



1764 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Cycle: 1, Proposal Category: GO

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JWST Proposal 1764 (Created: Wednesday, August 9, 2023 at 2:03:01 PM Eastern Standard Time) - Overview

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OBSERVATIONS

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
J1007+2115				
	1	J1007_NIRCam	NIRCam Imaging	(1) J1007+2115
	2	J1007_NIRCam_PSF	NIRCam Imaging	(6) PSF-J1007+2115
	3	J1007_MIRI_Imaging	MIRI Imaging	(1) J1007+2115
	4	J1007_MIRI_PSF	MIRI Imaging	(6) PSF-J1007+2115

JWST Proposal 1764 (Created: Wednesday, August 9, 2023 at 2:03:01 PM Eastern Standard Time) - Overview

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
	6	J1007_NIRSPEC_FS_S200A1andA2	NIRSpec Fixed Slit Spectroscopy	(1) J1007+2115
	7	J1007_NIRSPEC_IFU	NIRSpec IFU Spectroscopy	(1) J1007+2115
	8	J1007_NIRSPEC_IFU_PSF	NIRSpec IFU Spectroscopy	(7) NIRSPEC-PSF-J1007
	58	J1007_NIRSPEC_IFU_PSF	NIRSpec IFU Spectroscopy	(7) NIRSPEC-PSF-J1007
	21	J1007_MRS_SKY	MIRI Medium Resolution Spectroscopy	(12) J1007-MRS-SKY
	22	J1007_MIRI_MRS	MIRI Medium Resolution Spectroscopy	(10) J1007+2115-COPY-MRS
J0313-1806				
	9	J0313_NIRCam	NIRCam Imaging	(2) J0313-1806
	10	J0313_NIRCam_PSF	NIRCam Imaging	(8) PSF-J0313-1806
	11	J0313_MIRI_Imaging	MIRI Imaging	(2) J0313-1806
	12	J0313_MIRI_PSF	MIRI Imaging	(8) PSF-J0313-1806
	14	J0313_NIRSPEC_FS_S200A1andA2	NIRSpec Fixed Slit Spectroscopy	(2) J0313-1806
	15	J0313_NIRSPEC_IFU	NIRSpec IFU Spectroscopy	(2) J0313-1806
	16	J0313_NIRSPEC_IFU_PSF	NIRSpec IFU Spectroscopy	(9) NIRSPEC-PSF-J0313
	23	J0313_MRS_SKY	MIRI Medium Resolution Spectroscopy	(13) J0313-MRS-SKY
	24	J0313_MIRI_MRS	MIRI Medium Resolution Spectroscopy	(11) J0313-1806-COPY-MRS
J1342+0928				
	17	J1342_NIRCam	NIRCam Imaging	(3) J1342+0928
	18	J1342_NIRCam_PSF	NIRCam Imaging	(4) PSF-J1342+0928
	19	J1342_MIRI_Imaging	MIRI Imaging	(3) J1342+0928
	20	J1342_MIRI_PSF	MIRI Imaging	(4) PSF-J1342+0928

ABSTRACT

We propose to carry out comprehensive JWST observations of the only three quasars currently known at $z > 7.5$, deep into the epoch of reionization (EoR). Luminous quasars at the highest redshift directly probe the formation of the earliest supermassive black holes (SMBHs) in the universe, enable studies of the evolution of early massive galaxies and their connections to SMBH growth, and provide sensitive constraints on the state of the intergalactic medium (IGM) during the EoR not accessible with other probes.

JWST Proposal 1764 (Created: Wednesday, August 9, 2023 at 2:03:01 PM Eastern Standard Time) - Overview

We have carefully designed a JWST program to address outstanding science opportunities that EoR quasars provide, capitalizing on the transformative capabilities of JWST. By employing a combination of imaging and spectroscopic observations using NIRCcam, NIRSpec, MIRI and NIRISS, our program will (1) detect the stellar continuum and nebular emission of quasar host galaxies only 680 Myr after the Big Bang, to probe host galaxy assembly and to search for signatures of outflow and feedback, (2) map the large scale quasar environment, to test quasar formation models in the context of early structure formation, (3) yield reliable estimates of the SMBH masses and constrain physical properties of the quasar broad-line regions, and (4) provide the most accurate measurement of the IGM neutral fraction at $z=7.5$ and detect weak metal absorption features, to map the history of reionization and IGM enrichment.

These three EoR quasars constitute the culmination of decades of searches using all-sky surveys. They are the best JWST targets for quasars at the current redshift frontier and provide the definitive reference dataset for future EoR quasar and IGM science using JWST.

OBSERVING DESCRIPTION

The primary targets of our observations are the three most distant known quasars, J0313-1806 ($z=7.64$), J1007+2115 ($z=7.52$), and J1342+0928 ($z=7.54$), with a number of different observing modes. Quasar J0313-1806 is a newly discovered unpublished quasar. Quasar J1342+0928 will only be observed with NIRCcam and MIRI imaging modes because the other modes we describe below are covered by GTO programs. We will also observe PSF stars for each quasar in the imaging or IFU modes. Below is the summary of the observing plan for each observing mode:

1. NIRCcam Imaging (visit 1 and 2): three quasars, 9.1 hours science; 16.7 hours total.

The goal of the NIRCcam imaging is to detect the quasar host galaxy of these three quasars with accurate PSF subtraction, and to detect galaxies in the quasar fields.

