

1243 - Exploring the End of Cosmic Reionization

Cycle: 1, Proposal Category: GTO

INVESTIGATORS

Name	Institution
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Dr. Jorryt Matthee (CoI) (ESA Member)	Eidgenossiche Technische Hochschule (ETH)
Dr. Ruari Mackenzie (CoI) (ESA Member)	ETH Zurich

OBSERVATIONS

Folder	Observation	Label	Observing Template	Science Target
NIRCa	m LW WFSS and	d SW imaging		
	1	J0100+2802	NIRCam Wide Field Slitless Spectroscopy	(1) J0100+2802
	2	J1148+5251	NIRCam Wide Field Slitless Spectroscopy	(2) J1148+5251
	3	J1030+0524	NIRCam Wide Field Slitless Spectroscopy	(3) J1030+0524
	12	J1030+0524 - Repeat of Observation 3.	NIRCam Wide Field Slitless Spectroscopy	(3) J1030+0524
	13	J1030+0524 - Repeat of Observation 3. Copy of Tile-2	NIRCam Wide Field Slitless Spectroscopy	(7) J1030+0524-Tile-2
	4	J1120+0641	NIRCam Wide Field Slitless Spectroscopy	(4) J1120+0641
	5	J159-02	NIRCam Wide Field Slitless Spectroscopy	(5) J159-02
	14	J159-02 Copy of Tile-3	NIRCam Wide Field Slitless Spectroscopy	(8) J159-02-Tile-3
	15	J159-02 Copy of Tile-4	NIRCam Wide Field Slitless Spectroscopy	(9) J159-02-Tile-4
	6	J0148+0600	NIRCam Wide Field Slitless Spectroscopy	(6) J0148+0600

<u> </u>	-10p05ai 1243 (Created. Tuesday, Jur	100, 2025 at 0.00.42 FW Eastern Standard T	
Folder	Observation	Label	Observing Template	Science Target
	7	J1148+5251_imaging	NIRCam Imaging	(2) J1148+5251
	8	J1030+0524_imaging	NIRCam Imaging	(3) J1030+0524
	9	J1120+0641_imaging	NIRCam Imaging	(4) J1120+0641
	10	J159-02_imaging	NIRCam Imaging	(5) J159-02
	11	J0148+0600_imaging	NIRCam Imaging	(6) J0148+0600

JWST Proposal 1243 (Created: Tuesday, June 6, 2023 at 6:00:42 PM Eastern Standard Time) - Overview

ABSTRACT

Our program is motivated to explore the evolution of the intergalactic medium and of circumgalactic environments at the tail end of reionization, and thereby to better understand the reionization process. In particular, we aim (1) to measure the correlation between HI Lyman alpha opacity (measured from high resolution ground-based quasar spectra) and the galaxy overdensity to understand the cause of the large variation in optical depth at z > 5.7, (2) to identify the host systems of metal absorption systems at z>5 in the quasar spectra to investigate the chemical enrichment and the ionization state of the gas in and around young galaxies, and (3) to characterize the nature of the quasar host galaxies and the surrounding large-scale environment, and to measure their central black hale masses and via an accurate measurement of the systemic redshift, the size of the ionized near-zone.

We will use 110 hrs of GTO time to obtain deep NIRCam LW grism spectroscopy in the F356W filter (with corresponding direct images) and deep NIRCam SW direct images in F115W and F200W of 3 x 5 arcmin² mosaic fields centered on six luminous quasars at z>6, to achive these science goals. The R~1000 slitless spectroscopy will yield a complete census of emission-line selected galaxies at 5.3 < z < 7.0 with [OIII]4959,5007+Hbeta (the [OIII] doublet giving an unambiguous line identification) and at 3.7 < z < 5.1 with Halpha. We expect to measure redshifts and line fluxes down to a continuum flux of at least m~26.5 ABmag at 3.5um. This will yield an average of at least 20 [OIII]- and 100 Halpha-detected galaxies per field in these two redshift intervals. The broad-band images in the F356W, F200W and F115W filters will provide characterization of these galaxies in terms of their masses and star formation rates, being similar to the popular BzK diagnostic at z < 2.

OBSERVING DESCRIPTION

We will use 110 hrs of GTO time to carry out deep NIRCam Wide-Field Slitless Spectroscopy (WFSS) in roughly 3x5 arcmin² mosaicked fields that are centered on a sample of six luminous quasars at z>6. The program consists of the spectroscopy using the R-grism and F356W filters, and simultaneous deep imaging in two SW filters (F115W and F200W). We aim to spectroscopically detect strong emission lines Hbeta+[OIII]4959,5007 for star-forming galaxies at 5.3 < z < 7.0, and Halpha at 3.7 < z < 5.1. We expect to measure redshifts and fluxes down to m~26.5 in F356W, assuming a rest-frame equivalent width (EW) of 400 Angstrom. Recent observations of Halpha/[OIII] EWs of high-z (z>4) galaxies justify the assumption of

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strong lines. The broad-band images in the two SW filters plus LW direct images in F356W will yield a tool, like the popular BzK diagnostic used at $z\sim2$, to characterize rest-frame optical SEDs, from which stellar masses, star formation rates, and stellar populations could be estimated for the spectroscopic targets and for further fainter sources that not spectroscopically detected.

The LW grism observations all use the F356W filter and the Grism R in both Modules A and B. The mosaic is built up by four overlapping pointings (resulting in four visits per field) that are designed to give a certain minimum exposure time (7473 sec) across the whole field, and to give four times this exposure time in a central area of about 40x40 arcsec^2 which will be centered on the target quasar. We will get two reversed grism spectra for all sources in a central strip of width 70 arcsec covered by both Modules. In the rest of the survey areas, we will have only a single dispersion direction. Spectral confusion will be solved with the detection of two or three strong emission lines (Hbeta+[OIII]4959,5007). Note that the continuum spectra are not primarily important for our goal and the good spectral resolution of NIRCam can help to associate a detection of multiple emission lines to a detection on the direct images.

The SW imaging observations using the F115W and F200W filters will be conducted in parallel to the LW spectroscopy with filter exchange in the middle of the LW exposures. The minimum exposure time is 3736 sec for each SW image, half the exposure time for the LW grism. The direct imaging in LW F356W (for source identification) will be conducted at the end of the exposure series to have three images to fully cover the out-of-field region of the spectroscopic field-of-view. The exposure time of each LW image is 526 sec.

We employ the DEEP8 readout pattern for all exposures. The dithering patter is fixed to the 3-point INTERMODULE, with 4-point sub-pixel positions. As a result, we will acquire 24 spectroscopic frames (12 SW images per filter) for each pointing (visit). For each field (all six fields), the science exposure time is expected to be 9.75 (58.5) hrs, and the total charged time will be 18.1 (108.5) hrs.

