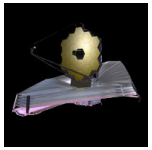

1185 - Transit Spectroscopy of Mature Planets

Cycle: 1, Proposal Category: GTO

INVESTIGATORS

Name	*Institution*
Dr. Thomas P. Greene (PI)	**NASA Ames Research Center**
Everett Schlawin (CoI) (Contact)	University of Arizona
Dr. Marcia J. Rieke (CoI) (Contact)	University of Arizona
Dr. Thomas G. Beatty (CoI) (Contact)	University of Wisconsin - Madison
Dr. Taylor James Bell (CoI)	Bay Area Environmental Research Institute

OBSERVATIONS

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
HD 189733 b				
	1	F444W Sec Eclipse	NIRCam Grism Time Series	(1) HD-189733
WASP-80 b				
	2	F322W2 Transit	NIRCam Grism Time Series	(2) WASP-80
	3	F444W Transit	NIRCam Grism Time Series	(2) WASP-80
	103	F444W Transit	NIRCam Grism Time Series	(2) WASP-80
	4	F322W2 Sec Eclipse	NIRCam Grism Time Series	(2) WASP-80
	5	F444W Sec Eclipse	NIRCam Grism Time Series	(2) WASP-80
WASP-69 b				
	6	F322W2 Sec Eclipse	NIRCam Grism Time Series	(3) WASP-69
	7	F444W Sec Eclipse	NIRCam Grism Time Series	(3) WASP-69
WASP-107 b				
	8	F322W2 Transit	NIRCam Grism Time Series	(4) WASP-107
	9	F444W Transit	NIRCam Grism Time Series	(4) WASP-107
GJ 436 b				

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
	10	F322W2 Sec Eclipse	NIRCam Grism Time Series	(5) GJ-436
	11	F444W Sec Eclipse	NIRCam Grism Time Series	(5) GJ-436
	12	F322W2 Sec Eclipse	NIRCam Grism Time Series	(10) GJ-436-offset
	13	F444W Sec Eclipse	NIRCam Grism Time Series	(5) GJ-436
	14	F322W2 Sec Eclipse	NIRCam Grism Time Series	(5) GJ-436
	15	F444W Sec Eclipse	NIRCam Grism Time Series	(5) GJ-436
GJ 3470 b				
	16	F322W2 Transit	NIRCam Grism Time Series	(8) GJ-3470
	17	F444W Transit	NIRCam Grism Time Series	(8) GJ-3470
GJ 1214 b				
	18	G395H transit	NIRSpec Bright Object Time Series	(9) GJ-1214
	19	G395H transit	NIRSpec Bright Object Time Series	(9) GJ-1214

ABSTRACT

We will observe the 2.4 – 5 micron spectra of a set of transiting planets that are less massive and cooler than ones spectrally characterized so far with HST and Spitzer. These planets fall mostly in the temperature range 700 – 1000 K with 20 – 200 Earth mass. We seek to obtain transmission and emission spectra (both for one planet) to probe a wide range of atmospheric pressures (altitudes) and surface regions. Simulations of these spectra and information retrievals show that we can measure mixing ratios of dominant molecular species, measure metallicities, determine pressure-temperature profiles, and perhaps detect new species not seen before in exoplanet atmospheres. These 19 NIRCam 2.4 – 5 micron grism observations are similar to our previous submissions with the exception of HAT-P-19b being exchanged for WASP-69 b (same type planet, brighter star), dropping NIRCam observations of HAT-P-26 b (minimize duplication with Telescope Team NIRSpec), and adding NIRCam observations of GJ 3470 b abd GJ 1214 b. We will also conduct additional 5 – 11+ micron MIRI LRS observations of most of these planets in T. Greene's GTO program. We will use state-of-the-art modeling and retrieval framework to derive physical and chemical properties from the combined NIRCam and MIRI exoplanet spectra.

OBSERVING DESCRIPTION

This file contains the specifications of the NIRCam component of our transiting planet spectroscopy program. Time-series observations will be taken using the NIRCam Module A long wavelength R grism used in series with either the F322W2 filter or the F444W filter using the standard NIRCam grism time-series template. Simultaneous short-wave imaging observations are taken simultaneously in all cases, and no other parallel observations are allowed (standard for the template). These observations have 2 types of timing constraints: 1. Precise timing starts phased with observing either

transits or secondary eclipses as desired (window is now 1.01 hr) 2. PA constraints to avoid spectral contamination from nearby bright stars I also specified V3 PA = 0 to 359.9 deg for some otherwise unconstrained observations in order to achieve better visibilities (better guide star access) We require precise target acquisition for all observations, a standard component of the NIRCam grism time series template we are using. Two target stars (HD 189733 and GJ 436) are too bright to be currently acquired with the NIRCam F335M filter without saturation. We will use offset acquisition for a star cloe to and comoving with HD 189733. GJ 436 is observable with a narrow-band (N) long-wave filter without saturation in at least 3 RAPID groups. We trust that STScI will enable N filter target acquisition by the start of Cycle 1 (it is on NIRCam's "to do" list). We have chosen integration parameters to achieve about 50% full-well (science and target acquisition). These are our targets, modes, phases, and visits for our 17 observations. The Module A R grism is used in all cases:

Obs#	TARGET	PHASE*	FILTER
1	HD 189733 b	0.5	F444W
2	WASP-80 b	1.0	F322W2
3	WASP-80 b	1.0	F444W
4	WASP-80 b	0.5	F322W2
5	WASP-80 b	0.5	F444W
6	WASP-69 b	0.5	F322W2
7	WASP-69 b	0.5	F444W
8	WASP-107 b	1.0	F322W2
9	WASP-107 b	1.0	F444W
10	GJ 436 b	0.5	F322W2
11	GJ 436 b	0.5	F444W
12	GJ 436 b	0.5	F322W2
13	GJ 436 b	0.5	F444W
14	GJ 436 b	0.5	F322W2
15	GJ 436 b	0.5	F444W
16	GJ 3470 b	1.0	F322W2
17	GJ 3470 b	1.0	F444W
18	GJ 1214 b	1.0	NIRSpec BOTS G395H
19	GJ 1214 b	1.0	NIRSpec BOTS G395H

*PHASE 0.5 corresponds to a secondary eclipse observation and 1.0 corresponds to a transit. Each observation has its own precise phase timing constraints.

In APT25.2.4, each observation gives the warning "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." We acknowledge this fact.

Notes on recent updates June 2019:
- Removed HAT-P-19 b target and observations, replaced with WASP-69 b
- Removed HAT-P-26 b target and NIRCam observations
- Entered new targets GJ 1214 b, and GJ 3470 b
- Updated all object coordinates and PMs using Gaia DR2 per SIMBAD
- I checked and agreed with Everett's phase and timing values (corrected WASP-69 b to sec eclipse)
- Entered new observations of WASP-69 b, GJ 1214 b, and GJ 3470 b including phases & PA limits. I computed PA limits to eliminate overlapping spectra with nearby stars having delta_K < 6.0 mag
- Updated all exposure parameters and phases / timings using Everett's recent values for our new dwell time (Dec 2018)
  Tdwell = 0.75 hr + MAX(1 hr, T14/2)(before transit) + T14(transit or eclipse) + MAX(1hr, T14/2) (after transit) + 1 hr (timing wi

Notes on September 2021 update:
- Readout mode changed from RAPID to BRIGHT2 and #groups reduced by ~1/2 for all observations of HD 189733 b (Obs 1) and GJ 436 b (Obs 10 - 15) to eliminate severe data volume excess warnings in APT 2021.3.
- Verified the saturation levels of revised observations in ETC 1.6.1 workbook #85520 (GJ 436 F322W2 max is 0.76 saturation)
- All exposures now use BRIGHT2 readout and have data volume excesses 4 - 9 GB.

Updated 2022 July 28 for post-commissioning optimization (APT 2022.3.1):
- Thomas Beatty and Taylor Bell were added as co-investigators
- Revised coordinates and proper motion for target GJ 436
- Reduced F444 +GRISMR integrations by 1 group to reduce saturation fraction for:

GJ 3470 (Obs 17) goes from 8 gr x 891 int to 7 x 1009

GJ 1214 (Obs 19) goes from 16 gr x 374 int to 15 x 398

- Updated phase constraints to move transit observation start times 25 min later (allow 20 min detector settling from commissioning analysis)
- Updated transit ephemerides P and T0 for WASP-107 b (Obs 8-9), GJ 436 b (Obs 10-15), and GJ 3470 b (Obs 16-17)
- Above changes will shift most observation start times by ~0-20 min but GJ 436 b changes by ~40 minutes (Obs 10 - 15). Exposure durations have not changed by more than ~1 minute.
- Total time unchanged: 140.11 hr / 96.67 hr science

A few other notes:

- TA of bright objects HD 189733 and GJ 436 done with F405N filter; others with F335 M filter, no more offset TA
- I set the SW filter to F210M + WLP8 for grism+322W2 and grism+F444W with SUBGRISM256 subarray (same filter both times)
- I set the SW filter to CLEAR/212N + WLP4 for grism+322W2 or grism+F444W with SUBGRISM64 subarray

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	HD-189733	RA: 20 00 43.7093 (300.1821221d) Dec: +22 42 35.19 (22.70978d) Equinox: J2000	Proper Motion RA: -2.3805594617473203E-4 sec of time/yr Proper Motion Dec: -0.25022499999067804 arcsec/yr Parallax: 0.05040" Epoch of Position: 2015.5	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.This object was generated by the targetselector and retrieved from the SIMBAD database. Updated with Gaia DR2 coordinates, PM and parallax; Epoch 2015.5 *Category=Star* *Description=[Exoplanet Systems, K dwarfs, K stars]* *Extended=NO*				
(2)	WASP-80	RA: 20 12 40.0319 (303.1667996d) Dec: -02 08 39.97 (-2.14444d) Equinox: J2000	Proper Motion RA: -0.008856802653901206 sec of time/yr Proper Motion Dec: -0.050428999907126126 arcsec/yr Parallax: 0.0200565" Epoch of Position: 2015.5	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Updated with Gaia DR2 coordinates, PM and parallax; Epoch 2015.5 *Category=Star* *Description=[Exoplanet Systems, K dwarfs, K stars]* *Extended=NO*				
(3)	WASP-69	RA: 21 00 6.2319 (315.0259663d) Dec: -05 05 41.49 (-5.09486d) Equinox: J2000	Proper Motion RA: 0.0022539720183223475 sec of time/yr Proper Motion Dec: -0.09343599992917007 arcsec/yr Parallax: 0.0199871" Epoch of Position: 2015.5	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Updated with Gaia DR2 coordinates, PM and parallax; Epoch 2015.5 *Category=Star* *Description=[Exoplanet Systems, K dwarfs, K stars]* *Extended=NO*				
(4)	WASP-107	RA: 12 33 32.7426 (188.3864275d) Dec: -10 08 46.37 (-10.14621d) Equinox: J2000	Proper Motion RA: -0.006545495650196717 sec of time/yr Proper Motion Dec: -0.00948299998526636 arcsec/yr Parallax: 0.0154175" Epoch of Position: 2015.5	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Updated with Gaia DR2 coordinates, PM and parallax; Epoch 2015.5 *Category=Star* *Description=[Exoplanet Systems, K dwarfs, K stars]* *Extended=NO*				
(5)	GJ-436	RA: 11 42 12.1620 (175.5506750d) Dec: +26 42 10.63 (26.70295d) Equinox: J2000	Proper Motion RA: 895.087 mas/yr Proper Motion Dec: -813.5498 mas/yr Parallax: 0.10230" Epoch of Position: 2016	
Comments: ES Manually copied from Gaia Archive on 2022-07-26, with the Gaia DR3 coordinates at epoch 2016.0, updated proper motion and parallax. *Category=Star* *Description=[Exoplanet Systems, M dwarfs, M stars]* *Extended=NO*				