-- Visit 1: We will observe each of our primary targets with NIRCcam imaging in three filter pairs, including three intermediate band and two broad band filters, with a total exposure time of 3768 sec for two pairs and 2802 sec for the other one. Because of the bright central quasar, we will use SHALLOW4 readout mode to avoid saturation. We will use INTRAMODULE three-points dither plus standard three-point subpixel dither pattern to improve the sampling, since our bluest filters are undersampled, and to fill the gaps between the SW detectors. We will use the FULL arrays to maximize the sky coverage to probe the environments of the quasars and to identify additional PSF stars.

-- Visit 2: We will observe a nearby late M-dwarf as our PSF star of each quasar. For the PSF star, we will use a 160P subarray readout and

BRIGHT1 readout mode to avoid saturation.

2. MIRI Imaging (visit 3 and 4): three quasars, 4.4 hours science; 7.3 hours total.

-- Visit 3: The goal of the MIRI imaging is to detect the quasar host galaxy in the shortest MIRI wavelength filter (F560W) which covers the H_α emission line at $z \sim 7.6$. We will use FAST readout mode with a four-point dither pattern to improve sampling.

-- Visit 4: We will observe the same PSF star of each quasar as in Visit 2.

3. MIRI MRS (visit 5): quasars J1007+2115 and J0313-1806, 4.2 hours science, 6.8 hours total.

The goal of the MIRI MRS observation is to obtain a high S/N mid-IR spectrum of each quasar to study quasar physics and to use as a quasar spectral template for future high-redshift quasar JWST observations. Therefore, we require a complete MRS wavelength coverage with all three grating settings. We will use SLOW readout mode with 2500 sec exposure in each setting for each quasar. We will carry out simultaneous imaging with MIRI in the F560W filter, which we will use to identify additional field PSF stars.

4. NIRSpec Fixed Slits (FSs) (visit 6): quasars J1007+2115 and J0313-1806, 1.8 hours science, 5.2 hours total.

The goal of the NIRSpec FSs observations is to obtain high quality near-IR spectra, uncontaminated by telluric features, to study IGM reionization and enrichment, and to provide a prototype quasar template for future high-redshift quasar JWST observations. We will use three high resolution settings with both slits (S200A1 and S200A2) to cover the wavelength range redward of rest-frame 1140Å of the quasar SED. We will carry out 19 minute exposures in each of the G140H/F100LP, G235H/G170LP, and G395H/F290LP configurations.

5. NIRSpec IFU (visit 7 and 8): quasars J1007+2115 and J0313-1806, 22.6 hours science, 29.6 hours total.

The goal of the NIRSpec IFU observation is to obtain emission line flux and velocity maps of the quasar host galaxy, after PSF subtraction.

-- Visit 7: We will observe our primary targets with the G395M grating with a total integration of 10 hours per target, broken into multiple dithers. We will also carry out a 1.2 hour MSA leakage calibration exposure at the first dither position.

-- Visit 8: We will observe a nearby bright F star as our PSF star for each quasar. We will use RAPID readout mode to minimize overhead.

6. Parallel observations with NIRISS: three quasars, 8.1 hours science.

We request parallel observations in NIRISS imaging mode with NIRCcam as the primary instrument in Visit 1. The NIRISS observations will image the field ~ 8 -13 cMpc from the central quasar, significantly expanding the survey volume for the quasar environment study. We choose F090W and F115W filters for a dropout selection and will reach a similar depth to the NIRCcam imaging. A direct comparison to the dropout sources in the NIRISS and NIRCcam fields will provide us with a unique and important constraint on the clustering of galaxies around the three $z \sim 7.5$ quasars.

Proposal 1764 - Targets - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	J1007+2115	RA: 10 07 58.2640 (151.9927667d) Dec: +21 15 29.21 (21.25811d) Equinox: J2000		
<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i>				
(2)	J0313-1806	RA: 03 13 43.8390 (48.4326625d) Dec: -18 06 36.40 (-18.11011d) Equinox: J2000		
<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i>				
(3)	J1342+0928	RA: 13 42 8.1000 (205.5337500d) Dec: +09 28 38.60 (9.47739d) Equinox: J2000		
<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i>				
(4)	PSF-J1342+0928	RA: 13 39 50.5100 (204.9604583d) Dec: +09 40 28.11 (9.67447d) Equinox: J2000	Proper Motion RA: -110.511 mas/yr Proper Motion Dec: -82.316 mas/yr Epoch of Position: 2000	
<i>Comments:</i> <i>Category=Star</i> <i>Description=[M dwarfs]</i> <i>Extended=NO</i>				
(6)	PSF-J1007+2115	RA: 10 07 43.0300 (151.9292917d) Dec: +21 16 29.25 (21.27479d) Equinox: J2000	Proper Motion RA: 2.262 mas/yr Proper Motion Dec: -14.679 mas/yr Epoch of Position: 2000	
<i>Comments:</i> <i>Category=Star</i> <i>Description=[M dwarfs]</i> <i>Extended=NO</i>				
(7)	NIRSPEC-PSF-J1007	RA: 10 07 57.1700 (151.9882083d) Dec: +21 27 30.45 (21.45846d) Equinox: J2000	Proper Motion RA: -23.770 mas/yr Proper Motion Dec: -1.506 mas/yr Epoch of Position: 2000	
<i>Comments:</i> <i>Category=Star</i> <i>Description=[F stars]</i> <i>Extended=NO</i>				
(8)	PSF-J0313-1806	RA: 03 13 45.7160 (48.4404833d) Dec: -18 02 8.95 (-18.03582d) Equinox: J2000	Proper Motion RA: 79.184 mas/yr Proper Motion Dec: -52.308 mas/yr Epoch of Position: 2000	
<i>Comments:</i> <i>Category=Star</i> <i>Description=[M dwarfs]</i> <i>Extended=NO</i>				

