



1355 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star formation

Cycle: 1, Proposal Category: ERS

INVESTIGATORS

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OBSERVATIONS

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
SGAS 1226 Observation Suite				
	1	SGAS 1226 NIRSpec	NIRSpec IFU Spectroscopy	(10) SGAS1226-IFU
	2	SGAS 1226 NIRSpec-OFFSET	NIRSpec IFU Spectroscopy	(11) SGAS1226-SKY
	3	SGAS 1226 NIRCам	NIRCам Imaging	(12) SGAS1226-PHOT
	4	SGAS 1226 MIRI imaging	MIRI Imaging	(12) SGAS1226-PHOT

JWST Proposal 1355 (Created: Thursday, September 1, 2022 at 6:00:33 PM Eastern Standard Time) - Overview

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
	5	SGAS 1226 MIRI IFU	MIRI Medium Resolution Spectroscopy	(10) SGAS1226-IFU
	6	SGAS 1226 MIRI IFU-OFFSET	MIRI Medium Resolution Spectroscopy	(23) SGAS1226-MRS-SKY
SGAS 1723 Observation Suite				
	7	SGAS 1723 NIRSpec	NIRSpec IFU Spectroscopy	(20) Group SGAS1723-NIRSPEC-IFU
	9	SGAS 1723 NIRCcam	NIRCcam Imaging	(9) SGAS1723-PHOT
	10	SGAS 1723 MIRI imaging	MIRI Imaging	(9) SGAS1723-PHOT
SPT0418-47 Observation Suite				
	11	NIRSpec IFU (H-alpha)	NIRSpec IFU Spectroscopy	(2) SPT0418-47-IFU
	12	NIRSpec IFU (H-alpha)-OFFSET	NIRSpec IFU Spectroscopy	(3) SPT0418-47-IFU-OFFSET
	13	MIRI MRS (Paschen-alpha)	MIRI Medium Resolution Spectroscopy	(21) Group SPT0418-47-IFU-GROUP
	15	MIRI Imaging (1.6 & 3 micron continuum and PAH3.3)	MIRI Imaging	(1) SPT0418-47
	16	NIRCAM Imaging (continuum)	NIRCcam Imaging	(1) SPT0418-47
	17	MIRI MRS (PAH 3.3)	MIRI Medium Resolution Spectroscopy	(21) Group SPT0418-47-IFU-GROUP
SPT2147-50 Observation Suite				
	19	NIRSpec IFU (H-alpha)	NIRSpec IFU Spectroscopy	(5) SPT2147-50-IFU
	20	NIRSpec IFU (H-alpha)-OFFSET	NIRSpec IFU Spectroscopy	(6) SPT2147-50-IFU-OFFSET
	21	MIRI MRS (Paschen-alpha)	MIRI Medium Resolution Spectroscopy	(5) SPT2147-50-IFU
	22	MIRI MRS-OFFSET (Paschen-alpha)	MIRI Medium Resolution Spectroscopy	(24) SPT2147-50-MRS-OFFSET
	23	MIRI Imaging (1.6 & 3 micron continuum and PAH3.3)	MIRI Imaging	(4) SPT2147-50
	24	NIRCAM Imaging (continuum)	NIRCcam Imaging	(4) SPT2147-50
	25	MIRI MRS (PAH 3.3)	MIRI Medium Resolution Spectroscopy	(5) SPT2147-50-IFU
	26	MIRI MRS-OFFSET (PAH 3.3)	MIRI Medium Resolution Spectroscopy	(24) SPT2147-50-MRS-OFFSET

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
SGAS 1723 NIRSpec IFU repeat WOPR 88493				
	27	SGAS 1723 NIRSpec r epeat on source	NIRSpec IFU Spectroscopy	(7) SGAS1723-IFU
	28	SGAS 1723 NIRSpec r epeat sky	NIRSpec IFU Spectroscopy	(8) SGAS1723-SKY

ABSTRACT

We propose high signal-to-noise NIRSpec and MIRI IFU spectroscopy, with accompanying imaging, for 4 gravitationally lensed galaxies at $1 < z < 4$. This program will spatially resolve the star formation in galaxies across the peak of cosmic star formation, in an extinction-robust manner. Lensing magnification pushes JWST to the highest spatial resolutions possible at these redshifts, to map the key spectral diagnostics of star formation and dust extinction: H-alpha, Pa-alpha, and 3.3um PAH within individual distant galaxies. Our targets are among the brightest, best-characterized lensed systems known, and span a wide range of specific star formation rate, extinction, and luminosity. They have extensive ancillary datasets. Our science goals are:

- 1) demonstrate extinction-robust star formation rate diagnostics for distant galaxies;
- 2) determine the physical scales of star formation in distant galaxies, in an extinction-robust way;
- 3) measure specific star formation rates and compare the spatial distribution of the young and old stars;
- 4) and measure the physical conditions of star formation and their spatial variation.

This program uses key instrument modes, heavily exercising the NIRSpec and MIRI IFUs. The resulting science-enabling data products will demonstrate JWST's capabilities and provide the extragalactic science community with rich datasets. In four deliveries, we will provide high-quality Level 3 data cubes and mosaics, empirical star formation diagnostics, maps of star formation, extinction, and physical properties, a tool for comparing NIRSpec and MIRI data cubes, and cookbooks on data reduction, analysis, and calibration strategy.

NOI #106

Co-PI: J. Vieira

OBSERVING DESCRIPTION

Summary description of the observations requested, including targets, instruments, and modes, for reference by program coordinators, contact scientists, and the scientific community.

Description updated 03/2021 by Jane Rigby

This ERS program has 4 primary targets: SGAS1723+3411, SGAS1226+2152, SPT0418-47, and SPT2147-50. The science instrument modes used are NIRCам imaging, NIRSpec IFU spectroscopy, MIRI imaging, and MIRI MRS IFU spectroscopy. Here, we describe each science instrument

mode used.

NIRCam imaging: The goal of the NIRCam imaging is to quickly obtain broad-band photometry in multiple bands, to facilitate spatially-resolved spectral energy distributions, from which we will make maps of stellar mass. We obtain NIRCam imaging for all 4 targets. We choose readout patterns BRIGHT1/2 or SHALLOW2 to avoid saturating nearby neighbor galaxies.

