



4237 - AGN Feedback and Radio Jet Driven Outflows in 3C 305

Cycle: 2, Proposal Category: GO

INVESTIGATORS

<i>Name</i>	<i>Institution</i>
Dr. Patrick Michael Ogle (PI)	Space Telescope Science Institute
Dr. Philip N. Appleton (CoI)	California Institute of Technology
Dr. Eiichi Egami (CoI)	University of Arizona
Dr. Pierre Guillard (CoI) (ESA Member)	CNRS, Institut d'Astrophysique de Paris
Dr. Alvaro Labiano (CoI) (ESA Member)	ESA-European Space Astronomy Centre
Dr. Aditya Togi (CoI)	Texas State University
Dr. Lauranne Lanz (CoI)	The College of New Jersey
Dr. Katherine Anne Alatalo (CoI)	Space Telescope Science Institute
Dr. Santiago Garcia-Burillo (CoI) (ESA Member)	Observatorio Astronomico Nacional
Dr. Matthew D. Lehnert (CoI) (ESA Member)	Centre de Recherche Astrophysique de Lyon
Prof. Raffaella Morganti (CoI) (ESA Member)	Stichting Astronomisch Onderzoek in Nederland (ASTRON)
Prof. Clive N. Tadhunter (CoI) (ESA Member)	University of Sheffield
Dr. Bjorn Emonts (CoI)	Associated Universities, Inc.
Dr. Stefi A. Baum (CoI) (CSA Member)	University of Manitoba
Dr. Christopher P. O'Dea (CoI) (CSA Member)	University of Manitoba

OBSERVATIONS

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
3C305	IFU_MRS			
	1	3C305_JET_NIRSpec_IFU	NIRSpec IFU Spectroscopy	(2) 3C-305
	2	3C305_MIRI_MRS	MIRI Medium Resolution Spectroscopy	(4) 3C-305-MRS
	3	3C305_OFF_MIRI_MRS	MIRI Medium Resolution Spectroscopy	(3) 3C-305-OFF

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
3C305_IM				
	5	3C305_MIRI_IM	MIRI Imaging	(5) 3C-305-IM
	6	3C305_OFF_MIRI_IM	MIRI Imaging	(3) 3C-305-OFF
	4	3C305_NIRCAM_IM	NIRCam Imaging	(2) 3C-305
	7	3C305_NIRCAM_IM	NIRCam Imaging	(2) 3C-305

ABSTRACT

AGN feedback on the interstellar medium is an important process that may limit star formation in the most massive galaxies. We propose NIRSpec and MIRI IFU mosaics and NIRCam and MIRI imaging of the nearby radio galaxy 3C 305 in order to measure the impact of spatially resolved molecular and ionized outflows on the interstellar medium and star formation in this prime nearby example of radio-jet feedback. Nearly 10% of the molecular gas in this merging galaxy has been heated to temperatures of >200 K by mechanical feedback from the radio jet, resulting in spectacularly strong H₂ emission. JWST can spatially resolve and map the kinematics and temperature distribution of this shocked molecular gas for the first time, allowing us to determine what fraction of it is heated in situ vs. entrained in an outflow. The radio jet can also inject turbulence into the interstellar medium and destroy small dust grains, potentially reducing the efficiency of star formation. We will map the velocity field, temperature distribution, power dissipation, and outflow rate in H₂ and ionized gas along the radio jet in order to evaluate its impact on the physical state and kinematics of the ISM. We will measure star formation rates in molecular clouds near and far from the jet in order to determine if there is any correlation or anticorrelation of star formation with the jet location. A detailed, spatially and spectrally resolved study of one of the brightest nearby examples of powerful radio-jet feedback on molecular gas will lay the groundwork for utilizing JWST to study quasar feedback on galaxy evolution at high redshifts.

OBSERVING DESCRIPTION

MIRI MRS: A 2x2 mosaic will cover the central 6.5×8.0 arcsec² region of 3C 305. Channels 1-4 will give 5–27 micron spectral coverage of the H₂ pure-rotational lines, PAH features, and forbidden lines at a spectral resolution of 80–240 km/s. A 4-pt extended source dither improves sampling, and a single, dithered, off-galaxy background pointing will enable reliable MIR background subtraction. Simultaneous MRS imaging off-galaxy will be used to improve the MRS astrometry. Exposures of 30 groups x 1 integration x 4 dithers (FASTR1) give representative SNR in the continuum-subtracted H₂ 0-0 S(2) line peak and wings of 30 and 6, respectively.

