



4492 - CAL-MIRI-236 MIRI LRS slit throughput

Cycle: 2, Proposal Category: CAL/MIRI

INVESTIGATORS

| <i>Name</i> | <i>Institution</i> |
|----------------------------------|--|
| Greg Sloan (PI) | Space Telescope Science Institute |
| Katherine Murray (CoI) (Contact) | Space Telescope Science Institute |
| Sarah Kendrew (CoI) (ESA Member) | Space Telescope Science Institute - ESA - JWST |

OBSERVATIONS

| <i>Folder</i> | <i>Observation</i> | <i>Label</i> | <i>Observing Template</i> | <i>Science Target</i> |
|--------------------|--------------------|--------------|----------------------------------|-----------------------|
| Observation Folder | | | | |
| | 1 | Nod 1 scan | MIRI Low Resolution Spectroscopy | (1) BD+60_1753 |
| | 2 | Nod 2 scan | MIRI Low Resolution Spectroscopy | (1) BD+60_1753 |

ABSTRACT

This activity will improve our understanding of the MIRI LRS slit throughput as a function of wavelength and position in the slit by scanning a point source across the slit at the two nominal nod positions. These scans will be the same scans used in Cycle 1. The data will also check the point-spread function (PSF) far from its center and improve our calibration for extended sources. These observations will improve the signal/noise ratio from similar work in Cycle 1 and Commissioning.

This calibration program may change in response to system developments and the final Cycle 2 science program.

OBSERVING DESCRIPTION

This activity scans the standard star BD+60 1753 across the LRS slit in the two nod positions.

JWST Proposal 4492 (Created: Monday, May 1, 2023 at 6:01:51 PM Eastern Standard Time) - Overview

The observations are linked as a non-interruptible sequence and are constrained to be obtained after 31 Aug 2023.

Proposal 4492 - Targets - CAL-MIRI-236 MIRI LRS slit throughput

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|---------------|--|------------|---|--|---------------|
| | (1) | BD+60_1753 | RA: 17 24 52.2754 (261.2178142d) Dec: +60 25 50.75 (60.43076d) Equinox: J2000 | Proper Motion RA: 4.892 mas/yr Proper Motion Dec: 3.759 mas/yr Parallax: 0.0017825" Epoch of Position: 2000.0 | |
| | <i>Comments:</i> Category=Star Description=[A dwarfs] Extended=NO | | | | |

Proposal 4492 - Observation 1 - CAL-MIRI-236 MIRI LRS slit throughput

Mon May 01 23:01:51 GMT 2023

| | | | | | | | | | | |
|------------------------------|---|---------------------------|---|--|-----------------------------------|----------------------------|---------------------------|-------------------------------|----------------------------|---------------|
| Observation | <p>Proposal 4492, Observation 1: Nod 1 scan</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Low Resolution Spectroscopy</p> | | | | | | | | | |
| Diagnostics | <p>(Nod 1 scan (Obs 1)) Warning (Form): Groups/Int cannot be 1, Groups/Int = 2 requires permission and Groups/Int of 3-4 is allowed but not recommended.</p> <p>(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> | | | | | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | | | Miscellaneous | | | |
| | (1) | BD+60_1753 | RA: 17 24 52.2754 (261.2178142d) Dec: +60 25 50.75 (60.43076d) Equinox: J2000 | Proper Motion RA: 4.892 mas/yr Proper Motion Dec: 3.759 mas/yr Parallax: 0.0017825" Epoch of Position: 2000.0 | | | | | | |
| | <p><i>Comments:</i> <i>Category=Star</i> <i>Description=[A dwarfs]</i> <i>Extended=NO</i></p> | | | | | | | | | |
| Acquisition | # | Target | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | |
| | 1 | 1 BD+60_1753 | F1000W | FAST | 4 | 1 | 1 | 11.1 | 150519.03 | |
| Template | Subarray | | | | Obtain Verification Image? | | | | | |
| | FULL | | | | true | | | | | |
| Dithers | # | Dither Type | No. Spectral Steps | Spectral Step Offset | No. Spatial Steps | Spatial Step Offset | | | | |
| | 1 | LONG CROSS SCAN NOD1 | | | | | | | | |
| Pointing Verification | # | PV Readout Pattern | PV Groups/Int | PV Integrations/Exp | PV Total Integrations | PV Exposures/Dith | PV Total Dithers | PV Total Exposure Time | PV ETC Wkbk.Calc ID | Filter |
| | 1 | FASTR1 | 4 | 1 | 1 | 1 | 1 | 11.1 | | F1000W |

