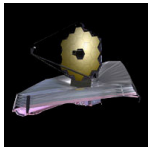

# 7973 - Mid-Infrared Abundances of Gaseous Environments (MIRAGE): A MIR Approach to the Abundance Discrepancy

Cycle: 4, Proposal Category: GO

**INVESTIGATORS**

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**OBSERVATIONS**

| *Folder* | *Observation* | *Label* | *Observing Template* | *Science Target* |
|---|---|---|---|---|
| Observation Folder | | | | |
| | 1 | UM461 | MIRI Medium Resolution Spectroscopy | (1) UM461 |
| | 2 | UM461-BKG | MIRI Medium Resolution Spectroscopy | (2) UM461-BKG |
| | 3 | KUG1138+327 | MIRI Medium Resolution Spectroscopy | (3) KUG1138+327 |
| | 4 | KUG1138+327-BKG | MIRI Medium Resolution Spectroscopy | (4) KUG1138+327-BKG |
| | 5 | HS1028+3843 | MIRI Medium Resolution Spectroscopy | (5) HS1028+3843 |
| | 6 | HS1028+3843-BKG | MIRI Medium Resolution Spectroscopy | (6) HS1028+3843-BKG |

| *Folder* | *Observation* | *Label* | *Observing Template* | *Science Target* |
|---|---|---|---|---|
| | 9 | HS0134+3415 | MIRI Medium Resolution Spectroscopy | (9) HS0134+3415 |
| | 10 | HS0134+3415-BKG | MIRI Medium Resolution Spectroscopy | (10) HS0134+3415-BKG |
| | 11 | HS0811+4913 | MIRI Medium Resolution Spectroscopy | (11) HS0811+4913 |
| | 12 | HS0811+4913-BKG | MIRI Medium Resolution Spectroscopy | (12) HS0811+4913-BKG |
| | 13 | J1136+4709 | MIRI Medium Resolution Spectroscopy | (13) J1136+4709 |
| | 14 | J1136+4709-BKG | MIRI Medium Resolution Spectroscopy | (14) J1136+4709-BKG |
| | 15 | SBS1415+437 | MIRI Medium Resolution Spectroscopy | (15) SBS1415+437 |
| | 16 | SBS1415+437-BKG | MIRI Medium Resolution Spectroscopy | (16) SBS1415+437-BKG |
| | 17 | J1331+4151 | MIRI Medium Resolution Spectroscopy | (17) J1331+4151 |
| | 18 | J1331+4151-BKG | MIRI Medium Resolution Spectroscopy | (18) J1331+4151-BKG |
| | 19 | HS0837+4717 | MIRI Medium Resolution Spectroscopy | (19) HS0837+4717 |
| | 20 | HS0837+4717-BKG | MIRI Medium Resolution Spectroscopy | (20) HS0837+4717-BKG |
| | 21 | LEDA279 | MIRI Medium Resolution Spectroscopy | (21) LEDA2790884 |
| | 22 | LEDA279-BKG | MIRI Medium Resolution Spectroscopy | (22) LEDA2790884-BKG |
| | 23 | SBS1420+544 | MIRI Medium Resolution Spectroscopy | (23) SBS1420+544 |
| | 24 | SBS1420+544-BKG | MIRI Medium Resolution Spectroscopy | (24) SBS1420+544-BKG |
| | 25 | J2310-0211 | MIRI Medium Resolution Spectroscopy | (25) J2310-0211 |
| | 26 | J2310-0211-BKG | MIRI Medium Resolution Spectroscopy | (26) J2310-0211-BKG |
| | 27 | HS0122+0743 | MIRI Medium Resolution Spectroscopy | (27) HS0122+0743 |
| | 28 | HS0122+0743-BKG | MIRI Medium Resolution Spectroscopy | (28) HS0122+0743-BKG |

**ABSTRACT**

The metallicity of the Interstellar Medium (ISM) directly traces star-formation and is a strong indicator of galaxy evolution. However, the methods used to measure the ISM metallicity are a matter of intense debate. Namely, abundances measured from optical temperature (Te) sensitive collisionally-excited lines (CELs) are ~2 times lower than abundances derived using metal recombination lines of the same ion. This Abundance Discrepancy (AD) calls into question the true abundance scale of the ISM, complicating our interpretation of chemical enrichment in local and high-z star-forming galaxies.

Te inhomogeneities in the ISM have been argued to be a main contributor to the AD, which can be directly assessed with the Te-insensitive MIR fine-structure lines of Ne, S, and Ar. These emission lines enable an alternative abundance measurement and, when compared to metallicities derived from optical CELs, directly probe the magnitude of Te variations. Prior MIR observations could not explore this abundance method owing to a

combination of poor sensitivity and inability to aperture match to ground-based data. JWST/MIRI, with its IFU capabilities and superior sensitivity, allows for the only direct comparison of MIR and optical ionic abundances. We propose the Mid-Infrared Abundances of Gaseous Environments (MIRAGE) survey to obtain the most accurate MIR gas-phase abundances to date. Combined with high-quality optical/NIR spectroscopy, MIRAGE will definitively address inhomogeneities in the ISM (both temperature and density fluctuations) as a potential source of the AD and resolve whether such fluctuations should be accounted for when deriving chemical abundances from optical CELs.

**OBSERVING DESCRIPTION**

We propose MIRAGE, the first large-scale MIR abundance survey in the era of JWST. Our observations target 14 local, low-metallicity dwarf galaxies and H II regions with existing high-quality optical/NIR spectra to study the chemical abundance trends measured from the MIR fine-structure lines. MIRI/MRS is the only instrument/observing mode capable of simultaneously measuring the required emission lines (including the faint H I recombination lines) while matching the apertures used in ground-based observations of the same regions.

MIRI/MRS Science: We require full MIR spectroscopic coverage to measure the [Ne III]15.6um, [S III]18.7um, and [Ar III]9.0um fine-structure lines and the H I recombination lines PfA and HuA. The exposure times were determined using the JWST ETC v4.0, which has been updated to account for the temporal behavior of the reduced count rates in MIRI/MRS. This effect is most significant for Channel 4, which contains the [S III] fine-structure line.

To infer the MIR emission line fluxes in each target, we use the measured optical HB, [Ne III] 3868, [S III] 9532, and [Ar III] 7135 emission line fluxes as well as the gas-phase physical conditions (Te and ne) from the existing optical spectrum. Using the optical CEL and MIR fine-structure line emissivities, we infer the MIR fine-structure line fluxes at the given Te+ne of the nebula. We then assume that the source is characterized by a symmetric 2D Gaussian profile with standard deviation determined by the size of the ionized region from the ground-based optical data. To measure robust MIR ionic abundances, we require S/N > 25 at HuA line center when using an aperture of equal size to the ground-based optical extraction aperture. This sets the groups/integration for Band A, which contains the HuA recombination line (the faintest line required for the MIRAGE science goals); we then verify that the same number of groups in Bands A, B, and C produce high S/N (>50) detections in each of the fine-structure lines of interest when using the same extraction area. We also check that the requested groups/integration is < 20% of the groups to reach saturation for a point source with the same emission line fluxes, ensuring that the cores of the bright lines will not saturate.

We use FASTR1, the default readout mode, when the groups/integration is <= 150. However, due to the sequential nature of our science+background observations (see below), longer exposures require the use of the SLOWR1 readout mode to avoid data excess warnings. We use a 4pt dither

optimized for extended sources to mitigate the impacts of cosmic rays and to provide improved spatial sampling of each target. Target Acquisition imaging is not required for MIRAGE because pointing precision is not needed to < 0.14". All targets are contained within Channel 2, so no PA limits are requested.

MIRI/MRS Background: MIRAGE targets local star-forming regions that are extended and require a dedicated observation to remove the MIR thermal background. These background observations are taken in a non-interruptible sequence before the science observations, as recommended by STScI. For each science target, we select a background pointing that is separated from the science observations by at least 1 arcminute and that is free from emission in SDSS, WISE, 2MASS, and GALEX imaging. Following the recommendations of STScI, the MIRI detector readout matches the configuration used for the science observation, the exposure time is selected to match the science observations in each Band, and a 2pt, background-optimized dither pattern is employed.

