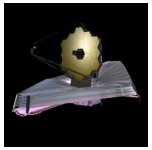

8384 - CAL-MIRI-412: MIRI Imaging External Flatfield

Cycle: 4, Proposal Category: CAL/MIRI

INVESTIGATORS

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OBSERVATIONS

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
Observation Folder				
	1	F560W F770W F1000W F1065C (5x5)	MIRI External Flat	(1) P330E
	2	F560W F770W F1000W F1065C LYOT	MIRI External Flat	(1) P330E
	3	F1065C	MIRI Coronagraphic Photometric Calibration	(1) P330E
	4	F1130W F1280W F1500W (5x5)	MIRI External Flat	(2) BD+60-1753
	14	F1140C (5x5)	MIRI External Flat	(2) BD+60-1753
	5	F1130W F1140C F1280W F1500W LYOT	MIRI External Flat	(2) BD+60-1753
	6	F1140C	MIRI Coronagraphic Photometric Calibration	(2) BD+60-1753
	7	F1800W F2100W (5x5)	MIRI External Flat	(3) HD-37725

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
	8	F1800W F2100W LYOT	MIRI External Flat	(3) HD-37725
	9	F1550C F2300C F2550W (5x5)	MIRI External Flat	(4) HD-128998
	10	F1550C F2300C F2550W LYOT	MIRI External Flat	(4) HD-128998
	11	F1550C	MIRI Coronagraphic Photometric Calibration	(4) HD-128998
	12	F2300C	MIRI Coronagraphic Photometric Calibration	(4) HD-128998
	13	F560W Lamp Flat	MIRI External Flat	NONE

ABSTRACT

This program will observe CALSPEC stars of appropriate brightness in each MIRI filter (imaging and coronagraphic imaging) in order to construct low-frequency flatfield (L-flat) reference files. The CALSPEC stars will be observed in 25 different locations across the imager field-of-view and 4 different locations across the Lyot region in each imaging and coronagraphic imaging filter. 4 positions across each 4QPM will be observed in each corresponding coronagraphic imaging filter. Variations in star brightness across the detector will be used to construct the L-flat for each filter, complementing the pixel-to-pixel flats (P-flats) already in use in the pipeline.

This calibration program may change in response to system developments and the final Cycle 4 science program.

OBSERVING DESCRIPTION

The goal of this program is to compute the low-frequency flat field (L-flat) for the MIRI imaging detector. This will be achieved by placing a CALSPEC standard star of appropriate brightness in 25 points across the MIRI imager FOV and 4 points across the Lyot region for every filter (including coronagraphic filters). Additional observations are included to place CALSPEC stars in 4 points across each of the three 4QPMs, using only the corresponding coronagraphic filter for each 4QPM. All observations with a given filter are in a non-interruptible group to prevent changes in thermal background from affecting the measurements.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	P330E	RA: 16 31 33.8124 (247.8908850d) Dec: +30 08 46.40 (30.14622d) Equinox: J2000	Proper Motion RA: -8.882 mas/yr Proper Motion Dec: -38.70500008815725 mas/yr Parallax: 0.0022149" Epoch of Position: 2000	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.* *Category=Calibration* *Description=[G stars]* *Extended=NO*				
(2)	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: 3.7590000000000003 mas/yr Parallax: 0.0017825" Epoch of Position: 2000	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.* *Category=Calibration* *Description=[A stars]* *Extended=NO*				
(3)	HD-37725	RA: 05 41 54.3698 (85.4765408d) Dec: +29 17 50.95 (29.29749d) Equinox: J2000	Proper Motion RA: 14.970000000000002 mas/yr Proper Motion Dec: -26.79200001693971 mas/yr Parallax: 0.0062607" Epoch of Position: 2000	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.* *Category=Calibration* *Description=[A stars]* *Extended=NO*				
(4)	HD-128998	RA: 14 38 15.2215 (219.5634229d) Dec: +54 01 24.03 (54.02334d) Equinox: J2000	Proper Motion RA: 16.88 mas/yr Proper Motion Dec: -18.610999973134312 mas/yr Parallax: 0.0088279" Epoch of Position: 2000	
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. *SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.* *Category=Calibration* *Description=[A stars]* *Extended=NO*				

Observation

Proposal 8384, Observation 1: F560W F770W F1000W F1065C (5x5) Tue Mar 31 06:00:14 GMT 2026

Diagnostic Status: Warning

Observing Template: MIRI External Flat

Diagnostics

(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 1:2) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 1:3) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 1:4) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 1:5) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	P330E	RA: 16 31 33.8124 (247.8908850d) Dec: +30 08 46.40 (30.14622d) Equinox: J2000	Proper Motion RA: -8.882 mas/yr Proper Motion Dec: -38.70500008815725 mas/yr Parallax: 0.0022149" Epoch of Position: 2000	

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

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=Calibration
Description=[G stars]
Extended=NO

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	OFF ONLY	0	FULL	Allow Auto Reorder

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
5	5	80.0	80.0	0.0	0.0	HILBERT_CURVE

Spectral Elements

#	Detector	MRS Subarray	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/ Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
1	IMAGER		F560W			FASTR1	10	1	1	1	1	27.75	
2	IMAGER		F770W			FASTR1	10	1	1	1	1	27.75	
3	IMAGER		F1000W			FASTR1	10	1	1	1	1	27.75	
4	IMAGER		F1065C			FASTR1	20	1	1	1	1	55.501	