NIRSpec IFU: A 2x2 mosaic covers the inner 6.2×6.2 arcsec². The G235H/F170LP and G395H/F290LP grating and filter combinations capture the H₂ ro-vibrational lines, hydrogen recombination lines including Pa-alpha, and PAH features from 1.7–5.3 microns, at a spectral resolution of 110

JWST Proposal 4237 (Created: Wednesday, April 3, 2024 at 3:02:17 PM Eastern Standard Time) - Overview

km/s. We will use a 4-pt dither to improve spatial sampling and mitigate against cosmic rays and detector defects. Leakcal observations are not necessary. Exposures of 15 groups x 1 integration x 4 dithers give peak SNR = 230 in an 0.25" radius aperture. The corresponding S/N ratios per spectral bin in the H₂ 1-0 S(0) line peak and wings are 30 and 10, respectively. Our ETC calculations show that we will have sufficient S/N (> 10) in the broad line wings to map the outflows in several ro-vibrational H₂ lines and Pa-alpha.

MIRI imaging of 8 micron PAH emission in the F770W filter and the H₂ 0-0 S(3) rotational line (redshifted to 10.1 microns) in the F1000W filter. This will give a global view of the distribution of PDRs and PAH ionization.

NIRCam imaging in the F182M/F150W and F335M/F277W bands will give continuum-subtracted Pa-alpha and PAH3.3um, which trace outflows and star formation, over the full galaxy.

Proposal 4237 - Targets - AGN Feedback and Radio Jet Driven Outflows in 3C 305

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(2)	3C-305	RA: 14 49 21.5926 (222.3399692d) Dec: +63 16 13.81 (63.27050d) Equinox: J2000	Proper Motion RA: 0 sec of time/yr Proper Motion Dec: 0 arcsec/yr Epoch of Position: 2015.5	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Galaxy</i> <i>Description=[Active galactic nuclei, Radio galaxies, Radio jets]</i></p>				
(3)	3C-305-OFF	RA: 14 49 24.6188 (222.3525783d) Dec: +63 14 50.21 (63.24728d) Equinox: J2000	Proper Motion RA: 0 sec of time/yr Proper Motion Dec: 0 arcsec/yr Epoch of Position: 2015.5	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Galaxy</i> <i>Description=[Active galactic nuclei, Radio galaxies, Radio jets]</i></p>				
(4)	3C-305-MRS	RA: 14 49 21.5926 (222.3399692d) Dec: +63 16 13.81 (63.27050d) Equinox: J2000	Proper Motion RA: 0 sec of time/yr Proper Motion Dec: 0 arcsec/yr Epoch of Position: 2015.5	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Galaxy</i> <i>Description=[Active galactic nuclei, Radio galaxies, Radio jets]</i> <i>Extended=YES</i></p>				
(5)	3C-305-IM	RA: 14 49 21.5926 (222.3399692d) Dec: +63 16 13.81 (63.27050d) Equinox: J2000	Proper Motion RA: 0 sec of time/yr Proper Motion Dec: 0 arcsec/yr Epoch of Position: 2015.5	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Galaxy</i> <i>Description=[Active galactic nuclei, Radio galaxies, Radio jets]</i></p>				

Fixed Targets

Proposal 4237 - Observation 1 - AGN Feedback and Radio Jet Driven Outflows in 3C 305

Wed Apr 03 20:02:17 GMT 2024

Observation	<p>Proposal 4237, Observation 1: 3C305_JET_NIRSpec_IFU</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec IFU Spectroscopy</p>											
Diagnostics	(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(2)	3C-305	RA: 14 49 21.5926 (222.3399692d) Dec: +63 16 13.81 (63.27050d) Equinox: J2000			Proper Motion RA: 0 sec of time/yr Proper Motion Dec: 0 arcsec/yr Epoch of Position: 2015.5						
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Galaxy</i></p> <p><i>Description=[Active galactic nuclei, Radio galaxies, Radio jets]</i></p>											
Template	<p>TA Method</p> <p>NONE</p>											
Mosaic	Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order					
	2	2	10.0	10.0	0.0	0.0	DEFAULT					
Dithers	#	Dither Type	Size	Starting Point	Number of Points	Points						
	1	CYCLING	SMALL	1	4							
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wbk. Calc ID
	1	G235H/F170LP	NRSIRS2RAPID	15	1	false	true	NONE	4	4	933.689	
	2	G395H/F290LP	NRSIRS2RAPID	15	1	false	true	NONE	4	4	933.689	