Fixed Targets

Proposal 1764 - Targets - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

(9)	NIRSPEC-PSF-J0313	RA: 03 14 20.5174 (48.5854892d) Dec: -17 43 52.43 (-17.73123d) Equinox: J2000	Proper Motion RA: 0.321 mas/yr Proper Motion Dec: 5.001 mas/yr Epoch of Position: 2000
<i>Comments:</i> Category=Star Description=[F stars] Extended=NO			
(10)	J1007+2115-COPY-MRS	RA: 10 07 58.2640 (151.9927667d) Dec: +21 15 29.21 (21.25811d) Equinox: J2000	
<i>Comments:</i> Category=Galaxy Description=[Quasars]			
(11)	J0313-1806-COPY-MRS	RA: 03 13 43.8390 (48.4326625d) Dec: -18 06 36.40 (-18.11011d) Equinox: J2000	
<i>Comments:</i> Category=Galaxy Description=[Quasars]			
(12)	J1007-MRS-SKY	RA: 10 08 2.6300 (152.0109583d) Dec: +21 15 56.90 (21.26581d) Equinox: J2000	
<i>Comments:</i> Category=Calibration Description=[Telescope/sky background]			
(13)	J0313-MRS-SKY	RA: 03 13 45.2900 (48.4387083d) Dec: -18 05 34.44 (-18.09290d) Equinox: J2000	
<i>Comments:</i> Category=Calibration Description=[Telescope/sky background]			

Proposal 1764 - Observation 1 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	Proposal 1764, Observation 1: J1007_NIRCam Diagnostic Status: Warning Observing Template: NIRCam Imaging Coordinated Parallel Template(s): NIRISS Imaging									
	(Visit 1:1) Warning (Form): Data Excess over lower threshold (Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (J1007_NIRCam (Obs 1)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.									
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Miscellaneous		
	(1)	J1007+2115	RA: 10 07 58.2640 (151.9927667d) Dec: +21 15 29.21 (21.25811d) Equinox: J2000							
<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=/Quasars/</i>										
Template	NIRCam Imaging					NIRISS Imaging				
	Module: ALL Subarray: FULL Target Placement: Module Gap									
Dithers	#	Primary Dither Type		Primary Dithers	Dither Size	Subpixel Positions		Coordinated Parallel Subpixel Selector		Dither Direct Images Primes
	1	INTRAMODULEX		3		3		NIRCam Only		NO_DITHERING
Spectral Elements	NIRCam Imaging	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
	1	F090W	F250M	SHALLOW4	8	1	9	9	3768.606	
	2	F090W	F360M	SHALLOW4	8	1	9	9	3768.606	
	3	F115W	F430M	SHALLOW4	6	1	9	9	2802.297	
Spectral Elements	NIRISS Imaging	Filter	Grism	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F090W		NIS	9	1	9	9	3575.344	
	2	F090W		NIS	9	1	9	9	3575.344	
	3	F115W		NIS	7	1	9	9	2802.297	

Proposal 1764 - Observation 1 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Special Requirements

Offset 65.0 arcsec, -15.0 arcsec
No Parallel Attachments

Sequence Observations 1, 2, Non-interruptible
Same V3 PA 1, 2 (Aperture PAs differ)

Proposal 1764 - Observation 2 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	Proposal 1764, Observation 2: J1007_NIRCam_PSF Diagnostic Status: Warning Observing Template: NIRCam Imaging									
Diagnostics	(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (J1007_NIRCam_PSF (Obs 2)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(6)	PSF-J1007+2115	RA: 10 07 43.0300 (151.9292917d) Dec: +21 16 29.25 (21.27479d) Equinox: J2000		Proper Motion RA: 2.262 mas/yr Proper Motion Dec: -14.679 mas/yr Epoch of Position: 2000					
	<i>Comments:</i> <i>Category=Star</i> <i>Description=[M dwarfs]</i> <i>Extended=NO</i>									
Template	Module		Subarray			Target Placement				
	B		SUB160P			Module Gap				
Dithers	#	Primary Dither Type		Primary Dithers		Subpixel Dither Type		Dither Size		Subpixel Positions
	1	NONE				STANDARD				9
Spectral Elements	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
	1	F090W	F250M	BRIGHT1	8	5	45	9	200.851	
	2	F115W	F360M	BRIGHT1	8	5	45	9	200.851	
Special Requirements	Sequence Observations 1, 2, Non-interruptible Same V3 PA 1, 2 (Aperture PAs differ)									

Proposal 1764 - Observation 3 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	<p>Proposal 1764, Observation 3: J1007_MIRI_Imaging</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</p>										
Diagnostics	<p>(Visit 3:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(J1007_MIRI_Imaging (Obs 3)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>										
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Miscellaneous			
	(1)	J1007+2115	RA: 10 07 58.2640 (151.9927667d) Dec: +21 15 29.21 (21.25811d) Equinox: J2000								
	<p><i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i></p>										
Template	<p>Subarray</p> <p>FULL</p>										
Dithers	#	Dither Type	Starting Point	Number of Points	Points	Starting Set	Number of Sets	Optimized For	Direction	Pattern Size	
	1	4-Point-Sets	1	3		5	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	56	8	1	Dither 1	4	32	5050.573	
Special Requirements	<p>Sequence Observations 3, 4, Non-interruptible</p> <p>Same V3 PA 3, 4</p>										