The same NIRCam filters are used for all 4 targets: F115W F150W F200W F277W F356W F444W

MIRI imaging: The goal of the MIRI imaging is to obtain rest-frame near-IR and mid-IR continuum emission, for fitting spectral energy distributions, and to map the PAH emission features. We use the MIRI filters to capture the 3.3um and 6.2 um PAH features in-band, to measure the continuum level near the PAH features, and to characterize the near-IR and mid-IR SED. We omit F1130W and F2500W because the integration time would be prohibitive.

The same MIRI imaging filters are used for all 4 targets: F560W F770W F1000W F1280W F1500W F1800W F2100W

NIRSpec IFU observations of Halpha: The goal of these observations is to spatially resolve the rest-frame optical emission lines, including Halpha for all targets, and Hbeta for all primary targets except SPT2147, where it falls off the edge of the grating. The grating/filter combination is chosen for each source based on redshift. We select the high spectral resolution gratings for targets SGAS1723 and SGAS1226 for several reasons: the higher spectral resolution brings kinematics; no important diagnostics fall on the chip gap; the ETC predicts only a small difference in emission-line-integrated signal-to-noise ratio between those particular high-res and medium-res grating. For the two SPT targets, we select G395M/F290LP rather than G395H/F290LP because it has higher throughput, which translates to significant gains in signal-to-noise ratio. Small-size cycling dithers are used. Sky offsets and leak calcs are obtained for all. We use the NIRSIRS2 readout mode since the fluxes are faint.

Target	Grating/Filter
SGAS1723	G140H/F100LP
SGAS1226	G235H/F170LP
SPT0418-47	G395M/F290LP
SPT2147	G395M/F290LP

NIRSpec IFU of Paschen alpha: The goal of this observation is to detect the Paschen alpha emission line for the lowest redshift target. Same strategy as the above NIRSpec observations.

Target	Grating/Filter
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SGAS1723 G395H/F290LP

MIRI MRS IFU observations of Paschen alpha: The goal of these observations is to detect the Paschen alpha emission line. We choose 4-point dithers that are optimized for an extended source, and SLOW readout. We take offset sky observations.

Target Channel

SGAS1226 Long(C)

SPT0418-47 Medium(B)

SPT2147 Medium(B)

MIRI MRS IFU observations of the 3.3um PAH feature: The goal of these observations is to detect the 3.3um PAH emission feature. The setup is as the previous MRS observations. This is done only for the two targets with highest infrared luminosity; for the other two targets the integration times would have been prohibitive, and we will get the PAHs from MIRI imaging instead.

Target Channel

SPT0418-47 Long(C)

SPT2147 Long(C)

End of Observation Description

Proposal 1355 - Targets - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star formation

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous	
(1)	SPT0418-47	RA: 04 18 39.6790 (64.6653292d) Dec: -47 51 52.68 (-47.86463d) Equinox: J2000			
<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[High-redshift galaxies]</i> <i>Extended=YES</i>					
(2)	SPT0418-47-IFU	RA: 04 18 39.6790 (64.6653292d) Dec: -47 51 52.68 (-47.86463d) Equinox: J2000			
<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[High-redshift galaxies]</i> <i>Extended=YES</i>					
(3)	SPT0418-47-IFU-OFFSET	RA: 04 18 38.8810 (64.6620042d) Dec: -47 51 47.25 (-47.86313d) Equinox: J2000			
<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[High-redshift galaxies]</i> <i>Extended=YES</i>					
Fixed Targets	(4)	SPT2147-50	RA: 21 47 19.0120 (326.8292167d) Dec: -50 35 54.50 (-50.59847d) Equinox: J2000		
	<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[High-redshift galaxies]</i> <i>Extended=YES</i>				
	(5)	SPT2147-50-IFU	RA: 21 47 19.0026 (326.8291775d) Dec: -50 35 54.23 (-50.59840d) Equinox: J2000		
	<i>Comments: 22nd August, 2022. KAP tweaked coordinates based on expected PA for the plan window.</i> <i>Category=Galaxy</i> <i>Description=[High-redshift galaxies]</i> <i>Extended=YES</i>				
	(6)	SPT2147-50-IFU-OFFSET	RA: 21 47 18.2960 (326.8262333d) Dec: -50 35 44.34 (-50.59565d) Equinox: J2000		
	<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[High-redshift galaxies]</i> <i>Extended=YES</i>				
	(7)	SGAS1723-IFU	RA: 17 23 36.4060 (260.9016917d) Dec: +34 11 54.69 (34.19852d) Equinox: J2000		
<i>Comments: JRR tweaked coordinates 1/26/2018 from HST F110W image.</i> <i>Centering on SW half of arc, since NE is a copy of it but has contam from a cluster galaxy.</i> <i>Category=Galaxy</i> <i>Description=[High-redshift galaxies]</i> <i>Extended=YES</i>					

Proposal 1355 - Targets - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star formation

(8)	SGAS1723-SKY	RA: 17 23 35.8957 (260.8995654d) Dec: +34 11 49.17 (34.19699d) Equinox: J2000
<p><i>Comments:</i> Category=Galaxy Description=[Brightest cluster galaxies]</p>		
(9)	SGAS1723-PHOT	RA: 17 23 36.4390 (260.9018292d) Dec: +34 11 55.27 (34.19869d) Equinox: J2000
<p><i>Comments: coords should match IFU</i> Category=Galaxy Description=[Brightest cluster galaxies]</p>		
(10)	SGAS1226-IFU	RA: 12 26 51.2960 (186.7137333d) Dec: +21 52 19.97 (21.87221d) Equinox: J2000
<p><i>Comments: JRR tweaked coordinates 1/26/2018 from HST F110W image. Coords are consistent w offset star.</i> Category=Galaxy Description=[High-redshift galaxies] Extended=YES</p>		
(11)	SGAS1226-SKY	RA: 12 26 50.3000 (186.7095833d) Dec: +21 52 20.00 (21.87222d) Equinox: J2000
<p><i>Comments:</i> Category=Calibration Description=[Telescope/sky background]</p>		
(12)	SGAS1226-PHOT	RA: 12 26 51.2960 (186.7137333d) Dec: +21 52 19.97 (21.87221d) Equinox: J2000
<p><i>Comments: coords should match IFU</i> Category=Galaxy Description=[High-redshift galaxies]</p>		
(20)	Group SGAS1723-NIRSPEC- IFU	<p><i>Comments: Target group for NIRSpec observations of SGAS1723</i> Target Selection=[7 SGAS1723-IFU, 8 SGAS1723-SKY]</p>
(21)	Group SPT0418-47-IFU- GROUP	<p><i>Comments: Target group for NIRSpec and MIRI MRS observations of SPT0418-47</i> Target Selection=[2 SPT0418-47-IFU, 3 SPT0418-47-IFU-OFFSET]</p>
(23)	SGAS1226-MRS-SKY	RA: 12 26 51.2960 (186.7137333d) Dec: +21 52 19.97 (21.87221d) Equinox: J2000
<p><i>Comments:</i> Category=Galaxy Description=[High-redshift galaxies] Extended=YES</p>		