Proposal 4237 - Observation 2 - AGN Feedback and Radio Jet Driven Outflows in 3C 305

Wed Apr 03 20:02:17 GMT 2024

Observation	Proposal 4237, Observation 2: 3C305_MIRI_MRS Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[3C305_OFF_MIRI_MRS (Obs 3)]												
	(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous				
	(4)	3C-305-MRS	RA: 14 49 21.5926 (222.3399692d) Dec: +63 16 13.81 (63.27050d) Equinox: J2000			Proper Motion RA: 0 sec of time/yr Proper Motion Dec: 0 arcsec/yr Epoch of Position: 2015.5							
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=Galaxy Description=[Active galactic nuclei, Radio galaxies, Radio jets] Extended=YES													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging		Imager Subarray		Grating Wheel Direction				
	F560W	All MRS			YES		FULL		NEUTRAL				
Mosaic	Rows	Columns	Row Overlap %		Column Overlap %		Row shift (deg)		Column shift (deg)		Tile Order		
	2	2	10.0		10.0		0.0		0.0		DEFAULT		
Dithers	#	Dither Type			Optimized For			Direction					
	1	4-Point			EXTENDED SOURCE			NEGATIVE					
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1130W	FASTR1	30	1	1	Dither 1	4	4	333.005	
	1	LONG(C)	MRSLONG		FASTR1	30	1	1	Dither 1	4	4	333.005	
	1	LONG(C)	MRSSHORT		FASTR1	30	1	1	Dither 1	4	4	333.005	
	2		IMAGER	F770W	FASTR1	30	1	1	Dither 1	4	4	333.005	
	2	MEDIUM(B)	MRSLONG		FASTR1	30	1	1	Dither 1	4	4	333.005	
	2	MEDIUM(B)	MRSSHORT		FASTR1	30	1	1	Dither 1	4	4	333.005	
	3		IMAGER	F560W	FASTR1	29	2	1	Dither 1	4	8	654.909	
	3	SHORT(A)	MRSLONG		FASTR1	29	2	1	Dither 1	4	8	654.909	
	3	SHORT(A)	MRSSHORT		FASTR1	29	2	1	Dither 1	4	8	654.909	

Proposal 4237 - Observation 2 - AGN Feedback and Radio Jet Driven Outflows in 3C 305

Special Requirements

Sequence Observations 2, 3, Non-interruptible

Proposal 4237 - Observation 3 - AGN Feedback and Radio Jet Driven Outflows in 3C 305

Wed Apr 03 20:02:17 GMT 2024

Observation	Proposal 4237, Observation 3: 3C305_OFF_MIRI_MRS Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [3C305_MIRI_MRS (Obs 2)]												
	(Visit 3:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous				
	(3)	3C-305-OFF	RA: 14 49 24.6188 (222.3525783d) Dec: +63 14 50.21 (63.24728d) Equinox: J2000			Proper Motion RA: 0 sec of time/yr Proper Motion Dec: 0 arcsec/yr Epoch of Position: 2015.5							
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Galaxy</i> <i>Description=[Active galactic nuclei, Radio galaxies, Radio jets]</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging		Imager Subarray		Grating Wheel Direction				
	F560W	All MRS			YES		FULL		NEUTRAL				
Dithers	#	Dither Type			Optimized For			Direction					
	1	4-Point			EXTENDED 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	F1130W	FASTR1	30	1	1	Dither 1	4	4	333.005	
	1	LONG(C)	MRSLONG		FASTR1	30	1	1	Dither 1	4	4	333.005	
	1	LONG(C)	MRSSHORT		FASTR1	30	1	1	Dither 1	4	4	333.005	
	2		IMAGER	F770W	FASTR1	30	1	1	Dither 1	4	4	333.005	
	2	MEDIUM(B)	MRSLONG		FASTR1	30	1	1	Dither 1	4	4	333.005	
	2	MEDIUM(B)	MRSSHORT		FASTR1	30	1	1	Dither 1	4	4	333.005	
	3		IMAGER	F560W	FASTR1	29	2	1	Dither 1	4	8	654.909	
	3	SHORT(A)	MRSLONG		FASTR1	29	2	1	Dither 1	4	8	654.909	
	3	SHORT(A)	MRSSHORT		FASTR1	29	2	1	Dither 1	4	8	654.909	