**Fixed Targets**

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (1) | UM461 | RA: 11 51 33.3623 (177.8890096d)<br>Dec: -02 22 22.16 (-2.37282d)<br>Equinox: J2000 | Epoch of Position: 2000 | |
| *Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.*<br>*Category=Galaxy*<br>*Description=[Compact dwarf galaxy]*<br>*Extended=YES* | | | | |
| (2) | UM461-BKG | RA: 11 51 33.3623 (177.8890096d)<br>Dec: -02 22 22.16 (-2.37282d)<br>Equinox: J2000 | | |
| *Comments:*<br>*Category=Calibration*<br>*Description=[Telescope/sky background]*<br>*Extended=YES* | | | | |
| (3) | KUG1138+327 | RA: 11 41 7.4960 (175.2812333d)<br>Dec: +32 25 37.33 (32.42704d)<br>Equinox: J2000 | Epoch of Position: 2000 | |
| *Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.*<br>*Category=Galaxy*<br>*Description=[Compact dwarf galaxy]*<br>*Extended=YES* | | | | |
| (4) | KUG1138+327-BKG | RA: 11 41 7.4960 (175.2812333d)<br>Dec: +32 25 37.33 (32.42704d)<br>Equinox: J2000 | | |
| *Comments:*<br>*Category=Calibration*<br>*Description=[Telescope/sky background]*<br>*Extended=YES* | | | | |
| (5) | HS1028+3843 | RA: 10 31 51.6330 (157.9651375d)<br>Dec: +38 28 8.41 (38.46900d)<br>Equinox: J2000 | Proper Motion RA: 0.476 mas/yr<br>Proper Motion Dec: 0.19 mas/yr<br>Epoch of Position: 2000 | |
| *Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.*<br>*Category=Galaxy*<br>*Description=[Compact dwarf galaxy]*<br>*Extended=YES* | | | | |
| (6) | HS1028+3843-BKG | RA: 10 31 51.6330 (157.9651375d)<br>Dec: +38 28 8.41 (38.46900d)<br>Equinox: J2000 | | |
| *Comments:*<br>*Category=Calibration*<br>*Description=[Telescope/sky background]*<br>*Extended=YES* | | | | |
| (9) | HS0134+3415 | RA: 01 37 13.7175 (24.3071562d)<br>Dec: +34 31 10.67 (34.51963d)<br>Equinox: J2000 | Epoch of Position: 2000 | |
| *Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.*<br>*Category=Galaxy*<br>*Description=[Blue compact dwarf galaxies]*<br>*Extended=YES* | | | | |

| | | | |
|---|---|---|---|
| (10) | HS0134+3415-BKG | RA: 01 37 13.7175 (24.3071562d)<br>Dec: +34 31 10.67 (34.51963d)<br>Equinox: J2000 | |

*Comments:*
*Category=Calibration*
*Description=[Telescope/sky background]*
*Extended=YES*

| | | | |
|---|---|---|---|
| (11) | HS0811+4913 | RA: 08 14 47.5388 (123.6980783d)<br>Dec: +49 04 0.70 (49.06686d)<br>Equinox: J2000 | Epoch of Position: 2000 |

*Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.*
*Category=ISM*
*Description=[H II regions]*
*Extended=YES*

| | | | |
|---|---|---|---|
| (12) | HS0811+4913-BKG | RA: 08 14 47.5388 (123.6980783d)<br>Dec: +49 04 0.70 (49.06686d)<br>Equinox: J2000 | |

*Comments:*
*Category=Calibration*
*Description=[Telescope/sky background]*
*Extended=YES*

| | | | |
|---|---|---|---|
| (13) | J1136+4709 | RA: 11 36 23.8200 (174.0992500d)<br>Dec: +47 09 29.08 (47.15808d)<br>Equinox: J2000 | Epoch of Position: 2000 |

*Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.*
*Category=Galaxy*
*Description=[Compact dwarf galaxy]*
*Extended=YES*

| | | | |
|---|---|---|---|
| (14) | J1136+4709-BKG | RA: 11 36 23.8200 (174.0992500d)<br>Dec: +47 09 29.08 (47.15808d)<br>Equinox: J2000 | |

*Comments:*
*Category=Calibration*
*Description=[Telescope/sky background]*
*Extended=YES*

| | | | |
|---|---|---|---|
| (15) | SBS1415+437 | RA: 14 17 1.4000 (214.2558333d)<br>Dec: +43 30 5.00 (43.50139d)<br>Equinox: J2000 | |

*Comments:*
*Category=Galaxy*
*Description=[Dwarf galaxies]*
*Extended=YES*

| | | | |
|---|---|---|---|
| (16) | SBS1415+437-BKG | RA: 14 17 1.4000 (214.2558333d)<br>Dec: +43 30 5.00 (43.50139d)<br>Equinox: J2000 | |

*Comments:*
*Category=Calibration*
*Description=[Telescope/sky background]*
*Extended=YES*

| | | | |
|---|---|---|---|
| (17) | J1331+4151 | RA: 13 31 26.9100 (202.8621250d)<br>Dec: +41 51 48.30 (41.86342d)<br>Equinox: J2000 | Epoch of Position: 2000 |
| *Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.*<br>*Category=Galaxy*<br>*Description=[Emission line galaxies]*<br>*Extended=YES* | | | |
| (18) | J1331+4151-BKG | RA: 13 31 24.3300 (202.8513750d)<br>Dec: +41 50 50.72 (41.84742d)<br>Equinox: J2000 | |
| *Comments:*<br>*Category=Calibration*<br>*Description=[Telescope/sky background]*<br>*Extended=YES* | | | |
| (19) | HS0837+4717 | RA: 08 40 29.9113 (130.1246304d)<br>Dec: +47 07 10.24 (47.11951d)<br>Equinox: J2000 | Proper Motion RA: -0.187 mas/yr<br>Proper Motion Dec: 0.658 mas/yr<br>Epoch of Position: 2000 |
| *Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.*<br>*Category=Galaxy*<br>*Description=[Compact galaxies]*<br>*Extended=YES* | | | |
| (20) | HS0837+4717-BKG | RA: 08 40 34.2400 (130.1426667d)<br>Dec: +47 06 23.30 (47.10647d)<br>Equinox: J2000 | |
| *Comments:*<br>*Category=Calibration*<br>*Description=[Telescope/sky background]*<br>*Extended=YES* | | | |
| (21) | LEDA2790884 | RA: 08 25 55.5166 (126.4813192d)<br>Dec: +35 32 31.83 (35.54218d)<br>Equinox: J2000 | Epoch of Position: 2000 |
| *Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.*<br>*Category=Galaxy*<br>*Description=[Blue compact dwarf galaxies]*<br>*Extended=YES* | | | |
| (22) | LEDA2790884-BKG | RA: 08 25 50.3900 (126.4599583d)<br>Dec: +35 32 45.55 (35.54599d)<br>Equinox: J2000 | |
| *Comments:*<br>*Category=Calibration*<br>*Description=[Telescope/sky background]*<br>*Extended=YES* | | | |
| (23) | SBS1420+544 | RA: 14 22 38.8500 (215.6618750d)<br>Dec: +54 14 9.22 (54.23589d)<br>Equinox: J2000 | |
| *Comments:*<br>*Category=Galaxy*<br>*Description=[Dwarf galaxies]*<br>*Extended=YES* | | | |

| | | |
|---|---|---|
| (24) | SBS1420+544-BKG | RA: 14 22 45.2389 (215.6884954d)<br>Dec: +54 13 38.99 (54.22750d)<br>Equinox: J2000 |
| *Comments:*<br>*Category=Calibration*<br>*Description=[Telescope/sky background]*<br>*Extended=YES* | | |
| (25) | J2310-0211 | RA: 23 10 48.8355 (347.7034812d)<br>Dec: -02 11 5.84 (-2.18496d)<br>Equinox: J2000 |
| *Comments:*<br>*Category=Galaxy*<br>*Description=[Dwarf galaxies]*<br>*Extended=YES* | | |
| (26) | J2310-0211-BKG | RA: 23 10 48.8355 (347.7034812d)<br>Dec: -02 11 5.84 (-2.18496d)<br>Equinox: J2000 |
| *Comments:*<br>*Category=Calibration*<br>*Description=[Telescope/sky background]*<br>*Extended=YES* | | |
| (27) | HS0122+0743 | RA: 01 25 34.1899 (21.3924579d)<br>Dec: +07 59 24.38 (7.99011d)<br>Equinox: J2000 |
| *Comments:*<br>*Category=ISM*<br>*Description=[H II regions]* | | |
| (28) | HS0122+0743-BKG | RA: 01 25 34.1899 (21.3924579d)<br>Dec: +07 59 24.38 (7.99011d)<br>Equinox: J2000 |
| *Comments:*<br>*Category=Calibration*<br>*Description=[Telescope/sky background]* | | |

## Observation

**Proposal 7973, Observation 1: UM461**

Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observations:[UM461-BKG (Obs 2)]

## Diagnostics

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

(UM461 (Obs 1)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (1) | UM461 | RA: 11 51 33.3623 (177.8890096d)<br>Dec: -02 22 22.16 (-2.37282d)<br>Equinox: J2000 | Epoch of Position: 2000 | |

*Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.*
*Category=Galaxy*
*Description=[Compact dwarf galaxy]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | All MRS | YES | FULL | Allow Auto Reorder |

