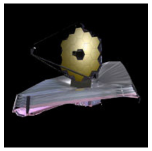

7169 - Dissecting the Arches cluster: An ideal test bed to study the metal-rich Universe

Cycle: 4, Proposal Category: GO

INVESTIGATORS

Name	*Institution*
Alexandre Legault (PI) (ESA Member)	**Centro de Astrobiologia - CAB**
Dr. Alexander W. Fullerton (CoI)	Space Telescope Science Institute
Prof. Artemio Herrero (CoI) (ESA Member)	Instituto de Astrofisica de Canarias
Dr. Bruno Rodriguez Del Pino (CoI) (ESA Member)	Centro de Astrobiologia - CAB
Dr. Christopher Evans (CoI) (ESA Member)	Space Telescope Science Institute - ESA - JWST
Dr. Donald F. Figer (CoI) (US Admin CoI)	Rochester Institute of Technology
Dr. Daniel J. Lennon (CoI) (ESA Member)	Instituto de Astrofisica de Canarias
Dr. D. John Hillier (CoI)	University of Pittsburgh
Mr. Edwin Alexani (CoI)	Rochester Institute of Technology
Dr. Frank Tramper (CoI) (ESA Member)	Centro de Astrobiologia - CAB
Dr. Ignacio Negueruela (CoI) (ESA Member)	Universidad de Alicante, Dpto de Fisica Aplicada
Dr. Joachim Puls (CoI) (ESA Member)	Universitats-Sternwarte Munchen
Dr. Lee Patrick (CoI) (ESA Member)	Centro de Astrobiologia - CAB
Dr. Miriam Garcia (CoI) (ESA Member)	Centro de Astrobiologia - CAB
Dr. Paco Najarro (CoI) (ESA Member)	Centro de Astrobiologia - CAB
Raul Castellanos (CoI) (ESA Member)	Centro de Astrobiologia - CAB
Dr. Rainer Schoedel (CoI) (ESA Member)	Instituto de Astrofisica de Andalucia (IAA)

OBSERVATIONS

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
Mosaics - Regular				

Folder	Observation	Label	Observing Template	Science Target
	1	Arches Cluster - Regular - Band 2 - Reduced Leakcals	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	2	Arches Cluster - Regular - Band 2 - Reduced Leakcals	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	3	Arches Cluster - Regular - Band 2 - Reduced Leakcals	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	4	Arches Cluster - Regular - Band 2 - Reduced Leakcals	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	5	Arches Cluster - Regular - Band 2	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	6	Arches Cluster - Regular - Band 2	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	7	Arches Cluster - Regular - Band 2	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	8	Arches Cluster - Regular two-in-one - Band 3 - Reduced Leakcal	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	9	Arches Cluster - Regular two-in-one - Band 3 - Reduced Leakcal	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	10	Arches Cluster - Regular two-in-one - Band 3 - Reduced Leakcal	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	11	Arches Cluster - Regular two-in-one - Band 3 - Reduced Leakcal	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	12	Arches Cluster - Regular two-in-one - Band 3	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	13	Arches Cluster - Regular two-in-one - Band 3	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	14	Arches Cluster - Regular two-in-one - Band 3	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	15	Arches Cluster - Regular two-in-one - Band 3	NIRSpec IFU Spectroscopy	(1) CenterIFUArches

Folder	***Observation***	***Label***	***Observing Template***	***Science Target***
	16	Arches Cluster - Regular two-in-one - Band 3	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
Mosaics - Bright Objects				
	17	Arches Cluster - Bright Objects two-in-one - Band 3 - Reduced Leakcal	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	18	Arches Cluster - Bright Objects two-in-one - Band 3	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	19	Arches Cluster - Bright Objects two-in-one - Band 3	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	20	Arches Cluster - Bright Objects two-in-one - Band 3	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	21	Arches Cluster - Bright Objects - Band 2	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	22	Arches Cluster - Bright Objects - Band 2	NIRSpec IFU Spectroscopy	(1) CenterIFUArches
	23	Arches Cluster - Bright Objects - Band 2 - Reduced Leakcals	NIRSpec IFU Spectroscopy	(1) CenterIFUArches