Proposal 1355 - Targets - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star formation

(24) SPT2147-50-MRS-OFFSET RA: 21 47 19.0026 (326.8291775d)
Dec: -50 35 54.23 (-50.59840d)
Equinox: J2000

Comments:

Category=Galaxy

Description=[High-redshift galaxies]

Extended=YES

Proposal 1355 - Observation 1 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star for...

Thu Sep 01 23:00:33 GMT 2022

Observation	<p>Proposal 1355, Observation 1: SGAS 1226 NIRSpec</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec IFU Spectroscopy</p> <p>Background Observations:[SGAS 1226 NIRSpec-OFFSET (Obs 2)]</p> <p><i>Comments: This is the closer, fainter offset star.</i></p>											
Diagnostics	(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(10)	SGAS1226-IFU	RA: 12 26 51.2960 (186.7137333d) Dec: +21 52 19.97 (21.87221d) Equinox: J2000									
	<p><i>Comments: JRR tweaked coordinates 1/26/2018 from HST F110W image. Coords are consistent w offset star. Category=Galaxy Description=[High-redshift galaxies] Extended=YES</i></p>											
Template	TA Method											
	NONE											
Dithers	#	Dither Type		Size	Starting Point			Number of Points	Points			
	1	CYCLING		SMALL	1			4				
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	G235H/F170LP	NRSIRS2	14	1	false	true	NONE	4	4	4143.245	
	2	G235H/F170LP	NRSIRS2	14	1	true	true	NONE	4	4	4143.245	
Special Requirements	Sequence Observations 1, 2, Non-interruptible											

Proposal 1355 - Observation 2 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star for...

Thu Sep 01 23:00:33 GMT 2022

Observation	<p>Proposal 1355, Observation 2: SGAS 1226 NIRSpec-OFFSET</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec IFU Spectroscopy</p> <p>Background Observation For: [SGAS 1226 NIRSpec (Obs 1)]</p> <p><i>Comments: This is the closer, fainter offset star.</i></p>											
Diagnostics	(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(11)	SGAS1226-SKY	RA: 12 26 50.3000 (186.7095833d) Dec: +21 52 20.00 (21.87222d) Equinox: J2000									
	<p><i>Comments:</i> Category=Calibration Description=[Telescope/sky background]</p>											
Template	TA Method											
	NONE											
Dithers	#	Dither Type		Size	Starting Point			Number of Points	Points			
	1	CYCLING		SMALL	1			4				
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	G235H/F170LP	NRSIRS2	14	1	false	true	NONE	4	4	4143.245	
	2	G235H/F170LP	NRSIRS2	14	1	true	true	NONE	4	4	4143.245	
Special Requirements	Sequence Observations 1, 2, Non-interruptible											

Proposal 1355 - Observation 3 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star for...

Thu Sep 01 23:00:33 GMT 2022

Observation	Proposal 1355, Observation 3: SGAS 1226 NIRCam Diagnostic Status: Warning Observing Template: NIRCam Imaging									
Diagnostics	(Visit 3:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(12)	SGAS1226-PHOT	RA: 12 26 51.2960 (186.7137333d) Dec: +21 52 19.97 (21.87221d) Equinox: J2000							
	Comments: coords should match IFU Category=Galaxy Description=[High-redshift galaxies]									
Template	Module				Subarray					
	ALL				FULL					
Dithers	#	Primary Dither Type		Primary Dithers	Subpixel Dither Type		Dither Size	Subpixel Positions		
	1	INTRASCA		3	STANDARD		8" (SMALL)	1		
Spectral Elements	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
	1	F115W	F277W	BRIGHT1	5	1	3	3	289.893	
	2	F150W	F356W	BRIGHT1	5	1	3	3	289.893	
	3	F200W	F444W	BRIGHT1	5	1	3	3	289.893	
Special Requirements	Offset -60.75458270676721 arcsec, 35.78063540408274 arcsec									

Proposal 1355 - Observation 4 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star for...

Thu Sep 01 23:00:33 GMT 2022

Observation	Proposal 1355, Observation 4: SGAS 1226 MIRI imaging Diagnostic Status: Warning Observing Template: MIRI Imaging										
	(Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.										
Diagnosics											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Miscellaneous			
	(12)	SGAS1226-PHOT	RA: 12 26 51.2960 (186.7137333d) Dec: +21 52 19.97 (21.87221d) Equinox: J2000								
Comments: coords should match IFU Category=Galaxy Description=[High-redshift galaxies]											
Template	Subarray										
	FULL										
Dithers	#	Dither Type	Starting Point	Number of Points	Points	Starting Set	Number of Sets	Optimized For	Direction	Pattern Size	
	1	4-Point-Sets				6	1	POINT SOURCE	POSITIVE	DEFAULT	
Spectral Elements	#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F560W	FASTR1	6	1	1	Dither 1	4	4	66.601	
	2	F770W	FASTR1	6	1	1	Dither 1	4	4	66.601	
	3	F1000W	FASTR1	6	1	1	Dither 1	4	4	66.601	
	4	F1280W	FASTR1	9	1	1	Dither 1	4	4	99.901	
	5	F1500W	FASTR1	9	1	1	Dither 1	4	4	99.901	
	6	F1800W	FASTR1	5	1	1	Dither 1	4	4	55.501	
	7	F2100W	FASTR1	5	1	1	Dither 1	4	4	55.501	

Proposal 1355 - Observation 5 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star for...

