062	12789.1

Template

Subarray	No. of Output Channels
SUBGRISM64	4

Spectral Elements

#	Short Pupil+Filter	Long Pupil+Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	CLEAR+WLP4	GRISMR+F322W2	BRIGHT2	4	9473	1	9473	29087.889	

Special Requirements

Phase 0.94042123 to 0.95224242 with period 3.5247455 Days and zero-phase 2455216.405640 HJD
Time Series Observation
No Parallel Attachments

Observation

Proposal 1274, Observation 3: HD209_F444W Wed Feb 01 17:00:27 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Diagnostics

(HD209_F444W (Obs 3)) Warning (Form): Exposure Duration exceeds the limit of 10000.0 seconds. Above this limit it is possible that a High Gain Antenna move may occur during the exposure.

(Visit 3:1) Warning (Form): Data Excess over lower threshold

(Visit 3:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(2)	HD209458	RA: 22 03 10.7728 (330.7948867d) Dec: +18 53 3.55 (18.88432d) Equinox: J2000	Proper Motion RA: 29.725 mas/yr Proper Motion Dec: -18.025 mas/yr Parallax: 0.02047" Epoch of Position: 2000.0	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=Star
Description=[Exoplanet Systems, G dwarfs]

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	SUB32TATSGRISM	F335M	RAPID	3	1	1	0.062	12789.1

Template

Subarray	No. of Output Channels
SUBGRISM64	4

Spectral Elements

#	Short Pupil+Filter	Long Pupil+Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	CLEAR+WLP4	GRISMR+F444W	BRIGHT1	6	7107	1	7107	29084.971	

Special Requirements

Phase 0.94042123 to 0.95224242 with period 3.5247455 Days and zero-phase 2455216.405640 HJD
Time Series Observation
No Parallel Attachments

Observation

Proposal 1274, Observation 4: HD149_F322W2 Wed Feb 01 17:00:27 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Diagnostics

(HD149_F322W2 (Obs 4)) Warning (Form): Exposure Duration exceeds the limit of 10000.0 seconds. Above this limit it is possible that a High Gain Antenna move may occur during the exposure.

(Visit 4:1) Warning (Form): Data Excess over lower threshold

(Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(3)	HD149026	RA: 16 30 29.6185 (247.6234104d) Dec: +38 20 50.31 (38.34731d) Equinox: J2000	Proper Motion RA: -77.9 mas/yr Proper Motion Dec: 52.694 mas/yr Parallax: 0.01304" Epoch of Position: 2000.0	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=Star
Description=[Exoplanet Systems, G dwarfs]

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	SUB32TATSGRISM	F335M	RAPID	3	1	1	0.062	12789.2

Template

Subarray	No. of Output Channels
SUBGRISM64	4

Spectral Elements

#	Short Pupil+Filter	Long Pupil+Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	CLEAR+WLP4	GRISMR+F322W2	BRIGHT2	5	7935	1	7935	29770.771	

Special Requirements

Phase 0.92560278 to 0.94009104 with period 2.8758916 Days and zero-phase 2454599.144396 HJD
Time Series Observation
No Parallel Attachments

Observation

Proposal 1274, Observation 5: HD149_F444W Wed Feb 01 17:00:27 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Diagnostics

(HD149_F444W (Obs 5)) Warning (Form): Exposure Duration exceeds the limit of 10000.0 seconds. Above this limit it is possible that a High Gain Antenna move may occur during the exposure.

(Visit 5:1) Warning (Form): Data Excess over lower threshold

(Visit 5:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(3)	HD149026	RA: 16 30 29.6185 (247.6234104d) Dec: +38 20 50.31 (38.34731d) Equinox: J2000	Proper Motion RA: -77.9 mas/yr Proper Motion Dec: 52.694 mas/yr Parallax: 0.01304" Epoch of Position: 2000.0	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=Star
Description=[Exoplanet Systems, G dwarfs]

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	SUB32TATSGRISM	F335M	RAPID	3	1	1	0.062	12789.2

Template

Subarray	No. of Output Channels
SUBGRISM64	4

Spectral Elements

#	Short Pupil+Filter	Long Pupil+Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	CLEAR+WLP4	GRISMR+F444W	BRIGHT2	9	4597	1	4597	29773.436	

Special Requirements

Phase 0.92560278 to 0.94009104 with period 2.8758916 Days and zero-phase 2454599.144396 HJD
Time Series Observation
No Parallel Attachments

Observation

Proposal 1274, Observation 9: W19_PRISM

Wed Feb 01 17:00:27 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(W19_PRISM (Obs 9)) Warning (Form): Exposure Duration exceeds the limit of 10000.0 seconds. Above this limit it is possible that a High Gain Antenna move may occur during the exposure.