ABSTRACT

Located at the centre of the Milky Way, the Arches cluster is a metal-rich, young massive star cluster, pervaded by massive stars that populate the cluster mass-function up to the highest masses. Its proximity, compactness, and youth, combined with the unprecedented spectroscopic sensitivity of JWST NIRSpec, enables --for the first time-- a detailed census and characterization of its heavily reddened massive cohort. We propose NIRSpec IFU spectroscopic observations covering 1.66 to 5.27 µm of a significant fraction of the Arches, down to early B-dwarfs, at a modest observational cost. Our results will allow for the first comprehensive test of the validity of current models of radiation driven winds in a high-metallicity environment. We will also obtain a direct measurement of the extinction towards each star, breaking current degeneracies that plague ground-based and space photometric studies. Quantitative spectroscopic analysis of the rich suite of H-, He-, and metal-line diagnostics with state-of-the-art model atmosphere programs will return accurate fundamental stellar properties, including masses and mass-loss rates. This will provide a gauge of the mechanical energy, momentum and ionizing power provided by the cluster to its environment, as well as the cluster mass function and its potential top-heavy nature. Consequently, the Arches cluster will become the prototypical template for understanding clusters and their environments in more

distant, metal-rich, massive star-forming galaxies.

OBSERVING DESCRIPTION
The program consists of a NIRSpec IFU mosaic with 29 tiles of 3.0"x3.0". The mosaic is composed of two different kinds of tiles.

The provided coordinates roughly match the cluster center (e.g. Hosek et al. 2022).

The proper motion of the cluster is small, of the order of 1 mas/yr (Hosek et al. 2022), hence negligible for the observational window.

-Tiles with bright objects:
Grating: G235H
Blocking Filter: F170LP
Aperture: 0.11"
Dithering pattern: 4-Point-Dither
Detector strategy: FULL-frame with NRSRAPID read-out pattern. 5 groups per integration. 4 integrations per exposure.

Grating: G395H
Blocking Filter: F290LP
Aperture: 0.11"
Dithering pattern: 4-Point-Dither
Detector strategy: FULL-frame with NRSRAPID read-out pattern. 2 groups per integration. 8 integrations per exposure.

-Regular tiles:
Grating: G235H
Blocking Filter: F170LP
Aperture: 0.11"
Dithering pattern: 4-Point-Dither
Detector strategy: FULL-frame with NRSIRS2RAPID read-out pattern. 14 groups per integration. 1 integrations per exposure.

Grating: G395H

Blocking Filter: F290LP

Aperture: 0.11"

Dithering pattern: 4-Point-Dither

Detector strategy: FULL-frame with NRSIRS2RAPID read-out pattern. 9 groups per integration. 1 integrations per exposure.

The mosaic has been designed for a specific V3PA = 90 degrees angle.

No TA is requested. The pointing accuracy delivered by the observatory is enough.

Our observational window coincides with the Micrometeoroid Avoidance Zone (MAZ).

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d)	Proper Motion RA: -0.96 mas/yr	
		Dec: -28 49 19.93 (-28.82220d)	Proper Motion Dec: -2.29 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Observation

Proposal 7169, Observation 1: Arches Cluster - Regular - Band 2 - Reduced Leakcals Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.46

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
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d)	Proper Motion RA: -0.96 mas/yr	
		Dec: -28 49 19.93 (-28.82220d)	Proper Motion Dec: -2.29 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	0.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

Spectral Elements

#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	G235H/F170LP	NRSIRS2RAPID	14	2	false	true	NONE	4	8	1750.667	256619.53
2	G235H/F170LP	NRSIRS2RAPID	14	2	true	false	NONE	1	2	437.667	256619.53

Special Requirements	
	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 2: Arches Cluster - Regular - Band 2 - Reduced Leakcals Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.46

Diagnostics

(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d) Dec: -28 49 19.93 (-28.82220d) Equinox: J2000	Proper Motion RA: -0.96 mas/yr Proper Motion Dec: -2.29 mas/yr Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	0.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

Spectral Elements

#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	G235H/F170LP	NRSIRS2RAPID	14	2	false	true	NONE	4	8	1750.667	256619.53
2	G235H/F170LP	NRSIRS2RAPID	14	2	true	false	NONE	1	2	437.667	256619.53