Proposal 1243 - Targets - Exploring the End of Cosmic Reionization

	# Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous								
	(1) J0100+2802	RA: 01 00 13.0160 (15.0542333d)										
		Dec: +28 02 25.80 (28.04050d)										
		Equinox: J2000										
	Comments: This object was generated by the	e targetselector and retrieved from the SIMBAD database.										
	Redshift 6.3528 m_UV=17.69 4 OI absorption systems z=5.8, 5.95, 6.11, 6. MgII absorption systems z=4.22, 4.35, 4.52, Category=Galaxy Description=[Quasars]	.15 4.64, 5.34, 6.11, 6.14										
	(2) J1148+5251	RA: 11 48 16.6000 (177.0691667d)										
		Dec: +52 51 50.00 (52.86389d)										
		Equinox: J2000										
	Comments: This object was generated by the	e targetselector and retrieved from the SIMBAD database.										
	Redshift 6.4189 m_UV=19.2 Absorption systems:CIV=4.8, 4.8, 4.9, 5.0, 5 Category=Galaxy	5.5, 5.7, 5.7, 6.0										
	Description=[Quasars]											
	(3) J1030+0524	RA: 10 30 27.0910 (157.6128792d)										
		Dec: +05 24 55.10 (5.41531d)										
ets		Equinox: J2000										
rg	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.											
Ked	Redshift 6.308 m_UV=19.8 Absorption systems: OI at z=6.0, 6.1, 6.2, 6 Category=Galaxy Description=[Quasars]	3										
	(4) J1120+0641	RA: 11 20 1.4800 (170.0061667d)										
		Dec: +06 41 24.30 (6.69008d)										
		Equinox: J2000										
	Comments: This object was generated by the	e targetselector and retrieved from the SIMBAD database.										
	Redshift 7.0842 m_UV=20.38 Note: the target itself is out of the range of F Category=Galaxy Description=[Quasars]	7356W.										
	(5) J159-02	RA: 10 36 54.1900 (159.2257917d)										
	1	Dec: -02 32 37.94 (-2.54387d)										
	1	Equinox: J2000										
	Comments: Redshift 6.35											
	This is a recently-identified quasar at $z=6.35$ MgII absorption lines are identified at $z=4.3$ Category=Galaxy Description=[Quasars]	5. Moderately luminous (m_UV=19.9) 8, 6.1, 6.2.										

Proposal 1243 - Targets - Exploring the End of Cosmic Reionization

00030	$a_1 + 2 + 3 + 1 + a_1 + b_2 + b_1$	xploring the End of Cosmic Reionization
(6)	J0148+0600	RA: 01 48 37.6390 (27.1568292d)
		Dec: +06 00 20.01 (6.00556d)
		Equinox: J2000
Comm	ents: This object was generated b	py the targetselector and retrieved from the SIMBAD database.
This is Catego	ift 5.98 s a luminous quasar at 5.98, which ory=Galaxy iption=[Quasars]	h displays the unusually deep and long Gunn-Peterson trough at $z\sim 5.7$.
(7)	J1030+0524-Tile-2	RA: 10 30 26.0276 (157.6084483d)
		Dec: +05 25 50.22 (5.43062d)
		Equinox: J2000
Comm	ents: This object was generated b	by the targetselector and retrieved from the SIMBAD database.
m_UV Absorp Catego	ift 6.308 =19.8 ption systems: OI at z=6.0, 6.1, 6. pry=Galaxy iption=[Quasars]	2, 6.3
(8)	J159-02-Tile-3	RA: 10 36 50.8780 (159.2119917d)
		Dec: -02 33 8.98 (-2.55249d)
		Equinox: J2000
Comm	ents: Redshift 6.35	
MgII a Catego	s a recently-identified quasar at z= ubsorption lines are identified at z ory=Galaxy iption=[Quasars]	=6.35. Moderately luminous (m_UV=19.9) z=4.3, 6.1, 6.2.
(9)	J159-02-Tile-4	RA: 10 36 55.3265 (159.2305271d)
		Dec: -02 33 32.72 (-2.55909d)
		Equinox: J2000
Comm	ents: Redshift 6.35	
MgII a Catego	s a recently-identified quasar at z= ubsorption lines are identified at z ory=Galaxy iption=[Quasars]	=6.35. Moderately luminous (m_UV=19.9) z=4.3, 6.1, 6.2.

Proposal 1243 - Observation 1 - Exploring the End of Cosmic Reionization

-	T			plotting the		Smic Reioniz						
io U	Proposal 1243, O		0100+2802								Tue Jun 06 23	:00:42 GMT 2023
ati	Diagnostic Status	-										
Observation	Observing Templa	te: NIRCam Wi	de Field Slitless S	pectroscopy								
ps.												
ō												
	(J0100+2802 (Obs	1)) Warning (F	orm): Use of only	one of GRISMR of	or GRISMC may r	esult in spectral ove	rlap from multip	ble sources that can't	be corrected. User	rs should address	this issue in their p	roposal text.
	(Visit 1:1) Warnin	g (Form): Data l	Excess over lower	threshold								
S	(Visit 1:1) Warnin	g (Form): Overh	neads are provision	nal until the Visit F	Planner has been ru	un.						
Diagnostic	(Visit 1:2) Warnin	g (Form): Data l	Excess over lower	threshold								
l Ö	(Visit 1:2) Warnin	g (Form): Overh	neads are provision	nal until the Visit H	Planner has been r	un.						
agi	(Visit 1:3) Warnin	g (Form): Data l	Excess over lower	threshold								
ā	(Visit 1:3) Warnin	g (Form): Overh	neads are provision	nal until the Visit F	Planner has been ru	un.						
	(Visit 1:4) Warning (Form): Data Excess over lower threshold											
	(Visit 1:4) Warnin	g (Form): Overł	neads are provision	nal until the Visit F	Planner has been ru	un.						
	# Nai	me	Targ	get Coordinates		1	farg. Coord. Co	orrections		Miscellaneous		
	(1) J01	00+2802	RA:	01 00 13.0160 (15	.0542333d)							
Targets			Dec:	+28 02 25.80 (28.	04050d)							
Į			Equi	nox: J2000								
<u>–</u>	Comments: This of	bject was genera	ated by the targets	elector and retriev	ed from the SIMB	AD database.						
Fixed	Redshift 6.3528											
Ĭ.	m UV=17.69											
1	4 OI absorption sy MgII absorption sy	stems z=5.8, 5.9 stems z=4.22, 4	95, 0.11, 0.15 4.35. 4.52. 4.64. 5.	34. 6.11. 6.14								
	Category=Galaxy	- ,	,,,	, , , , , , , , , , , , , , , , , , , ,								
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Template	Module ALL				Subarray FULL				Grism (Long W GRISMR	avelengtn)		
<u>d</u>	ALL				FULL				GRISMR			
e												
-	Rows	Ca	lumns	Bow Or	verlap %	Column Over	lon 9/	Row shift (deg)	Colum	nn shift (deg)	Tile Order	
šaj	2	2	iumns	45.0	veriap 70	72.0	Tap 70	0.0	-1.2	ini shirt (deg)	DEFAULT	
Mosaic	2	2		45.0		72.0		0.0	-1.2		DEFACET	
	#			Primary Dithe	г Туре		Primary Dithe	ers		Subpixel Positi	ons	
Dithers	1			INTRAMODUI	LEX		3			4-Point		
Ξ												
	#	Short Filter	Long Filter	Readout	Groups/Int	Integrations/Ex	Total	Total Exposure		Grism (Long	Exposure Type	Total Dithers
Image			-	Pattern	-	р	Integrations	Time	Wkbk.Calc ID	Wavelength)		
1 =	1	F200W	F356W	SHALLOW4	10	1	1	526.102	39119	GRISMR	Direct Image	1
eci												
Direct												
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Proposal 1243 - Observation 1 - Exploring the End of Cosmic Reionization