Thu Sep 01 23:00:33 GMT 2022

Observation	<p>Proposal 1355, Observation 5: SGAS 1226 MIRI IFU</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Medium Resolution Spectroscopy</p> <p>Background Observations:[SGAS 1226 MIRI IFU-OFFSET (Obs 6)]</p> <p><i>Comments: MIRI MRS TA uses offset star 2, which is further away from science target than offset star 1, but brighter & isolated at 4.6um in spitzer images.</i></p>												
Diagnostics	(Visit 5:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(10)	SGAS1226-IFU	RA: 12 26 51.2960 (186.7137333d) Dec: +21 52 19.97 (21.87221d) Equinox: J2000										
	<p><i>Comments: JRR tweaked coordinates 1/26/2018 from HST F110W image. Coords are consistent w offset star. Category=Galaxy Description=[High-redshift galaxies] Extended=YES</i></p>												
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter		Primary Channel				Simultaneous Imaging			Imager Subarray			
	F560W		CHANNEL1				YES			FULL			
Dithers	#	Dither Type				Optimized For			Direction				
	1	4-Point				EXTENDED SOURCE			NEGATIVE				
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F560W	FASTR1	22	14	1	Dither 1	4	56	3563.151	
	1	LONG(C)	MRSLONG		SLOWR1	38	1	1	Dither 1	4	4	3631.268	
	1	LONG(C)	MRSSHORT		SLOWR1	38	1	1	Dither 1	4	4	3631.268	

Special Requirements

Sequence Observations 5, 6, Non-interruptible

Proposal 1355 - Observation 6 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star for...

Thu Sep 01 23:00:33 GMT 2022

Observation	<p>Proposal 1355, Observation 6: SGAS 1226 MIRI IFU-OFFSET</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Medium Resolution Spectroscopy</p> <p>Background Observation For: [SGAS 1226 MIRI IFU (Obs 5)]</p> <p><i>Comments: MIRI MRS TA uses offset star 2, which is further away from science target than offset star 1, but brighter & isolated at 4.6um in spitzer images.</i></p>																																																															
Diagnostics	(Visit 6:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.																																																															
Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(23)</td> <td>SGAS1226-MRS-SKY</td> <td>RA: 12 26 51.2960 (186.7137333d) Dec: +21 52 19.97 (21.87221d) Equinox: J2000</td> <td></td> <td></td> </tr> </tbody> </table> <p><i>Comments: Category=Galaxy Description=[High-redshift galaxies] Extended=YES</i></p>												#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous	(23)	SGAS1226-MRS-SKY	RA: 12 26 51.2960 (186.7137333d) Dec: +21 52 19.97 (21.87221d) Equinox: J2000																																												
#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous																																																												
(23)	SGAS1226-MRS-SKY	RA: 12 26 51.2960 (186.7137333d) Dec: +21 52 19.97 (21.87221d) Equinox: J2000																																																														
Acquisition	<table border="1"> <thead> <tr> <th>#</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>NONE</td> </tr> </tbody> </table>												#	Target	1	NONE																																																
#	Target																																																															
1	NONE																																																															
Template	<table border="1"> <thead> <tr> <th>AcqFilter</th> <th>Primary Channel</th> <th>Simultaneous Imaging</th> <th>Imager Subarray</th> </tr> </thead> <tbody> <tr> <td>F560W</td> <td>CHANNEL1</td> <td>YES</td> <td>FULL</td> </tr> </tbody> </table>												AcqFilter	Primary Channel	Simultaneous Imaging	Imager Subarray	F560W	CHANNEL1	YES	FULL																																												
AcqFilter	Primary Channel	Simultaneous Imaging	Imager Subarray																																																													
F560W	CHANNEL1	YES	FULL																																																													
Dithers	<table border="1"> <thead> <tr> <th>#</th> <th>Dither Type</th> <th>Optimized For</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>4-Point</td> <td>EXTENDED SOURCE</td> <td>NEGATIVE</td> </tr> </tbody> </table>												#	Dither Type	Optimized For	Direction	1	4-Point	EXTENDED SOURCE	NEGATIVE																																												
#	Dither Type	Optimized For	Direction																																																													
1	4-Point	EXTENDED SOURCE	NEGATIVE																																																													
Spectral Elements	<table border="1"> <thead> <tr> <th>#</th> <th>Wavelength Range</th> <th>Detector</th> <th>Filter</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/Exp</th> <th>Exposures/Dith</th> <th>Dither</th> <th>Total Dithers</th> <th>Total Integrations</th> <th>Total Exposure Time</th> <th>ETC Wkbk.Calc ID</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td>IMAGER</td> <td>F560W</td> <td>FASTR1</td> <td>22</td> <td>14</td> <td>1</td> <td>Dither 1</td> <td>4</td> <td>56</td> <td>3563.151</td> <td></td> </tr> <tr> <td>1</td> <td>LONG(C)</td> <td>MRSLONG</td> <td></td> <td>SLOWR1</td> <td>38</td> <td>1</td> <td>1</td> <td>Dither 1</td> <td>4</td> <td>4</td> <td>3631.268</td> <td></td> </tr> <tr> <td>1</td> <td>LONG(C)</td> <td>MRSSHORT</td> <td></td> <td>SLOWR1</td> <td>38</td> <td>1</td> <td>1</td> <td>Dither 1</td> <td>4</td> <td>4</td> <td>3631.268</td> <td></td> </tr> </tbody> </table>												#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	1		IMAGER	F560W	FASTR1	22	14	1	Dither 1	4	56	3563.151		1	LONG(C)	MRSLONG		SLOWR1	38	1	1	Dither 1	4	4	3631.268		1	LONG(C)	MRSSHORT		SLOWR1	38	1	1	Dither 1	4	4	3631.268	
#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID																																																				
1		IMAGER	F560W	FASTR1	22	14	1	Dither 1	4	56	3563.151																																																					
1	LONG(C)	MRSLONG		SLOWR1	38	1	1	Dither 1	4	4	3631.268																																																					
1	LONG(C)	MRSSHORT		SLOWR1	38	1	1	Dither 1	4	4	3631.268																																																					

Proposal 1355 - Observation 6 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star for...

