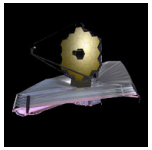

4440 - MIRI Coronagraph Boresight Offset

Cycle: 1, Proposal Category: CAL/MIRI

INVESTIGATORS

Name	*Institution*
Dr. Jonathan Aguilar (PI)	**Space Telescope Science Institute**

OBSERVATIONS

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
F1550C/F1000W Boresight Offsets				
	1	upper left	MIRI External Flat	(3) BD+60-BORESIGHT
	2	lower left	MIRI External Flat	(3) BD+60-BORESIGHT
	3	upper right	MIRI External Flat	(3) BD+60-BORESIGHT
	4	lower right	MIRI External Flat	(3) BD+60-BORESIGHT
	5	center upper left	MIRI External Flat	(3) BD+60-BORESIGHT
	6	center lower left	MIRI External Flat	(3) BD+60-BORESIGHT
	7	center upper right	MIRI External Flat	(3) BD+60-BORESIGHT
	8	center lower right	MIRI External Flat	(3) BD+60-BORESIGHT
	11	upper left	MIRI External Flat	(7) BD+60-1753
	12	lower left	MIRI External Flat	(7) BD+60-1753
	13	upper right	MIRI External Flat	(7) BD+60-1753
	14	lower right	MIRI External Flat	(7) BD+60-1753
	15	center upper left	MIRI External Flat	(7) BD+60-1753
	16	center lower left	MIRI External Flat	(7) BD+60-1753
	17	center upper right	MIRI External Flat	(7) BD+60-1753
	18	center lower right	MIRI External Flat	(7) BD+60-1753
TA confirmation with binary				
	19	Binary confirmation A	MIRI Coronagraphic Imaging	(8) HD-167855A

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
	20	Binary confirmation B	MIRI Coronagraphic Imaging	(10) HD-167855B

ABSTRACT

This program will measure the boresight offset between the F1000W imaging filter and the F1550C coronagraphic filter. It wil also test our knowledge of that offset with a second set of observations.

This calibration program is provisional and may change in response to system developments and the final science program.

OBSERVING DESCRIPTION

Observations 1-8 will measure the boresight offset at the reference point of the subarray. Observations 9 and 10 will test the TA performance, after the boresight offsets have been updated in SIAF. The time constraints for Obs 1-8 and Obs 9-10 will provide the time required to update the SIAF and test that update before the beginning of Cycle 2.

Observations 1-8 should occur before 15 May 2023.

Observations 9-10 should occur in the period 7-16 June 2023.

All observations will be of the standard star BD+60 1753.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(3)	BD+60-BORESIGHT	RA: 17 24 52.2772 (261.2178217d) Dec: +60 25 50.78 (60.43077d) Equinox: J2000	Proper Motion RA: 3.981 mas/yr Proper Motion Dec: 1.809 arcsec/yr Epoch of Position: 2000.0	
Comments: Position from Gaia EDR3. *Category=Calibration* *Description=[A stars]* *Extended=NO*				
(4)	BD+60-TA	RA: 17 24 52.2772 (261.2178217d) Dec: +60 25 50.78 (60.43077d) Equinox: J2000	Proper Motion RA: 3.981 mas/yr Proper Motion Dec: 1.809 mas/yr Epoch of Position: 2000.0	
Comments: Position from Gaia EDR3. *Category=Calibration* *Description=[A stars]* *Extended=NO*				
(5)	BD+60-BACKGROUND	RA: 17 25 8.3674 (261.2848642d) Dec: +60 31 39.14 (60.52754d) Equinox: J2000	Proper Motion RA: 0 Proper Motion Dec: 0	
Comments: The background is 325" east and 348" north of BD+60 1753. *Category=Calibration* *Description=[A stars]*				
(7)	BD+60-1753	RA: 17 24 52.2856 (261.2178567d) Dec: +60 25 50.81 (60.43078d) Equinox: J2000	Proper Motion RA: 4.892 mas/yr Proper Motion Dec: 3.759 mas/yr Parallax: 0.0017825" Epoch of Position: 2000.0	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *PM entered manually by JA from SIMBAD* *Category=Calibration* *Description=[A stars]* *Extended=NO*				
(8)	HD-167855A	RA: 18 11 15.2709 (272.8136288d) Dec: +69 15 0.27 (69.25007d) Equinox: J2000	Proper Motion RA: 10.7067 mas/yr Proper Motion Dec: 30.4788 mas/yr Parallax: 0.0082679 " Epoch of Position: 2016	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *Position, PM, and parallax entered from Gaia DR3 by Jonathan Aguilar.* *Category=Calibration* *Description=[Binary stars, G stars]*				
(9)	HD-167855A-BACKGROUND	RA: 18 11 27.0524 (272.8627183d) Dec: +69 15 3.09 (69.25086d) Equinox: J2000	Proper Motion RA: 0 mas/yr Proper Motion Dec: 0 mas/yr Parallax: 0" Epoch of Position: 2016	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *Position, PM, and parallax entered from Gaia DR3 by Jonathan Aguilar.* *Category=Unidentified* *Description=[Blank field]*				

