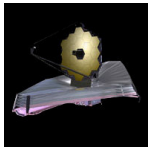

3171 - Red Dwarfs and the Seven Giants: First Insights into the Atmospheres of Giant Exoplanets around M-dwarf Stars

Cycle: 2, Proposal Category: GO

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OBSERVATIONS

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
TOI-3984				

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
	1	TOI-3984	NIRSpec Bright Object Time Series	(1) TOI-3984
	2	TOI-3984	NIRSpec Bright Object Time Series	(1) TOI-3984
	3	TOI-3984	NIRSpec Bright Object Time Series	(1) TOI-3984
TOI-3757				
	4	TOI-3757	NIRSpec Bright Object Time Series	(2) TOI-3757
	5	TOI-3757	NIRSpec Bright Object Time Series	(2) TOI-3757
HATS-6				
	6	HATS-6	NIRSpec Bright Object Time Series	(3) HATS-6
	7	HATS-6	NIRSpec Bright Object Time Series	(3) HATS-6
HATS-75				
	8	HATS-75	NIRSpec Bright Object Time Series	(4) HATS-75
	9	HATS-75	NIRSpec Bright Object Time Series	(4) HATS-75
	10	HATS-75	NIRSpec Bright Object Time Series	(4) HATS-75
	19	HATS-75	NIRSpec Bright Object Time Series	(4) HATS-75
TOI-5293				
	11	TOI-5293	NIRSpec Bright Object Time Series	(5) TOI-5293
	12	TOI-5293	NIRSpec Bright Object Time Series	(5) TOI-5293
	20	TOI-5293 repeat	NIRSpec Bright Object Time Series	(5) TOI-5293
TOI-3714				
	13	TOI-3714	NIRSpec Bright Object Time Series	(6) TOI-3714
	14	TOI-3714	NIRSpec Bright Object Time Series	(6) TOI-3714
	15	TOI-3714	NIRSpec Bright Object Time Series	(6) TOI-3714
TOI-5205				
	16	TOI-5205	NIRSpec Bright Object Time Series	(7) TOI-5205
	17	TOI-5205	NIRSpec Bright Object Time Series	(7) TOI-5205
	18	TOI-5205	NIRSpec Bright Object Time Series	(7) TOI-5205

ABSTRACT

A primary science goal of JWST is to understand the atmospheres of other worlds and investigate how a planet's atmospheric composition can inform us about its formation and evolutionary history. Of particular interest is the recently-discovered sample of short-period, Jupiter-sized planets orbiting M-dwarfs, which present challenges to our current theories of planet formation. This new sample of planets also represents an extreme regime of

planet formation that has not yet been probed in the context of atmospheric characterization.

The path to understanding how these systems form therefore begins with a fundamental question: How do the atmospheres of these M-dwarf giant planets compare to giant planets orbiting Sun-like stars? Thanks to the large transit-depths and warm temperatures of M-dwarf giant planets, we can access the absorption features for both water and methane in the planet atmospheres. We therefore have the unique opportunity to observe this new sample of close-in giant planets orbiting M dwarfs with JWST to precisely characterize their atmospheric composition and metallicity, and compare them with their FGK host analogues.

In this study, we will obtain transmission spectra of seven M-dwarf short-period Jupiters using the NIRSpec/PRISM to observe between 0.6-5.3 μm, a region where molecular features from water and methane are dominant, which we will use as tracers for atmospheric metallicity. Ultimately, this study will shed light on whether M-dwarf gas giants have similar formation and evolution pathways to their FGK counterparts.

OBSERVING DESCRIPTION

All targets will use NIRSpec with the PRISM to achieve full wavelength coverage from 0.6—5.3 μm. Our targets are faint enough to be acquired directly using WATA in a narrow filter (F110W).

We will operate in bright object time-series (BOTS) mode, using the S1600A1 with the SUB512 subarray to maximize duty cycle and limit aperture losses and associated small variations from pointing jitter and drift. The optimal number of groups per integration and integrations per exposure are derived with PandExo and confirmed using the JWST exposure time calculator. We adopt a saturation threshold of 80% the well-depth, to prevent non-linearity in the detector response, when optimizing for the number of integrations and groups per integration.

These observations are time-critical and must be centered on the transit of each planet. Our targets have transit periods <5 days and the events occur frequently in JWST Cycle 2. The transit ephemerides for all our targets are known precisely and have an uncertainty on the transit midpoint through July 1, 2024 of <3 minutes.