Special Requirements

Aperture PA Range 108.0 to 148.0 Degrees (V3 108.0 to 148.0)
Aperture PA Range 263.0 to 302.0 Degrees (V3 263.0 to 302.0)
Offset -37.772850954763165 arcsec, -33.4023547241912 arcsec
Sequence Observations 5, 6, Non-interruptible

Proposal 1355 - Observation 7 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star for...

Thu Sep 01 23:00:33 GMT 2022

Observation	Proposal 1355, Observation 7: SGAS 1723 NIRSpec Diagnostic Status: Warning Observing Template: NIRSpec IFU Spectroscopy Background Observations:[]											
	(Visit 7:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Diagnosics												
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(20)	Group SGAS1723-NIRSPEC-IFU										
Comments: Target group for NIRSpec observations of SGAS1723 Target Selection=[7 SGAS1723-IFU, 8 SGAS1723-SKY]												
Template	TA Method											
	NONE											
Dithers	#	Dither Type		Size	Starting Point		Number of Points		Points			
	1	CYCLING		SMALL	1		4					
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	G140H/F100LP	NRSIRS2	15	1	false	true	NONE	4	4	4435.023	
	2	G140H/F100LP	NRSIRS2	15	1	true	true	NONE	4	4	4435.023	
	3	G395H/F290LP	NRSIRS2	6	1	false	true	NONE	4	4	1809.022	
	4	G395H/F290LP	NRSIRS2	6	1	true	true	NONE	4	4	1809.022	

Proposal 1355 - Observation 9 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star for...

Thu Sep 01 23:00:33 GMT 2022

Observation	<p>Proposal 1355, Observation 9: SGAS 1723 NIRCcam</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Imaging</p>									
Diagnostics	(Visit 9:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(9)	SGAS1723-PHOT	RA: 17 23 36.4390 (260.9018292d) Dec: +34 11 55.27 (34.19869d) Equinox: J2000							
	<p><i>Comments: coords should match IFU</i></p> <p><i>Category=Galaxy</i></p> <p><i>Description= Brightest cluster galaxies </i></p>									
Template	Module				Subarray					
	B				FULL					
Dithers	#	Primary Dither Type		Primary Dithers	Subpixel Dither Type		Dither Size		Subpixel Positions	
	1	INTRASCA		3	STANDARD		8" (SMALL)		1	
Spectral Elements	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
	1	F115W	F277W	BRIGHT1	5	1	3	3	289.893	
	2	F150W	F356W	BRIGHT1	5	1	3	3	289.893	
	3	F200W	F444W	BRIGHT1	5	1	3	3	289.893	
Special Requirements	Offset -30.7 arcsec, -26.4 arcsec									

Proposal 1355 - Observation 10 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Thu Sep 01 23:00:33 GMT 2022

Observation	Proposal 1355, Observation 10: SGAS 1723 MIRI imaging Diagnostic Status: Warning Observing Template: MIRI Imaging										
	(Visit 10:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.										
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Miscellaneous			
	(9)	SGAS1723-PHOT	RA: 17 23 36.4390 (260.9018292d) Dec: +34 11 55.27 (34.19869d) Equinox: J2000								
<i>Comments: coords should match IFU</i> <i>Category=Galaxy</i> <i>Description= Brightest cluster galaxies </i>											
Template	Subarray										
	FULL										
Dithers	#	Dither Type	Starting Point	Number of Points	Points	Starting Set	Number of Sets	Optimized For	Direction	Pattern Size	
	1	4-Point-Sets				6	1	POINT SOURCE	POSITIVE	DEFAULT	
Spectral Elements	#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F560W	FASTR1	16	1	1	Dither 1	4	4	177.603	
	2	F770W	FASTR1	9	1	1	Dither 1	4	4	99.901	
	3	F1000W	FASTR1	18	1	1	Dither 1	4	4	199.803	
	4	F1280W	FASTR1	32	1	1	Dither 1	4	4	355.205	
	5	F1500W	FASTR1	20	1	1	Dither 1	4	4	222.003	
	6	F1800W	FASTR1	16	1	1	Dither 1	4	4	177.603	
	7	F2100W	FASTR1	30	1	1	Dither 1	4	4	333.005	

Proposal 1355 - Observation 11 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Thu Sep 01 23:00:33 GMT 2022

Observation	<p>Proposal 1355, Observation 11: NIRSpec IFU (H-alpha)</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec IFU Spectroscopy</p> <p>Background Observations:[NIRSpec IFU (H-alpha)-OFFSET (Obs 12)]</p>											
Diagnostics	(Visit 11:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(2)	SPT0418-47-IFU	RA: 04 18 39.6790 (64.6653292d) Dec: -47 51 52.68 (-47.86463d) Equinox: J2000									
	<p><i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[High-redshift galaxies]</i> <i>Extended=YES</i></p>											
Template	TA Method											
	NONE											
Dithers	#	Dither Type		Size	Starting Point			Number of Points	Points			
	1	CYCLING		MEDIUM	54			4				
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Ex p	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	G395M/F290LP	NRSIRS2	11	1	false	true	NONE	4	4	3267.911	
	2	G395M/F290LP	NRSIRS2	11	1	true	true	NONE	4	4	3267.911	
Special Requirements	Sequence Observations 11, 12, Non-interruptible											

Proposal 1355 - Observation 12 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Thu Sep 01 23:00:33 GMT 2022

Observation	Proposal 1355, Observation 12: NIRSpec IFU (H-alpha)-OFFSET Diagnostic Status: Warning Observing Template: NIRSpec IFU Spectroscopy Background Observation For: [NIRSpec IFU (H-alpha) (Obs 11)]											
	(Visit 12:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(3)	SPT0418-47-IFU-OFFSET	RA: 04 18 38.8810 (64.6620042d) Dec: -47 51 47.25 (-47.86313d) Equinox: J2000									
<i>Comments:</i> Category=Galaxy Description=[High-redshift galaxies] Extended=YES												
Template	TA Method											
	NONE											
Dithers	#	Dither Type		Size	Starting Point			Number of Points	Points			
	1	CYCLING		MEDIUM	54			4				
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Ex p	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	G395M/F290LP	NRSIRS2	11	1	false	true	NONE	4	4	3267.911	
	2	G395M/F290LP	NRSIRS2	11	1	true	true	NONE	4	4	3267.911	
Special Requirements	Sequence Observations 11, 12, Non-interruptible											