(8)	GJ-3470	RA: 07 59 5.6405 (119.7735021d) Dec: +15 23 28.35 (15.39121d) Equinox: J2000	Proper Motion RA: -0.012842861276189133 sec of time/yr Proper Motion Dec: -0.057263000076090975 arcsec/yr Parallax: 0.0339601" Epoch of Position: 2015.5
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Updated with Gaia DR2 coordinates, PM and parallax; Epoch 2015.5 *Category=Star* *Description=[Exoplanet Systems, M dwarfs]* *Extended=NO*				
(9)	GJ-1214	RA: 17 15 19.5552 (258.8314800d) Dec: +04 57 38.07 (4.96058d) Equinox: J2000	Proper Motion RA: 580.2022 mas/yr Proper Motion Dec: -749.7133 mas/yr Parallax: 0.0682653" Epoch of Position: 2016
Comments: Updated with Gaia DR3 coordinates, epoch 2016. *Category=Star* *Description=[Exoplanet Systems, M dwarfs]* *Extended=NO*				
(10)	GJ-436-offset	RA: 11 42 11.6753 (175.5486471d) Dec: +26 42 4.14 (26.70115d) Equinox: J2000	Proper Motion RA: 895.087 mas/yr Proper Motion Dec: -813.5498 mas/yr Parallax: 0.10230" Epoch of Position: 2016
Comments: ES Manually copied from Gaia Archive on 2022-07-26, with the Gaia DR3 coordinates at epoch 2016.0, updated proper motion and parallax. *Category=Star* *Description=[Exoplanet Systems, M dwarfs, M stars]* *Extended=NO*				
(11)	GJ1214offset	RA: 17 15 19.8954 (258.8328975d) Dec: +04 57 27.41 (4.95761d) Equinox: J2000	Proper Motion RA: -4.001 mas/yr Proper Motion Dec: -8.341 mas/yr Parallax: 0.0007695" Epoch of Position: 2016.0
Comments: Gaia DR coordinates, Epoch 2016. This star is a 2MASS source and is resolved as a point source by HST and JWST. *Category=Star* *Description=[Companion stars]*				

Observation

Proposal 1185, Observation 1: F444W Sec Eclipse Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Comments: HD 189733 is too bright to be currently acquired with the NIRCam F335M filter. It is observable with a narrow-band (N) long-wave filter without saturation in at least 3 RAPID groups. We trust that STScI will enable N filter target acquisition by the start of Cycle 1 (it is on NIRCam's desired implementation list).

Diagnostics

(F444W Sec Eclipse (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)	HD-189733	RA: 20 00 43.7093 (300.1821221d) Dec: +22 42 35.19 (22.70978d) Equinox: J2000	Proper Motion RA: -2.3805594617473203E-4 sec of time/yr Proper Motion Dec: -0.25022499999067804 arcsec/yr Parallax: 0.05040" Epoch of Position: 2015.5	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated with Gaia DR2 coordinates, PM and parallax; Epoch 2015.5
Category=Star
Description=[Exoplanet Systems, K dwarfs, K stars]
Extended=NO

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	1 HD-189733	SUB32TATSGRISM	F405N+F444W	RAPID	9	1	1	0.152	37665.2

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	4	6533	1	6533	20060.295	85520.3

Special Requirements	
	Phase 0.43122 to 0.45003 with period 2.21857567 Days and zero-phase 2454279.436714 HJD Aperture PA Range 5 to 25 Degrees (V3 5.36622083 to 25.36622083) Aperture PA Range 70 to 100 Degrees (V3 70.36622083 to 100.36622083) Aperture PA Range 121 to 131 Degrees (V3 121.36622083 to 131.36622083) Aperture PA Range 185 to 205 Degrees (V3 185.36622083 to 205.36622083) Aperture PA Range 251 to 280 Degrees (V3 251.36622083 to 280.36622083) Aperture PA Range 300 to 310 Degrees (V3 300.36622083 to 310.36622083) Time Series Observation No Parallel Attachments

Observation

Proposal 1185, Observation 2: F322W2 Transit Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Diagnostics