## 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 | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | IMAGER | F770W | FASTR1 | 10 | 6 | 1 | Dither 1 | 4 | 24 | 721.51 | |
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 65 | 1 | 1 | Dither 1 | 4 | 4 | 721.51 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 65 | 1 | 1 | Dither 1 | 4 | 4 | 721.51 | |
| 2 | | IMAGER | F1000W | FASTR1 | 10 | 6 | 1 | Dither 1 | 4 | 24 | 721.51 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 65 | 1 | 1 | Dither 1 | 4 | 4 | 721.51 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 65 | 1 | 1 | Dither 1 | 4 | 4 | 721.51 | |
| 3 | | IMAGER | F1130W | FASTR1 | 10 | 6 | 1 | Dither 1 | 4 | 24 | 721.51 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 65 | 1 | 1 | Dither 1 | 4 | 4 | 721.51 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 65 | 1 | 1 | Dither 1 | 4 | 4 | 721.51 | |

| Special Requirements | Sequence Observations 2, 1 (reordered), Non-interruptible<br>Same V3 PA 1, 2 (Aperture PAs differ) |
|---|---|

## Observation

**Proposal 7973, Observation 2: UM461-BKG** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observation For: [UM461 (Obs 1)]

## Diagnostics

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

(UM461-BKG (Obs 2)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (2) | UM461-BKG | RA: 11 51 33.3623 (177.8890096d)<br>Dec: -02 22 22.16 (-2.37282d)<br>Equinox: J2000 | | |

*Comments:*
*Category=Calibration*
*Description=[Telescope/sky background]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | Imager | YES | FULL | Allow Auto Reorder |

## Dithers

| # | Dither Type | Optimized For | Direction |
|---|---|---|---|
| 1 | 2-Point | BACKGROUND | NEGATIVE |

## Spectral Elements

| # | Wavelength Range | Detector | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Dither | Total Dithers | Total Integrations | Total Exposure Time | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | IMAGER | F770W | FASTR1 | 10 | 6 | 1 | Dither 1 | 2 | 12 | 360.755 | |
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 65 | 1 | 1 | Dither 1 | 2 | 2 | 360.755 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 65 | 1 | 1 | Dither 1 | 2 | 2 | 360.755 | |
| 2 | | IMAGER | F1000W | FASTR1 | 10 | 6 | 1 | Dither 1 | 2 | 12 | 360.755 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 65 | 1 | 1 | Dither 1 | 2 | 2 | 360.755 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 65 | 1 | 1 | Dither 1 | 2 | 2 | 360.755 | |
| 3 | | IMAGER | F1130W | FASTR1 | 10 | 6 | 1 | Dither 1 | 2 | 12 | 360.755 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 65 | 1 | 1 | Dither 1 | 2 | 2 | 360.755 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 65 | 1 | 1 | Dither 1 | 2 | 2 | 360.755 | |

| Special Requirements | |
|---|---|
| | Aperture PA Range 4.83544897 to 55.83544897 Degrees (V3 0.0 to 51.0)<br>Aperture PA Range 66.83544897 to 109.63544897 Degrees (V3 62.0 to 104.8)<br>Aperture PA Range 120.03544897 to 122.83544897 Degrees (V3 115.2 to 118.0)<br>Aperture PA Range 132.83544897 to 156.33544897 Degrees (V3 128.0 to 151.5)<br>Aperture PA Range 166.43544897 to 169.73544897 Degrees (V3 161.6 to 164.9)<br>Aperture PA Range 180.03544897 to 239.93544897 Degrees (V3 175.2 to 235.1)<br>Aperture PA Range 247.83544897 to 257.83544897 Degrees (V3 243.0 to 253.0)<br>Aperture PA Range 266.03544897 to 287.83544897 Degrees (V3 261.2 to 283.0)<br>Aperture PA Range 296.83544897 to 315.13544897 Degrees (V3 292.0 to 310.3)<br>Aperture PA Range 325.83544897 to 352.83544897 Degrees (V3 321.0 to 348.0)<br><br>Sequence Observations 2, 1 (reordered), Non-interruptible<br>Same V3 PA 1, 2 (Aperture PAs differ) |

## Observation

**Proposal 7973, Observation 3: KUG1138+327** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observations:[KUG1138+327-BKG (Obs 4)]

## Diagnostics

(Visit 3:1) Warning (Form): Data Excess over lower threshold

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

(KUG1138+327 (Obs 3)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (3) | KUG1138+327 | RA: 11 41 7.4960 (175.2812333d)<br>Dec: +32 25 37.33 (32.42704d)<br>Equinox: J2000 | Epoch of Position: 2000 | |

*Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.*
*Category=Galaxy*
*Description=[Compact dwarf galaxy]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | All MRS | YES | FULL | Allow Auto Reorder |

## 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 | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | IMAGER | F770W | FASTR1 | 10 | 12 | 1 | Dither 1 | 4 | 48 | 1454.121 | |
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 140 | 1 | 1 | Dither 1 | 4 | 4 | 1554.022 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 140 | 1 | 1 | Dither 1 | 4 | 4 | 1554.022 | |
| 2 | | IMAGER | F1000W | FASTR1 | 10 | 12 | 1 | Dither 1 | 4 | 48 | 1454.121 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 140 | 1 | 1 | Dither 1 | 4 | 4 | 1554.022 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 140 | 1 | 1 | Dither 1 | 4 | 4 | 1554.022 | |
| 3 | | IMAGER | F1130W | FASTR1 | 10 | 12 | 1 | Dither 1 | 4 | 48 | 1454.121 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 140 | 1 | 1 | Dither 1 | 4 | 4 | 1554.022 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 140 | 1 | 1 | Dither 1 | 4 | 4 | 1554.022 | |

| | |
|---|---|
| **Special Requirements** | Sequence Observations 4, 3 (reordered), Non-interruptible<br>Same V3 PA 3, 4 (Aperture PAs differ) |

## Observation

**Proposal 7973, Observation 4: KUG1138+327-BKG** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observation For: [KUG1138+327 (Obs 3)]

## Diagnostics

(Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(KUG1138+327-BKG (Obs 4)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (4) | KUG1138+327-BKG | RA: 11 41 7.4960 (175.2812333d)<br>Dec: +32 25 37.33 (32.42704d)<br>Equinox: J2000 | | |

*Comments:*
*Category=Calibration*
*Description=[Telescope/sky background]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | Imager | YES | FULL | Allow Auto Reorder |

## Dithers

| # | Dither Type | Optimized For | Direction |
|---|---|---|---|
| 1 | 2-Point | BACKGROUND | NEGATIVE |

## Spectral Elements

| # | Wavelength Range | Detector | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Dither | Total Dithers | Total Integrations | Total Exposure Time | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | IMAGER | F770W | FASTR1 | 10 | 12 | 1 | Dither 1 | 2 | 24 | 727.06 | |
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 140 | 1 | 1 | Dither 1 | 2 | 2 | 777.011 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 140 | 1 | 1 | Dither 1 | 2 | 2 | 777.011 | |
| 2 | | IMAGER | F1000W | FASTR1 | 10 | 12 | 1 | Dither 1 | 2 | 24 | 727.06 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 140 | 1 | 1 | Dither 1 | 2 | 2 | 777.011 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 140 | 1 | 1 | Dither 1 | 2 | 2 | 777.011 | |
| 3 | | IMAGER | F1130W | FASTR1 | 10 | 12 | 1 | Dither 1 | 2 | 24 | 727.06 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 140 | 1 | 1 | Dither 1 | 2 | 2 | 777.011 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 140 | 1 | 1 | Dither 1 | 2 | 2 | 777.011 | |

| Special Requirements | |
|---|---|
| | Aperture PA Range 0.03544897 to 31.03544897 Degrees (V3 355.2 to 26.2)<br>Aperture PA Range 37.93544897 to 65.93544897 Degrees (V3 33.1 to 61.1)<br>Aperture PA Range 84.73544897 to 107.53544897 Degrees (V3 79.9 to 102.7)<br>Aperture PA Range 117.73544897 to 128.63544897 Degrees (V3 112.9 to 123.8)<br>Aperture PA Range 137.63544897 to 146.43544897 Degrees (V3 132.8 to 141.6)<br>Aperture PA Range 152.23544897 to 185.33544897 Degrees (V3 147.4 to 180.5)<br>Aperture PA Range 193.63544897 to 197.73544897 Degrees (V3 188.8 to 192.9)<br>Aperture PA Range 222.13544897 to 236.43544897 Degrees (V3 217.3 to 231.6)<br>Aperture PA Range 311.63544897 to 316.13544897 Degrees (V3 306.8 to 311.3)<br>Aperture PA Range 340.43544897 to 349.83544897 Degrees (V3 335.6 to 345.0)<br><br>Sequence Observations 4, 3 (reordered), Non-interruptible<br>Same V3 PA 3, 4 (Aperture PAs differ) |

## Observation

**Proposal 7973, Observation 5: HS1028+3843** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observations:[HS1028+3843-BKG (Obs 6)]