Special Requirements	
	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 3: Arches Cluster - Regular - Band 2 - Reduced Leakcals Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.46

Diagnostics

(Visit 3:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d)	Proper Motion RA: -0.96 mas/yr	
		Dec: -28 49 19.93 (-28.82220d)	Proper Motion Dec: -2.29 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	0.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

Spectral Elements

#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	G235H/F170LP	NRSIRS2RAPID	14	2	false	true	NONE	4	8	1750.667	256619.53
2	G235H/F170LP	NRSIRS2RAPID	14	2	true	false	NONE	1	2	437.667	256619.53

Special Requirements	
	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 4: Arches Cluster - Regular - Band 2 - Reduced Leakcals Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.46

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
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d)	Proper Motion RA: -0.96 mas/yr	
		Dec: -28 49 19.93 (-28.82220d)	Proper Motion Dec: -2.29 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	0.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

Spectral Elements

#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	G235H/F170LP	NRSIRS2RAPID	14	2	false	true	NONE	4	8	1750.667	256619.53
2	G235H/F170LP	NRSIRS2RAPID	14	2	true	false	NONE	1	2	437.667	256619.53

Special Requirements	
	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 5: Arches Cluster - Regular - Band 2

Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.46

Diagnostics

(Visit 5:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d) Dec: -28 49 19.93 (-28.82220d) Equinox: J2000	Proper Motion RA: -0.96 mas/yr Proper Motion Dec: -2.29 mas/yr Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	0.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

Spectral Elements

#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	G235H/F170LP	NRSIRS2RAPID	14	2	false	true	NONE	4	8	1750.667	256619.53
2	G235H/F170LP	NRSIRS2RAPID	14	2	true	true	NONE	4	8	1750.667	256619.53

Special Requirements	
	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 6: Arches Cluster - Regular - Band 2

Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.46

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
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d)	Proper Motion RA: -0.96 mas/yr	
		Dec: -28 49 19.93 (-28.82220d)	Proper Motion Dec: -2.29 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	0.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

Spectral Elements

#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	G235H/F170LP	NRSIRS2RAPID	14	2	false	true	NONE	4	8	1750.667	256619.53
2	G235H/F170LP	NRSIRS2RAPID	14	2	true	true	NONE	4	8	1750.667	256619.53

Special Requirements	
	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 7: Arches Cluster - Regular - Band 2

Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.46

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
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d) Dec: -28 49 19.93 (-28.82220d) Equinox: J2000	Proper Motion RA: -0.96 mas/yr Proper Motion Dec: -2.29 mas/yr Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	0.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

Spectral Elements

#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	G235H/F170LP	NRSIRS2RAPID	14	2	false	true	NONE	4	8	1750.667	256619.53
2	G235H/F170LP	NRSIRS2RAPID	14	2	true	true	NONE	4	8	1750.667	256619.53

Special Requirements	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 8: Arches Cluster - Regular two-in-one - Band 3 - Reduced Leakcal Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.44

Diagnostics

(Visit 8:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d) Dec: -28 49 19.93 (-28.82220d) Equinox: J2000	Proper Motion RA: -0.96 mas/yr Proper Motion Dec: -2.29 mas/yr Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	50.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	G395H/F290LP	NRSIRS2RAPID	9	2	false	true	NONE	4	8	1167.111	256619.48
2	G395H/F290LP	NRSIRS2RAPID	9	2	true	false	NONE	1	2	291.778	256619.48

Special Requirements	
	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 9: Arches Cluster - Regular two-in-one - Band 3 - Reduced Leakcal
Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.44

Diagnostics

(Visit 9:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d)	Proper Motion RA: -0.96 mas/yr	
		Dec: -28 49 19.93 (-28.82220d)	Proper Motion Dec: -2.29 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	50.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	G395H/F290LP	NRSIRS2RAPID	9	2	false	true	NONE	4	8	1167.111	256619.48
2	G395H/F290LP	NRSIRS2RAPID	9	2	true	false	NONE	1	2	291.778	256619.48

Special Requirements	
	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 10: Arches Cluster - Regular two-in-one - Band 3 - Reduced Leakcal Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.44