(F322W2 Transit (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)	WASP-80	RA: 20 12 40.0319 (303.1667996d) Dec: -02 08 39.97 (-2.14444d) Equinox: J2000	Proper Motion RA: -0.008856802653901206 sec of time/yr Proper Motion Dec: -0.050428999907126126 arcsec/yr Parallax: 0.0200565" Epoch of Position: 2015.5	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated with Gaia DR2 coordinates, PM and parallax; Epoch 2015.5
Category=Star
Description=[Exoplanet Systems, K dwarfs, K stars]
Extended=NO

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	SUB32TATSGRISM	F335M	RAPID	5	1	1	0.092	37665.4

Template

Subarray	No. of Output Channels
SUBGRISM256	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	WLP8+F210M	GRISMR+F322W2	BRIGHT2	6	1227	1	1227	21506.181	

Special Requirements	
	Phase 0.95319 to 0.96680 with period 3.06785234 Days and zero-phase 2456487.42501 HJD Aperture PA Range 65 to 85 Degrees (V3 64.74750455 to 84.74750455) Aperture PA Range 168 to 175 Degrees (V3 167.74750455 to 174.74750455) Aperture PA Range 201 to 210 Degrees (V3 200.74750455 to 209.74750455) Aperture PA Range 347 to 1 Degrees (V3 346.74750455 to 0.74750455) Time Series Observation No Parallel Attachments

Observation

Proposal 1185, Observation 3: F444W Transit

Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Diagnostics

(F444W Transit (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)	WASP-80	RA: 20 12 40.0319 (303.1667996d) Dec: -02 08 39.97 (-2.14444d) Equinox: J2000	Proper Motion RA: -0.008856802653901206 sec of time/yr Proper Motion Dec: -0.050428999907126126 arcsec/yr Parallax: 0.0200565" Epoch of Position: 2015.5	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated with Gaia DR2 coordinates, PM and parallax; Epoch 2015.5
Category=Star
Description=[Exoplanet Systems, K dwarfs, K stars]
Extended=NO

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	SUB32TATSGRISM	F335M	RAPID	5	1	1	0.092	37665.4

Template

Subarray	No. of Output Channels
SUBGRISM256	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	WLP8+F210M	GRISMR+F444W	BRIGHT2	12	639	1	639	21526.459	

Special Requirements	
	Phase 0.95319 to 0.96680 with period 3.06785234 Days and zero-phase 2456487.42501 HJD Aperture PA Range 20 to 69 Degrees (V3 20.36622083 to 69.36622083) Aperture PA Range 88 to 115 Degrees (V3 88.36622083 to 115.36622083) Aperture PA Range 165 to 180 Degrees (V3 165.36622083 to 180.36622083) Aperture PA Range 200 to 249 Degrees (V3 200.36622083 to 249.36622083) Aperture PA Range 270 to 295 Degrees (V3 270.36622083 to 295.36622083) Aperture PA Range 345 to 0 Degrees (V3 345.36622083 to 0.36622083) Time Series Observation No Parallel Attachments

Observation

Proposal 1185, Observation 103: F444W Transit Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Comments: Repeat of skipped observation 3

Diagnostics

(F444W Transit (Obs 103)) 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 103:1) Warning (Form): Data Excess over lower threshold

(Visit 103:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(2)	WASP-80	RA: 20 12 40.0319 (303.1667996d) Dec: -02 08 39.97 (-2.14444d) Equinox: J2000	Proper Motion RA: -0.008856802653901206 sec of time/yr Proper Motion Dec: -0.050428999907126126 arcsec/yr Parallax: 0.0200565" Epoch of Position: 2015.5	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated with Gaia DR2 coordinates, PM and parallax; Epoch 2015.5
Category=Star
Description=[Exoplanet Systems, K dwarfs, K stars]
Extended=NO

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	SUB32TATSGRISM	F335M	RAPID	5	1	1	0.092	37665.4

Template

Subarray	No. of Output Channels
SUBGRISM256	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	WLP8+F210M	GRISMR+F444W	BRIGHT2	12	639	1	639	21526.459	

Special Requirements	
	Before Date 10-OCT-2023:00:00:00 Phase 0.95319 to 0.96680 with period 3.06785234 Days and zero-phase 2456487.42501 HJD Aperture PA Range 20 to 69 Degrees (V3 20.36622083 to 69.36622083) Aperture PA Range 88 to 115 Degrees (V3 88.36622083 to 115.36622083) Aperture PA Range 165 to 180 Degrees (V3 165.36622083 to 180.36622083) Aperture PA Range 200 to 249 Degrees (V3 200.36622083 to 249.36622083) Aperture PA Range 270 to 295 Degrees (V3 270.36622083 to 295.36622083) Aperture PA Range 345 to 0 Degrees (V3 345.36622083 to 0.36622083) Time Series Observation No Parallel Attachments

Observation

Proposal 1185, Observation 4: F322W2 Sec Eclipse Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Diagnostics

(F322W2 Sec Eclipse (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
(2)	WASP-80	RA: 20 12 40.0319 (303.1667996d) Dec: -02 08 39.97 (-2.14444d) Equinox: J2000	Proper Motion RA: -0.008856802653901206 sec of time/yr Proper Motion Dec: -0.050428999907126126 arcsec/yr Parallax: 0.0200565" Epoch of Position: 2015.5	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated with Gaia DR2 coordinates, PM and parallax; Epoch 2015.5
Category=Star
Description=[Exoplanet Systems, K dwarfs, K stars]
Extended=NO

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	SUB32TATSGRISM	F335M	RAPID	5	1	1	0.092	37665.4