Proposal 4237 - Observation 3 - AGN Feedback and Radio Jet Driven Outflows in 3C 305

Special Requirements

Sequence Observations 2, 3, Non-interruptible

Proposal 4237 - Observation 5 - AGN Feedback and Radio Jet Driven Outflows in 3C 305

Wed Apr 03 20:02:17 GMT 2024

Observation	<p>Proposal 4237, Observation 5: 3C305_MIRI_IM</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</p> <p>Background Observations:[3C305_OFF_MIRI_IM (Obs 6)]</p>																																																					
Diagnostics	<p>(3C305_MIRI_IM (Obs 5)) Warning (Form): Target requiring background exposure selected for template that doesn't require background exposure</p> <p>(Visit 5:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>																																																					
Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th colspan="3">Targ. Coord. Corrections</th> <th colspan="4">Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(5)</td> <td>3C-305-IM</td> <td>RA: 14 49 21.5926 (222.3399692d) Dec: +63 16 13.81 (63.27050d) Equinox: J2000</td> <td colspan="3">Proper Motion RA: 0 sec of time/yr Proper Motion Dec: 0 arcsec/yr Epoch of Position: 2015.5</td> <td colspan="4"></td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Galaxy</i></p> <p><i>Description=[Active galactic nuclei, Radio galaxies, Radio jets]</i></p>										#	Name	Target Coordinates	Targ. Coord. Corrections			Miscellaneous				(5)	3C-305-IM	RA: 14 49 21.5926 (222.3399692d) Dec: +63 16 13.81 (63.27050d) Equinox: J2000	Proper Motion RA: 0 sec of time/yr Proper Motion Dec: 0 arcsec/yr Epoch of Position: 2015.5																														
#	Name	Target Coordinates	Targ. Coord. Corrections			Miscellaneous																																																
(5)	3C-305-IM	RA: 14 49 21.5926 (222.3399692d) Dec: +63 16 13.81 (63.27050d) Equinox: J2000	Proper Motion RA: 0 sec of time/yr Proper Motion Dec: 0 arcsec/yr Epoch of Position: 2015.5																																																			
Template	<p>Subarray</p> <p>FULL</p>																																																					
Dithers	<table border="1"> <thead> <tr> <th>#</th> <th>Dither Type</th> <th>Starting Point</th> <th>Number of Points</th> <th>Points</th> <th>Starting Set</th> <th>Number of Sets</th> <th>Optimized For</th> <th>Direction</th> <th>Pattern Size</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CYCLING</td> <td>1</td> <td>4</td> <td></td> <td>1</td> <td>1</td> <td></td> <td></td> <td>DEFAULT</td> </tr> </tbody> </table>										#	Dither Type	Starting Point	Number of Points	Points	Starting Set	Number of Sets	Optimized For	Direction	Pattern Size	1	CYCLING	1	4		1	1			DEFAULT																								
#	Dither Type	Starting Point	Number of Points	Points	Starting Set	Number of Sets	Optimized For	Direction	Pattern Size																																													
1	CYCLING	1	4		1	1			DEFAULT																																													
Spectral Elements	<table border="1"> <thead> <tr> <th>#</th> <th>Filter</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/Exp</th> <th>Exposures/Dith</th> <th>Dither</th> <th>Total Dithers</th> <th>Total Integrations</th> <th>Total Exposure Time</th> <th>ETC Wkbk.Calc ID</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>F770W</td> <td>FASTR1</td> <td>10</td> <td>1</td> <td>1</td> <td>Dither 1</td> <td>4</td> <td>4</td> <td>111.002</td> <td></td> </tr> <tr> <td>2</td> <td>F1000W</td> <td>FASTR1</td> <td>10</td> <td>1</td> <td>1</td> <td>Dither 1</td> <td>4</td> <td>4</td> <td>111.002</td> <td></td> </tr> <tr> <td>3</td> <td>F1280W</td> <td>FASTR1</td> <td>10</td> <td>1</td> <td>1</td> <td>Dither 1</td> <td>4</td> <td>4</td> <td>111.002</td> <td></td> </tr> </tbody> </table>										#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	1	F770W	FASTR1	10	1	1	Dither 1	4	4	111.002		2	F1000W	FASTR1	10	1	1	Dither 1	4	4	111.002		3	F1280W	FASTR1	10	1	1	Dither 1	4	4	111.002	
#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID																																												
1	F770W	FASTR1	10	1	1	Dither 1	4	4	111.002																																													
2	F1000W	FASTR1	10	1	1	Dither 1	4	4	111.002																																													
3	F1280W	FASTR1	10	1	1	Dither 1	4	4	111.002																																													
Special Requirements	<p>Group Observations 5, 6, Non-interruptible</p>																																																					