The time needed to observe a single transit includes the full transit duration, a pre and post out-of-transit baseline that is at least 60-minutes but at most half the transit duration, a 60-minute window before the transit to allow for flexibility with scheduling, and a 30-minute window before transit to allow for instrument settling and stabilization. The baseline data are critical to identify ensure identify any potential systematics and correct for them. We apply a phase constraint to each target that satisfies our baseline requirements around mid-transit.

A summary of our targets and the requires number of integrations and groups per integration:

Host name	J mag	Groups per int.	# of int.	Total time per transit (hrs)	Number of transits
TOI-3984	11.93	2	29822	7.71	3
TOI-3757	12.00	2	28760	7.47	2
HATS-6	12.05	3	22214	7.62	2
HATS-75	12.48	4	17232	7.39	3
TOI-5293	12.47	4	17383	7.44	2
TOI-3714	11.74	2	27380	7.16	3
TOI-5205	11.93	2	25999	6.85	3

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	TOI-3984	RA: 15 05 20.9784 (226.3374100d) Dec: +36 47 12.45 (36.78679d) Equinox: J2000	Proper Motion RA: -48.935 mas/yr Proper Motion Dec: 42.685 mas/yr Epoch of Position: 2000	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *Category=Star* *Description=[M dwarfs]*				
(2)	TOI-3757	RA: 06 04 0.8904 (91.0037100d) Dec: +55 01 12.59 (55.02016d) Equinox: J2000	Proper Motion RA: -9.032 mas/yr Proper Motion Dec: -43.12800003845041 mas/yr Epoch of Position: 2000	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *Category=Star* *Description=[M dwarfs]*				
(3)	HATS-6	RA: 05 52 35.2367 (88.1468196d) Dec: -19 01 53.97 (-19.03166d) Equinox: J2000	Proper Motion RA: -2.568 mas/yr Proper Motion Dec: 7.371 mas/yr Epoch of Position: 2000	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *Category=Star* *Description=[M dwarfs]*				
(4)	HATS-75	RA: 04 03 47.8393 (60.9493304d) Dec: -25 24 32.09 (-25.40891d) Equinox: J2000	Proper Motion RA: 12.872 mas/yr Proper Motion Dec: -1.752999946802447 mas/yr Epoch of Position: 2000	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *Category=Star* *Description=[M dwarfs]*				
(5)	TOI-5293	RA: 23 43 18.8831 (355.8286796d) Dec: -02 02 42.34 (-2.04509d) Equinox: J2000	Proper Motion RA: -17.130828947268377 mas/yr Proper Motion Dec: 0.48657400450104976 mas/yr Epoch of Position: 2016.0	
Comments: *Category=Star* *Description=[M dwarfs]* *Extended=NO*				
(6)	TOI-3714	RA: 04 38 12.5354 (69.5522308d) Dec: +39 27 29.91 (39.45831d) Equinox: J2000	Proper Motion RA: 19.826 mas/yr Proper Motion Dec: -70.7620000866882 mas/yr Epoch of Position: 2000	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *Category=Star* *Description=[M dwarfs]*				
(7)	TOI-5205	RA: 20 55 4.9164 (313.7704850d) Dec: +24 21 38.71 (24.36075d) Equinox: J2000	Proper Motion RA: 41.678 mas/yr Proper Motion Dec: 52.074 mas/yr Epoch of Position: 2000	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *Category=Star* *Description=[M dwarfs]*				

Observation

Proposal 3171, Observation 1: TOI-3984

Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(TOI-3984 (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): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	TOI-3984	RA: 15 05 20.9784 (226.3374100d)	Proper Motion RA: -48.935 mas/yr	
		Dec: +36 47 12.45 (36.78679d)	Proper Motion Dec: 42.685 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

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

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136491

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	18105	1	1	18105	20843.924	136491

Special Requirements

Phase 0.966405 to 0.97597622 with period 4.353326 Days and zero-phase 2459715.02268 HJD
Time Series Observation
No Parallel Attachments

2 After 1 by 1 Days to <None specified>
Group Observations 1, 2, 3 within 100 Days

Observation

Proposal 3171, Observation 2: TOI-3984

Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(TOI-3984 (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): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	TOI-3984	RA: 15 05 20.9784 (226.3374100d)	Proper Motion RA: -48.935 mas/yr	
		Dec: +36 47 12.45 (36.78679d)	Proper Motion Dec: 42.685 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