Elements	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Ex p	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	Grism (Long Wavelength)	Exposure Type	Total Dithers
leme	1	F115W	F356W	SHALLOW4	7	1	12	4380.602	39119	GRISMR	Grism (Long Wavelength)	12
alE	2	F200W	F356W	SHALLOW4	7	1	12	4380.602	39119	GRISMR	Grism (Long Wavelength)	12
Spectral	3	F200W	F356W	SHALLOW4	10	1	2	1052.203	39119		Out of Field	2
Special Requirements		ge 60 to 65 Degre ge 230 to 245 Deg	ees (V3 60.0 to 65. grees (V3 230.0 to									

Proposal 1243 - Observation 2 - Exploring the End of Cosmic Reionization

L S	Proposal 1243, Observation 2: J1148+5251							Tue Jun 06 23	:00:42 GMT 2023
ğ	Diagnostic Status: Warning								
Ž	Observing Template: NIRCam Wide Field Sli	tless Spectroscopy							
Observation									
ð									
	(J1148+5251 (Obs 2)) Warning (Form): Use of	of only one of GRISMR or GRISMC may r	esult in spectral over	rlap from multi	ple sources that can't	be corrected. User	rs should address	this issue in their p	roposal text.
	(Visit 2:1) Warning (Form): Data Excess over	lower threshold							
ω	(Visit 2:1) Warning (Form): Overheads are pro-	ovisional until the Visit Planner has been r	un.						
Ę.	(Visit 2:2) Warning (Form): Data Excess over	lower threshold							
Diagnostics	(Visit 2:2) Warning (Form): Overheads are pro-	ovisional until the Visit Planner has been r	un.						
g	(Visit 2:3) Warning (Form): Data Excess over	lower threshold							
<u>Jia</u>	(Visit 2:3) Warning (Form): Overheads are pro-	ovisional until the Visit Planner has been r	un.						
	(Visit 2:4) Warning (Form): Data Excess over	lower threshold							
	(Visit 2:4) Warning (Form): Overheads are pro-	ovisional until the Visit Planner has been r	un.						
	(J1148+5251 (Obs 2)) Informational (Form): 7	The Visit Planner and Spike may produce of	lifferent schedulabil	ity results.					
	# Name	Target Coordinates	Т	arg. Coord. C	orrections		Miscellaneous		
s	(2) J1148+5251	RA: 11 48 16.6000 (177.0691667d)							
je		Dec: +52 51 50.00 (52.86389d)							
Targets		Equinox: J2000							
	Comments: This object was generated by the t	targetselector and retrieved from the SIMB	AD database.						
Fixed	Redshift 6.4189								
ΪÊ	m_UV=19.2 Absorption systems:CIV=4.8, 4.8, 4.9, 5.0, 5.5	5 5 7 5 7 6 0							
	Category=Galaxy	, 5.7, 5.7, 6.0							
	Description=[Quasars]					<u> </u>			
ate	Module ALL	Subarray				Grism (Long W	avelengtn)		
l d	ALL	FULL				GRISMR			
Template									
	Rows Columns	Row Overlap %	Column Over	an %	Row shift (deg)	Colum	ın shift (deg)	Tile Order	
ŝai	2 2	45.0	72.0	ap 70	0.0	-1.2	in shirt (deg)	DEFAULT	
Mosaic	2 2	15.0	72.0		0.0	1.2		DEINCEI	
	#	Primary Dither Type		Primary Dith	ors		Subpixel Position	one	
Je.	" 1	INTRAMODULEX		3	(15		4-Point	0113	
Dithers	-			5			1 I onit		
Direct Image	# Short Filter Long Filt	ter Readout Groups/Int Pattern	Integrations/Ex		Total Exposure Time	ETC Wkbk.Calc ID	Grism (Long Wavelength)	Exposure Type	Total Dithers
ma	1 F200W F356W	SHALLOW4 10	p	Integrations	526.102	39119	GRISMR	Direct Image	1
H H	120011 15501	Similar in the	*		520.102		Children	Sheet mage	-
re									
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Proposal 1243 - Observation 2 - Exploring the End of Cosmic Reionization

ents	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Ex p	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	Grism (Long Wavelength)	Exposure Type	Total Dithers
Elements	1	F115W	F356W	SHALLOW4	7	1	12	4380.602	39119	GRISMR	Grism (Long Wavelength)	12
	2	F200W	F356W	SHALLOW4	7	1	12	4380.602	39119	GRISMR	Grism (Long Wavelength)	12
Spectral	3	F200W	F356W	SHALLOW4	10	1	2	1052.203	39119		Out of Field	2
Special Requirements	Group Visits with Aperture PA Ran Visits Same PA Offset 4.0 arcsec, Group Observatic Same Aperture P.	ge 220 to 280 Deg , -3.5 arcsec ons 2, 7 within 53		280.0)								

Proposal 1243 - Observation 3 - Exploring the End of Cosmic Reionization

nc	Proposal 1243, Observation 3: J10	30+0524								Tue Jun 06 23	:00:42 GMT 2023
atic	Diagnostic Status: Warning										
Š	Observing Template: NIRCam Wide	e Field Slitless Spe	ectroscopy								
Observation											
ð											
	(J1030+0524 (Obs 3)) Warning (For	m): Use of only or	ne of GRISMR or	GRISMC may res	sult in spectral over	rlap from multi	ple sources that can't	be corrected. User	rs should address t	his issue in their p	roposal text.
	(Visit 3:1) Warning (Form): Data Ex	cess over lower th	nreshold								
s	(Visit 3:1) Warning (Form): Overhea	ads are provisional	l until the Visit Pl	anner has been rur	1.						
tic	(Visit 3:2) Warning (Form): Data Ex	cess over lower th	nreshold								
os	(Visit 3:2) Warning (Form): Overhea	ads are provisional	l until the Visit Pl	anner has been rur	1.						
gn	(Visit 3:3) Warning (Form): Data Ex	cess over lower th	nreshold								
Diagnostics	(Visit 3:3) Warning (Form): Overhea	ads are provisional	l until the Visit Pl	anner has been run	l.						
	(Visit 3:4) Warning (Form): Data Ex	cess over lower th	nreshold								
	(Visit 3:4) Warning (Form): Overhea	ads are provisional	l until the Visit Pl	anner has been rur	l.						
	(J1030+0524 (Obs 3)) Informational	(Form): The Visit	t Planner and Spil	ke may produce dif	ferent schedulabil	ity results.					
	# Name	Target	t Coordinates		Т	arg. Coord. Co	orrections		Miscellaneous		
s	(3) J1030+0524	RA: 10	0 30 27.0910 (157	.6128792d)							
jet			05 24 55.10 (5.41	531d)							
Targets		1	ox: J2000								
	Comments: This object was generate	ed by the targetseld	ector and retrieve	d from the SIMBA	D database.						
Fixed	Redshift 6.308										
ΪĹ	<i>m_UV=19.8</i> <i>Absorption systems: OI at z=6.0, 6.1</i>	62.63									
	Category=Galaxy	, 012, 010									
ð	Description=[Quasars] Module			Subarray				Grism (Long W	avalanath)		
Template	ALL			FULL				GRISMR	avelength)		
du	ALL			FULL				OKISIMIK			
Ler											
	Rows Colu	mns	Row Ove	erlan %	Column Over	an %	Row shift (deg)	Colun	ın shift (deg)	Tile Order	
sai	2 2 2		45.0	11ap /0	72.0	iap /0	0.0	-1.2	in shirt (deg)	DEFAULT	
Mosaic	-										
	#		Primary Dither	Tyne		Primary Dith	Prs		Subpixel Positio	ns	
Jer	1		INTRAMODULI			3			4-Point	J	
Dithers	-					0					
	# Short Filter	Long Filter	Readout	Groups/Int	Integrations/Ex	Total	Total Exposure	ETC	Grism (Long	Exposure Type	Total Dithers
Direct Image			Pattern		<u>p</u>	Integrations	Time	Wkbk.Calc ID	Wavelength)		
t h	1 F200W	F356W	SHALLOW4	10	1	1	526.102	39119	GRISMR	Direct Image	1
ec											
Dir											