Proposal 1355 - Observation 13 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Thu Sep 01 23:00:33 GMT 2022

Observation	Proposal 1355, Observation 13: MIRI MRS (Paschen-alpha) Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[]												
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			
Acquisition	#	Target											
Template	AcqFilter	Primary Channel				Simultaneous Imaging			Imager Subarray				
Dithers	#	Dither Type				Optimized For			Direction				
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1000W	FASTR1	22	13	1	Dither 1	4	52	3307.848	
	1	MEDIUM(B)	MRSLONG		SLOWR1	36	1	1	Dither 1	4	4	3440.148	
	1	MEDIUM(B)	MRSSHORT		SLOWR1	36	1	1	Dither 1	4	4	3440.148	

Proposal 1355 - Observation 15 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Thu Sep 01 23:00:33 GMT 2022

Observation	Proposal 1355, Observation 15: MIRI Imaging (1.6 & 3 micron continuum and PAH3.3) Diagnostic Status: Warning Observing Template: MIRI Imaging										
Diagnostics	(Visit 15:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.										
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Miscellaneous			
	(1)	SPT0418-47	RA: 04 18 39.6790 (64.6653292d) Dec: -47 51 52.68 (-47.86463d) Equinox: J2000								
	Comments: Category=Galaxy Description=[High-redshift galaxies] Extended=YES										
Template	Subarray										
	FULL										
Dithers	#	Dither Type	Starting Point	Number of Points	Points	Starting Set	Number of Sets	Optimized For	Direction	Pattern Size	
	1	4-Point-Sets				6	1	EXTENDED SOURCE	POSITIVE	DEFAULT	
	2	4-Point-Sets				5	3	EXTENDED SOURCE	POSITIVE	DEFAULT	
Spectral Elements	#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F560W	FASTR1	25	1	1	Dither 1	4	4	277.504	
	2	F770W	FASTR1	13	1	1	Dither 1	4	4	144.302	
	3	F1000W	FASTR1	10	1	1	Dither 1	4	4	111.002	
	4	F1280W	FASTR1	10	1	1	Dither 1	4	4	111.002	
	5	F1500W	FASTR1	10	1	1	Dither 1	4	4	111.002	
	6	F1800W	FASTR1	20	1	1	Dither 1	4	4	222.003	
	7	F2100W	FASTR1	25	1	1	Dither 2	12	12	832.512	

Proposal 1355 - Observation 16 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Thu Sep 01 23:00:33 GMT 2022

Observation	<p>Proposal 1355, Observation 16: NIRCAM Imaging (continuum)</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCAM Imaging</p>									
Diagnostics	(Visit 16:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.									
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Miscellaneous		
	(1)	SPT0418-47	RA: 04 18 39.6790 (64.6653292d) Dec: -47 51 52.68 (-47.86463d) Equinox: J2000							
	<p><i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[High-redshift galaxies]</i> <i>Extended=YES</i></p>									
Template	Module					Subarray				
	B					FULL				
Dithers	#	Primary Dither Type		Primary Dithers	Subpixel Dither Type		Dither Size	Subpixel Positions		
	1	INTRASCA		2	STANDARD		8" (SMALL)	1		
Spectral Elements	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
	1	F115W	F277W	SHALLOW2	7	1	2	2	687.153	
	2	F150W	F356W	BRIGHT2	8	1	2	2	343.577	
	3	F200W	F444W	BRIGHT2	10	1	2	2	429.471	
Special Requirements	<p>Aperture PA Range 41 to 210 Degrees (V3 40.97427728 to 209.97427728)</p> <p>Aperture PA Range 233 to 322 Degrees (V3 232.97427728 to 321.97427728)</p> <p>Aperture PA Range 346 to 20 Degrees (V3 345.97427728 to 19.97427728)</p> <p>Offset -30.7 arcsec, -26.4 arcsec</p>									

Proposal 1355 - Observation 17 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Thu Sep 01 23:00:33 GMT 2022

Observation	Proposal 1355, Observation 17: MIRI MRS (PAH 3.3) Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[]												
Diagnostics	(Visit 17:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
Acquisition	#	Target											
Template	AcqFilter	Primary Channel				Simultaneous Imaging			Imager Subarray				
Dithers	#	Dither Type				Optimized For			Direction				
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F560W	FASTR1	22	13	1	Dither 1	4	52	3307.848	
	1	LONG(C)	MRSLONG		SLOWR1	36	1	1	Dither 1	4	4	3440.148	
	1	LONG(C)	MRSSHORT		SLOWR1	36	1	1	Dither 1	4	4	3440.148	

Proposal 1355 - Observation 19 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Thu Sep 01 23:00:33 GMT 2022

Observation	Proposal 1355, Observation 19: NIRSspec IFU (H-alpha) Diagnostic Status: Warning Observing Template: NIRSspec IFU Spectroscopy Background Observations:[NIRSspec IFU (H-alpha)-OFFSET (Obs 20)]											
	(Visit 19:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(5)	SPT2147-50-IFU	RA: 21 47 19.0026 (326.8291775d) Dec: -50 35 54.23 (-50.59840d) Equinox: J2000									
<i>Comments: 22nd August, 2022. KAP tweaked coordinates based on expected PA for the plan window.</i> <i>Category=Galaxy</i> <i>Description=[High-redshift galaxies]</i> <i>Extended=YES</i>												
Template	TA Method											
	NONE											
Dithers	#	Dither Type		Size	Starting Point			Number of Points	Points			
	1	CYCLING		MEDIUM	54			4				
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	G395M/F290LP	NRSIRS2	9	1	false	true	NONE	4	4	2684.356	
	2	G395M/F290LP	NRSIRS2	9	1	true	true	NONE	4	4	2684.356	
Special Requirements	Sequence Observations 19, 20, Non-interruptible											