Template

Subarray	No. of Output Channels
SUBGRISM256	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	WLP8+F210M	GRISMR+F322W2	BRIGHT2	6	1227	1	1227	21506.181	

Special Requirements	
	Phase 0.44754 to 0.46114 with period 3.06785234 Days and zero-phase 2456487.42501 HJD Aperture PA Range 65 to 85 Degrees (V3 64.74750455 to 84.74750455) Aperture PA Range 168 to 175 Degrees (V3 167.74750455 to 174.74750455) Aperture PA Range 201 to 210 Degrees (V3 200.74750455 to 209.74750455) Aperture PA Range 347 to 1 Degrees (V3 346.74750455 to 0.74750455) Time Series Observation No Parallel Attachments

Observation

Proposal 1185, Observation 5: F444W Sec Eclipse Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Diagnostics

(F444W Sec Eclipse (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
(2)	WASP-80	RA: 20 12 40.0319 (303.1667996d) Dec: -02 08 39.97 (-2.14444d) Equinox: J2000	Proper Motion RA: -0.008856802653901206 sec of time/yr Proper Motion Dec: -0.050428999907126126 arcsec/yr Parallax: 0.0200565" Epoch of Position: 2015.5	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated with Gaia DR2 coordinates, PM and parallax; Epoch 2015.5
Category=Star
Description=[Exoplanet Systems, K dwarfs, K stars]
Extended=NO

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	SUB32TATSGRISM	F335M	RAPID	5	1	1	0.092	11652.4

Template

Subarray	No. of Output Channels
SUBGRISM256	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	WLP8+F210M	GRISMR+F444W	BRIGHT2	12	639	1	639	21526.459	

Special Requirements	
	Phase 0.44754 to 0.46114 with period 3.06785234 Days and zero-phase 2456487.42501 HJD Aperture PA Range 20 to 69 Degrees (V3 20.36622083 to 69.36622083) Aperture PA Range 88 to 115 Degrees (V3 88.36622083 to 115.36622083) Aperture PA Range 165 to 180 Degrees (V3 165.36622083 to 180.36622083) Aperture PA Range 200 to 249 Degrees (V3 200.36622083 to 249.36622083) Aperture PA Range 270 to 295 Degrees (V3 270.36622083 to 295.36622083) Aperture PA Range 345 to 0 Degrees (V3 345.36622083 to 0.36622083) Time Series Observation No Parallel Attachments

Observation

Proposal 1185, Observation 6: F322W2 Sec Eclipse Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Diagnostics

(F322W2 Sec Eclipse (Obs 6)) 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 6:1) Warning (Form): Data Excess over lower threshold

(Visit 6:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(3)	WASP-69	RA: 21 00 6.2319 (315.0259663d) Dec: -05 05 41.49 (-5.09486d) Equinox: J2000	Proper Motion RA: 0.0022539720183223475 sec of time/yr Proper Motion Dec: -0.09343599992917007 arcsec/yr Parallax: 0.0199871" Epoch of Position: 2015.5	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated with Gaia DR2 coordinates, PM and parallax; Epoch 2015.5
Category=Star
Description=[Exoplanet Systems, K dwarfs, K stars]
Extended=NO

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	37665.8

Template

Subarray	No. of Output Channels
SUBGRISM256	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	WLP8+F210M	GRISMR+F322W2	BRIGHT2	3	2367	1	2367	22361.783	

Special Requirements	
	Phase 0.45713 to 0.46791 with period 3.8681382 Days and zero-phase 2455748.83422 HJD Time Series Observation No Parallel Attachments

Observation

Proposal 1185, Observation 7: F444W Sec Eclipse Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Diagnostics

(F444W Sec Eclipse (Obs 7)) 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 7:1) Warning (Form): Data Excess over lower threshold

(Visit 7:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(3)	WASP-69	RA: 21 00 6.2319 (315.0259663d) Dec: -05 05 41.49 (-5.09486d) Equinox: J2000	Proper Motion RA: 0.0022539720183223475 sec of time/yr Proper Motion Dec: -0.09343599992917007 arcsec/yr Parallax: 0.0199871" Epoch of Position: 2015.5	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated with Gaia DR2 coordinates, PM and parallax; Epoch 2015.5
Category=Star
Description=[Exoplanet Systems, K dwarfs, K stars]
Extended=NO

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	37665.8

Template

Subarray	No. of Output Channels
SUBGRISM256	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	WLP8+F210M	GRISMR+F444W	BRIGHT2	5	1507	1	1507	22354.943	

Special Requirements	
	Phase 0.45713 to 0.46791 with period 3.8681382 Days and zero-phase 2455748.83422 HJD Time Series Observation No Parallel Attachments

Observation

Proposal 1185, Observation 8: F322W2 Transit

Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Diagnostics

(F322W2 Transit (Obs 8)) 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 8:1) Warning (Form): Data Excess over lower threshold

(Visit 8:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(4)	WASP-107	RA: 12 33 32.7426 (188.3864275d) Dec: -10 08 46.37 (-10.14621d) Equinox: J2000	Proper Motion RA: -0.006545495650196717 sec of time/yr Proper Motion Dec: -0.00948299998526636 arcsec/yr Parallax: 0.0154175" Epoch of Position: 2015.5	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated with Gaia DR2 coordinates, PM and parallax; Epoch 2015.5
Category=Star
Description=[Exoplanet Systems, K dwarfs, K stars]
Extended=NO

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	SUB32TATSGRISM	F335M	RAPID	9	1	1	0.152	11652.6