Proposal 1243 - Observation 3 - Exploring the End of Cosmic Reionization

ents	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Ex p	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	Grism (Long Wavelength)	Exposure Type	Total Dithers
Elements	1	F115W	F356W	SHALLOW4	7	1	12	4380.602	39119	GRISMR	Grism (Long Wavelength)	12
	2	F200W	F356W	SHALLOW4	7	1	12	4380.602	39119	GRISMR	Grism (Long Wavelength)	12
Spectral	3	F200W	F356W	SHALLOW4	10	1	2	1052.203	39119		Out of Field	2
Special Requirements	Group Visits with Aperture PA Ran Visits Same PA Offset 4.0 arcsec, Group Observatic Same Aperture P.	ge 105 to 110 Deg 3.5 arcsec ons 3, 8 within 53	grees (V3 105.0 to Days iffer)	110.0)								

											Tue I 06 02	.00.42 CMT 2022	
<u>.</u>	Proposal 1243, Ob		11050+0524 - Kep	eat of Observatio	ш э.						Tue Jun 06 23	:00:43 GMT 2023	
at	Diagnostic Status:	-	1 5 11014										
Observation	Observing Templat	e: NIRCam Wi	de Field Slitless Sj	pectroscopy									
	(J1030+0524 - Rep issue in their propo		ion 3. (Obs 12)) W	varning (Form): Us	se of only one of C	GRISMR or GRISM	IC may result in a	spectral overlap from	m multiple sources	s that can't be corr	rected. Users should	l address this	
6	(Visit 12:1) Warnin	ng (Form): Data	Excess over lowe	r threshold									
<u>ö</u>	(Visit 12:1) Warnin	ng (Form): Over	heads are provisio	nal until the Visit	Planner has been r	run.							
Diagnostics	(Visit 12:2) Warnin	ng (Form): Data	Excess over lowe	r threshold									
ĬĔ	(Visit 12:2) Warnin	ng (Form): Over	heads are provisio	nal until the Visit	Planner has been r	run.							
iaç	(Visit 12:3) Warning (Form): Data Excess over lower threshold												
	(Visit 12:3) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
	(Visit 12:4) Warnin	-	-										
	(Visit 12:4) Warnin	-			Planner has been r	run.							
	# Nan			et Coordinates			Farg. Coord. Co	rrections		Miscellaneous			
	(3) J103	30+0524	RA:	10 30 27.0910 (157	7.6128792d)								
ets			Dec:	+05 24 55.10 (5.41	1531d)								
Targets	Equinox: J2000												
⊢ ⊢	Comments: This ob	eject was genera	ted by the targets	elector and retrieve	ed from the SIMBA	AD database.							
ed	Redshift 6.308												
Fixed	m UV=19.8												
1	Absorption systems Category=Galaxy	: OI at $z=6.0, 6$.1, 6.2, 6.3										
	Description=[Quas	sars]											
ite	Module				Subarray				Grism (Long W	avelength)			
pla	ALL				FULL				GRISMR				
Template													
μ													
aic	Rows	Col	umns	Row Ov	erlap %	Column Over	lap %	Row shift (deg)	Colun	nn shift (deg)	Tile Order		
Mosaic	2	2		45.0		72.0		0.0	-1.2		DEFAULT		
	#			Primary Dither	Type		Primary Dithe	rs		Subpixel Positi	ons		
er 1	1			INTRAMODUL	••		3	15		4-Point	0115		
Dithers	1			in the into both			5			1 I Olin			
Image	# S	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Ex p	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	Grism (Long Wavelength)	Exposure Type	Total Dithers	
<u> </u>	1 F	F200W	F356W	SHALLOW4	10	1	1	526.102	39119	GRISMR	Direct Image	1	
5											-		
Direct													

Proposal 1243 - Observation 12 - Exploring the End of Cosmic Reionization

ents	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Ex p	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	Grism (Long Wavelength)	Exposure Type	Total Dithers
Elements	1	F115W	F356W	SHALLOW4	7	1	12	4380.602	39119	GRISMR	Grism (Long Wavelength)	12
	2	F200W	F356W	SHALLOW4	7	1	12	4380.602	39119	GRISMR	Grism (Long Wavelength)	12
Spectral	3	F200W	F356W	SHALLOW4	10	1	2	1052.203	39119		Out of Field	2
ิง												
Special Requirements	Group Visits with Aperture PA Ran Visits Same PA Offset 4.0 arcsec, Same Aperture P.	ge 105 to 110 Deg 3.5 arcsec	grees (V3 105.0 to differ)	110.0)								

	Proposal 1243 - Observation	n 13 - Explorina t	the End of Cosmic Reionization
--	-----------------------------	--------------------	--------------------------------

tion	Proposal 1243, Observation 13: J1030+0524 - Repeat of Observation 3. Copy of Tile-2 Diagnostic Status: Warning Observing Template: NIRCam Wide Field Slitless Spectroscopy											:00:43 GMT 2023
serva	-	-	ide Field Slitless S _I	pectroscopy								
qO												
tics		epeat of Observate in their proposal		e-2 (Obs 13)) Warr	ning (Form): Use o	of only one of GRIS	SMR or GRISMC	may result in spec	tral overlap from 1	multiple sources th	at can't be correcte	d. Users should
nos	(Visit 13:1) Warr	ning (Form): Ove	rheads are provisio	nal until the Visit	Planner has been r	un.						
Diagnostics												
F	# N:	ame	Targ	et Coordinates		1	Targ. Coord. Cor	rections		Miscellaneous		
ts	(7) J1	030+0524-Tile-2		10 30 26.0276 (157	<i>,</i>							
Targets				+05 25 50.22 (5.43 nox: J2000	50620)							
I a	Comments: This	object was gener	ated by the targetse	elector and retrieve	ed from the SIMBA	AD database.						
Fixed	Redshift 6.308 m_UV=19.8 Absorption system Category=Galax Description=[Ou	<i>y</i>	6.1, 6.2, 6.3									
te	Module				Subarray				Grism (Long W	avelength)		
Template	ALL				FULL				GRISMR			
	#			Primary Dither	Туре		Primary Dither	'S		Subpixel Positio	ons	
Dithers	1			INTRAMODUL	* *		3			4-Point		
	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Ex p	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	Grism (Long Wavelength)	Exposure Type	Total Dithers
t T	1	F200W	F356W	SHALLOW4	10	1	1	526.102	39119	GRISMR	Direct Image	1
Direct Image												
ents	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Ex p	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	Grism (Long Wavelength)	Exposure Type	Total Dithers
Spectral Elements	1	F200W	F356W	SHALLOW4	7	1	12	4380.602	39119	GRISMR	Grism (Long Wavelength)	12
alE	2	F200W	F356W	SHALLOW4	10	1	2	1052.203	39119		Out of Field	2
ectr												
Sp(