Proposal 1355 - Observation 20 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Thu Sep 01 23:00:33 GMT 2022

Observation	<p>Proposal 1355, Observation 20: NIRSpec IFU (H-alpha)-OFFSET</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec IFU Spectroscopy</p> <p>Background Observation For: [NIRSpec IFU (H-alpha) (Obs 19)]</p>											
Diagnostics	(Visit 20:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(6)	SPT2147-50-IFU-OFFSET	RA: 21 47 18.2960 (326.8262333d) Dec: -50 35 44.34 (-50.59565d) Equinox: J2000									
	<p><i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[High-redshift galaxies]</i> <i>Extended=YES</i></p>											
Template	TA Method											
	NONE											
Dithers	#	Dither Type		Size	Starting Point			Number of Points	Points			
	1	CYCLING		MEDIUM	54			4				
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Ex p	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	G395M/F290LP	NRSIRS2	9	1	false	true	NONE	4	4	2684.356	
	2	G395M/F290LP	NRSIRS2	9	1	true	true	NONE	4	4	2684.356	
Special Requirements	Sequence Observations 19, 20, Non-interruptible											

Proposal 1355 - Observation 21 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Thu Sep 01 23:00:33 GMT 2022

Observation	Proposal 1355, Observation 21: MIRI MRS (Paschen-alpha) Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[MIRI MRS-OFFSET (Paschen-alpha) (Obs 22)]												
	(Visit 21:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous				
	(5)	SPT2147-50-IFU	RA: 21 47 19.0026 (326.8291775d) Dec: -50 35 54.23 (-50.59840d) Equinox: J2000										
Comments: 22nd August, 2022. KAP tweaked coordinates based on expected PA for the plan window. Category=Galaxy Description=[High-redshift galaxies] Extended=YES													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray					
	F560W	CHANNEL2			YES			FULL					
Dithers	#	Dither Type			Optimized For			Direction					
	1	4-Point			EXTENDED SOURCE			NEGATIVE					
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1000W	FASTR1	26	8	1	Dither 1	4	32	2386.534	
	1	MEDIUM(B)	MRSLONG		SLOWR1	25	1	1	Dither 1	4	4	2388.992	
	1	MEDIUM(B)	MRSSHORT		SLOWR1	25	1	1	Dither 1	4	4	2388.992	

Special Requirements

Sequence Observations 21, 22, Non-interruptible

Proposal 1355 - Observation 22 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Thu Sep 01 23:00:33 GMT 2022

Observation	Proposal 1355, Observation 22: MIRI MRS-OFFSET (Paschen-alpha) Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [MIRI MRS (Paschen-alpha) (Obs 21)]												
	(Visit 22:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous				
	(24)	SPT2147-50-MRS-OFFSET	RA: 21 47 19.0026 (326.8291775d) Dec: -50 35 54.23 (-50.59840d) Equinox: J2000										
<i>Comments:</i> Category=Galaxy Description=[High-redshift galaxies] Extended=YES													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray					
	F560W	CHANNEL2			YES			FULL					
Dithers	#	Dither Type			Optimized For			Direction					
	1	4-Point			EXTENDED SOURCE			NEGATIVE					
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1000W	FASTR1	26	8	1	Dither 1	4	32	2386.534	
	1	MEDIUM(B)	MRSLONG		SLOWR1	25	1	1	Dither 1	4	4	2388.992	
	1	MEDIUM(B)	MRSSHORT		SLOWR1	25	1	1	Dither 1	4	4	2388.992	

Proposal 1355 - Observation 22 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Special Requirements

Aperture PA Range 18.0 to 74.0 Degrees (V3 18.0 to 74.0)
Aperture PA Range 239.0 to 295.0 Degrees (V3 239.0 to 295.0)
Offset -31.544052203901803 arcsec, -21.775562421945622 arcsec
Sequence Observations 21, 22, Non-interruptible

Proposal 1355 - Observation 23 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Thu Sep 01 23:00:33 GMT 2022

Observation	Proposal 1355, Observation 23: MIRI Imaging (1.6 & 3 micron continuum and PAH3.3) Diagnostic Status: Warning Observing Template: MIRI Imaging										
	(Visit 23:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.										
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Miscellaneous			
	(4)	SPT2147-50	RA: 21 47 19.0120 (326.8292167d) Dec: -50 35 54.50 (-50.59847d) Equinox: J2000								
Template	Comments: Category=Galaxy Description=[High-redshift galaxies] Extended=YES										
	Subarray FULL										
Dithers	#	Dither Type	Starting Point	Number of Points	Points	Starting Set	Number of Sets	Optimized For	Direction	Pattern Size	
	1	4-Point-Sets				6	1	EXTENDED SOURCE	POSITIVE	DEFAULT	
	2	4-Point-Sets				5	3	EXTENDED SOURCE	POSITIVE	DEFAULT	
Spectral Elements	#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F560W	FASTR1	9	1	1	Dither 1	4	4	99.901	
	2	F770W	FASTR1	9	1	1	Dither 1	4	4	99.901	
	3	F1000W	FASTR1	9	1	1	Dither 1	4	4	99.901	
	4	F1280W	FASTR1	10	1	1	Dither 1	4	4	111.002	
	5	F1500W	FASTR1	10	1	1	Dither 1	4	4	111.002	
	6	F1800W	FASTR1	20	1	1	Dither 1	4	4	222.003	
	7	F2100W	FASTR1	25	1	1	Dither 2	12	12	832.512	

Proposal 1355 - Observation 24 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Thu Sep 01 23:00:33 GMT 2022