Template

Subarray	No. of Output Channels
SUBGRISM256	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	WLP8+F210M	GRISMR+F322W2	BRIGHT2	7	1293	1	1293	26145.533	

Special Requirements	
	Phase 0.97024 to 0.97753 with period 5.72149 Days and zero-phase 2456514.410600 HJD Aperture PA Range 80.225804 to 120.225804 Degrees (V3 79.97330855 to 119.97330855) Aperture PA Range 147.225804 to 240.225804 Degrees (V3 146.97330855 to 239.97330855) Aperture PA Range 267 to 298 Degrees (V3 266.74750455 to 297.74750455) Aperture PA Range 327 to 45 Degrees (V3 326.74750455 to 44.74750455) Time Series Observation No Parallel Attachments

Observation

Proposal 1185, Observation 9: F444W Transit

Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Diagnostics

(F444W Transit (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): Data Excess over lower threshold

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

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(4)	WASP-107	RA: 12 33 32.7426 (188.3864275d) Dec: -10 08 46.37 (-10.14621d) Equinox: J2000	Proper Motion RA: -0.006545495650196717 sec of time/yr Proper Motion Dec: -0.00948299998526636 arcsec/yr Parallax: 0.0154175" Epoch of Position: 2015.5	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated with Gaia DR2 coordinates, PM and parallax; Epoch 2015.5
Category=Star
Description=[Exoplanet Systems, K dwarfs, K stars]
Extended=NO

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	SUB32TATSGRISM	F335M	RAPID	9	1	1	0.152	11652.6

Template

Subarray	No. of Output Channels
SUBGRISM256	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	WLP8+F210M	GRISMR+F444W	BRIGHT2	15	625	1	625	26104.919	

Special Requirements	
	Phase 0.97024 to 0.97753 with period 5.72149 Days and zero-phase 2456514.410600 HJD Aperture PA Range 85 to 120 Degrees (V3 85.36622083 to 120.36622083) Aperture PA Range 147 to 225 Degrees (V3 147.36622083 to 225.36622083) Aperture PA Range 267 to 298 Degrees (V3 267.36622083 to 298.36622083) Aperture PA Range 327 to 45 Degrees (V3 327.36622083 to 45.36622083) Time Series Observation No Parallel Attachments

Observation

Proposal 1185, Observation 10: F322W2 Sec Eclipse Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Comments: GJ 436 is too bright to be currently acquired with the NIRCam F335M filter. It ise observable with a narrow-band (N) long-wave filter without saturation in at least 3 RAPID groups. We trust that STScI will enable N filter target acquisition by the start of Cycle 1 (it is on NIRCam's desired implementation list).

Diagnostics

(F322W2 Sec Eclipse (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.

(Visit 10:1) Warning (Form): Data Excess over lower threshold

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

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(5)	GJ-436	RA: 11 42 12.1620 (175.5506750d)	Proper Motion RA: 895.087 mas/yr	
		Dec: +26 42 10.63 (26.70295d)	Proper Motion Dec: -813.5498 mas/yr	
		Equinox: J2000	Parallax: 0.10230"	
			Epoch of Position: 2016	

Comments: ES Manually copied from Gaia Archive on 2022-07-26, with the Gaia DR3 coordinates at epoch 2016.0, updated proper motion and parallax.
Category=Star
Description=[Exoplanet Systems, M dwarfs, M stars]
Extended=NO

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	SUB32TATSGRISM	F405N+F444W	RAPID	9	1	1	0.152	37665.2

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	3	7215	1	7215	17239.449	85520.2

Special Requirements

Phase 0.53496 to 0.55073 with period 2.64389751 Days and zero-phase 2454873.015820 HJD
Aperture PA Range 177 to 151 Degrees (V3 176.74750455 to 150.74750455)
Time Series Observation
No Parallel Attachments

Observation

Proposal 1185, Observation 11: F444W Sec Eclipse Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Comments: GJ 436 is too bright to be currently acquired with the NIRCam F335M filter. It ise observable with a narrow-band (N) long-wave filter without saturation in at least 3 RAPID groups. We trust that STScI will enable N filter target acquisition by the start of Cycle 1 (it is on NIRCam's desired implementation list).

Diagnostics

(F444W Sec Eclipse (Obs 11)) 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 11:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(5)	GJ-436	RA: 11 42 12.1620 (175.5506750d)	Proper Motion RA: 895.087 mas/yr	
		Dec: +26 42 10.63 (26.70295d)	Proper Motion Dec: -813.5498 mas/yr	
		Equinox: J2000	Parallax: 0.10230"	
			Epoch of Position: 2016	

Comments: ES Manually copied from Gaia Archive on 2022-07-26, with the Gaia DR3 coordinates at epoch 2016.0, updated proper motion and parallax.
Category=Star
Description=[Exoplanet Systems, M dwarfs, M stars]
Extended=NO

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	SUB32TATSGRISM	F405N+F444W	RAPID	9	1	1	0.152	37665.2

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	5	4597	1	4597	17247.163	85520.1

Special Requirements

Phase 0.53496 to 0.55073 with period 2.64389751 Days and zero-phase 2454873.015820 HJD
Aperture PA Range 177 to 331 Degrees (V3 177.36622083 to 331.36622083)
Aperture PA Range 357 to 151 Degrees (V3 357.36622083 to 151.36622083)
Time Series Observation
No Parallel Attachments

Observation

Proposal 1185, Observation 12: F322W2 Sec Eclipse Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Comments: GJ 436 is too bright to be currently acquired with the NIRCam F335M filter. It ise observable with a narrow-band (N) long-wave filter without saturation in at least 3 RAPID groups. We trust that STScI will enable N filter target acquisition by the start of Cycle 1 (it is on NIRCam's desired implementation list).