	(10)	HD-167855B	RA: 18 11 14.9161 (272.8121504d) Dec: +69 14 56.34 (69.24898d) Equinox: J2000	Proper Motion RA: 9.4049 mas/yr Proper Motion Dec: 30.9726 mas/yr Parallax: 0.0082638 " Epoch of Position: 2016

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Position, PM, and parallax entered from Gaia DR3 by Jonathan Aguilar.
Category=Calibration
Description=[G stars]

Observation

Proposal 4440, Observation 1: upper left

Thu Jun 08 21:00:28 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI External Flat

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
(3)	BD+60-BORESIGHT	RA: 17 24 52.2772 (261.2178217d)	Proper Motion RA: 3.981 mas/yr	
		Dec: +60 25 50.78 (60.43077d)	Proper Motion Dec: 1.809 arcsec/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3.
Category=Calibration
Description=[A stars]
Extended=NO

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	OFF ONLY	0	MASK1550	NEUTRAL

Spectral Elements

#	Detector	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	IMAGER	F1000W			FASTR1	22	1	1	1	1	5.273	151207
2	IMAGER	F1550C			FASTR1	100	3	1	1	3	72.383	151207

Special Requirements

Before Date 15-MAY-2023
Offset -6.37 arcsec, 6.88 arcsec
No Parallel Attachments

Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, Non-interruptible

Observation

Proposal 4440, Observation 2: lower left

Thu Jun 08 21:00:28 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI External Flat

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
(3)	BD+60-BORESIGHT	RA: 17 24 52.2772 (261.2178217d)	Proper Motion RA: 3.981 mas/yr	
		Dec: +60 25 50.78 (60.43077d)	Proper Motion Dec: 1.809 arcsec/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3.
Category=Calibration
Description=[A stars]
Extended=NO

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	OFF ONLY	0	MASK1550	NEUTRAL

Spectral Elements

#	Detector	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	IMAGER	F1000W			FASTR1	22	1	1	1	1	5.273	151207
2	IMAGER	F1550C			FASTR1	100	3	1	1	3	72.383	151207

Special Requirements

Offset -6.664 arcsec, -5.648 arcsec
No Parallel Attachments

Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, Non-interruptible

Observation

Proposal 4440, Observation 3: upper right

Thu Jun 08 21:00:28 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI External Flat

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
(3)	BD+60-BORESIGHT	RA: 17 24 52.2772 (261.2178217d)	Proper Motion RA: 3.981 mas/yr	
		Dec: +60 25 50.78 (60.43077d)	Proper Motion Dec: 1.809 arcsec/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3.
Category=Calibration
Description=[A stars]
Extended=NO