Observation	<p>Proposal 1355, Observation 24: NIRCAM Imaging (continuum)</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCAM Imaging</p>									
Diagnostics	(Visit 24:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(4)	SPT2147-50	RA: 21 47 19.0120 (326.8292167d) Dec: -50 35 54.50 (-50.59847d) Equinox: J2000							
	<p><i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[High-redshift galaxies]</i> <i>Extended=YES</i></p>									
Template	Module					Subarray				
	B					FULL				
Dithers	#	Primary Dither Type		Primary Dithers	Subpixel Dither Type		Dither Size	Subpixel Positions		
	1	INTRASCA		2	STANDARD		8" (SMALL)	1		
Spectral Elements	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F356W	SHALLOW2	7	1	2	2	687.153	
	2	F200W	F444W	BRIGHT2	8	1	2	2	343.577	
	3	F200W	F277W	BRIGHT2	10	1	2	2	429.471	
Special Requirements	<p>Aperture PA Range 66 to 68 Degrees (V3 65.97427728 to 67.97427728)</p> <p>Aperture PA Range 90 to 154 Degrees (V3 89.97427728 to 153.97427728)</p> <p>Aperture PA Range 175 to 285 Degrees (V3 174.97427728 to 284.97427728)</p> <p>Aperture PA Range 305 to 45 Degrees (V3 304.97427728 to 44.97427728)</p> <p>Offset -30.7 arcsec, -26.4 arcsec</p>									

Proposal 1355 - Observation 25 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Thu Sep 01 23:00:33 GMT 2022

Observation	<p>Proposal 1355, Observation 25: MIRI MRS (PAH 3.3)</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Medium Resolution Spectroscopy</p> <p>Background Observations:[MIRI MRS-OFFSET (PAH 3.3) (Obs 26)]</p>																																																															
Diagnostics	(Visit 25:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.																																																															
Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(5)</td> <td>SPT2147-50-IFU</td> <td>RA: 21 47 19.0026 (326.8291775d) Dec: -50 35 54.23 (-50.59840d) Equinox: J2000</td> <td></td> <td></td> </tr> </tbody> </table> <p><i>Comments: 22nd August, 2022. KAP tweaked coordinates based on expected PA for the plan window.</i></p> <p><i>Category=Galaxy</i></p> <p><i>Description=[High-redshift galaxies]</i></p> <p><i>Extended=YES</i></p>												#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous	(5)	SPT2147-50-IFU	RA: 21 47 19.0026 (326.8291775d) Dec: -50 35 54.23 (-50.59840d) Equinox: J2000																																												
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Template	<table border="1"> <thead> <tr> <th>AcqFilter</th> <th>Primary Channel</th> <th>Simultaneous Imaging</th> <th>Imager Subarray</th> </tr> </thead> <tbody> <tr> <td>F560W</td> <td>ALL</td> <td>YES</td> <td>FULL</td> </tr> </tbody> </table>												AcqFilter	Primary Channel	Simultaneous Imaging	Imager Subarray	F560W	ALL	YES	FULL																																												
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Special Requirements

Sequence Observations 25, 26, Non-interruptible

Proposal 1355 - Observation 26 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Thu Sep 01 23:00:33 GMT 2022

Observation	<p>Proposal 1355, Observation 26: MIRI MRS-OFFSET (PAH 3.3)</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Medium Resolution Spectroscopy</p> <p>Background Observation For: [MIRI MRS (PAH 3.3) (Obs 25)]</p>																																																															
Diagnostics	(Visit 26:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.																																																															
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Proposal 1355 - Observation 26 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Special Requirements

Aperture PA Range 18.0 to 74.0 Degrees (V3 18.0 to 74.0)
Aperture PA Range 239.0 to 295.0 Degrees (V3 239.0 to 295.0)
Offset -31.544052203901803 arcsec, -21.775562421945622 arcsec
Sequence Observations 25, 26, Non-interruptible

Proposal 1355 - Observation 27 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Thu Sep 01 23:00:33 GMT 2022

Observation	<p>Proposal 1355, Observation 27: SGAS 1723 NIRSpec repeat on source</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec IFU Spectroscopy</p> <p>Background Observations:[SGAS 1723 NIRSpec repeat sky (Obs 28)]</p>											
Diagnostics	(Visit 27:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(7)	SGAS1723-IFU	RA: 17 23 36.4060 (260.9016917d) Dec: +34 11 54.69 (34.19852d) Equinox: J2000									
	<p><i>Comments: JRR tweaked coordinates 1/26/2018 from HST F110W image. Centering on SW half of arc, since NE is a copy of it but has contam from a cluster galaxy. Category=Galaxy Description=[High-redshift galaxies] Extended=YES</i></p>											
Template	TA Method											
	NONE											
Dithers	#	Dither Type		Size	Starting Point			Number of Points	Points			
	1	CYCLING		SMALL	1			4				
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	G140H/F100LP	NRSIRS2	15	1	false	true	NONE	4	4	4435.023	
	2	G140H/F100LP	NRSIRS2	15	1	true	true	NONE	4	4	4435.023	
	3	G395H/F290LP	NRSIRS2	6	1	false	true	NONE	4	4	1809.022	
	4	G395H/F290LP	NRSIRS2	6	1	true	true	NONE	4	4	1809.022	
Special Requirements	Sequence Observations 27, 28, Non-interruptible											

Proposal 1355 - Observation 28 - TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star f...

Thu Sep 01 23:00:33 GMT 2022

Observation	<p>Proposal 1355, Observation 28: SGAS 1723 NIRSpec repeat sky</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec IFU Spectroscopy</p> <p>Background Observation For: [SGAS 1723 NIRSpec repeat on source (Obs 27)]</p>											
Diagnostics	(Visit 28:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(8)	SGAS1723-SKY	RA: 17 23 35.8957 (260.8995654d) Dec: +34 11 49.17 (34.19699d) Equinox: J2000									
	<p><i>Comments:</i> <i>Category=Galaxy</i> <i>Description= Brightest cluster galaxies </i></p>											
Template	TA Method											
	NONE											
Dithers	#	Dither Type		Size	Starting Point			Number of Points	Points			
	1	CYCLING		SMALL	1			4				
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	G140H/F100LP	NRSIRS2	15	1	false	true	NONE	4	4	4435.023	
	2	G140H/F100LP	NRSIRS2	15	1	true	true	NONE	4	4	4435.023	
	3	G395H/F290LP	NRSIRS2	6	1	false	true	NONE	4	4	1809.022	
	4	G395H/F290LP	NRSIRS2	6	1	true	true	NONE	4	4	1809.022	
Special Requirements	Sequence Observations 27, 28, Non-interruptible											