Proposal 1764 - Observation 4 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	Proposal 1764, Observation 4: J1007_MIRI_PSF Diagnostic Status: Warning Observing Template: MIRI Imaging										
Diagnostics	(Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (J1007_MIRI_PSF (Obs 4)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.										
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Miscellaneous			
	(6)	PSF-J1007+2115	RA: 10 07 43.0300 (151.9292917d) Dec: +21 16 29.25 (21.27479d) Equinox: J2000			Proper Motion RA: 2.262 mas/yr Proper Motion Dec: -14.679 mas/yr Epoch of Position: 2000					
	<i>Comments:</i> <i>Category=Star</i> <i>Description=[M dwarfs]</i> <i>Extended=NO</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	1	3		5	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	14	2	1	Dither 1	4	8	321.905	
Special Requirements	Sequence Observations 3, 4, Non-interruptible Same V3 PA 3, 4										

Proposal 1764 - Observation 6 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Observation	Proposal 1764, Observation 6: J1007_NIRSPEC_FS_S200A1andA2 Wed Aug 09 19:03:01 GMT 2023 Diagnostic Status: Warning Observing Template: NIRSpec Fixed Slit Spectroscopy										
	(Visit 6:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.										
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous			
	(1)	J1007+2115	RA: 10 07 58.2640 (151.9927667d) Dec: +21 15 29.21 (21.25811d) Equinox: J2000								
Comments: Category=Galaxy Description=[Quasars]											
Acquisition	#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	SAME	WATA	FULL	F110W	NRSRAPID	3	1	1	42.947	55420.10
Template	Slit				Subarray						
	S200A1 and S200A2				FULL						
Dithers	#	Primary Dither Positions					Sub-Pixel Pattern				
	1	3					NONE				
Spectral Elements	#	Grating/Filter	Slit	Readout Pattern	Groups/Int	Integrations/Exp #	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	G235H/F170LP	S200A1	NRSIRS2RAPID	12	1	NONE	3	3	568.967	
	2	G235H/F170LP	S200A2	NRSIRS2RAPID	12	1	NONE	3	3	568.967	
	3	G395H/F290LP	S200A2	NRSIRS2RAPID	12	1	NONE	3	3	568.967	
	4	G395H/F290LP	S200A1	NRSIRS2RAPID	12	1	NONE	3	3	568.967	
	5	G140H/F100LP	S200A1	NRSIRS2RAPID	12	1	NONE	3	3	568.967	
	6	G140H/F100LP	S200A2	NRSIRS2RAPID	12	1	NONE	3	3	568.967	

Proposal 1764 - Observation 7 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	<p>Proposal 1764, Observation 7: J1007_NIRSPEC_IFU</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec IFU Spectroscopy</p>											
Diagnostics	<p>(Visit 7:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(J1007_NIRSPEC_IFU (Obs 7)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(1)	J1007+2115	RA: 10 07 58.2640 (151.9927667d) Dec: +21 15 29.21 (21.25811d) Equinox: J2000									
	<p><i>Comments:</i> Category=Galaxy Description=[Quasars]</p>											
Template	TA Method											
	NONE											
Dithers	#	Dither Type		Size	Starting Point			Number of Points	Points			
	1	CYCLING		SMALL	1			8				
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	20	3	false	true	NONE	8	24	35363.469	
	2	G395M/F290LP	NRSIRS2	20	3	true	false	NONE	1	3	4420.434	
Special Requirements	<p>Sequence Observations 7, 8, Non-interruptible</p> <p>Same V3 PA 7, 8</p>											

Proposal 1764 - Observation 8 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	Proposal 1764, Observation 8: J1007_NIRSPEC_IFU_PSF Diagnostic Status: Warning Observing Template: NIRSpec IFU Spectroscopy											
Diagnostics	(Visit 8:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (J1007_NIRSPEC_IFU_PSF (Obs 8)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(7)	NIRSPEC-PSF-J1007	RA: 10 07 57.1700 (151.9882083d) Dec: +21 27 30.45 (21.45846d) Equinox: J2000			Proper Motion RA: -23.770 mas/yr Proper Motion Dec: -1.506 mas/yr Epoch of Position: 2000						
	<i>Comments:</i> Category=Star Description=[F stars] Extended=NO											
Template	TA Method											
	NONE											
Dithers	#	Dither Type		Size	Starting Point		Number of Points	Points				
	1	CYCLING		SMALL	1		8					
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	NRSRAPID	6	1	false	true	NONE	8	8	601.259	
Special Requirements	Sequence Observations 7, 8, Non-interruptible Same V3 PA 7, 8											

Proposal 1764 - Observation 58 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	<p>Proposal 1764, Observation 58: J1007_NIRSPEC_IFU_PSF</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec IFU Spectroscopy</p>											
Diagnostics	<p>(Visit 58:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(Visit 58:1) Informational (Form): Visit schedulable, but most scheduling windows are when JWST is pointed in direction of greatest micrometeoroid impact risk. This is likely due to scheduling special requirements.</p>											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(7)	NIRSPEC-PSF-J1007	RA: 10 07 57.1700 (151.9882083d) Dec: +21 27 30.45 (21.45846d) Equinox: J2000			Proper Motion RA: -23.770 mas/yr Proper Motion Dec: -1.506 mas/yr Epoch of Position: 2000						
	<p><i>Comments:</i> Category=Star Description=[F stars] Extended=NO</p>											
Template	TA Method											
	NONE											
Dithers	#	Dither Type		Size	Starting Point		Number of Points	Points				
	1	CYCLING		SMALL	1		8					
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	NRSRAPID	6	1	false	true	NONE	8	8	601.259	
Special Requirements	Aperture PA Range 70.036384245 to 70.036384245 Degrees (V3 291.063850065 to 291.063850065)											