Proposal 1243 - Observation 13 - Exploring the End of Cosmic Reionization

Aperture PA Range 109.8 to 109.8 Degrees (V3 109.8 to 109.8) Offset 4.0 arcsec, -3.5 arcsec

Proposal 1243 - Observation 4 - Exploring the End of Cosmic Reionization

	_	DOSAL 1243 - ODSERVATION 4 · Proposal 1243, Observation 4: J1120+0641				allon				Tue Jun 06 23	:00:43 GMT 2023			
Ē	ľ	Diagnostic Status: Warning								Tue Juli 00 25	.00.43 GMT 2023			
vai		Observing Template: NIRCam Wide Field Sli	tless Spectroscopy											
lêr.		Comments: NIRCam obsevations in this field w	1 15	ng and sample so	election for a NIRSn	ec MSA observa	tion in GTO time (G	TO 1222 PI Chri	s I Willott)					
Observation		containents. Trifectain observations in this field	mit be used jos pre imagin	is und sumple se	cicculon for a remop			10 1222, 11 0/// 8	<i></i>					
	((J1120+0641 (Obs 4)) Warning (Form): Use of	of only one of GRISMR or	GRISMC may 1	result in spectral ove	rlap from multi	ple sources that can't	be corrected. Use	rs should address	this issue in their p	roposal text.			
	(Visit 4:1) Warning (Form): Data Excess over	lower threshold											
ŝ	(Visit 4:1) Warning (Form): Overheads are pre-	ovisional until the Visit Pla	anner has been r	un.									
li ji	(Visit 4:2) Warning (Form): Data Excess over												
Diagnostics	(Visit 4:2) Warning (Form): Overheads are pre-	ovisional until the Visit Pla	anner has been r	un.									
l p)	Visit 4:3) Warning (Form): Data Excess over												
Ξ	(Visit 4:3) Warning (Form): Overheads are pre-		anner has been r	un.									
		Visit 4:4) Warning (Form): Data Excess over												
		(Visit 4:4) Warning (Form): Overheads are pro-												
		(J1120+0641 (Obs 4)) Informational (Form): 7		te may produce of										
	#		Target Coordinates		<u>'</u>	Farg. Coord. C	orrections		Miscellaneous					
ţ	((4) J1120+0641	RA: 11 20 1.4800 (170.0											
ge			Dec: +06 41 24.30 (6.69)	0080)										
Targets	Equinox: J2000 Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.													
۲. تو	ľ	v 0 v	argeiselector and retrieved	a from the SIMD	AD uulubuse.									
Fixed	ŀ	Redshift 7.0842 n UV=20.38												
1	1	Note: the target itself is out of the range of $F3$	56W.											
		Category=Galaxy Description=[Quasars]												
ē	_	Module		Subarray				Grism (Long W	avelength)					
<u>la</u>	A	ALL		FULL				GRISMR	<u> </u>					
Template	1													
	_													
ai c	I	Rows Columns	Row Ove	erlap %	Column Over	lap %	Row shift (deg)		nn shift (deg)	Tile Order				
Mosaic	2	2 2	45.0		72.0		0.0	-1.2		DEFAULT				
	-			-										
ers	ħ	Ŧ	Primary Dither			Primary Dith	ers		Subpixel Positi	ons				
Dithers	1	I	INTRAMODULE	EX		3			4-Point					
Direct Image	-	# Short Filter Long Filt	ter Readout Pattern	Groups/Int	Integrations/Ex	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	Grism (Long Wavelength)	Exposure Type	Total Dithers			
l a		I F200W F356W	SHALLOW4	10	p	1	526.102	39119	GRISMR	Direct Image				
5	ľ	1200 100000			-	-	2 2011 02				-			
Ĩe														
Ξ														

Proposal 1243 - Observation 4 - Exploring the End of Cosmic Reionization

ents	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Ex p	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	Grism (Long Wavelength)	Exposure Type	Total Dithers
Elements	1	F115W	F356W	SHALLOW4	7	1	12	4380.602	39119	GRISMR	Grism (Long Wavelength)	12
	2	F200W	F356W	SHALLOW4	7	1	12	4380.602	39119	GRISMR	Grism (Long Wavelength)	12
Spectral	3	F200W	F356W	SHALLOW4	10	1	2	1052.203	39119		Out of Field	2
Special Requirements	Group Visits with Aperture PA Ran Visits Same PA Offset 4.0 arcsec, Group Observatic Same Aperture P	ge 290 to 300 Deg , -3.5 arcsec ons 4, 9 within 53		300.0)								

Proposal 1243 - Observation 5 - Exploring the End of Cosmic Reionization

		3, Observation 5: J									Tue Iun 06 23	:00:43 GMT 2023
tio	-	atus: Warning	139-02								1 de 3 di 00 23	.00.45 GM11 2025
Observation	-	nplate: NIRCam W	ide Field Slitless S	pectroscopy								
	(J159-02 (Obs	5)) Warning (Form): Use of only one	of GRISMR or GI	RISMC may resul	t in spectral overlap	from multiple se	ources that can't be c	corrected. Users sh	ould address this	issue in their propo	sal text.
	(Visit 5:1) Wa	rning (Form): Data	Excess over lower	threshold								
ß	(Visit 5:1) Wa	rning (Form): Over	heads are provision	nal until the Visit F	Planner has been r	un.						
tic	(Visit 5:2) Wa	rning (Form): Data	Excess over lower	threshold								
osi	(Visit 5:2) Wa	rning (Form): Over	heads are provision	nal until the Visit F	Planner has been r	un.						
gn	(Visit 5:3) Wa	rning (Form): Data	Excess over lower	threshold								
Diagnostics	(Visit 5:3) Wa	rning (Form): Over	heads are provision	nal until the Visit F	Planner has been r	un.						
	(Visit 5:4) Wa	rning (Form): Data	Excess over lower	threshold								
	(Visit 5:4) Wa	rning (Form): Over	heads are provision	nal until the Visit F	Planner has been r	un.						
	(J159-02 (Obs	5)) Informational (Form): The Visit F	lanner and Spike r	nay produce diffe	rent schedulability r	esults.					
	#	Name	Targ	get Coordinates]	Farg. Coord. Co	orrections		Miscellaneous		
ts	(5)	J159-02	RA:	10 36 54.1900 (15	9.2257917d)							
ge				-02 32 37.94 (-2.5	4387d)							
Targets			Equi	nox: J2000								
ק'	Comments: Re	edshift 6.35										
Fixed	This is a recer	tly-identified quasa	er at z=6.35. Mode	rately luminous (m	_UV=19.9)							
ш	MgII absorpti Category=Ga	on lines are identifie	ed at z=4.3, 6.1, 6.	2.								
	Description=	Quasars]										
te	Module				Subarray				Grism (Long W	avelength)		
Template	ALL				FULL				GRISMR			
l L												
μ												
lic	Rows	Co	olumns	Row Ov	verlap %	Column Over	·lap %	Row shift (deg)	Colun	nn shift (deg)	Tile Order	
Mosaic	2	2		45.0		72.0		0.0	-1.2		DEFAULT	
Ĕ												
ŝ	#			Primary Dithe	т Туре		Primary Dithe	ers		Subpixel Positi	ons	
her	1			INTRAMODUI	• •		3			4-Point		
Dithers												
	#	Short Filter	Long Filter	Readout	Groups/Int	Integrations/Ex	Total	Total Exposure	FTC	Grism (Long	Exposure Type	Total Dithora
ag	#	Short Filter	Long Filter	Pattern	Groups/Int	p	Integrations	Time	Wkbk.Calc ID	Wavelength)	Exposure Type	Total Ditners
Direct Image	1	F200W	F356W	SHALLOW4	10	1	1	526.102	39119	GRISMR	Direct Image	1
t											-	
ire												