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

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136491

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	18105	1	1	18105	20843.924	136491

Special Requirements

Phase 0.966405 to 0.97597622 with period 4.353326 Days and zero-phase 2459715.02268 HJD
Time Series Observation
No Parallel Attachments

2 After 1 by 1 Days to <None specified>
3 After 2 by 1 Days to <None specified>
Group Observations 1, 2, 3 within 100 Days

Observation

Proposal 3171, Observation 3: TOI-3984

Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(TOI-3984 (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): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	TOI-3984	RA: 15 05 20.9784 (226.3374100d)	Proper Motion RA: -48.935 mas/yr	
		Dec: +36 47 12.45 (36.78679d)	Proper Motion Dec: 42.685 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

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

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136491

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	18105	1	1	18105	20843.924	136491

Special Requirements

Phase 0.966405 to 0.97597622 with period 4.353326 Days and zero-phase 2459715.02268 HJD
Time Series Observation
No Parallel Attachments

3 After 2 by 1 Days to <None specified>
Group Observations 1, 2, 3 within 100 Days

Observation

Proposal 3171, Observation 4: TOI-3757

Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(TOI-3757 (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): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(2)	TOI-3757	RA: 06 04 0.8904 (91.0037100d)	Proper Motion RA: -9.032 mas/yr	
		Dec: +55 01 12.59 (55.02016d)	Proper Motion Dec: -43.12800003845041 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

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

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136490

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	17460	1	1	17460	20101.349	136490

Special Requirements

Phase 0.958075888 to 0.970192683 with period 3.438753 Days and zero-phase 2458838.77148 HJD
Time Series Observation
No Parallel Attachments

5 After 4 by 1 Days to <None specified>
Group Observations 4, 5 within 72.4 Days

Observation

Proposal 3171, Observation 5: TOI-3757

Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(TOI-3757 (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): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(2)	TOI-3757	RA: 06 04 0.8904 (91.0037100d)	Proper Motion RA: -9.032 mas/yr	
		Dec: +55 01 12.59 (55.02016d)	Proper Motion Dec: -43.12800003845041 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

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

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136490

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	17460	1	1	17460	20101.349	136490

Special Requirements

Phase 0.958075888 to 0.970192683 with period 3.438753 Days and zero-phase 2458838.77148 HJD
Time Series Observation
No Parallel Attachments

5 After 4 by 1 Days to <None specified>
Group Observations 4, 5 within 72.4 Days

Observation

Proposal 3171, Observation 6: HATS-6

Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(HATS-6 (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): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(3)	HATS-6	RA: 05 52 35.2367 (88.1468196d)	Proper Motion RA: -2.568 mas/yr	
		Dec: -19 01 53.97 (-19.03166d)	Proper Motion Dec: 7.371 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

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

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136488

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	17850	1	1	17850	20550.348	142904

Special Requirements

Phase 0.955630704 to 0.968161005 with period 3.3252725 Days and zero-phase 2456660.36771 HJD
Time Series Observation
No Parallel Attachments

7 After 6 by 1 Days to <None specified>
Group Observations 6, 7 within 70.2 Days

Observation

Proposal 3171, Observation 7: HATS-6

Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(HATS-6 (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): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(3)	HATS-6	RA: 05 52 35.2367 (88.1468196d)	Proper Motion RA: -2.568 mas/yr	
		Dec: -19 01 53.97 (-19.03166d)	Proper Motion Dec: 7.371 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

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

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136488

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	17850	1	1	17850	20550.348	142904

Special Requirements

Phase 0.955630704 to 0.968161005 with period 3.3252725 Days and zero-phase 2456660.36771 HJD
Time Series Observation
No Parallel Attachments

7 After 6 by 1 Days to <None specified>
Group Observations 6, 7 within 70.2 Days

Observation

Proposal 3171, Observation 8: HATS-75

Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(HATS-75 (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): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(4)	HATS-75	RA: 04 03 47.8393 (60.9493304d)	Proper Motion RA: 12.872 mas/yr	
		Dec: -25 24 32.09 (-25.40891d)	Proper Motion Dec: -1.752999946802447 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