Proposal 1764 - Observation 21 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	Proposal 1764, Observation 21: J1007_MRS_SKY Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [J1007_MIRI_MRS (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			
	(12)	J1007-MRS-SKY	RA: 10 08 2.6300 (152.0109583d) Dec: +21 15 56.90 (21.26581d) Equinox: J2000 <i>Comments:</i> <i>Category=Calibration</i> <i>Description=[Telescope/sky background]</i>										
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray		Grating Wheel Direction			
	F560W	ALL			YES			FULL		NEUTRAL			
Dithers	#	Dither Type				Optimized For			Direction				
	1	2-Point				POINT SOURCE			NEGATIVE				
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F560W	FASTR1	55	4	1	Dither 1	2	8	1237.668	
	1	SHORT(A)	MRSLONG		SLOWR1	26	1	1	Dither 1	2	2	1242.276	
	1	SHORT(A)	MRSSHORT		SLOWR1	26	1	1	Dither 1	2	2	1242.276	
	2		IMAGER	F560W	FASTR1	55	4	1	Dither 1	2	8	1237.668	
	2	MEDIUM(B)	MRSLONG		SLOWR1	26	1	1	Dither 1	2	2	1242.276	
	2	MEDIUM(B)	MRSSHORT		SLOWR1	26	1	1	Dither 1	2	2	1242.276	
	3		IMAGER	F560W	FASTR1	55	4	1	Dither 1	2	8	1237.668	
	3	LONG(C)	MRSLONG		SLOWR1	26	1	1	Dither 1	2	2	1242.276	
	3	LONG(C)	MRSSHORT		SLOWR1	26	1	1	Dither 1	2	2	1242.276	

Proposal 1764 - Observation 21 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Special Requirements

Sequence Observations 21, 22, Non-interruptible

Proposal 1764 - Observation 22 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	Proposal 1764, Observation 22: J1007_MIRI_MRS Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[J1007_MRS_SKY (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			
	(10)	J1007+2115-COPY-MRS	RA: 10 07 58.2640 (151.9927667d) Dec: +21 15 29.21 (21.25811d) Equinox: J2000 <i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i>										
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray		Grating Wheel Direction			
	F560W	ALL			YES			FULL		NEUTRAL			
Dithers	#	Dither Type				Optimized For				Direction			
	1	4-Point				POINT SOURCE				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F560W	FASTR1	55	4	1	Dither 1	4	16	2475.336	
	1	SHORT(A)	MRSLONG		SLOWR1	26	1	1	Dither 1	4	4	2484.552	
	1	SHORT(A)	MRSSHORT		SLOWR1	26	1	1	Dither 1	4	4	2484.552	
	2		IMAGER	F560W	FASTR1	55	4	1	Dither 1	4	16	2475.336	
	2	MEDIUM(B)	MRSLONG		SLOWR1	26	1	1	Dither 1	4	4	2484.552	
	2	MEDIUM(B)	MRSSHORT		SLOWR1	26	1	1	Dither 1	4	4	2484.552	
	3		IMAGER	F560W	FASTR1	55	4	1	Dither 1	4	16	2475.336	
	3	LONG(C)	MRSLONG		SLOWR1	26	1	1	Dither 1	4	4	2484.552	
	3	LONG(C)	MRSSHORT		SLOWR1	26	1	1	Dither 1	4	4	2484.552	

Proposal 1764 - Observation 22 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Special Requirements

Sequence Observations 21, 22, Non-interruptible

Proposal 1764 - Observation 9 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	Proposal 1764, Observation 9: J0313_NIRCam Diagnostic Status: Warning Observing Template: NIRCam Imaging Coordinated Parallel Template(s): NIRISS Imaging																																																	
Diagnostics	(Visit 9:1) Warning (Form): Data Excess over lower threshold (Visit 9:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (J0313_NIRCam (Obs 9)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.																																																	
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>(2)</td> <td>J0313-1806</td> <td>RA: 03 13 43.8390 (48.4326625d) Dec: -18 06 36.40 (-18.11011d) Equinox: J2000</td> <td></td> <td></td> </tr> <tr> <td colspan="5"> <i>Comments:</i> <i>Category=Galaxy</i> <i>Description=/Quasars/</i> </td> </tr> </tbody> </table>										#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous	(2)	J0313-1806	RA: 03 13 43.8390 (48.4326625d) Dec: -18 06 36.40 (-18.11011d) Equinox: J2000			<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=/Quasars/</i>																													
#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous																																														
(2)	J0313-1806	RA: 03 13 43.8390 (48.4326625d) Dec: -18 06 36.40 (-18.11011d) Equinox: J2000																																																
<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=/Quasars/</i>																																																		
Template	NIRCam Imaging Module: ALL Subarray: FULL Target Placement: Module Gap					NIRISS Imaging																																												
Dithers	<table border="1"> <thead> <tr> <th>#</th> <th>Primary Dither Type</th> <th>Primary Dithers</th> <th>Dither Size</th> <th>Subpixel Positions</th> <th>Coordinated Parallel Subpixel Selector</th> <th>Dither Direct Images Primes</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>INTRAMODULEX</td> <td>3</td> <td></td> <td>3</td> <td>NIRCam Only</td> <td>NO_DITHERING</td> </tr> </tbody> </table>										#	Primary Dither Type	Primary Dithers	Dither Size	Subpixel Positions	Coordinated Parallel Subpixel Selector	Dither Direct Images Primes	1	INTRAMODULEX	3		3	NIRCam Only	NO_DITHERING																										
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NIRCam Imaging	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID																																									
1	F090W	F250M	SHALLOW4	8	1	9	9	3768.606																																										
2	F090W	F360M	SHALLOW4	8	1	9	9	3768.606																																										
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Spectral Elements	<table border="1"> <thead> <tr> <th>NIRISS Imaging</th> <th>Filter</th> <th>Grism</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/Exp</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>F090W</td> <td></td> <td>NIS</td> <td>9</td> <td>1</td> <td>9</td> <td>9</td> <td>3575.344</td> <td></td> </tr> <tr> <td>2</td> <td>F090W</td> <td></td> <td>NIS</td> <td>9</td> <td>1</td> <td>9</td> <td>9</td> <td>3575.344</td> <td></td> </tr> <tr> <td>3</td> <td>F115W</td> <td></td> <td>NIS</td> <td>7</td> <td>1</td> <td>9</td> <td>9</td> <td>2802.297</td> <td></td> </tr> </tbody> </table>										NIRISS Imaging	Filter	Grism	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	1	F090W		NIS	9	1	9	9	3575.344		2	F090W		NIS	9	1	9	9	3575.344		3	F115W		NIS	7	1	9	9	2802.297	
NIRISS Imaging	Filter	Grism	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID																																									
1	F090W		NIS	9	1	9	9	3575.344																																										
2	F090W		NIS	9	1	9	9	3575.344																																										
3	F115W		NIS	7	1	9	9	2802.297																																										