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	OFF ONLY	0	MASK1550	NEUTRAL

Spectral Elements

#	Detector	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	IMAGER	F1000W			FASTR1	22	1	1	1	1	5.273	151207
2	IMAGER	F1550C			FASTR1	100	3	1	1	3	72.383	151207

Special Requirements

Offset 5.947 arcsec, 5.698 arcsec
No Parallel Attachments

Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, Non-interruptible

Observation

Proposal 4440, Observation 4: lower right

Thu Jun 08 21:00:28 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI External Flat

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
(3)	BD+60-BORESIGHT	RA: 17 24 52.2772 (261.2178217d)	Proper Motion RA: 3.981 mas/yr	
		Dec: +60 25 50.78 (60.43077d)	Proper Motion Dec: 1.809 arcsec/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3.
Category=Calibration
Description=[A stars]
Extended=NO

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	OFF ONLY	0	MASK1550	NEUTRAL

Spectral Elements

#	Detector	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	IMAGER	F1000W			FASTR1	22	1	1	1	1	5.273	151207
2	IMAGER	F1550C			FASTR1	100	3	1	1	3	72.383	151207

Special Requirements

Offset 5.448 arcsec, -6.405 arcsec
No Parallel Attachments

Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, Non-interruptible

Observation

Proposal 4440, Observation 5: center upper left

Thu Jun 08 21:00:28 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI External Flat

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
(3)	BD+60-BORESIGHT	RA: 17 24 52.2772 (261.2178217d)	Proper Motion RA: 3.981 mas/yr	
		Dec: +60 25 50.78 (60.43077d)	Proper Motion Dec: 1.809 arcsec/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3.
Category=Calibration
Description=[A stars]
Extended=NO

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	OFF ONLY	0	MASK1550	NEUTRAL

Spectral Elements

#	Detector	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	IMAGER	F1000W			FASTR1	22	1	1	1	1	5.273	151207
2	IMAGER	F1550C			FASTR1	100	3	1	1	3	72.383	151207

Special Requirements

Offset -1.559 arcsec, 1.684 arcsec
No Parallel Attachments

Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, Non-interruptible

Observation

Proposal 4440, Observation 6: center lower left

Thu Jun 08 21:00:28 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI External Flat

Diagnostics

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

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(3)	BD+60-BORESIGHT	RA: 17 24 52.2772 (261.2178217d)	Proper Motion RA: 3.981 mas/yr	
		Dec: +60 25 50.78 (60.43077d)	Proper Motion Dec: 1.809 arcsec/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3.
Category=Calibration
Description=[A stars]
Extended=NO

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	OFF ONLY	0	MASK1550	NEUTRAL

Spectral Elements

#	Detector	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	IMAGER	F1000W			FASTR1	22	1	1	1	1	5.273	151207
2	IMAGER	F1550C			FASTR1	100	3	1	1	3	72.383	151207

Special Requirements

Offset -1.797 arcsec, -1.423 arcsec
No Parallel Attachments

Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, Non-interruptible

Observation

Proposal 4440, Observation 7: center upper right

Thu Jun 08 21:00:28 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI External Flat

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
(3)	BD+60-BORESIGHT	RA: 17 24 52.2772 (261.2178217d)	Proper Motion RA: 3.981 mas/yr	
		Dec: +60 25 50.78 (60.43077d)	Proper Motion Dec: 1.809 arcsec/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3.
Category=Calibration
Description=[A stars]
Extended=NO

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	OFF ONLY	0	MASK1550	NEUTRAL

Spectral Elements

#	Detector	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	IMAGER	F1000W			FASTR1	22	1	1	1	1	5.273	151207
2	IMAGER	F1550C			FASTR1	100	3	1	1	3	72.383	151207

Special Requirements

Offset 1.41 arcsec, 1.247 arcsec
No Parallel Attachments

Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, Non-interruptible

Observation

Proposal 4440, Observation 8: center lower right

Thu Jun 08 21:00:28 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI External Flat