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

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136484

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	5	14402	1	1	14402	19837.891	136488

Special Requirements

Phase 0.948358031 to 0.96329952 with period 2.7886556 Days and zero-phase 2458611.05487 HJD
Time Series Observation
No Parallel Attachments

Observation

Proposal 3171, Observation 9: HATS-75

Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(HATS-75 (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
(4)	HATS-75	RA: 04 03 47.8393 (60.9493304d)	Proper Motion RA: 12.872 mas/yr	
		Dec: -25 24 32.09 (-25.40891d)	Proper Motion Dec: -1.752999946802447 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

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

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136484

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	5	14402	1	1	14402	19837.891	136488

Special Requirements

Phase 0.948358031 to 0.96329952 with period 2.7886556 Days and zero-phase 2458611.05487 HJD
Time Series Observation
No Parallel Attachments

Observation

Proposal 3171, Observation 10: HATS-75

Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(HATS-75 (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): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(4)	HATS-75	RA: 04 03 47.8393 (60.9493304d)	Proper Motion RA: 12.872 mas/yr	
		Dec: -25 24 32.09 (-25.40891d)	Proper Motion Dec: -1.752999946802447 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

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

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136484

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	5	14402	1	1	14402	19837.891	136488

Special Requirements

Phase 0.948358031 to 0.96329952 with period 2.7886556 Days and zero-phase 2458611.05487 HJD
Time Series Observation
No Parallel Attachments

19 After 10 by 1 Days to <None specified>

Observation

Proposal 3171, Observation 19: HATS-75

Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(HATS-75 (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
(4)	HATS-75	RA: 04 03 47.8393 (60.9493304d)	Proper Motion RA: 12.872 mas/yr	
		Dec: -25 24 32.09 (-25.40891d)	Proper Motion Dec: -1.752999946802447 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

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

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136484

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	5	14402	1	1	14402	19837.891	136488

Special Requirements

Phase 0.948358031 to 0.96329952 with period 2.7886556 Days and zero-phase 2458611.05487 HJD
Time Series Observation
No Parallel Attachments

19 After 10 by 1 Days to <None specified>

Observation

Proposal 3171, Observation 11: TOI-5293

Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(TOI-5293 (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)	TOI-5293	RA: 23 43 18.8831 (355.8286796d) Dec: -02 02 42.34 (-2.04509d) Equinox: J2000	Proper Motion RA: -17.130828947268377 mas/yr Proper Motion Dec: 0.48657400450104976 mas/yr Epoch of Position: 2016.0	

Comments:
Category=Star
Description=[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	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136493

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	5	14528	1	1	14528	20011.448	136493

Special Requirements

Phase 0.950516826 to 0.964736129 with period 2.930289 Days and zero-phase 2459448.9148 HJD
Time Series Observation
No Parallel Attachments

12 After 11 by 1 Days to <None specified>
Group Observations 11, 12 within 41.2 Days

Observation

Proposal 3171, Observation 12: TOI-5293

Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(TOI-5293 (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
(5)	TOI-5293	RA: 23 43 18.8831 (355.8286796d) Dec: -02 02 42.34 (-2.04509d) Equinox: J2000	Proper Motion RA: -17.130828947268377 mas/yr Proper Motion Dec: 0.48657400450104976 mas/yr Epoch of Position: 2016.0	

Comments:
Category=Star
Description=[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	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136493

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	5	14528	1	1	14528	20011.448	136493

Special Requirements

Phase 0.950516826 to 0.964736129 with period 2.930289 Days and zero-phase 2459448.9148 HJD
Time Series Observation
No Parallel Attachments

12 After 11 by 1 Days to <None specified>
Group Observations 11, 12 within 41.2 Days

Observation

Proposal 3171, Observation 20: TOI-5293 repeat Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(TOI-5293 repeat (Obs 20)) 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 20:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(5)	TOI-5293	RA: 23 43 18.8831 (355.8286796d) Dec: -02 02 42.34 (-2.04509d) Equinox: J2000	Proper Motion RA: -17.130828947268377 mas/yr Proper Motion Dec: 0.48657400450104976 mas/yr Epoch of Position: 2016.0	

Comments:
Category=Star
Description=[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	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136493

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	5	14528	1	1	14528	20011.448	136493

Special Requirements

Phase 0.950516826 to 0.964736129 with period 2.930289 Days and zero-phase 2459448.9148 HJD
Time Series Observation
No Parallel Attachments