## Diagnostics

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

(HS1028+3843 (Obs 5)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (5) | HS1028+3843 | RA: 10 31 51.6330 (157.9651375d) | Proper Motion RA: 0.476 mas/yr | |
| | | Dec: +38 28 8.41 (38.46900d) | Proper Motion Dec: 0.19 mas/yr | |
| | | Equinox: J2000 | Epoch of Position: 2000 | |

*Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.*
*Category=Galaxy*
*Description=[Compact dwarf galaxy]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | All MRS | YES | FULL | Allow Auto Reorder |

## 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 | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | IMAGER | F770W | FASTR1 | 10 | 8 | 1 | Dither 1 | 4 | 32 | 965.714 | |
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 92 | 1 | 1 | Dither 1 | 4 | 4 | 1021.215 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 92 | 1 | 1 | Dither 1 | 4 | 4 | 1021.215 | |
| 2 | | IMAGER | F1000W | FASTR1 | 10 | 8 | 1 | Dither 1 | 4 | 32 | 965.714 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 92 | 1 | 1 | Dither 1 | 4 | 4 | 1021.215 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 92 | 1 | 1 | Dither 1 | 4 | 4 | 1021.215 | |
| 3 | | IMAGER | F1130W | FASTR1 | 10 | 8 | 1 | Dither 1 | 4 | 32 | 965.714 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 92 | 1 | 1 | Dither 1 | 4 | 4 | 1021.215 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 92 | 1 | 1 | Dither 1 | 4 | 4 | 1021.215 | |

| Special Requirements | Sequence Observations 6, 5 (reordered), Non-interruptible<br>Same V3 PA 5, 6 (Aperture PAs differ) |
|---|---|

## Observation

**Proposal 7973, Observation 6: HS1028+3843-BKG** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observation For: [HS1028+3843 (Obs 5)]

## Diagnostics

(Visit 6:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(HS1028+3843-BKG (Obs 6)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (6) | HS1028+3843-BKG | RA: 10 31 51.6330 (157.9651375d)<br>Dec: +38 28 8.41 (38.46900d)<br>Equinox: J2000 | | |

*Comments:*
*Category=Calibration*
*Description=[Telescope/sky background]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | Imager | YES | FULL | Allow Auto Reorder |

## Dithers

| # | Dither Type | Optimized For | Direction |
|---|---|---|---|
| 1 | 2-Point | BACKGROUND | NEGATIVE |

## Spectral Elements

| # | Wavelength Range | Detector | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Dither | Total Dithers | Total Integrations | Total Exposure Time | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | IMAGER | F770W | FASTR1 | 10 | 8 | 1 | Dither 1 | 2 | 16 | 482.857 | |
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 92 | 1 | 1 | Dither 1 | 2 | 2 | 510.607 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 92 | 1 | 1 | Dither 1 | 2 | 2 | 510.607 | |
| 2 | | IMAGER | F1000W | FASTR1 | 10 | 8 | 1 | Dither 1 | 2 | 16 | 482.857 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 92 | 1 | 1 | Dither 1 | 2 | 2 | 510.607 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 92 | 1 | 1 | Dither 1 | 2 | 2 | 510.607 | |
| 3 | | IMAGER | F1130W | FASTR1 | 10 | 8 | 1 | Dither 1 | 2 | 16 | 482.857 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 92 | 1 | 1 | Dither 1 | 2 | 2 | 510.607 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 92 | 1 | 1 | Dither 1 | 2 | 2 | 510.607 | |

| Special Requirements | |
|---|---|
| | Aperture PA Range 67.43544897 to 88.43544897 Degrees (V3 62.6 to 83.6)<br>Aperture PA Range 96.83544897 to 144.63544897 Degrees (V3 92.0 to 139.8)<br>Aperture PA Range 149.73544897 to 187.53544897 Degrees (V3 144.9 to 182.7)<br>Aperture PA Range 198.03544897 to 228.43544897 Degrees (V3 193.2 to 223.6)<br>Aperture PA Range 233.73544897 to 240.73544897 Degrees (V3 228.9 to 235.9)<br>Aperture PA Range 247.03544897 to 268.83544897 Degrees (V3 242.2 to 264.0)<br>Aperture PA Range 309.43544897 to 317.23544897 Degrees (V3 304.6 to 312.4)<br>Aperture PA Range 328.03544897 to 340.93544897 Degrees (V3 323.2 to 336.1)<br>Aperture PA Range 351.53544897 to 32.13544897 Degrees (V3 346.7 to 27.3)<br><br>Sequence Observations 6, 5 (reordered), Non-interruptible<br>Same V3 PA 5, 6 (Aperture PAs differ) |

## Observation

**Proposal 7973, Observation 9: HS0134+3415** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observations:[HS0134+3415-BKG (Obs 10)]

## Diagnostics

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

(HS0134+3415 (Obs 9)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (9) | HS0134+3415 | RA: 01 37 13.7175 (24.3071562d)<br>Dec: +34 31 10.67 (34.51963d)<br>Equinox: J2000 | Epoch of Position: 2000 | |

*Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.*
*Category=Galaxy*
*Description=[Blue compact dwarf galaxies]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | All MRS | YES | FULL | Allow Auto Reorder |

## 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 | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | IMAGER | F770W | FASTR1 | 10 | 9 | 1 | Dither 1 | 4 | 36 | 1087.816 | |
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 105 | 1 | 1 | Dither 1 | 4 | 4 | 1165.517 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 105 | 1 | 1 | Dither 1 | 4 | 4 | 1165.517 | |
| 2 | | IMAGER | F1000W | FASTR1 | 10 | 9 | 1 | Dither 1 | 4 | 36 | 1087.816 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 105 | 1 | 1 | Dither 1 | 4 | 4 | 1165.517 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 105 | 1 | 1 | Dither 1 | 4 | 4 | 1165.517 | |
| 3 | | IMAGER | F1130W | FASTR1 | 10 | 9 | 1 | Dither 1 | 4 | 36 | 1087.816 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 105 | 1 | 1 | Dither 1 | 4 | 4 | 1165.517 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 105 | 1 | 1 | Dither 1 | 4 | 4 | 1165.517 | |

| Special Requirements | Sequence Observations 10, 9 (reordered), Non-interruptible<br>Same V3 PA 9, 10 (Aperture PAs differ) |
|---|---|

## Observation

**Proposal 7973, Observation 10: HS0134+3415-BKG** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observation For: [HS0134+3415 (Obs 9)]

## Diagnostics

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

(HS0134+3415-BKG (Obs 10)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (10) | HS0134+3415-BKG | RA: 01 37 13.7175 (24.3071562d)<br>Dec: +34 31 10.67 (34.51963d)<br>Equinox: J2000 | | |

*Comments:*
*Category=Calibration*
*Description=[Telescope/sky background]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | Imager | YES | FULL | Allow Auto Reorder |

## Dithers

| # | Dither Type | Optimized For | Direction |
|---|---|---|---|
| 1 | 2-Point | BACKGROUND | NEGATIVE |

## Spectral Elements

| # | Wavelength Range | Detector | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Dither | Total Dithers | Total Integrations | Total Exposure Time | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | IMAGER | F770W | FASTR1 | 10 | 9 | 1 | Dither 1 | 2 | 18 | 543.908 | |
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 105 | 1 | 1 | Dither 1 | 2 | 2 | 582.758 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 105 | 1 | 1 | Dither 1 | 2 | 2 | 582.758 | |
| 2 | | IMAGER | F1000W | FASTR1 | 10 | 9 | 1 | Dither 1 | 2 | 18 | 543.908 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 105 | 1 | 1 | Dither 1 | 2 | 2 | 582.758 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 105 | 1 | 1 | Dither 1 | 2 | 2 | 582.758 | |
| 3 | | IMAGER | F1130W | FASTR1 | 10 | 9 | 1 | Dither 1 | 2 | 18 | 543.908 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 105 | 1 | 1 | Dither 1 | 2 | 2 | 582.758 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 105 | 1 | 1 | Dither 1 | 2 | 2 | 582.758 | |

| Special Requirements | |
|---|---|
| | Aperture PA Range 4.83544897 to 23.53544897 Degrees (V3 0.0 to 18.7)<br>Aperture PA Range 33.83544897 to 69.83544897 Degrees (V3 29.0 to 65.0)<br>Aperture PA Range 79.63544897 to 91.83544897 Degrees (V3 74.8 to 87.0)<br>Aperture PA Range 113.03544897 to 137.53544897 Degrees (V3 108.2 to 132.7)<br>Aperture PA Range 148.53544897 to 187.83544897 Degrees (V3 143.7 to 183.0)<br>Aperture PA Range 195.23544897 to 211.43544897 Degrees (V3 190.4 to 206.6)<br>Aperture PA Range 218.13544897 to 310.23544897 Degrees (V3 213.3 to 305.4)<br>Aperture PA Range 318.73544897 to 333.93544897 Degrees (V3 313.9 to 329.1)<br>Aperture PA Range 339.93544897 to 353.73544897 Degrees (V3 335.1 to 348.9)<br><br>Sequence Observations 10, 9 (reordered), Non-interruptible<br>Same V3 PA 9, 10 (Aperture PAs differ) |