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
(3)	BD+60-BORESIGHT	RA: 17 24 52.2772 (261.2178217d)	Proper Motion RA: 3.981 mas/yr	
		Dec: +60 25 50.78 (60.43077d)	Proper Motion Dec: 1.809 arcsec/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3.
Category=Calibration
Description=[A stars]
Extended=NO

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	OFF ONLY	0	MASK1550	NEUTRAL

Spectral Elements

#	Detector	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	IMAGER	F1000W			FASTR1	22	1	1	1	1	5.273	151207
2	IMAGER	F1550C			FASTR1	100	3	1	1	3	72.383	151207

Special Requirements

Offset 1.395 arcsec, -1.749 arcsec
No Parallel Attachments

Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, Non-interruptible

Observation

Proposal 4440, Observation 11: upper left

Thu Jun 08 21:00:28 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI External Flat

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
(7)	BD+60-1753	RA: 17 24 52.2856 (261.2178567d) Dec: +60 25 50.81 (60.43078d) Equinox: J2000	Proper Motion RA: 4.892 mas/yr Proper Motion Dec: 3.759 mas/yr Parallax: 0.0017825" Epoch of Position: 2000.0	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

PM entered manually by JA from SIMBAD
Category=Calibration
Description=[A stars]
Extended=NO

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	OFF ONLY	0	MASK1550	NEUTRAL

Spectral Elements

#	Detector	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	IMAGER	F1000W			FASTR1	25	2	1	1	2	12.224	151207
2	IMAGER	F1550C			FASTR1	100	2	1	1	2	48.176	151207

Special Requirements

Before Date 01-JUN-2023
Offset -6.37 arcsec, 6.88 arcsec
No Parallel Attachments

Sequence Observations 11, 12, 13, 14, 15, 16, 17, 18, Non-interruptible

Observation

Proposal 4440, Observation 12: lower left

Thu Jun 08 21:00:28 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI External Flat

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
(7)	BD+60-1753	RA: 17 24 52.2856 (261.2178567d) Dec: +60 25 50.81 (60.43078d) Equinox: J2000	Proper Motion RA: 4.892 mas/yr Proper Motion Dec: 3.759 mas/yr Parallax: 0.0017825" Epoch of Position: 2000.0	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

PM entered manually by JA from SIMBAD
Category=Calibration
Description=[A stars]
Extended=NO

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	OFF ONLY	0	MASK1550	NEUTRAL

Spectral Elements

#	Detector	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	IMAGER	F1000W			FASTR1	25	2	1	1	2	12.224	151207
2	IMAGER	F1550C			FASTR1	100	2	1	1	2	48.176	151207

Special Requirements

Offset -6.664 arcsec, -5.648 arcsec
No Parallel Attachments

Sequence Observations 11, 12, 13, 14, 15, 16, 17, 18, Non-interruptible

Observation

Proposal 4440, Observation 13: upper right

Thu Jun 08 21:00:28 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI External Flat

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
(7)	BD+60-1753	RA: 17 24 52.2856 (261.2178567d) Dec: +60 25 50.81 (60.43078d) Equinox: J2000	Proper Motion RA: 4.892 mas/yr Proper Motion Dec: 3.759 mas/yr Parallax: 0.0017825" Epoch of Position: 2000.0	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

PM entered manually by JA from SIMBAD
Category=Calibration
Description=[A stars]
Extended=NO

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	OFF ONLY	0	MASK1550	NEUTRAL

Spectral Elements

#	Detector	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	IMAGER	F1000W			FASTR1	25	2	1	1	2	12.224	151207
2	IMAGER	F1550C			FASTR1	100	2	1	1	2	48.176	151207

Special Requirements

Offset 5.947 arcsec, 5.698 arcsec
No Parallel Attachments

Sequence Observations 11, 12, 13, 14, 15, 16, 17, 18, Non-interruptible

Observation

Proposal 4440, Observation 14: lower right

Thu Jun 08 21:00:28 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI External Flat