Diagnostics

(Visit 10:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d)	Proper Motion RA: -0.96 mas/yr	
		Dec: -28 49 19.93 (-28.82220d)	Proper Motion Dec: -2.29 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	50.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	G395H/F290LP	NRSIRS2RAPID	9	2	false	true	NONE	4	8	1167.111	256619.48
2	G395H/F290LP	NRSIRS2RAPID	9	2	true	false	NONE	1	2	291.778	256619.48

Special Requirements	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 11: Arches Cluster - Regular two-in-one - Band 3 - Reduced Leakcal Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.44

Diagnostics

(Visit 11:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d) Dec: -28 49 19.93 (-28.82220d) Equinox: J2000	Proper Motion RA: -0.96 mas/yr Proper Motion Dec: -2.29 mas/yr Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	50.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	G395H/F290LP	NRSIRS2RAPID	9	2	false	true	NONE	4	8	1167.111	256619.48
2	G395H/F290LP	NRSIRS2RAPID	9	2	true	false	NONE	1	2	291.778	256619.48

Special Requirements	
	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 12: Arches Cluster - Regular two-in-one - Band 3

Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.44

Diagnostics

(Visit 12:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d) Dec: -28 49 19.93 (-28.82220d) Equinox: J2000	Proper Motion RA: -0.96 mas/yr Proper Motion Dec: -2.29 mas/yr Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	50.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	G395H/F290LP	NRSIRS2RAPID	9	2	false	true	NONE	4	8	1167.111	256619.48
2	G395H/F290LP	NRSIRS2RAPID	9	2	true	true	NONE	4	8	1167.111	256619.48

Special Requirements	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 13: Arches Cluster - Regular two-in-one - Band 3

Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.44

Diagnostics

(Visit 13:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d)	Proper Motion RA: -0.96 mas/yr	
		Dec: -28 49 19.93 (-28.82220d)	Proper Motion Dec: -2.29 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	50.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	G395H/F290LP	NRSIRS2RAPID	9	2	false	true	NONE	4	8	1167.111	256619.48
2	G395H/F290LP	NRSIRS2RAPID	9	2	true	true	NONE	4	8	1167.111	256619.48

Special Requirements	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 14: Arches Cluster - Regular two-in-one - Band 3 Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.44

Diagnostics

(Visit 14:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d) Dec: -28 49 19.93 (-28.82220d) Equinox: J2000	Proper Motion RA: -0.96 mas/yr Proper Motion Dec: -2.29 mas/yr Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	50.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	G395H/F290LP	NRSIRS2RAPID	9	2	false	true	NONE	4	8	1167.111	256619.48
2	G395H/F290LP	NRSIRS2RAPID	9	2	true	true	NONE	4	8	1167.111	256619.48

Special Requirements	
	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 15: Arches Cluster - Regular two-in-one - Band 3 Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.44

Diagnostics

(Visit 15:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d) Dec: -28 49 19.93 (-28.82220d) Equinox: J2000	Proper Motion RA: -0.96 mas/yr Proper Motion Dec: -2.29 mas/yr Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	50.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	G395H/F290LP	NRSIRS2RAPID	9	2	false	true	NONE	4	8	1167.111	256619.48
2	G395H/F290LP	NRSIRS2RAPID	9	2	true	true	NONE	4	8	1167.111	256619.48

Special Requirements	
	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 16: Arches Cluster - Regular two-in-one - Band 3 Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.44

Diagnostics

(Visit 16:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d) Dec: -28 49 19.93 (-28.82220d) Equinox: J2000	Proper Motion RA: -0.96 mas/yr Proper Motion Dec: -2.29 mas/yr Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	50.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	G395H/F290LP	NRSIRS2RAPID	9	2	false	true	NONE	4	8	1167.111	256619.48
2	G395H/F290LP	NRSIRS2RAPID	9	2	true	true	NONE	4	8	1167.111	256619.48

Special Requirements	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 17: Arches Cluster - Bright Objects two-in-one - Band 3 - Reduced Leakcal

Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.49

Diagnostics

(Visit 17:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d)	Proper Motion RA: -0.96 mas/yr	
		Dec: -28 49 19.93 (-28.82220d)	Proper Motion Dec: -2.29 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	50.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	G395H/F290LP	NRSRAPID	4	8	false	true	NONE	4	32	1717.883	256619.51
2	G395H/F290LP	NRSRAPID	4	8	true	false	NONE	1	8	429.471	256619.51