(Visit 9:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(10)	WASP-19	RA: 09 53 40.0241 (148.4167671d) Dec: -45 39 32.79 (-45.65911d) Equinox: J2000	Proper Motion RA: -0.0033772774282762063 sec of time/yr Proper Motion Dec: 0.017288 arcsec/yr Epoch of Position: 2015.5	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=Star
Description=[Exoplanet Systems, G stars]

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	9 TA-WASP19	WATA	SUB32	F140X	NRSRAPID	3	1	1	0.08	73850.2

Template

Subarray
SUB512

Spectral Elements

#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	PRISM/CLEAR	NRSRAPID	4	18231	1	1	18231	20988.986	73850.1

Special Requirements

Phase 0.313 to 0.366 with period 0.788838989 Days and zero-phase 2455708.534626 HJD
Time Series Observation
No Parallel Attachments

Observation

Proposal 1274, Observation 10: W77_G395 Wed Feb 01 17:00:27 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(W77_G395 (Obs 10)) Warning (Form): Exposure Duration exceeds the limit of 10000.0 seconds. Above this limit it is possible that a High Gain Antenna move may occur during the exposure.

(W77_G395 (Obs 10)) Warning (Form): The slew between the acquisition exposure and the farthest science exposure is 65.217 Arcsec (larger than the recommended limit of 40.000 Arcsec) and may result in reduced or no schedulability. See more information in the diagnostic browser.

(Visit 10:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(4)	WASP-77A	RA: 02 28 37.2266 (37.1551108d)	Proper Motion RA: 94.884 mas/yr	
		Dec: -07 03 38.37 (-7.06066d)	Proper Motion Dec: -2.371 mas/yr	
		Equinox: J2000	Parallax: 0.01"	
			Epoch of Position: 2000.0	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=Star
Description=[Exoplanet Systems, G dwarfs]

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	11 TA-WASP77	WATA	SUB32	CLEAR	NRSRAPID	3	1	1	0.08	73850.4

Template

Subarray
SUB2048

Spectral Elements

#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	G395H/F290LP	NRSRAPID	17	1419	1	1	1419	23067.945	73850.3

Special Requirements

Phase 0.383 to 0.413 with period 1.3600309 Days and zero-phase 2455870.45054 HJD
Time Series Observation
No Parallel Attachments

Observation

Proposal 1274, Observation 12: eclipse

Wed Feb 01 17:00:27 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI Low Resolution Spectroscopy

Diagnostics

(eclipse (Obs 12)) Warning (Form): Exposure Duration exceeds the limit of 10000.0 seconds. Above this limit it is possible that a High Gain Antenna move may occur during the exposure.

(Visit 12:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(8)	GJ1132	RA: 10 14 50.1767 (153.7090696d) Dec: -47 09 17.77 (-47.15494d) Equinox: J2000	Proper Motion RA: -0.10332851021288136 sec of time/yr Proper Motion Dec: 0.4143 arcsec/yr Parallax: 0.0792543" Epoch of Position: 2015.5	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=Star
Description=[Exoplanet Systems, M dwarfs]
Extended=NO

Acquisition

#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F560W	FAST	4	1	1	0.636	72575.1

Template

Subarray	Obtain Verification Image?
SLITLESSPRISM	true

Dithers

#	Dither Type	No. Spectral Steps	Spectral Step Offset	No. Spatial Steps	Spatial Step Offset
1	NONE				

Pointing Verification

#	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	FAST	4	1	1	0.636	72575.1

Spectral Elements

#	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Exposures/Dith	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
1	FASTR1	28	3594	3594	1	1	16575.944	72575.2

Special Requirements

Phase 0.41799370 to 0.44357294 with period 1.6289299 Days and zero-phase 2457184.55747 HJD
Time Series Observation
No Parallel Attachments
No Parallel Attachments

Sequence Observations 12, 13, Non-interruptible

Observation

Proposal 1274, Observation 13: background

Wed Feb 01 17:00:27 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI Low Resolution Spectroscopy

Diagnostics

(Visit 13:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(8)	GJ1132	RA: 10 14 50.1767 (153.7090696d) Dec: -47 09 17.77 (-47.15494d) Equinox: J2000	Proper Motion RA: -0.10332851021288136 sec of time/yr Proper Motion Dec: 0.4143 arcsec/yr Parallax: 0.0792543" Epoch of Position: 2015.5	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=Star
Description=[Exoplanet Systems, M dwarfs]
Extended=NO

Acquisition

#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F560W	FAST	4	1	1	0.636	72575.1

Template

Subarray	Obtain Verification Image?
SLITLESSPRISM	true

Dithers

#	Dither Type	No. Spectral Steps	Spectral Step Offset	No. Spatial Steps	Spatial Step Offset
1	NONE				

Pointing Verification

#	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	FAST	4	1	1	0.636	72575.1

Spectral Elements

#	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Exposures/Dith	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
1	FASTR1	28	10	10	1	1	45.963	72575.2

Special Requirements

Offset 16.0 arcsec, 0.0 arcsec
Time Series Observation
No Parallel Attachments
No Parallel Attachments

Sequence Observations 12, 13, Non-interruptible