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
(7)	BD+60-1753	RA: 17 24 52.2856 (261.2178567d)	Proper Motion RA: 4.892 mas/yr	
		Dec: +60 25 50.81 (60.43078d)	Proper Motion Dec: 3.759 mas/yr	
		Equinox: J2000	Parallax: 0.0017825"	
			Epoch of Position: 2000.0	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

PM entered manually by JA from SIMBAD
Category=Calibration
Description=[A stars]
Extended=NO

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	OFF ONLY	0	MASK1550	NEUTRAL

Spectral Elements

#	Detector	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	IMAGER	F1000W			FASTR1	25	2	1	1	2	12.224	151207
2	IMAGER	F1550C			FASTR1	100	2	1	1	2	48.176	151207

Special Requirements

Offset 5.448 arcsec, -6.405 arcsec
No Parallel Attachments

Sequence Observations 11, 12, 13, 14, 15, 16, 17, 18, Non-interruptible

Observation

Proposal 4440, Observation 15: center upper left

Thu Jun 08 21:00:28 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI External Flat

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
(7)	BD+60-1753	RA: 17 24 52.2856 (261.2178567d) Dec: +60 25 50.81 (60.43078d) Equinox: J2000	Proper Motion RA: 4.892 mas/yr Proper Motion Dec: 3.759 mas/yr Parallax: 0.0017825" Epoch of Position: 2000.0	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

PM entered manually by JA from SIMBAD
Category=Calibration
Description=[A stars]
Extended=NO

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	OFF ONLY	0	MASK1550	NEUTRAL

Spectral Elements

#	Detector	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	IMAGER	F1000W			FASTR1	25	2	1	1	2	12.224	151207
2	IMAGER	F1550C			FASTR1	100	2	1	1	2	48.176	151207

Special Requirements

Offset -1.559 arcsec, 1.684 arcsec
No Parallel Attachments

Sequence Observations 11, 12, 13, 14, 15, 16, 17, 18, Non-interruptible

Observation

Proposal 4440, Observation 16: center lower left

Thu Jun 08 21:00:28 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI External Flat

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
(7)	BD+60-1753	RA: 17 24 52.2856 (261.2178567d) Dec: +60 25 50.81 (60.43078d) Equinox: J2000	Proper Motion RA: 4.892 mas/yr Proper Motion Dec: 3.759 mas/yr Parallax: 0.0017825" Epoch of Position: 2000.0	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

PM entered manually by JA from SIMBAD
Category=Calibration
Description=[A stars]
Extended=NO

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	OFF ONLY	0	MASK1550	NEUTRAL

Spectral Elements

#	Detector	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	IMAGER	F1000W			FASTR1	25	2	1	1	2	12.224	151207
2	IMAGER	F1550C			FASTR1	100	2	1	1	2	48.176	151207

Special Requirements

Offset -1.797 arcsec, -1.423 arcsec
No Parallel Attachments

Sequence Observations 11, 12, 13, 14, 15, 16, 17, 18, Non-interruptible

Observation

Proposal 4440, Observation 17: center upper right

Thu Jun 08 21:00:28 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI External Flat

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
(7)	BD+60-1753	RA: 17 24 52.2856 (261.2178567d)	Proper Motion RA: 4.892 mas/yr	
		Dec: +60 25 50.81 (60.43078d)	Proper Motion Dec: 3.759 mas/yr	
		Equinox: J2000	Parallax: 0.0017825"	
			Epoch of Position: 2000.0	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

PM entered manually by JA from SIMBAD
Category=Calibration
Description=[A stars]
Extended=NO

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	OFF ONLY	0	MASK1550	NEUTRAL

Spectral Elements

#	Detector	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	IMAGER	F1000W			FASTR1	25	2	1	1	2	12.224	151207
2	IMAGER	F1550C			FASTR1	100	2	1	1	2	48.176	151207