Proposal 1764 - Observation 9 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Special Requirements

Offset 65.0 arcsec, -15.0 arcsec
No Parallel Attachments

Sequence Observations 9, 10, Non-interruptible
Same V3 PA 9, 10 (Aperture PAs differ)

Proposal 1764 - Observation 10 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	Proposal 1764, Observation 10: J0313_NIRCam_PSF Diagnostic Status: Warning Observing Template: NIRCam Imaging									
Diagnostics	(Visit 10:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (J0313_NIRCam_PSF (Obs 10)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(8)	PSF-J0313-1806	RA: 03 13 45.7160 (48.4404833d) Dec: -18 02 8.95 (-18.03582d) Equinox: J2000		Proper Motion RA: 79.184 mas/yr Proper Motion Dec: -52.308 mas/yr Epoch of Position: 2000					
	<i>Comments:</i> <i>Category=Star</i> <i>Description=[M dwarfs]</i> <i>Extended=NO</i>									
Template	Module		Subarray			Target Placement				
	B		SUB160P			Module Gap				
Dithers	#	Primary Dither Type		Primary Dithers		Subpixel Dither Type		Dither Size		Subpixel Positions
	1	NONE				STANDARD				9
Spectral Elements	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
	1	F090W	F250M	BRIGHT1	8	5	45	9	200.851	
	2	F115W	F360M	BRIGHT1	8	5	45	9	200.851	
Special Requirements	Sequence Observations 9, 10, Non-interruptible Same V3 PA 9, 10 (Aperture PAs differ)									

Proposal 1764 - Observation 11 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	<p>Proposal 1764, Observation 11: J0313_MIRI_Imaging</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</p>										
Diagnostics	<p>(Visit 11:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(J0313_MIRI_Imaging (Obs 11)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>										
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Miscellaneous			
	(2)	J0313-1806	RA: 03 13 43.8390 (48.4326625d) Dec: -18 06 36.40 (-18.11011d) Equinox: J2000								
	<p><i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i></p>										
Template	<p>Subarray FULL</p>										
Dithers	#	Dither Type	Starting Point	Number of Points	Points	Starting Set	Number of Sets	Optimized For	Direction	Pattern Size	
	1	4-Point-Sets	1	3		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	56	8	1	Dither 1	4	32	5050.573	
Special Requirements	<p>Sequence Observations 11, 12, Non-interruptible Same V3 PA 11, 12</p>										

Proposal 1764 - Observation 12 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	Proposal 1764, Observation 12: J0313_MIRI_PSF Diagnostic Status: Warning Observing Template: MIRI Imaging										
Diagnostics	(Visit 12:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (J0313_MIRI_PSF (Obs 12)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.										
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Miscellaneous			
	(8)	PSF-J0313-1806	RA: 03 13 45.7160 (48.4404833d) Dec: -18 02 8.95 (-18.03582d) Equinox: J2000			Proper Motion RA: 79.184 mas/yr Proper Motion Dec: -52.308 mas/yr Epoch of Position: 2000					
	<i>Comments:</i> Category=Star Description=[M dwarfs] Extended=NO										
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	1	3		5	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	14	2	1	Dither 1	4	8	321.905	
Special Requirements	Sequence Observations 11, 12, Non-interruptible Same V3 PA 11, 12										

Proposal 1764 - Observation 14 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	Proposal 1764, Observation 14: J0313_NIRSPEC_FS_S200A1andA2 Diagnostic Status: Warning Observing Template: NIRSPEC Fixed Slit Spectroscopy										
	(Visit 14:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.										
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous		
	(2)	J0313-1806	RA: 03 13 43.8390 (48.4326625d) Dec: -18 06 36.40 (-18.11011d) Equinox: J2000								
Comments: Category=Galaxy Description=[Quasars]											
Acquisition	#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	SAME	WATA	FULL	F110W	NRSRAPID	3	1	1	42.947	55420.10
Template	Slit					Subarray					
	S200A1 and S200A2					FULL					
Dithers	#	Primary Dither Positions					Sub-Pixel Pattern				
	1	3					NONE				
Spectral Elements	#	Grating/Filter	Slit	Readout Pattern	Groups/Int	Integrations/Exp #	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	G235H/F170LP	S200A1	NRSIRS2RAPID	12	1	NONE	3	3	568.967	
	2	G235H/F170LP	S200A2	NRSIRS2RAPID	12	1	NONE	3	3	568.967	
	3	G395H/F290LP	S200A2	NRSIRS2RAPID	12	1	NONE	3	3	568.967	
	4	G395H/F290LP	S200A1	NRSIRS2RAPID	12	1	NONE	3	3	568.967	
	5	G140H/F100LP	S200A1	NRSIRS2RAPID	12	1	NONE	3	3	568.967	
	6	G140H/F100LP	S200A2	NRSIRS2RAPID	12	1	NONE	3	3	568.967	