Proposal 1243 - Observation 5 - Exploring the End of Cosmic Reionization

ents	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Ex p	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	Grism (Long Wavelength)	Exposure Type	Total Dithers
Elements	1	F115W	F356W	SHALLOW4	7	1	12	4380.602	39119	GRISMR	Grism (Long Wavelength)	12
	2	F200W	F356W	SHALLOW4	7	1	12	4380.602	39119	GRISMR	Grism (Long Wavelength)	12
Spectral	3	F200W	F356W	SHALLOW4	10	1	2	1052.203	39119		Out of Field	2
quirements	Group Visits within 53.0 Days Aperture PA Range 105 to 110 Degrees (V3 105.0 to 110.0) Visits Same PA Offset 4.0 arcsec, -3.5 arcsec Group Observations 5, 10 within 53 Days Same Aperture PA 5, 10 (V3 PAs differ)											
ll Req	Same Aperture P.	A 5, 10 (V3 PAs	differ)									
Special												

Proposal 1243 - Observation 14 - Exploring the End of Cosmic Reionization Observation Proposal 1243, Observation 14: J159-02 Copy of Tile-3 Tue Jun 06 23:00:43 GMT 2023 **Diagnostic Status: Warning** Observing Template: NIRCam Wide Field Slitless Spectroscopy Diagnostics (J159-02 Copy of Tile-3 (Obs 14)) Warning (Form): Use of only one of GRISMR or GRISMC may result in spectral overlap from multiple sources that can't be corrected. Users should address this issue in their proposal text. (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. Targ. Coord. Corrections # Name **Target Coordinates** Miscellaneous (8) J159-02-Tile-3 RA: 10 36 50.8780 (159.2119917d) **Fixed Targets** Dec: -02 33 8.98 (-2.55249d) Equinox: J2000 Comments: Redshift 6.35 *This is a recently-identified quasar at z=6.35. Moderately luminous (m_UV=19.9)* MgII absorption lines are identified at z=4.3, 6.1, 6.2. Category=Galaxy Description=[Ouasars] Template Module Subarray Grism (Long Wavelength) ALL FULL GRISMR Dithers **Primary Dithers Subpixel Positions Primary Dither Type** INTRAMODULEX 3 4-Point **Direct Image** Total Exposure ETC Short Filter Long Filter Readout Groups/Int Integrations/Ex Total Grism (Long Exposure Type Total Dithers Wkbk.Calc ID Pattern Integrations Wavelength) p Time F200W F356W SHALLOW4 10 1 526.102 GRISMR 1 39119 Direct Image 1 Spectral Elements Short Filter Long Filter Readout Groups/Int Integrations/Ex Total **Total Exposure ETC** Grism (Long Exposure Type Total Dithers Pattern Integrations Time Wkbk.Calc ID Wavelength) n F115W F356W SHALLOW4 7 1 12 4380.602 GRISMR Grism (Long 12 39119 Wavelength) F200W F356W SHALLOW4 7 1 12 4380.602 39119 GRISMR Grism (Long 12 Wavelength) F200W F356W SHALLOW4 10 1 2 1052.203 39119 Out of Field 2

Proposal 1243 - Observation 14 - Exploring the End of Cosmic Reionization

Aperture PA Range 108.6 to 108.6 Degrees (V3 108.6 to 108.6) Offset 4.0 arcsec, -3.5 arcsec

Proposal 1243 - Observation 15 - Exploring the End of Cosmic Reionization Observation Proposal 1243, Observation 15: J159-02 Copy of Tile-4 Tue Jun 06 23:00:43 GMT 2023 **Diagnostic Status: Warning** Observing Template: NIRCam Wide Field Slitless Spectroscopy Diagnostics (J159-02 Copy of Tile-4 (Obs 15)) Warning (Form): Use of only one of GRISMR or GRISMC may result in spectral overlap from multiple sources that can't be corrected. Users should address this issue in their proposal text. (Visit 15:1) Warning (Form): Data Excess over lower threshold (Visit 15:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. Targ. Coord. Corrections # Name **Target Coordinates** Miscellaneous (9) RA: 10 36 55.3265 (159.2305271d) J159-02-Tile-4 **Fixed Targets** Dec: -02 33 32.72 (-2.55909d) Equinox: J2000 Comments: Redshift 6.35 This is a recently-identified quasar at z=6.35. Moderately luminous (m_UV=19.9) MgII absorption lines are identified at z=4.3, 6.1, 6.2. Category=Galaxy Description=[Ouasars] Template Module Subarray Grism (Long Wavelength) ALL FULL GRISMR Dithers **Primary Dithers Subpixel Positions Primary Dither Type** INTRAMODULEX 3 4-Point **Direct Image** Total Exposure ETC Short Filter Long Filter Readout Groups/Int Integrations/Ex Total Grism (Long Exposure Type Total Dithers Wkbk.Calc ID Pattern Integrations Wavelength) p Time F200W F356W SHALLOW4 10 1 526.102 GRISMR 1 39119 Direct Image 1 Spectral Elements Short Filter Long Filter Readout Groups/Int Integrations/Ex Total **Total Exposure ETC** Grism (Long **Exposure Type** Total Dithers Pattern Integrations Time Wkbk.Calc ID Wavelength) n F115W F356W SHALLOW4 7 1 12 4380.602 GRISMR Grism (Long 12 39119 Wavelength) F200W F356W SHALLOW4 7 1 12 4380.602 39119 GRISMR Grism (Long 12 Wavelength) F200W F356W SHALLOW4 10 1 2 1052.203 39119 Out of Field 2

Proposal 1243 - Observation 15 - Exploring the End of Cosmic Reionization

Aperture PA Range 108.6 to 108.6 Degrees (V3 108.6 to 108.6) Offset 4.0 arcsec, -3.5 arcsec