Diagnostics

(F322W2 Sec 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): Data Excess over lower threshold

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

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(10)	GJ-436-offset	RA: 11 42 11.6753 (175.5486471d)	Proper Motion RA: 895.087 mas/yr	
		Dec: +26 42 4.14 (26.70115d)	Proper Motion Dec: -813.5498 mas/yr	
		Equinox: J2000	Parallax: 0.10230"	
			Epoch of Position: 2016	

Comments: ES Manually copied from Gaia Archive on 2022-07-26, with the Gaia DR3 coordinates at epoch 2016.0, updated proper motion and parallax.
Category=Star
Description=[Exoplanet Systems, M dwarfs, M stars]
Extended=NO

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	5 GJ-436	SUB32TATSGRISM	F405N+F444W	RAPID	9	1	1	0.152	37665.2

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	3	7136	1	7136	17050.687	85520.2

Special Requirements

Phase 0.53496 to 0.55073 with period 2.64389751 Days and zero-phase 2454873.015820 HJD
Aperture PA Range 135.25249545 to 136.25249545 Degrees (V3 135.0 to 136.0)
Time Series Observation
No Parallel Attachments

Observation

Proposal 1185, Observation 13: F444W Sec Eclipse Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Comments: GJ 436 is too bright to be currently acquired with the NIRCam F335M filter. It ise observable with a narrow-band (N) long-wave filter without saturation in at least 3 RAPID groups. We trust that STScI will enable N filter target acquisition by the start of Cycle 1 (it is on NIRCam's desired implementation list).

Diagnostics

(F444W Sec Eclipse (Obs 13)) 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 13:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(5)	GJ-436	RA: 11 42 12.1620 (175.5506750d)	Proper Motion RA: 895.087 mas/yr	
		Dec: +26 42 10.63 (26.70295d)	Proper Motion Dec: -813.5498 mas/yr	
		Equinox: J2000	Parallax: 0.10230"	
			Epoch of Position: 2016	

Comments: ES Manually copied from Gaia Archive on 2022-07-26, with the Gaia DR3 coordinates at epoch 2016.0, updated proper motion and parallax.
Category=Star
Description=[Exoplanet Systems, M dwarfs, M stars]
Extended=NO

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	SUB32TATSGRISM	F405N+F444W	RAPID	9	1	1	0.152	37665.2

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	5	4597	1	4597	17247.163	85520.1

Special Requirements

Phase 0.53496 to 0.55073 with period 2.64389751 Days and zero-phase 2454873.015820 HJD
Aperture PA Range 177 to 331 Degrees (V3 177.36622083 to 331.36622083)
Aperture PA Range 357 to 151 Degrees (V3 357.36622083 to 151.36622083)
Time Series Observation
No Parallel Attachments

Observation

Proposal 1185, Observation 14: F322W2 Sec Eclipse Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Comments: GJ 436 is too bright to be currently acquired with the NIRCam F335M filter. It ise observable with a narrow-band (N) long-wave filter without saturation in at least 3 RAPID groups. We trust that STScI will enable N filter target acquisition by the start of Cycle 1 (it is on NIRCam's desired implementation list).

Diagnostics

(F322W2 Sec Eclipse (Obs 14)) 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 14:1) Warning (Form): Data Excess over lower threshold

(Visit 14:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(Visit 14:1) Informational (Form): Visit schedulable, but most scheduling windows are when JWST is pointed in direction of greatest micrometeoroid impact risk. This is likely due to scheduling special requirements.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(5)	GJ-436	RA: 11 42 12.1620 (175.5506750d)	Proper Motion RA: 895.087 mas/yr	
		Dec: +26 42 10.63 (26.70295d)	Proper Motion Dec: -813.5498 mas/yr	
		Equinox: J2000	Parallax: 0.10230"	
			Epoch of Position: 2016	

Comments: ES Manually copied from Gaia Archive on 2022-07-26, with the Gaia DR3 coordinates at epoch 2016.0, updated proper motion and parallax.
Category=Star
Description=[Exoplanet Systems, M dwarfs, M stars]
Extended=NO

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	SUB32TATSGRISM	F405N+F444W	RAPID	9	1	1	0.152	37665.2

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	3	7136	1	7136	17050.687	85520.2

Special Requirements

Phase 0.53496 to 0.55073 with period 2.64389751 Days and zero-phase 2454873.015820 HJD
Aperture PA Range 177 to 151 Degrees (V3 176.74750455 to 150.74750455)
Offset 9.2 arcsec, -0.0566 arcsec
Time Series Observation
No Parallel Attachments

Observation

Proposal 1185, Observation 15: F444W Sec Eclipse Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Comments: GJ 436 is too bright to be currently acquired with the NIRCam F335M filter. It ise observable with a narrow-band (N) long-wave filter without saturation in at least 3 RAPID groups. We trust that STScI will enable N filter target acquisition by the start of Cycle 1 (it is on NIRCam's desired implementation list).