Proposal 1764 - Observation 15 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	<p>Proposal 1764, Observation 15: J0313_NIRSPEC_IFU</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSPEC IFU Spectroscopy</p>											
Diagnostics	<p>(Visit 15:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(J0313_NIRSPEC_IFU (Obs 15)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(2)	J0313-1806	RA: 03 13 43.8390 (48.4326625d) Dec: -18 06 36.40 (-18.11011d) Equinox: J2000									
	<p><i>Comments:</i> Category=Galaxy Description=[Quasars]</p>											
Template	TA Method											
	NONE											
Dithers	#	Dither Type		Size	Starting Point			Number of Points	Points			
	1	CYCLING		SMALL	1			8				
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	20	3	false	true	NONE	8	24	35363.469	
	2	G395M/F290LP	NRSIRS2	20	3	true	false	NONE	1	3	4420.434	
Special Requirements	<p>Sequence Observations 15, 16, Non-interruptible</p> <p>Same V3 PA 15, 16</p>											

Proposal 1764 - Observation 16 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	<p>Proposal 1764, Observation 16: J0313_NIRSPEC_IFU_PSF</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec IFU Spectroscopy</p>											
Diagnostics	<p>(Visit 16:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(J0313_NIRSPEC_IFU_PSF (Obs 16)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(9)	NIRSPEC-PSF-J0313	RA: 03 14 20.5174 (48.5854892d) Dec: -17 43 52.43 (-17.73123d) Equinox: J2000			Proper Motion RA: 0.321 mas/yr Proper Motion Dec: 5.001 mas/yr Epoch of Position: 2000						
	<i>Comments:</i> <i>Category=Star</i> <i>Description=[F stars]</i> <i>Extended=NO</i>											
Template	TA Method											
	NONE											
Dithers	#	Dither Type		Size	Starting Point		Number of Points	Points				
	1	CYCLING		SMALL	1		8					
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	NRSRAPID	6	1	false	true	NONE	8	8	601.259	
Special Requirements	Sequence Observations 15, 16, Non-interruptible Same V3 PA 15, 16											

Proposal 1764 - Observation 23 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	Proposal 1764, Observation 23: J0313_MRS_SKY Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [J0313_MIRI_MRS (Obs 24)]												
	(Visit 23:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections				Miscellaneous				
	(13)	J0313-MRS-SKY	RA: 03 13 45.2900 (48.4387083d) Dec: -18 05 34.44 (-18.09290d) Equinox: J2000										
Comments: Category=Calibration Description=[Telescope/sky background]													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel		Simultaneous Imaging		Imager Subarray		Grating Wheel Direction					
	F560W	ALL		YES		FULL		NEUTRAL					
Dithers	#	Dither Type			Optimized For			Direction					
	1	2-Point			POINT SOURCE			NEGATIVE					
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F560W	FASTR1	70	4	1	Dither 1	2	8	1570.673	
	1	SHORT(A)	MRSLONG		SLOWR1	16	2	1	Dither 1	2	4	1576.735	
	1	SHORT(A)	MRSSHORT		SLOWR1	16	2	1	Dither 1	2	4	1576.735	
	2		IMAGER	F560W	FASTR1	70	4	1	Dither 1	2	8	1570.673	
	2	MEDIUM(B)	MRSLONG		SLOWR1	16	2	1	Dither 1	2	4	1576.735	
	2	MEDIUM(B)	MRSSHORT		SLOWR1	16	2	1	Dither 1	2	4	1576.735	
	3		IMAGER	F560W	FASTR1	70	4	1	Dither 1	2	8	1570.673	
	3	LONG(C)	MRSLONG		SLOWR1	16	2	1	Dither 1	2	4	1576.735	
	3	LONG(C)	MRSSHORT		SLOWR1	16	2	1	Dither 1	2	4	1576.735	

Proposal 1764 - Observation 23 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Special Requirements

Sequence Observations 23, 24, Non-interruptible

Proposal 1764 - Observation 24 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	Proposal 1764, Observation 24: J0313_MIRI_MRS Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[J0313_MRS_SKY (Obs 23)]												
	(Visit 24:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Diagnosics													
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(11)	J0313-1806-COPY-MRS	RA: 03 13 43.8390 (48.4326625d) Dec: -18 06 36.40 (-18.11011d) Equinox: J2000										
<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=/[Quasars]</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray		Grating Wheel Direction			
	F560W	ALL			YES			FULL		NEUTRAL			
Dithers	#	Dither Type				Optimized For				Direction			
	1	4-Point				POINT SOURCE				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F560W	FASTR1	70	4	1	Dither 1	4	16	3141.345	
	1	SHORT(A)	MRSLONG		SLOWR1	16	2	1	Dither 1	4	8	3153.469	
	1	SHORT(A)	MRSSHORT		SLOWR1	16	2	1	Dither 1	4	8	3153.469	
	2		IMAGER	F560W	FASTR1	70	4	1	Dither 1	4	16	3141.345	
	2	MEDIUM(B)	MRSLONG		SLOWR1	16	2	1	Dither 1	4	8	3153.469	
	2	MEDIUM(B)	MRSSHORT		SLOWR1	16	2	1	Dither 1	4	8	3153.469	
	3		IMAGER	F560W	FASTR1	70	4	1	Dither 1	4	16	3141.345	
	3	LONG(C)	MRSLONG		SLOWR1	16	2	1	Dither 1	4	8	3153.469	
	3	LONG(C)	MRSSHORT		SLOWR1	16	2	1	Dither 1	4	8	3153.469	