Proposal 1243 - Observation 6 - Exploring the End of Cosmic Reionization

		Observation 6: J									Tue Jun 06 23	:00:43 GMT 2023
ati	Diagnostic Sta	tus: Warning										
Observation	Observing Tem	plate: NIRCam W	ide Field Slitless S	pectroscopy								
	(J0148+0600 (0	Obs 6)) Warning (H	Form): Use of only	one of GRISMR of	or GRISMC may r	esult in spectral ove	erlap from multip	ole sources that can't	be corrected. Use	rs should address	this issue in their p	roposal text.
	(Visit 6:1) War	ning (Form): Data	Excess over lower	threshold								
s	(Visit 6:1) War	ning (Form): Over	heads are provision	nal until the Visit F	Planner has been ru	un.						
tic:	(Visit 6:2) War	ning (Form): Data	Excess over lower	threshold								
osi	(Visit 6:2) War	ning (Form): Over	heads are provision	nal until the Visit F	Planner has been ru	un.						
gn	(Visit 6:3) War	ning (Form): Data	Excess over lower	threshold								
Diagnostic	(Visit 6:3) War	ning (Form): Over	heads are provision	nal until the Visit F	Planner has been ru	un.						
	(Visit 6:4) War	ning (Form): Data	Excess over lower	threshold								
	(Visit 6:4) War	ning (Form): Over	heads are provision	nal until the Visit F	Planner has been ru	un.						
	(J0148+0600 (0	Obs 6)) Information	nal (Form): The Vi	isit Planner and Sp	ike may produce d	lifferent schedulabil	ity results.					
		Name	Targ	get Coordinates]	Farg. Coord. Co	orrections		Miscellaneous		
ts	(6)	0148+0600		01 48 37.6390 (27	· ·							
-ge				+06 00 20.01 (6.0	0556d)							
Targets			-	nox: J2000								
ן. ק	Comments: Thi	s object was gener	ated by the targets	elector and retriev	ed from the SIMB.	AD database.						
Fixed	Redshift 5.98											
ш	This is a lumino Category=Galo		which displays the	e unusually deep a	nd long Gunn-Pete	erson trough at z~5	.7.					
	Description=[Q	Quasars]										
Ite	Module				Subarray				Grism (Long W	avelength)		
Template	ALL				FULL				GRISMR			
m												
Mosaic	Rows		olumns	Row Ov	erlap %	Column Over	lap %	Row shift (deg)	Colun	nn shift (deg)	Tile Order	
Số	2	2		45.0		72.0		0.0	-1.2		DEFAULT	
Ĕ												
Dithers	#			Primary Dithe	туре		Primary Dithe	ers		Subpixel Positi	ions	
he	1			INTRAMODUI	LEX		3			4-Point		
Dit												
	#	Short Filter	Long Filter	Readout	Groups/Int	Integrations/Ex		Total Exposure		Grism (Long	Exposure Type	Total Dithers
naç				Pattern		p	Integrations	Time	Wkbk.Calc ID	Wavelength)		
Direct Image	1	F200W	F356W	SHALLOW4	10	1	1	526.102	39119	GRISMR	Direct Image	1
ec												
D.												

Proposal 1243 - Observation 6 - Exploring the End of Cosmic Reionization

ents	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Ex p	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	Grism (Long Wavelength)	Exposure Type	Total Dithers
Elements	1	F115W	F356W	SHALLOW4	7	1	12	4380.602	39119	GRISMR	Grism (Long Wavelength)	12
	2	F200W	F356W	SHALLOW4	7	1	12	4380.602	39119	GRISMR	Grism (Long Wavelength)	12
Spectral	3	F200W	F356W	SHALLOW4	10	1	2	1052.203	39119		Out of Field	2
	a											
Special Requirements	Group Visits with Aperture PA Ran Visits Same PA Offset 4.0 arcsec, Group Observatic Same Aperture PA	ge 66 to 70 Degre , -3.5 arcsec ons 6, 11 within 53		0)								

Pro	<u>oposal 1243</u>	3 - Observation	<u> 7 - Explorin</u>	g the End of C	osmic Reio	nization				
Observation	Proposal 1243, Diagnostic Statu	Dbservation 7: J1148+:							Tue Jun	06 23:00:43 GMT 2023
Diagnostics	(Visit 7:1) Warni (Visit 7:2) Warni (J1148+5251_im	ng (Form): Overheads a	re provisional until	the Visit Planner has bee the Visit Planner has bee isit Planner and Spike m	n run.	nt schedulability results.				
		ame	Target Coor			Targ. Coord. Correc	ctions	Miscel	laneous	
Targets	(2) J1	148+5251		.6000 (177.0691667d) 50.00 (52.86389d) 00						
Ē	Comments: This	object was generated by	the targetselector a	nd retrieved from the SI	MBAD database.					
Fixed	Redshift 6.4189 m_UV=19.2 Absorption system Category=Galax Description=[Qu	ns:CIV=4.8, 4.8, 4.9, 5. y asars]	0, 5.5, 5.7, 5.7, 6.0							
Ite	Module			Subarray			Targ	et Placement		
Template	ALL			FULL			Mod	ule Gap		
ie.	Rows	Columns		Row Overlap %	Column C	Overlap % Rov	v shift (deg)	Column shift	(deg) Tile O	rder
Mosaic	1	2		10.0	63.0	0.0		0.0	DEFA	ULT
rs	#	Prin	nary Dither Type	Primary Di	thers	Subpixel Dither T	ype Dithe	er Size	Subpixel P	ositions
Dithers	1	NOM	ΝE			STANDARD			1	
ents	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
Spectral Elements	1	F200W	F356W	SHALLOW4	10	1	1	1	526.102	

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Proposal 1243 - Observation 7 - Exploring the End of Cosmic Reionization

Group Visits within 53.0 Days Visits Same PA Offset 3.0 arcsec, 54.0 arcsec **Special Requirements**

Group Observations 2, 7 within 53 Days Same Aperture PA 2, 7 (V3 PAs differ)

FIC	<u>posai 1243 -</u>	<u>Observation</u>	<u>8 - Explorin</u>	g the End of C	<u>osmic Reior</u>	nization				
Observation	Diagnostic Status:	servation 8: J1030+0 Warning e: NIRCam Imaging	524_imaging						Tue Jun	06 23:00:43 GMT 2023
Diagnostics	(Visit 8:2) Warning	(Form): Overheads ar	e provisional until	the Visit Planner has bee the Visit Planner has bee 'isit Planner and Spike m	n run.					
	# Nam		Target Coor			Targ. Coord. Correc	tions	Miscella	ineous	
Targets	(3) J103	0+0524		.0910 (157.6128792d) 55.10 (5.41531d) 00						
Ц	Comments: This obj	iect was generated by	the targetselector a	nd retrieved from the SII	MBAD database.					
Fixed	Redshift 6.308 m_UV=19.8 Absorption systems: Category=Galaxy Description=[Quast	• OI at z=6.0, 6.1, 6.2, ars]	6.3							
Ite	Module			Subarray			Targ	et Placement		
Template	ALL			FULL			Modu	ıle Gap		
nic.	Rows	Columns		Row Overlap %	Column O	verlap % Row	v shift (deg)	Column shift (d	eg) Tile O	rder
Mosaic	1	2		10.0	63.0	0.0		0.0	DEFA	ULT
rs	#	Prim	ary Dither Type	Primary Di	thers	Subpixel Dither Ty	pe Dithe	er Size	Subpixel P	ositions
Dithers	1	NON	E			STANDARD			1	
	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
Spectral Elements	1	F200W	F356W	SHALLOW4	10	1	1	1	526.102	

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Proposal 1243 - Observation 8 - Exploring the End of Cosmic Reionization

Group Visits within 53.0 Days Visits Same PA Offset 3.0 arcsec, 54.0 arcsec **Special Requirements**

Group Observations 3, 8 within 53 Days Same Aperture PA 3, 8 (V3 PAs differ) Same Aperture PA 8, 12 (V3 PAs differ)