Observation

Proposal 3171, Observation 13: TOI-3714

Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(TOI-3714 (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
(6)	TOI-3714	RA: 04 38 12.5354 (69.5522308d)	Proper Motion RA: 19.826 mas/yr	
		Dec: +39 27 29.91 (39.45831d)	Proper Motion Dec: -70.7620000866882 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

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

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136486

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	16622	1	1	16622	19136.576	136486

Special Requirements

Phase 0.935610337 to 0.954946572 with period 2.154849 Days and zero-phase 2458840.5093 HJD
Time Series Observation
No Parallel Attachments

14 After 13 by 1 Days to <None specified>
Group Observations 13, 14, 15 within 46.6 Days

Observation

Proposal 3171, Observation 14: TOI-3714

Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(TOI-3714 (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): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(6)	TOI-3714	RA: 04 38 12.5354 (69.5522308d)	Proper Motion RA: 19.826 mas/yr	
		Dec: +39 27 29.91 (39.45831d)	Proper Motion Dec: -70.7620000866882 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

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

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136486

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	16622	1	1	16622	19136.576	136486

Special Requirements

Phase 0.935610337 to 0.954946572 with period 2.154849 Days and zero-phase 2458840.5093 HJD
Time Series Observation
No Parallel Attachments

14 After 13 by 1 Days to <None specified>
15 After 14 by 1 Days to <None specified>
Group Observations 13, 14, 15 within 46.6 Days

Observation

Proposal 3171, Observation 15: TOI-3714

Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(TOI-3714 (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
(6)	TOI-3714	RA: 04 38 12.5354 (69.5522308d)	Proper Motion RA: 19.826 mas/yr	
		Dec: +39 27 29.91 (39.45831d)	Proper Motion Dec: -70.7620000866882 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

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

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136486

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	16622	1	1	16622	19136.576	136486

Special Requirements

Phase 0.935610337 to 0.954946572 with period 2.154849 Days and zero-phase 2458840.5093 HJD
Time Series Observation
No Parallel Attachments

15 After 14 by 1 Days to <None specified>
Group Observations 13, 14, 15 within 46.6 Days

Observation

Proposal 3171, Observation 16: TOI-5205

Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(TOI-5205 (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): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(7)	TOI-5205	RA: 20 55 4.9164 (313.7704850d)	Proper Motion RA: 41.678 mas/yr	
		Dec: +24 21 38.71 (24.36075d)	Proper Motion Dec: 52.074 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

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

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136494

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	15784	1	1	15784	18171.804	136494

Special Requirements

Phase 0.918248601 to 0.943799107 with period 1.630757 Days and zero-phase 2459443.47179 HJD
Time Series Observation
No Parallel Attachments

17 After 16 by 1 Days to <None specified>
Group Observations 16, 17, 18 within 108 Days

Observation

Proposal 3171, Observation 17: TOI-5205 Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(TOI-5205 (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): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(7)	TOI-5205	RA: 20 55 4.9164 (313.7704850d)	Proper Motion RA: 41.678 mas/yr	
		Dec: +24 21 38.71 (24.36075d)	Proper Motion Dec: 52.074 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

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

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136494

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	15784	1	1	15784	18171.804	136494

Special Requirements

Phase 0.918248601 to 0.943799107 with period 1.630757 Days and zero-phase 2459443.47179 HJD
Time Series Observation
No Parallel Attachments

17 After 16 by 1 Days to <None specified>
18 After 17 by 1 Days to <None specified>
Group Observations 16, 17, 18 within 108 Days

Observation

Proposal 3171, Observation 18: TOI-5205

Mon Aug 12 21:00:21 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Bright Object Time Series

Diagnostics

(TOI-5205 (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
(7)	TOI-5205	RA: 20 55 4.9164 (313.7704850d)	Proper Motion RA: 41.678 mas/yr	
		Dec: +24 21 38.71 (24.36075d)	Proper Motion Dec: 52.074 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

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

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	136494

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	15784	1	1	15784	18171.804	136494

Special Requirements

Phase 0.918248601 to 0.943799107 with period 1.630757 Days and zero-phase 2459443.47179 HJD
Time Series Observation
No Parallel Attachments

18 After 17 by 1 Days to <None specified>
Group Observations 16, 17, 18 within 108 Days