## Observation

**Proposal 7973, Observation 11: HS0811+4913**

Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observations:[HS0811+4913-BKG (Obs 12)]

## Diagnostics

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

(HS0811+4913 (Obs 11)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (11) | HS0811+4913 | RA: 08 14 47.5388 (123.6980783d)<br>Dec: +49 04 0.70 (49.06686d)<br>Equinox: J2000 | Epoch of Position: 2000 | |

*Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.*
*Category=ISM*
*Description=[H II regions]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | All MRS | YES | FULL | Allow Auto Reorder |

## 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 | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | IMAGER | F770W | FASTR1 | 10 | 9 | 1 | Dither 1 | 4 | 36 | 1087.816 | |
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 100 | 1 | 1 | Dither 1 | 4 | 4 | 1110.016 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 100 | 1 | 1 | Dither 1 | 4 | 4 | 1110.016 | |
| 2 | | IMAGER | F1000W | FASTR1 | 10 | 9 | 1 | Dither 1 | 4 | 36 | 1087.816 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 100 | 1 | 1 | Dither 1 | 4 | 4 | 1110.016 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 100 | 1 | 1 | Dither 1 | 4 | 4 | 1110.016 | |
| 3 | | IMAGER | F1130W | FASTR1 | 10 | 9 | 1 | Dither 1 | 4 | 36 | 1087.816 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 100 | 1 | 1 | Dither 1 | 4 | 4 | 1110.016 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 100 | 1 | 1 | Dither 1 | 4 | 4 | 1110.016 | |

| Special Requirements | Sequence Observations 12, 11 (reordered), Non-interruptible<br>Same V3 PA 11, 12 (Aperture PAs differ) |
|---|---|

## Observation

**Proposal 7973, Observation 12: HS0811+4913-BKG** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observation For: [HS0811+4913 (Obs 11)]

## Diagnostics

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

(HS0811+4913-BKG (Obs 12)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (12) | HS0811+4913-BKG | RA: 08 14 47.5388 (123.6980783d)<br>Dec: +49 04 0.70 (49.06686d)<br>Equinox: J2000 | | |

*Comments:*
*Category=Calibration*
*Description=[Telescope/sky background]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | Imager | YES | FULL | Allow Auto Reorder |

## Dithers

| # | Dither Type | Optimized For | Direction |
|---|---|---|---|
| 1 | 2-Point | BACKGROUND | NEGATIVE |

## Spectral Elements

| # | Wavelength Range | Detector | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Dither | Total Dithers | Total Integrations | Total Exposure Time | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | IMAGER | F770W | FASTR1 | 10 | 9 | 1 | Dither 1 | 2 | 18 | 543.908 | |
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 100 | 1 | 1 | Dither 1 | 2 | 2 | 555.008 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 100 | 1 | 1 | Dither 1 | 2 | 2 | 555.008 | |
| 2 | | IMAGER | F1000W | FASTR1 | 10 | 9 | 1 | Dither 1 | 2 | 18 | 543.908 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 100 | 1 | 1 | Dither 1 | 2 | 2 | 555.008 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 100 | 1 | 1 | Dither 1 | 2 | 2 | 555.008 | |
| 3 | | IMAGER | F1130W | FASTR1 | 10 | 9 | 1 | Dither 1 | 2 | 18 | 543.908 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 100 | 1 | 1 | Dither 1 | 2 | 2 | 555.008 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 100 | 1 | 1 | Dither 1 | 2 | 2 | 555.008 | |

| Special Requirements | |
|---|---|
| | Aperture PA Range 93.28544897 to 101.83544897 Degrees (V3 88.45 to 97.0)<br>Aperture PA Range 111.33544897 to 138.43544897 Degrees (V3 106.5 to 133.6)<br>Aperture PA Range 150.43544897 to 160.43544897 Degrees (V3 145.6 to 155.6)<br>Aperture PA Range 171.23544897 to 175.23544897 Degrees (V3 166.4 to 170.4)<br><br>Sequence Observations 12, 11 (reordered), Non-interruptible<br>Same V3 PA 11, 12 (Aperture PAs differ) |

## Observation

**Proposal 7973, Observation 13: J1136+4709** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observations:[J1136+4709-BKG (Obs 14)]

## Diagnostics

(Visit 13:1) Warning (Form): Data Excess over lower threshold

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

(J1136+4709 (Obs 13)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (13) | J1136+4709 | RA: 11 36 23.8200 (174.0992500d)<br>Dec: +47 09 29.08 (47.15808d)<br>Equinox: J2000 | Epoch of Position: 2000 | |

*Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.*
*Category=Galaxy*
*Description=[Compact dwarf galaxy]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | All MRS | YES | FULL | Allow Auto Reorder |

## 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 | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | IMAGER | F770W | FASTR1 | 10 | 10 | 1 | Dither 1 | 4 | 40 | 1209.917 | |
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 105 | 2 | 1 | Dither 1 | 4 | 8 | 2342.134 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 105 | 2 | 1 | Dither 1 | 4 | 8 | 2342.134 | |
| 2 | | IMAGER | F1000W | FASTR1 | 10 | 10 | 1 | Dither 1 | 4 | 40 | 1209.917 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 105 | 2 | 1 | Dither 1 | 4 | 8 | 2342.134 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 105 | 2 | 1 | Dither 1 | 4 | 8 | 2342.134 | |
| 3 | | IMAGER | F1130W | FASTR1 | 10 | 10 | 1 | Dither 1 | 4 | 40 | 1209.917 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 105 | 2 | 1 | Dither 1 | 4 | 8 | 2342.134 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 105 | 2 | 1 | Dither 1 | 4 | 8 | 2342.134 | |

| Special Requirements | Sequence Observations 14, 13 (reordered), Non-interruptible<br>Same V3 PA 13, 14 (Aperture PAs differ) |
|---|---|

## Observation

**Proposal 7973, Observation 14: J1136+4709-BKG** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observation For: [J1136+4709 (Obs 13)]

## Diagnostics

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

(J1136+4709-BKG (Obs 14)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (14) | J1136+4709-BKG | RA: 11 36 23.8200 (174.0992500d)<br>Dec: +47 09 29.08 (47.15808d)<br>Equinox: J2000 | | |

*Comments:*
*Category=Calibration*
*Description=[Telescope/sky background]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | Imager | YES | FULL | Allow Auto Reorder |

## Dithers

| # | Dither Type | Optimized For | Direction |
|---|---|---|---|
| 1 | 2-Point | BACKGROUND | NEGATIVE |

## Spectral Elements

| # | Wavelength Range | Detector | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Dither | Total Dithers | Total Integrations | Total Exposure Time | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | IMAGER | F770W | FASTR1 | 10 | 10 | 1 | Dither 1 | 2 | 20 | 604.959 | |
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 105 | 2 | 1 | Dither 1 | 2 | 4 | 1171.067 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 105 | 2 | 1 | Dither 1 | 2 | 4 | 1171.067 | |
| 2 | | IMAGER | F1000W | FASTR1 | 10 | 10 | 1 | Dither 1 | 2 | 20 | 604.959 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 105 | 2 | 1 | Dither 1 | 2 | 4 | 1171.067 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 105 | 2 | 1 | Dither 1 | 2 | 4 | 1171.067 | |
| 3 | | IMAGER | F1130W | FASTR1 | 10 | 10 | 1 | Dither 1 | 2 | 20 | 604.959 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 105 | 2 | 1 | Dither 1 | 2 | 4 | 1171.067 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 105 | 2 | 1 | Dither 1 | 2 | 4 | 1171.067 | |

| Special Requirements | |
|---|---|
| | Aperture PA Range 36.83544897 to 46.68544897 Degrees (V3 32.0 to 41.85)<br>Aperture PA Range 67.52544897 to 133.23544897 Degrees (V3 62.69 to 128.4)<br>Aperture PA Range 137.63544897 to 139.13544897 Degrees (V3 132.8 to 134.3)<br>Aperture PA Range 151.63544897 to 156.73544897 Degrees (V3 146.8 to 151.9)<br>Aperture PA Range 165.73544897 to 193.33544897 Degrees (V3 160.9 to 188.5)<br>Aperture PA Range 207.73544897 to 229.73544897 Degrees (V3 202.9 to 224.9)<br>Aperture PA Range 239.53544897 to 250.83544897 Degrees (V3 234.7 to 246.0)<br>Aperture PA Range 259.03544897 to 282.43544897 Degrees (V3 254.2 to 277.6)<br>Aperture PA Range 291.33544897 to 311.83544897 Degrees (V3 286.5 to 307.0)<br>Aperture PA Range 327.03544897 to 338.83544897 Degrees (V3 322.2 to 334.0)<br><br>Sequence Observations 14, 13 (reordered), Non-interruptible<br>Same V3 PA 13, 14 (Aperture PAs differ) |