Special Requirements	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 18: Arches Cluster - Bright Objects two-in-one - Band 3 Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.49

Diagnostics

(Visit 18:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d) Dec: -28 49 19.93 (-28.82220d) Equinox: J2000	Proper Motion RA: -0.96 mas/yr Proper Motion Dec: -2.29 mas/yr Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	50.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	G395H/F290LP	NRSRAPID	4	8	false	true	NONE	4	32	1717.883	256619.51
2	G395H/F290LP	NRSRAPID	4	8	true	true	NONE	4	32	1717.883	256619.51

Special Requirements	
	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 19: Arches Cluster - Bright Objects two-in-one - Band 3

Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.49

Diagnostics

(Visit 19:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d) Dec: -28 49 19.93 (-28.82220d) Equinox: J2000	Proper Motion RA: -0.96 mas/yr Proper Motion Dec: -2.29 mas/yr Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	50.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	G395H/F290LP	NRSRAPID	4	8	false	true	NONE	4	32	1717.883	256619.51
2	G395H/F290LP	NRSRAPID	4	8	true	true	NONE	4	32	1717.883	256619.51

Special Requirements	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 20: Arches Cluster - Bright Objects two-in-one - Band 3

Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.49

Diagnostics

(Visit 20:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d)	Proper Motion RA: -0.96 mas/yr	
		Dec: -28 49 19.93 (-28.82220d)	Proper Motion Dec: -2.29 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	50.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	G395H/F290LP	NRSRAPID	4	8	false	true	NONE	4	32	1717.883	256619.51
2	G395H/F290LP	NRSRAPID	4	8	true	true	NONE	4	32	1717.883	256619.51

Special Requirements	
	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 21: Arches Cluster - Bright Objects - Band 2

Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.52

Diagnostics

(Visit 21:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d)	Proper Motion RA: -0.96 mas/yr	
		Dec: -28 49 19.93 (-28.82220d)	Proper Motion Dec: -2.29 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	0.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

Spectral Elements

#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	G235H/F170LP	NRSRAPID	10	4	false	true	NONE	4	16	1889.672	256619.47
2	G235H/F170LP	NRSRAPID	10	4	true	true	NONE	4	16	1889.672	256619.47

Special Requirements	
	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 22: Arches Cluster - Bright Objects - Band 2

Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.52

Diagnostics

(Visit 22:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d)	Proper Motion RA: -0.96 mas/yr	
		Dec: -28 49 19.93 (-28.82220d)	Proper Motion Dec: -2.29 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	0.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

Spectral Elements

#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	G235H/F170LP	NRSRAPID	10	4	false	true	NONE	4	16	1889.672	256619.47
2	G235H/F170LP	NRSRAPID	10	4	true	true	NONE	4	16	1889.672	256619.47

Special Requirements	
	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)

Observation

Proposal 7169, Observation 23: Arches Cluster - Bright Objects - Band 2 - Reduced Leakcals Wed Jul 16 19:00:24 GMT 2025

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Additional ETC was done to verify the SNR of the fainter targets: 256619.52

Diagnostics

(Visit 23:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	CenterIFUArches	RA: 17 45 50.6783 (266.4611596d)	Proper Motion RA: -0.96 mas/yr	
		Dec: -28 49 19.93 (-28.82220d)	Proper Motion Dec: -2.29 mas/yr	
		Equinox: J2000	Epoch of Position: 2000	

Comments: The proper motion (Hosek et al. 2022) could offset the mosaic and the targets by 0.0001 mas in RA and 0.0003 mas in DEC the mosaic and the targets. This is negligible.
Category=Stellar Cluster
Description=[O clusters, Open star clusters, Young star clusters]
Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
11	11	0.0	0.0	0.0	0.0	ROW_ORDER

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

Spectral Elements

#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	G235H/F170LP	NRSRAPID	10	4	false	true	NONE	4	16	1889.672	256619.47
2	G235H/F170LP	NRSRAPID	10	4	true	false	NONE	1	4	472.418	256619.47

Special Requirements	Aperture PA Range 228.97164917 to 228.97164917 Degrees (V3 90.0 to 90.0)