Proposal 4492 - Observation 1 - CAL-MIRI-236 MIRI LRS slit throughput

| Spectral Elements | # | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Exposures/Dith | Total Dithers | Total Exposure Time ETC Wkbk.Calc ID |
|----------------------|---|-----------------|------------|------------------|--------------------|----------------|---------------|--------------------------------------|
| | 1 | FASTR1 | 6 | 8 | 136 | 1 | 17 | 2594.662 |
| Special Requirements | After Date 31-AUG-2023 | | | | | | | |
| | Sequence Observations 1, 2, Non-interruptible | | | | | | | |

Proposal 4492 - Observation 2 - CAL-MIRI-236 MIRI LRS slit throughput

Mon May 01 23:01:51 GMT 2023

| | | | | | | | | | | |
|------------------------------|---|---------------------------|---|--|-----------------------------------|----------------------------|---------------------------|-------------------------------|----------------------------|---------------|
| Observation | <p>Proposal 4492, Observation 2: Nod 2 scan</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Low Resolution Spectroscopy</p> | | | | | | | | | |
| Diagnostics | <p>(Nod 2 scan (Obs 2)) Warning (Form): Groups/Int cannot be 1, Groups/Int = 2 requires permission and Groups/Int of 3-4 is allowed but not recommended.</p> <p>(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> | | | | | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | | | Miscellaneous | | | |
| | (1) | BD+60_1753 | RA: 17 24 52.2754 (261.2178142d) Dec: +60 25 50.75 (60.43076d) Equinox: J2000 | Proper Motion RA: 4.892 mas/yr Proper Motion Dec: 3.759 mas/yr Parallax: 0.0017825" Epoch of Position: 2000.0 | | | | | | |
| | <p><i>Comments:</i> <i>Category=Star</i> <i>Description=[A dwarfs]</i> <i>Extended=NO</i></p> | | | | | | | | | |
| Acquisition | # | Target | Filter | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | |
| | 1 | 1 BD+60_1753 | F1000W | FAST | 4 | 1 | 1 | 11.1 | 150519.03 | |
| Template | Subarray | | | | Obtain Verification Image? | | | | | |
| | FULL | | | | true | | | | | |
| Dithers | # | Dither Type | No. Spectral Steps | Spectral Step Offset | No. Spatial Steps | Spatial Step Offset | | | | |
| | 1 | LONG CROSS SCAN NOD2 | | | | | | | | |
| Pointing Verification | # | PV Readout Pattern | PV Groups/Int | PV Integrations/Exp | PV Total Integrations | PV Exposures/Dith | PV Total Dithers | PV Total Exposure Time | PV ETC Wkbk.Calc ID | Filter |
| | 1 | FASTR1 | 4 | 1 | 1 | 1 | 1 | 11.1 | | F1000W |

Proposal 4492 - Observation 2 - CAL-MIRI-236 MIRI LRS slit throughput

| Spectral Elements | # | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Exposures/Dith | Total Dithers | Total Exposure Time ETC Wkbk.Calc ID |
|-------------------|---|-----------------|------------|------------------|--------------------|----------------|---------------|--------------------------------------|
| | Special Requirements | 1 | FASTR1 | 6 | 8 | 136 | 1 | 17 |
| | Sequence Observations 1, 2, Non-interruptible | | | | | | | |