## Observation

**Proposal 7973, Observation 15: SBS1415+437** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observations:[SBS1415+437-BKG (Obs 16)]

## Diagnostics

(Visit 15:1) Warning (Form): Data Excess over lower threshold

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

(SBS1415+437 (Obs 15)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (15) | SBS1415+437 | RA: 14 17 1.4000 (214.2558333d)<br>Dec: +43 30 5.00 (43.50139d)<br>Equinox: J2000 | | |

*Comments:*
*Category=Galaxy*
*Description=[Dwarf galaxies]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | All MRS | YES | FULL | Allow Auto Reorder |

## 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 | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | IMAGER | F1130W | FASTR1 | 10 | 10 | 1 | Dither 1 | 4 | 40 | 1209.917 | |
| 1 | LONG(C) | MRSLONG | | FASTR1 | 102 | 2 | 1 | Dither 1 | 4 | 8 | 2275.533 | |
| 1 | LONG(C) | MRSSHORT | | FASTR1 | 102 | 2 | 1 | Dither 1 | 4 | 8 | 2275.533 | |
| 2 | | IMAGER | F1000W | FASTR1 | 10 | 10 | 1 | Dither 1 | 4 | 40 | 1209.917 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 102 | 2 | 1 | Dither 1 | 4 | 8 | 2275.533 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 102 | 2 | 1 | Dither 1 | 4 | 8 | 2275.533 | |
| 3 | | IMAGER | F770W | FASTR1 | 10 | 10 | 1 | Dither 1 | 4 | 40 | 1209.917 | |
| 3 | SHORT(A) | MRSLONG | | FASTR1 | 102 | 2 | 1 | Dither 1 | 4 | 8 | 2275.533 | |
| 3 | SHORT(A) | MRSSHORT | | FASTR1 | 102 | 2 | 1 | Dither 1 | 4 | 8 | 2275.533 | |

| Special Requirements | Sequence Observations 16, 15 (reordered), Non-interruptible<br>Same V3 PA 15, 16 (Aperture PAs differ) |
|---|---|

## Observation

**Proposal 7973, Observation 16: SBS1415+437-BKG** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observation For: [SBS1415+437 (Obs 15)]

## Diagnostics

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

(SBS1415+437-BKG (Obs 16)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (16) | SBS1415+437-BKG | RA: 14 17 1.4000 (214.2558333d)<br>Dec: +43 30 5.00 (43.50139d)<br>Equinox: J2000 | | |

*Comments:*
*Category=Calibration*
*Description=[Telescope/sky background]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | Imager | YES | FULL | Allow Auto Reorder |

## Dithers

| # | Dither Type | Optimized For | Direction |
|---|---|---|---|
| 1 | 2-Point | BACKGROUND | NEGATIVE |

## Spectral Elements

| # | Wavelength Range | Detector | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Dither | Total Dithers | Total Integrations | Total Exposure Time | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | IMAGER | F1130W | FASTR1 | 10 | 10 | 1 | Dither 1 | 2 | 20 | 604.959 | |
| 1 | LONG(C) | MRSLONG | | FASTR1 | 102 | 2 | 1 | Dither 1 | 2 | 4 | 1137.766 | |
| 1 | LONG(C) | MRSSHORT | | FASTR1 | 102 | 2 | 1 | Dither 1 | 2 | 4 | 1137.766 | |
| 2 | | IMAGER | F1000W | FASTR1 | 10 | 10 | 1 | Dither 1 | 2 | 20 | 604.959 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 102 | 2 | 1 | Dither 1 | 2 | 4 | 1137.766 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 102 | 2 | 1 | Dither 1 | 2 | 4 | 1137.766 | |
| 3 | | IMAGER | F770W | FASTR1 | 10 | 10 | 1 | Dither 1 | 2 | 20 | 604.959 | |
| 3 | SHORT(A) | MRSLONG | | FASTR1 | 102 | 2 | 1 | Dither 1 | 2 | 4 | 1137.766 | |
| 3 | SHORT(A) | MRSSHORT | | FASTR1 | 102 | 2 | 1 | Dither 1 | 2 | 4 | 1137.766 | |

| Special Requirements | |
|---|---|
| | Aperture PA Range 28.85544897 to 35.57544897 Degrees (V3 24.02 to 30.74)<br>Aperture PA Range 44.51544897 to 70.97544897 Degrees (V3 39.68 to 66.14)<br>Aperture PA Range 82.71544897 to 112.53544897 Degrees (V3 77.88 to 107.7)<br>Aperture PA Range 118.43544897 to 123.83544897 Degrees (V3 113.6 to 119.0)<br>Aperture PA Range 133.13544897 to 136.43544897 Degrees (V3 128.3 to 131.6)<br>Aperture PA Range 157.23544897 to 180.63544897 Degrees (V3 152.4 to 175.8)<br>Aperture PA Range 187.73544897 to 220.63544897 Degrees (V3 182.9 to 215.8)<br>Aperture PA Range 228.23544897 to 231.13544897 Degrees (V3 223.4 to 226.3)<br>Aperture PA Range 240.53544897 to 271.93544897 Degrees (V3 235.7 to 267.1)<br>Aperture PA Range 281.53544897 to 286.93544897 Degrees (V3 276.7 to 282.1)<br>Aperture PA Range 295.93544897 to 302.93544897 Degrees (V3 291.1 to 298.1)<br>Aperture PA Range 312.03544897 to 321.43544897 Degrees (V3 307.2 to 316.6)<br>Aperture PA Range 333.13544897 to 347.63544897 Degrees (V3 328.3 to 342.8)<br>Aperture PA Range 359.43544897 to 6.63544897 Degrees (V3 354.6 to 1.8)<br><br>Sequence Observations 16, 15 (reordered), Non-interruptible<br>Same V3 PA 15, 16 (Aperture PAs differ) |

## Observation

**Proposal 7973, Observation 17: J1331+4151** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observations:[J1331+4151-BKG (Obs 18)]

## Diagnostics

(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.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (17) | J1331+4151 | RA: 13 31 26.9100 (202.8621250d)<br>Dec: +41 51 48.30 (41.86342d)<br>Equinox: J2000 | Epoch of Position: 2000 | |

*Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.*
*Category=Galaxy*
*Description=[Emission line galaxies]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | All MRS | NO | FULL | Allow Auto Reorder |

## 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 | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 125 | 2 | 1 | Dither 1 | 4 | 8 | 2786.14 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 125 | 2 | 1 | Dither 1 | 4 | 8 | 2786.14 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 125 | 2 | 1 | Dither 1 | 4 | 8 | 2786.14 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 125 | 2 | 1 | Dither 1 | 4 | 8 | 2786.14 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 125 | 2 | 1 | Dither 1 | 4 | 8 | 2786.14 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 125 | 2 | 1 | Dither 1 | 4 | 8 | 2786.14 | |

| | |
|---|---|
| **Special Requirements** | Sequence Observations 18, 17 (reordered), Non-interruptible |

## Observation

**Proposal 7973, Observation 18: J1331+4151-BKG** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observation For: [J1331+4151 (Obs 17)]

## 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 |
|---|---|---|---|---|
| (18) | J1331+4151-BKG | RA: 13 31 24.3300 (202.8513750d)<br>Dec: +41 50 50.72 (41.84742d)<br>Equinox: J2000 | | |

*Comments:*
*Category=Calibration*
*Description=[Telescope/sky background]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | All MRS | NO | FULL | Allow Auto Reorder |

## Dithers

| # | Dither Type | Optimized For | Direction |
|---|---|---|---|
| 1 | 2-Point | BACKGROUND | NEGATIVE |

## Spectral Elements

| # | Wavelength Range | Detector | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Dither | Total Dithers | Total Integrations | Total Exposure Time | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 125 | 2 | 1 | Dither 1 | 2 | 4 | 1393.07 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 125 | 2 | 1 | Dither 1 | 2 | 4 | 1393.07 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 125 | 2 | 1 | Dither 1 | 2 | 4 | 1393.07 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 125 | 2 | 1 | Dither 1 | 2 | 4 | 1393.07 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 125 | 2 | 1 | Dither 1 | 2 | 4 | 1393.07 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 125 | 2 | 1 | Dither 1 | 2 | 4 | 1393.07 | |

| | |
|---|---|
| **Special Requirements** | Sequence Observations 18, 17 (reordered), Non-interruptible |

## Observation

**Proposal 7973, Observation 19: HS0837+4717** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observations:[HS0837+4717-BKG (Obs 20)]

## 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 |
|---|---|---|---|---|
| (19) | HS0837+4717 | RA: 08 40 29.9113 (130.1246304d) | Proper Motion RA: -0.187 mas/yr | |
| | | Dec: +47 07 10.24 (47.11951d) | Proper Motion Dec: 0.658 mas/yr | |
| | | Equinox: J2000 | Epoch of Position: 2000 | |

*Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.*
*Category=Galaxy*
*Description=[Compact galaxies]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | All MRS | NO | FULL | Allow Auto Reorder |

## 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 | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 100 | 2 | 1 | Dither 1 | 4 | 8 | 2231.132 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 100 | 2 | 1 | Dither 1 | 4 | 8 | 2231.132 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 100 | 2 | 1 | Dither 1 | 4 | 8 | 2231.132 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 100 | 2 | 1 | Dither 1 | 4 | 8 | 2231.132 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 100 | 2 | 1 | Dither 1 | 4 | 8 | 2231.132 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 100 | 2 | 1 | Dither 1 | 4 | 8 | 2231.132 | |

| | |
|---|---|
| **Special Requirements** | Sequence Observations 20, 19 (reordered), Non-interruptible |

## Observation

**Proposal 7973, Observation 20: HS0837+4717-BKG** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observation For: [HS0837+4717 (Obs 19)]

## 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 |
|---|---|---|---|---|
| (20) | HS0837+4717-BKG | RA: 08 40 34.2400 (130.1426667d)<br>Dec: +47 06 23.30 (47.10647d)<br>Equinox: J2000 | | |

*Comments:*
*Category=Calibration*
*Description=[Telescope/sky background]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | All MRS | NO | FULL | Allow Auto Reorder |

## Dithers

| # | Dither Type | Optimized For | Direction |
|---|---|---|---|
| 1 | 2-Point | BACKGROUND | NEGATIVE |

## Spectral Elements

| # | Wavelength Range | Detector | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Dither | Total Dithers | Total Integrations | Total Exposure Time | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 100 | 2 | 1 | Dither 1 | 2 | 4 | 1115.566 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 100 | 2 | 1 | Dither 1 | 2 | 4 | 1115.566 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 100 | 2 | 1 | Dither 1 | 2 | 4 | 1115.566 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 100 | 2 | 1 | Dither 1 | 2 | 4 | 1115.566 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 100 | 2 | 1 | Dither 1 | 2 | 4 | 1115.566 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 100 | 2 | 1 | Dither 1 | 2 | 4 | 1115.566 | |

| Special Requirements | Sequence Observations 20, 19 (reordered), Non-interruptible |
|---|---|

## Observation

**Proposal 7973, Observation 21: LEDA279** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observations:[LEDA279-BKG (Obs 22)]

## Diagnostics

(Visit 21:1) Warning (Form): Data Excess over lower threshold

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

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (21) | LEDA2790884 | RA: 08 25 55.5166 (126.4813192d)<br>Dec: +35 32 31.83 (35.54218d)<br>Equinox: J2000 | Epoch of Position: 2000 | |

*Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.*
*Category=Galaxy*
*Description=[Blue compact dwarf galaxies]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | All MRS | NO | FULL | Allow Auto Reorder |

## 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 | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 135 | 2 | 1 | Dither 1 | 4 | 8 | 3008.143 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 135 | 2 | 1 | Dither 1 | 4 | 8 | 3008.143 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 135 | 2 | 1 | Dither 1 | 4 | 8 | 3008.143 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 135 | 2 | 1 | Dither 1 | 4 | 8 | 3008.143 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 135 | 2 | 1 | Dither 1 | 4 | 8 | 3008.143 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 135 | 2 | 1 | Dither 1 | 4 | 8 | 3008.143 | |

| | |
|---|---|
| **Special Requirements** | Sequence Observations 22, 21 (reordered), Non-interruptible |

## Observation

**Proposal 7973, Observation 22: LEDA279-BKG** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observation For: [LEDA279 (Obs 21)]

## 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 |
|---|---|---|---|---|
| (22) | LEDA2790884-BKG | RA: 08 25 50.3900 (126.4599583d)<br>Dec: +35 32 45.55 (35.54599d)<br>Equinox: J2000 | | |

*Comments:*
*Category=Calibration*
*Description=[Telescope/sky background]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | All MRS | NO | FULL | Allow Auto Reorder |

## Dithers

| # | Dither Type | Optimized For | Direction |
|---|---|---|---|
| 1 | 2-Point | BACKGROUND | NEGATIVE |

## Spectral Elements

| # | Wavelength Range | Detector | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Dither | Total Dithers | Total Integrations | Total Exposure Time | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 135 | 2 | 1 | Dither 1 | 2 | 4 | 1504.072 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 135 | 2 | 1 | Dither 1 | 2 | 4 | 1504.072 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 135 | 2 | 1 | Dither 1 | 2 | 4 | 1504.072 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 135 | 2 | 1 | Dither 1 | 2 | 4 | 1504.072 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 135 | 2 | 1 | Dither 1 | 2 | 4 | 1504.072 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 135 | 2 | 1 | Dither 1 | 2 | 4 | 1504.072 | |

| Special Requirements | Sequence Observations 22, 21 (reordered), Non-interruptible |
|---|---|

## Observation

**Proposal 7973, Observation 23: SBS1420+544** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observations:[SBS1420+544-BKG (Obs 24)]

## 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 |
|---|---|---|---|---|
| (23) | SBS1420+544 | RA: 14 22 38.8500 (215.6618750d)<br>Dec: +54 14 9.22 (54.23589d)<br>Equinox: J2000 | | |

*Comments:*
*Category=Galaxy*
*Description=[Dwarf galaxies]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | All MRS | NO | FULL | Allow Auto Reorder |

## 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 | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | LONG(C) | MRSLONG | | FASTR1 | 107 | 2 | 1 | Dither 1 | 4 | 8 | 2386.534 | |
| 1 | LONG(C) | MRSSHORT | | FASTR1 | 107 | 2 | 1 | Dither 1 | 4 | 8 | 2386.534 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 107 | 2 | 1 | Dither 1 | 4 | 8 | 2386.534 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 107 | 2 | 1 | Dither 1 | 4 | 8 | 2386.534 | |
| 3 | SHORT(A) | MRSLONG | | FASTR1 | 107 | 2 | 1 | Dither 1 | 4 | 8 | 2386.534 | |
| 3 | SHORT(A) | MRSSHORT | | FASTR1 | 107 | 2 | 1 | Dither 1 | 4 | 8 | 2386.534 | |

| Special Requirements | Sequence Observations 24, 23 (reordered), Non-interruptible |
|---|---|

## Observation

**Proposal 7973, Observation 24: SBS1420+544-BKG** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observation For: [SBS1420+544 (Obs 23)]

## Diagnostics

(Visit 24:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (24) | SBS1420+544-BKG | RA: 14 22 45.2389 (215.6884954d)<br>Dec: +54 13 38.99 (54.22750d)<br>Equinox: J2000 | | |

*Comments:*
*Category=Calibration*
*Description=[Telescope/sky background]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | All MRS | NO | FULL | Allow Auto Reorder |

## Dithers

| # | Dither Type | Optimized For | Direction |
|---|---|---|---|
| 1 | 2-Point | BACKGROUND | NEGATIVE |

## Spectral Elements

| # | Wavelength Range | Detector | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Dither | Total Dithers | Total Integrations | Total Exposure Time | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | LONG(C) | MRSLONG | | FASTR1 | 107 | 2 | 1 | Dither 1 | 2 | 4 | 1193.267 | |
| 1 | LONG(C) | MRSSHORT | | FASTR1 | 107 | 2 | 1 | Dither 1 | 2 | 4 | 1193.267 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 107 | 2 | 1 | Dither 1 | 2 | 4 | 1193.267 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 107 | 2 | 1 | Dither 1 | 2 | 4 | 1193.267 | |
| 3 | SHORT(A) | MRSLONG | | FASTR1 | 107 | 2 | 1 | Dither 1 | 2 | 4 | 1193.267 | |
| 3 | SHORT(A) | MRSSHORT | | FASTR1 | 107 | 2 | 1 | Dither 1 | 2 | 4 | 1193.267 | |

| | |
|---|---|
| **Special Requirements** | Sequence Observations 24, 23 (reordered), Non-interruptible |

## Observation

**Proposal 7973, Observation 25: J2310-0211** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observations:[J2310-0211-BKG (Obs 26)]

## Diagnostics

(Visit 25:1) Warning (Form): Data Excess over lower threshold

(Visit 25:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(J2310-0211 (Obs 25)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (25) | J2310-0211 | RA: 23 10 48.8355 (347.7034812d)<br>Dec: -02 11 5.84 (-2.18496d)<br>Equinox: J2000 | | |

*Comments:*
*Category=Galaxy*
*Description=[Dwarf galaxies]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | All MRS | YES | FULL | Allow Auto Reorder |