Special Requirements

Offset 1.41 arcsec, 1.247 arcsec
No Parallel Attachments

Sequence Observations 11, 12, 13, 14, 15, 16, 17, 18, Non-interruptible

Observation

Proposal 4440, Observation 18: center lower right

Thu Jun 08 21:00:28 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI External Flat

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
(7)	BD+60-1753	RA: 17 24 52.2856 (261.2178567d) Dec: +60 25 50.81 (60.43078d) Equinox: J2000	Proper Motion RA: 4.892 mas/yr Proper Motion Dec: 3.759 mas/yr Parallax: 0.0017825" Epoch of Position: 2000.0	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

PM entered manually by JA from SIMBAD
Category=Calibration
Description=[A stars]
Extended=NO

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	OFF ONLY	0	MASK1550	NEUTRAL

Spectral Elements

#	Detector	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	IMAGER	F1000W			FASTR1	25	2	1	1	2	12.224	151207
2	IMAGER	F1550C			FASTR1	100	2	1	1	2	48.176	151207

Special Requirements

Offset 1.395 arcsec, -1.749 arcsec
No Parallel Attachments

Sequence Observations 11, 12, 13, 14, 15, 16, 17, 18, Non-interruptible

Observation

Proposal 4440, Observation 19: Binary confirmation A

Thu Jun 08 21:00:28 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI Coronagraphic Imaging

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
(8)	HD-167855A	RA: 18 11 15.2709 (272.8136288d) Dec: +69 15 0.27 (69.25007d) Equinox: J2000	Proper Motion RA: 10.7067 mas/yr Proper Motion Dec: 30.4788 mas/yr Parallax: 0.0082679 " Epoch of Position: 2016	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Position, PM, and parallax entered from Gaia DR3 by Jonathan Aguilar.
Category=Calibration
Description=[Binary stars, G stars]

Acquisition

#	Target	Filter	Quadrant	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F1000W	1	FAST	6	1	1	1.438	151207

Template

Repeat observation
NO

Dithers

#	Dither Type
1	NONE

Spectral Elements

#	Coron Mask/Filter	Subarray	Mask	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	4QPM/F1550C	MASK1550	4QPM	F1550C	FASTR1	100	10	1	1	10	241.837	151207

PSF References	Additional Justification: false
Special Requirements	Between Dates 22-JUN-2023 and 01-JUL-2023 Offset -0.0367 arcsec, -0.0949 arcsec No Parallel Attachments Sequence Observations 19, 20, Non-interruptible

Observation

Proposal 4440, Observation 20: Binary confirmation B

Thu Jun 08 21:00:28 GMT 2023

Diagnostic Status: Warning

Observing Template: MIRI Coronagraphic Imaging

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
(10)	HD-167855B	RA: 18 11 14.9161 (272.8121504d) Dec: +69 14 56.34 (69.24898d) Equinox: J2000	Proper Motion RA: 9.4049 mas/yr Proper Motion Dec: 30.9726 mas/yr Parallax: 0.0082638 " Epoch of Position: 2016	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Position, PM, and parallax entered from Gaia DR3 by Jonathan Aguilar.
Category=Calibration
Description=[G stars]

Acquisition

#	Target	Filter	Quadrant	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F1000W	1	FAST	6	1	1	1.438	151207

Template

Repeat observation
NO

Dithers

#	Dither Type
1	NONE

Spectral Elements

#	Coron Mask/Filter	Subarray	Mask	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	4QPM/F1550C	MASK1550	4QPM	F1550C	FASTR1	100	10	1	1	10	241.837	151207

PSF References	Additional Justification: false
Special Requirements	Between Dates 22-JUN-2023 and 01-JUL-2023 Offset -0.0367 arcsec, -0.0949 arcsec No Parallel Attachments Sequence Observations 19, 20, Non-interruptible