Diagnostics

(F444W Sec Eclipse (Obs 15)) 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 15:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(5)	GJ-436	RA: 11 42 12.1620 (175.5506750d)	Proper Motion RA: 895.087 mas/yr	
		Dec: +26 42 10.63 (26.70295d)	Proper Motion Dec: -813.5498 mas/yr	
		Equinox: J2000	Parallax: 0.10230"	
			Epoch of Position: 2016	

Comments: ES Manually copied from Gaia Archive on 2022-07-26, with the Gaia DR3 coordinates at epoch 2016.0, updated proper motion and parallax.
Category=Star
Description=[Exoplanet Systems, M dwarfs, M stars]
Extended=NO

Acquisition

#	Target	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	SUB32TATSGRISM	F405N+F444W	RAPID	9	1	1	0.152	37665.2

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	5	4549	1	4549	17067.075	85520.1

Special Requirements

Phase 0.53496 to 0.55073 with period 2.64389751 Days and zero-phase 2454873.015820 HJD
Aperture PA Range 177 to 331 Degrees (V3 177.36622083 to 331.36622083)
Aperture PA Range 357 to 151 Degrees (V3 357.36622083 to 151.36622083)
Offset -5.276 arcsec, 0.0092 arcsec
Time Series Observation
No Parallel Attachments

Observation

Proposal 1185, Observation 16: F322W2 Transit Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Diagnostics

(F322W2 Transit (Obs 16)) 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 16:1) Warning (Form): Data Excess over lower threshold

(Visit 16:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(8)	GJ-3470	RA: 07 59 5.6405 (119.7735021d) Dec: +15 23 28.35 (15.39121d) Equinox: J2000	Proper Motion RA: -0.012842861276189133 sec of time/yr Proper Motion Dec: -0.057263000076090975 arcsec/yr Parallax: 0.0339601" Epoch of Position: 2015.5	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated with Gaia DR2 coordinates, PM and parallax; Epoch 2015.5
Category=Star
Description=[Exoplanet Systems, M dwarfs]
Extended=NO

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	37665.9

Template

Subarray	No. of Output Channels
SUBGRISM256	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	WLP8+F210M	GRISMR+F322W2	BRIGHT2	4	1681	1	1681	20408.5	

Special Requirements	
	Phase 0.95887 to 0.97139 with period 3.33667 Days and zero-phase 2459527.228800 HJD Aperture PA Range 144 to 264 Degrees (V3 143.74750455 to 263.74750455) Aperture PA Range 287 to 329 Degrees (V3 286.74750455 to 328.74750455) Aperture PA Range 352 to 109 Degrees (V3 351.74750455 to 108.74750455) Time Series Observation No Parallel Attachments

Observation

Proposal 1185, Observation 17: F444W Transit

Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Grism Time Series

Diagnostics

(F444W Transit (Obs 17)) 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 17:1) Warning (Form): Data Excess over lower threshold

(Visit 17:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(8)	GJ-3470	RA: 07 59 5.6405 (119.7735021d) Dec: +15 23 28.35 (15.39121d) Equinox: J2000	Proper Motion RA: -0.012842861276189133 sec of time/yr Proper Motion Dec: -0.057263000076090975 arcsec/yr Parallax: 0.0339601" Epoch of Position: 2015.5	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated with Gaia DR2 coordinates, PM and parallax; Epoch 2015.5
Category=Star
Description=[Exoplanet Systems, M dwarfs]
Extended=NO

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	37665.9

Template

Subarray	No. of Output Channels
SUBGRISM256	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	WLP8+F210M	GRISMR+F444W	BRIGHT2	7	1009	1	1009	20402.817	

Special Requirements	
	Phase 0.95887 to 0.97139 with period 3.33667 Days and zero-phase 2459527.228800 HJD Time Series Observation No Parallel Attachments

Observation

Proposal 1185, Observation 18: G395H transit

Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(G395H transit (Obs 18)) 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 18:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(9)	GJ-1214	RA: 17 15 19.5552 (258.8314800d) Dec: +04 57 38.07 (4.96058d) Equinox: J2000	Proper Motion RA: 580.2022 mas/yr Proper Motion Dec: -749.7133 mas/yr Parallax: 0.0682653" Epoch of Position: 2016	

Comments: Updated with Gaia DR3 coordinates, epoch 2016.
Category=Star
Description=[Exoplanet Systems, M dwarfs]
Extended=NO

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	11 GJ1214offset	WATA	SUB32	F110W	NRSRAPIDD6	3	1	1	0.26	156307.5

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	16	1084	1	1	1084	16644.256	156307.4

Special Requirements

Phase 0.927 to 0.95342 with period 1.580404938 Days and zero-phase 2455320.53573 HJD
Time Series Observation
No Parallel Attachments

Observation

Proposal 1185, Observation 19: G395H transit

Fri Oct 20 16:00:29 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(G395H transit (Obs 19)) 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 19:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(9)	GJ-1214	RA: 17 15 19.5552 (258.8314800d) Dec: +04 57 38.07 (4.96058d) Equinox: J2000	Proper Motion RA: 580.2022 mas/yr Proper Motion Dec: -749.7133 mas/yr Parallax: 0.0682653" Epoch of Position: 2016	

Comments: Updated with Gaia DR3 coordinates, epoch 2016.
Category=Star
Description=[Exoplanet Systems, M dwarfs]
Extended=NO

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	11 GJ1214offset	WATA	SUB32	F110W	NRSRAPIDD6	3	1	1	0.26	156307.5

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	16	1084	1	1	1084	16644.256	156307.4

Special Requirements

Phase 0.927 to 0.95342 with period 1.580404938 Days and zero-phase 2455320.53573 HJD
Time Series Observation
No Parallel Attachments