## 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 | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | IMAGER | F770W | FASTR1 | 10 | 12 | 1 | Dither 1 | 4 | 48 | 1454.121 | |
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 135 | 1 | 1 | Dither 1 | 4 | 4 | 1498.522 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 135 | 1 | 1 | Dither 1 | 4 | 4 | 1498.522 | |
| 2 | | IMAGER | F1000W | FASTR1 | 10 | 12 | 1 | Dither 1 | 4 | 48 | 1454.121 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 135 | 1 | 1 | Dither 1 | 4 | 4 | 1498.522 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 135 | 1 | 1 | Dither 1 | 4 | 4 | 1498.522 | |
| 3 | | IMAGER | F1130W | FASTR1 | 10 | 12 | 1 | Dither 1 | 4 | 48 | 1454.121 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 135 | 1 | 1 | Dither 1 | 4 | 4 | 1498.522 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 135 | 1 | 1 | Dither 1 | 4 | 4 | 1498.522 | |

| Special Requirements | Sequence Observations 26, 25 (reordered), Non-interruptible<br>Same V3 PA 25, 26 (Aperture PAs differ) |
|---|---|

## Observation

**Proposal 7973, Observation 26: J2310-0211-BKG** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observation For: [J2310-0211 (Obs 25)]

## Diagnostics

(Visit 26:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(J2310-0211-BKG (Obs 26)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (26) | J2310-0211-BKG | RA: 23 10 48.8355 (347.7034812d)<br>Dec: -02 11 5.84 (-2.18496d)<br>Equinox: J2000 | | |

*Comments:*
*Category=Calibration*
*Description=[Telescope/sky background]*
*Extended=YES*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | Imager | YES | FULL | Allow Auto Reorder |

## Dithers

| # | Dither Type | Optimized For | Direction |
|---|---|---|---|
| 1 | 2-Point | BACKGROUND | NEGATIVE |

## Spectral Elements

| # | Wavelength Range | Detector | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Dither | Total Dithers | Total Integrations | Total Exposure Time | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | IMAGER | F770W | FASTR1 | 10 | 12 | 1 | Dither 1 | 2 | 24 | 727.06 | |
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 135 | 1 | 1 | Dither 1 | 2 | 2 | 749.261 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 135 | 1 | 1 | Dither 1 | 2 | 2 | 749.261 | |
| 2 | | IMAGER | F1000W | FASTR1 | 10 | 12 | 1 | Dither 1 | 2 | 24 | 727.06 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 135 | 1 | 1 | Dither 1 | 2 | 2 | 749.261 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 135 | 1 | 1 | Dither 1 | 2 | 2 | 749.261 | |
| 3 | | IMAGER | F1130W | FASTR1 | 10 | 12 | 1 | Dither 1 | 2 | 24 | 727.06 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 135 | 1 | 1 | Dither 1 | 2 | 2 | 749.261 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 135 | 1 | 1 | Dither 1 | 2 | 2 | 749.261 | |

| Special Requirements | |
|---|---|
| | Aperture PA Range 3.83544897 to 79.93544897 Degrees (V3 359.0 to 75.1)<br>Aperture PA Range 87.83544897 to 95.73544897 Degrees (V3 83.0 to 90.9)<br>Aperture PA Range 99.83544897 to 131.43544897 Degrees (V3 95.0 to 126.6)<br>Aperture PA Range 139.63544897 to 168.03544897 Degrees (V3 134.8 to 163.2)<br>Aperture PA Range 176.23544897 to 188.13544897 Degrees (V3 171.4 to 183.3)<br>Aperture PA Range 233.93544897 to 329.93544897 Degrees (V3 229.1 to 325.1)<br><br>Sequence Observations 26, 25 (reordered), Non-interruptible<br>Same V3 PA 25, 26 (Aperture PAs differ) |

## Observation

**Proposal 7973, Observation 27: HS0122+0743** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observations:[HS0122+0743-BKG (Obs 28)]

## Diagnostics

(Visit 27:1) Warning (Form): Data Excess over lower threshold

(Visit 27:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(HS0122+0743 (Obs 27)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (27) | HS0122+0743 | RA: 01 25 34.1899 (21.3924579d)<br>Dec: +07 59 24.38 (7.99011d)<br>Equinox: J2000 | | |

*Comments:*
*Category=ISM*
*Description=[H II regions]*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | All MRS | YES | FULL | Allow Auto Reorder |

## 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 | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | IMAGER | F770W | FASTR1 | 10 | 10 | 1 | Dither 1 | 4 | 40 | 1209.917 | |
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 121 | 2 | 1 | Dither 1 | 4 | 8 | 2697.339 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 121 | 2 | 1 | Dither 1 | 4 | 8 | 2697.339 | |
| 2 | | IMAGER | F1000W | FASTR1 | 10 | 10 | 1 | Dither 1 | 4 | 40 | 1209.917 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 121 | 2 | 1 | Dither 1 | 4 | 8 | 2697.339 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 121 | 2 | 1 | Dither 1 | 4 | 8 | 2697.339 | |
| 3 | | IMAGER | F1130W | FASTR1 | 10 | 10 | 1 | Dither 1 | 4 | 40 | 1209.917 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 121 | 2 | 1 | Dither 1 | 4 | 8 | 2697.339 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 121 | 2 | 1 | Dither 1 | 4 | 8 | 2697.339 | |

| Special Requirements | Sequence Observations 28, 27 (reordered), Non-interruptible<br>Same V3 PA 27, 28 (Aperture PAs differ) |
|---|---|

## Observation

**Proposal 7973, Observation 28: HS0122+0743-BKG** Fri Feb 13 23:00:30 GMT 2026

**Diagnostic Status: Warning**

Observing Template: MIRI Medium Resolution Spectroscopy

Background Observation For: [HS0122+0743 (Obs 27)]

## Diagnostics

(Visit 28:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(HS0122+0743-BKG (Obs 28)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---|---|---|---|---|
| (28) | HS0122+0743-BKG | RA: 01 25 34.1899 (21.3924579d)<br>Dec: +07 59 24.38 (7.99011d)<br>Equinox: J2000 | | |

*Comments:*
*Category=Calibration*
*Description=[Telescope/sky background]*

## Acquisition

| # | Target |
|---|---|
| 1 | NONE |

## Template

| AcqFilter | Primary Channel | Simultaneous Imaging | Imager Subarray | Grating Wheel Direction |
|---|---|---|---|---|
| | Imager | YES | FULL | Allow Auto Reorder |

## Dithers

| # | Dither Type | Optimized For | Direction |
|---|---|---|---|
| 1 | 2-Point | BACKGROUND | NEGATIVE |

## Spectral Elements

| # | Wavelength Range | Detector | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Exposures/Dith | Dither | Total Dithers | Total Integrations | Total Exposure Time | Optional ETC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | IMAGER | F770W | FASTR1 | 10 | 10 | 1 | Dither 1 | 2 | 20 | 604.959 | |
| 1 | SHORT(A) | MRSLONG | | FASTR1 | 121 | 2 | 1 | Dither 1 | 2 | 4 | 1348.669 | |
| 1 | SHORT(A) | MRSSHORT | | FASTR1 | 121 | 2 | 1 | Dither 1 | 2 | 4 | 1348.669 | |
| 2 | | IMAGER | F1000W | FASTR1 | 10 | 10 | 1 | Dither 1 | 2 | 20 | 604.959 | |
| 2 | MEDIUM(B) | MRSLONG | | FASTR1 | 121 | 2 | 1 | Dither 1 | 2 | 4 | 1348.669 | |
| 2 | MEDIUM(B) | MRSSHORT | | FASTR1 | 121 | 2 | 1 | Dither 1 | 2 | 4 | 1348.669 | |
| 3 | | IMAGER | F1130W | FASTR1 | 10 | 10 | 1 | Dither 1 | 2 | 20 | 604.959 | |
| 3 | LONG(C) | MRSLONG | | FASTR1 | 121 | 2 | 1 | Dither 1 | 2 | 4 | 1348.669 | |
| 3 | LONG(C) | MRSSHORT | | FASTR1 | 121 | 2 | 1 | Dither 1 | 2 | 4 | 1348.669 | |

| Special Requirements | |
|---|---|
| | Aperture PA Range 109.63544897 to 130.63544897 Degrees (V3 104.8 to 125.8)<br>Aperture PA Range 141.43544897 to 150.73544897 Degrees (V3 136.6 to 145.9)<br>Aperture PA Range 178.63544897 to 228.23544897 Degrees (V3 173.8 to 223.4)<br>Aperture PA Range 232.83544897 to 246.73544897 Degrees (V3 228.0 to 241.9)<br>Aperture PA Range 250.53544897 to 252.43544897 Degrees (V3 245.7 to 247.6)<br>Aperture PA Range 259.43544897 to 265.73544897 Degrees (V3 254.6 to 260.9)<br>Aperture PA Range 272.33544897 to 321.23544897 Degrees (V3 267.5 to 316.4)<br>Aperture PA Range 329.33544897 to 102.73544897 Degrees (V3 324.5 to 97.9)<br><br>Sequence Observations 28, 27 (reordered), Non-interruptible<br>Same V3 PA 27, 28 (Aperture PAs differ) |