	$p_{0}sa_{1} + 2 + 3 - C$					πταιισπ				
۲ ۵	Proposal 1243, Obser	vation 9: J1120+0	641_imaging						Tue Jun	06 23:00:43 GMT 2023
Observation	Diagnostic Status: Wa	arning								
Ž	Observing Template: N	VIRCam Imaging								
se										
18										
	(Visit 9.1) Warning (Fe	orm): Overheads ar	e provisional until t	he Visit Planner has bee	ח דווח					
E:			*	he Visit Planner has bee						
0 S			-	sit Planner and Spike m		t ashadulahilitu asa	140			
l ĝ	(J1120+0041_IIIIagilig	(Obs 9)) informati	onai (Form). The v	isit Flainlei and Spike in	ay produce differen	t schedulability lest	ints.			
Diagnostics										
P			-							
	# Name		Target Coord			Targ. Coord. Co	orrections	Misce	llaneous	
ŝ	(4) J1120+0	0641		800 (170.0061667d)						
get				4.30 (6.69008d)						
Targets			Equinox: J200							
	Comments: This object	t was generated by	the targetselector a	nd retrieved from the SI	MBAD database.					
Fixed	Redshift 7.0842									
Ϊ	$m_UV = 20.38$	s out of the range of	£ F356W							
	Note: the target itself is Category=Galaxy	s our of the runge of	<i>j</i> 1 ³³⁰ <i>w</i> .							
	Description=[Quasars	1								
Template	Module			Subarray				arget Placement		
đ	ALL			FULL			Μ	lodule Gap		
Ĩ										
Ĕ										
Mosaic	Rows	Columns		Row Overlap %	Column O	verlap %	Row shift (deg)	Column shift	(deg) Tile O	rder
SS	1	2		10.0	63.0		0.0	0.0	DEFA	ULT
Ĭ										
Ś	#	Prim	ary Dither Type	Primary Di	thers	Subpixel Dithe	er Type D	ither Size	Subpixel P	ositions
hel	1	NON	E			STANDARD	•		1	
Dithers										
	# 5	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/E	yn Total Intogrativ	ons Total Dithers	Total Exposure	ETC Wkbk.Calc
j,	π 5	short Filter	Long Filter	Keauout 1 attern	Groups/Int	integrations/E		his Total Ditlets	Time	ID
ΙĔ	1 F	F200W	F356W	SHALLOW4	10	1	1	1	526.102	
l 🗄										
Ë										
Spectral Elements										
ي د										

Proposal 1243 - Observation 9 - Exploring the End of Cosmic Reionization

Proposal 1243 - Observation 9 - Exploring the End of Cosmic Reionization

Group Visits within 53.0 Days Visits Same PA Offset 3.0 arcsec, 54.0 arcsec **Special Requirements**

Group Observations 4, 9 within 53 Days Same Aperture PA 4, 9 (V3 PAs differ)

Pro	Proposal 1243 - Observation 10 - Exploring the End of Cosmic Reionization										
Observation	Proposal 1243, Observ Diagnostic Status: War Observing Template: NI	ation 10: J159-0 ming							Tue Jun	06 23:00:43 GMT 2023	
Diagnostics	(Visit 10:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (Visit 10:2) Warning (Form): Overheads are provisional until the Visit Planner has been run. (J159-02_imaging (Obs 10)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.										
	# Name Target Coor		Target Coord	linates		Targ. Coord. Corre	ctions	Miscell	Miscellaneous		
Fixed Targets	(5) J159-02 Comments: Redshift 6.3.	5		1900 (159.2257917d) 7.94 (-2.54387d) 00							
Fixed	This is a recently-identified quasar at z=6.35. Moderately luminous (m_UV=19.9) MgII absorption lines are identified at z=4.3, 6.1, 6.2. Category=Galaxy Description=[Quasars]										
te	Module			Subarray		Target Placement					
Template	ALL FULL						Module Gap				
ic	Rows Columns		Row Overlap % Column		Overlap % Row shift (deg)		Column shift (deg) Tile O	Tile Order		
Mosaic	1	2		10.0	63.0	0.0		0.0	DEFA	ULT	
Ś	#	Primary Dither Type		Primary Dithers		Subpixel Dither Type D		er Size	Subpixel P	Subpixel Positions	
Dithers	1 NONE		¥		STANDARD			1			
	# Sh	ort Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID	
Spectral Elements	1 F2	00W	F356W	SHALLOW4	10	1	1	1	526.102		
Sp											

Proposal 1243 - Observation 10 - Exploring the End of Cosmic Reionization

Group Visits within 53.0 Days Visits Same PA Offset 3.0 arcsec, 54.0 arcsec **Special Requirements**

Group Observations 5, 10 within 53 Days Same Aperture PA 5, 10 (V3 PAs differ)

5	Proposal 1243,	Observation 11: J0148	+0600_imaging						Tue Jun	06 23:00:43 GMT 2023	
ğ	Diagnostic Sta	tus: Warning									
Proposal 1243, Observation 11: J0148+0600_imaging Tu Diagnostic Status: Warning Observing Template: NIRCam Imaging											
se											
ရ											
-	(Wight 11.1) We	mina (Forma): Orienhaada	ana muovisional until	the Wesit Dlenner has he							
ü.		(Visit 11:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.									
S	(Visit 11:2) Warning (Form): Overheads are provisional until the Visit Planner has been run.										
ĬŠ	(J0148+0600_imaging (Obs 11)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.										
Diagnostics											
	# Name Target Coor				Targ. Coord. C	orrections	Miscel	Miscellaneous			
ts	(6) J0148+0600 RA: 01 48 3'			.6390 (27.1568292d)							
e e			Dec: +06 00 2	20.01 (6.00556d)							
Targets		Equinox: J2000									
	Comments: Thi	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.									
Fixed [.]	Redshift 5.98										
Ē	This is a lumino	ous quasar at 5.98, which	displays the unusua	lly deep and long Gunn-	Peterson trough at	z~5.7.					
	Category=Gala	lxy Duasars I									
Description=[Quasars] Module Module Subarray Target Placement											
lat	ALL FULL					Module Gap					
물											
Template											
	Rows	Rows Columns Row Overlap % Colum				Overlap % Row shift (deg) Column shi			ft (deg) Tile Order		
Saj	1	2		10.0 63.0		0.0		0.0		DEFAULT	
Mosaic	1	2		10.0	05.0		0.0	0.0	DEIA	ULI	
ers I	#	Primary Dither Type		Primary Di	thers		Subpixel Dither Type Dithe			Subpixel Positions	
Dithers	1	NONE				STANDARD			1		
ā											
ts	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/I	Exp Total Inte	grations Total Dithers	Total Exposure	ETC Wkbk.Calc	
en									Time	ID	
E	1	F200W	F356W	SHALLOW4	10	1	1	1	526.102		
Шщ											
a											
E.											
Spectral Elements											

Proposal 1243 - Observation 11 - Exploring the End of Cosmic Reionization

Proposal 1243 - Observation 11 - Exploring the End of Cosmic Reionization

Group Visits within 53.0 Days Visits Same PA Offset 3.0 arcsec, 54.0 arcsec **Special Requirements**

Group Observations 6, 11 within 53 Days Same Aperture PA 6, 11 (V3 PAs differ)