Proposal 1764 - Observation 24 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Special Requirements

Sequence Observations 23, 24, Non-interruptible

Proposal 1764 - Observation 17 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	Proposal 1764, Observation 17: J1342_NIRCam Diagnostic Status: Warning Observing Template: NIRCam Imaging Coordinated Parallel Template(s): NIRISS Imaging									
	(Visit 17:1) Warning (Form): Data Excess over lower threshold (Visit 17:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (J1342_NIRCam (Obs 17)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.									
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Miscellaneous		
	(3)	J1342+0928	RA: 13 42 8.1000 (205.5337500d) Dec: +09 28 38.60 (9.47739d) Equinox: J2000							
<i>Comments:</i> Category=Galaxy Description=[Quasars]										
Template	NIRCam Imaging					NIRISS Imaging				
	Module: ALL Subarray: FULL Target Placement: Module Gap									
Dithers	#	Primary Dither Type		Primary Dithers	Dither Size	Subpixel Positions		Coordinated Parallel Subpixel Selector		Dither Direct Images Primes
	1	INTRAMODULEX		3		3		NIRCam Only		NO_DITHERING
Spectral Elements	NIRCam Imaging	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
	1	F090W	F250M	SHALLOW4	8	1	9	9	3768.606	
	2	F090W	F360M	SHALLOW4	8	1	9	9	3768.606	
	3	F115W	F430M	SHALLOW4	6	1	9	9	2802.297	
Spectral Elements	NIRISS Imaging	Filter	Grism	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F090W		NIS	9	1	9	9	3575.344	
	2	F090W		NIS	9	1	9	9	3575.344	
	3	F115W		NIS	7	1	9	9	2802.297	

Proposal 1764 - Observation 17 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Special Requirements

Offset 65.0 arcsec, -15.0 arcsec
No Parallel Attachments

Sequence Observations 17, 18, Non-interruptible
Same V3 PA 17, 18 (Aperture PAs differ)

Proposal 1764 - Observation 18 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	Proposal 1764, Observation 18: J1342_NIRCam_PSF Diagnostic Status: Warning Observing Template: NIRCam Imaging									
Diagnostics	(Visit 18:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (J1342_NIRCam_PSF (Obs 18)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(4)	PSF-J1342+0928	RA: 13 39 50.5100 (204.9604583d) Dec: +09 40 28.11 (9.67447d) Equinox: J2000		Proper Motion RA: -110.511 mas/yr Proper Motion Dec: -82.316 mas/yr Epoch of Position: 2000					
	<i>Comments:</i> <i>Category=Star</i> <i>Description=[M dwarfs]</i> <i>Extended=NO</i>									
Template	Module		Subarray			Target Placement				
	B		SUB160P			Module Gap				
Dithers	#	Primary Dither Type		Primary Dithers		Subpixel Dither Type		Dither Size		Subpixel Positions
	1	NONE				STANDARD				9
Spectral Elements	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
	1	F090W	F250M	BRIGHT1	8	5	45	9	200.851	
	2	F115W	F360M	BRIGHT1	8	5	45	9	200.851	
Special Requirements	Sequence Observations 17, 18, Non-interruptible Same V3 PA 17, 18 (Aperture PAs differ)									

Proposal 1764 - Observation 19 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	<p>Proposal 1764, Observation 19: J1342_MIRI_Imaging</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</p>										
Diagnostics	<p>(Visit 19:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(J1342_MIRI_Imaging (Obs 19)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>										
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Miscellaneous			
	(3)	J1342+0928	RA: 13 42 8.1000 (205.5337500d)			Dec: +09 28 38.60 (9.47739d)		Equinox: J2000			
	<p><i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i></p>										
Template	<p>Subarray</p> <p>FULL</p>										
Dithers	#	Dither Type	Starting Point	Number of Points	Points	Starting Set	Number of Sets	Optimized For	Direction	Pattern Size	
	1	4-Point-Sets	1	3		5	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	56	8	1	Dither 1	4	32	5050.573	
Special Requirements	<p>Sequence Observations 19, 20, Non-interruptible</p> <p>Same V3 PA 19, 20</p>										

Proposal 1764 - Observation 20 - A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization

Wed Aug 09 19:03:01 GMT 2023

Observation	<p>Proposal 1764, Observation 20: J1342_MIRI_PSF</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</p>										
Diagnostics	<p>(Visit 20:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(J1342_MIRI_PSF (Obs 20)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>										
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Miscellaneous			
	(4)	PSF-J1342+0928	RA: 13 39 50.5100 (204.9604583d) Dec: +09 40 28.11 (9.67447d) Equinox: J2000			Proper Motion RA: -110.511 mas/yr Proper Motion Dec: -82.316 mas/yr Epoch of Position: 2000					
	<p><i>Comments:</i> <i>Category=Star</i> <i>Description=[M dwarfs]</i> <i>Extended=NO</i></p>										
Template	<p>Subarray</p> <p>FULL</p>										
Dithers	#	Dither Type	Starting Point	Number of Points	Points	Starting Set	Number of Sets	Optimized For	Direction	Pattern Size	
	1	4-Point-Sets	1	3		5	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	14	2	1	Dither 1	4	8	321.905	
Special Requirements	<p>Sequence Observations 19, 20, Non-interruptible Same V3 PA 19, 20</p>										