Proposal 4237 - Observation 6 - AGN Feedback and Radio Jet Driven Outflows in 3C 305

Wed Apr 03 20:02:17 GMT 2024

Observation	<p>Proposal 4237, Observation 6: 3C305_OFF_MIRI_IM</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</p> <p>Background Observation For: [3C305_MIRI_IM (Obs 5)]</p>										
Diagnostics	(Visit 6:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.										
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous		
	(3)	3C-305-OFF	RA: 14 49 24.6188 (222.3525783d) Dec: +63 14 50.21 (63.24728d) Equinox: J2000			Proper Motion RA: 0 sec of time/yr Proper Motion Dec: 0 arcsec/yr Epoch of Position: 2015.5					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Galaxy</i></p> <p><i>Description=[Active galactic nuclei, Radio galaxies, Radio jets]</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	CYCLING	1	4		1	1			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	F770W	FASTR1	10	1	1	Dither 1	4	4	111.002	
	2	F1000W	FASTR1	10	1	1	Dither 1	4	4	111.002	
	3	F1280W	FASTR1	10	1	1	Dither 1	4	4	111.002	
Special Requirements	Group Observations 5, 6, Non-interruptible										

Proposal 4237 - Observation 4 - AGN Feedback and Radio Jet Driven Outflows in 3C 305

Wed Apr 03 20:02:17 GMT 2024

Observation	<p>Proposal 4237, Observation 4: 3C305_NIRCAM_IM</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCAM Imaging</p>									
Diagnostics	(Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.									
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous	
	(2)	3C-305	RA: 14 49 21.5926 (222.3399692d) Dec: +63 16 13.81 (63.27050d) Equinox: J2000			Proper Motion RA: 0 sec of time/yr Proper Motion Dec: 0 arcsec/yr Epoch of Position: 2015.5				
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Galaxy</i></p> <p><i>Description=[Active galactic nuclei, Radio galaxies, Radio jets]</i></p>									
Template	Module		Subarray			Target Placement				
	B		FULL			Module Gap				
Dithers	#	Primary Dither Type		Primary Dithers		Subpixel Dither Type		Dither Size		Subpixel Positions
	1	INTRASCA		2		STANDARD		8" (SMALL)		3
Spectral Elements	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
	1	F182M	F335M	RAPID	8	1	6	6	515.365	
	2	F150W	F277W	RAPID	8	1	6	6	515.365	
Special Requirements	Offset 38.0 arcsec, 37.0 arcsec									

Proposal 4237 - Observation 7 - AGN Feedback and Radio Jet Driven Outflows in 3C 305

Wed Apr 03 20:02:17 GMT 2024

Observation	<p>Proposal 4237, Observation 7: 3C305_NIRCAM_IM</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCAM Imaging</p>									
Diagnostics	(Visit 7:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.									
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous	
	(2)	3C-305	RA: 14 49 21.5926 (222.3399692d) Dec: +63 16 13.81 (63.27050d) Equinox: J2000			Proper Motion RA: 0 sec of time/yr Proper Motion Dec: 0 arcsec/yr Epoch of Position: 2015.5				
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Galaxy</i></p> <p><i>Description=[Active galactic nuclei, Radio galaxies, Radio jets]</i></p>									
Template	Module		Subarray			Target Placement				
	B		FULL			Module Gap				
Dithers	#	Primary Dither Type		Primary Dithers	Subpixel Dither Type		Dither Size	Subpixel Positions		
	1	INTRASCA		2	STANDARD		8" (SMALL)	3		
Spectral Elements	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
	1	F182M	F335M	RAPID	8	1	6	6	515.365	
	2	F150W	F277W	RAPID	8	1	6	6	515.365	
Special Requirements	Offset 38.0 arcsec, 37.0 arcsec									