Special Requirements	
	Group Visits within 53.0 Days Visits Same PA No Parallel Attachments Group Observations 1, 2, 3, Non-interruptible

Observation

Proposal 8384, Observation 2: F560W F770W F1000W F1065C LYOT Tue Mar 31 06:00:14 GMT 2026

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
(1)	P330E	RA: 16 31 33.8124 (247.8908850d)	Proper Motion RA: -8.882 mas/yr	
		Dec: +30 08 46.40 (30.14622d)	Proper Motion Dec: -38.70500008815725 mas/yr	
		Equinox: J2000	Parallax: 0.0022149"	
			Epoch of Position: 2000	

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

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=Calibration
Description=[G stars]
Extended=NO

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	OFF ONLY	0	FULL	Allow Auto Reorder

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
2	2	85.0	80.0	0.0	0.0	DEFAULT

Spectral Elements

#	Detector	MRS Subarray	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/ Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
1	IMAGER		F560W			FASTR1	10	1	1	1	1	27.75	
2	IMAGER		F770W			FASTR1	10	1	1	1	1	27.75	
3	IMAGER		F1000W			FASTR1	10	1	1	1	1	27.75	
4	IMAGER		F1065C			FASTR1	20	1	1	1	1	55.501	

Special Requirements	
	Offset -60.0 arcsec, 40.0 arcsec No Parallel Attachments Group Observations 1, 2, 3, Non-interruptible

Observation

Proposal 8384, Observation 3: F1065C Tue Mar 31 06:00:14 GMT 2026

Diagnostic Status: Warning

Observing Template: MIRI Coronagraphic Photometric Calibration

Diagnostics

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

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	P330E	RA: 16 31 33.8124 (247.8908850d)	Proper Motion RA: -8.882 mas/yr	
		Dec: +30 08 46.40 (30.14622d)	Proper Motion Dec: -38.70500008815725 mas/yr	
		Equinox: J2000	Parallax: 0.0022149"	
			Epoch of Position: 2000	

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

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=Calibration
Description=[G stars]
Extended=NO

Template

Subarray
MASK1065

Dithers

#	Starting Set	Number of Sets	Optimized For	Direction
1	1	1	POINT SOURCE	POSITIVE

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
1	F1065C	FASTR1	200	1	1	4	4	191.744	

Special Requirements	Group Observations 1, 2, 3, Non-interruptible

Observation

Proposal 8384, Observation 4: F1130W F1280W F1500W (5x5) Tue Mar 31 06:00:14 GMT 2026

Diagnostic Status: Warning

Observing Template: MIRI External Flat

Diagnostics

(Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 4:2) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 4:3) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 4:4) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 4:5) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(2)	BD+60-1753	RA: 17 24 52.2754 (261.2178142d)	Proper Motion RA: 4.892 mas/yr	
		Dec: +60 25 50.75 (60.43076d)	Proper Motion Dec: 3.7590000000000003 mas/yr	
		Equinox: J2000	Parallax: 0.0017825"	
			Epoch of Position: 2000	

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

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
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	FULL	Allow Auto Reorder

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
5	5	80.0	80.0	0.0	0.0	HILBERT_CURVE

Spectral Elements

#	Detector	MRS Subarray	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/ Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
1	IMAGER		F1130W			FASTR1	10	1	1	1	1	27.75	
2	IMAGER		F1280W			FASTR1	10	1	1	1	1	27.75	
3	IMAGER		F1500W			FASTR1	10	1	1	1	1	27.75	

Special Requirements	
	Group Visits within 53.0 Days Visits Same PA No Parallel Attachments Group Observations 4, 5, 6, 14, Non-interruptible

Observation

Proposal 8384, Observation 14: F1140C (5x5)

Tue Mar 31 06:00:14 GMT 2026

Diagnostic Status: Warning

Observing Template: MIRI External Flat

Diagnostics

(Visit 14:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 14:2) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 14:3) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 14:4) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 14:5) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(2)	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: 3.7590000000000003 mas/yr Parallax: 0.0017825" Epoch of Position: 2000	

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

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
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	FULL	Allow Auto Reorder

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
5	5	80.0	80.0	0.0	0.0	HILBERT_CURVE

Spectral Elements

#	Detector	MRS Subarray	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/ Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
1	IMAGER		F1140C			FASTR1	10	1	1	1	1	27.75	

Special Requirements	
	Group Visits within 53.0 Days Visits Same PA No Parallel Attachments Group Observations 4, 5, 6, 14, Non-interruptible

Observation

Proposal 8384, Observation 5: F1130W F1140C F1280W F1500W LYOT Tue Mar 31 06:00:14 GMT 2026

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
(2)	BD+60-1753	RA: 17 24 52.2754 (261.2178142d)	Proper Motion RA: 4.892 mas/yr	
		Dec: +60 25 50.75 (60.43076d)	Proper Motion Dec: 3.7590000000000003 mas/yr	
		Equinox: J2000	Parallax: 0.0017825"	
			Epoch of Position: 2000	

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

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
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	FULL	Allow Auto Reorder

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
2	2	85.0	80.0	0.0	0.0	DEFAULT

Spectral Elements

#	Detector	MRS Subarray	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/ Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
1	IMAGER		F1130W			FASTR1	10	1	1	1	1	27.75	
2	IMAGER		F1140C			FASTR1	10	1	1	1	1	27.75	
3	IMAGER		F1280W			FASTR1	10	1	1	1	1	27.75	
4	IMAGER		F1500W			FASTR1	10	1	1	1	1	27.75	

Special Requirements	
	Offset -60.0 arcsec, 40.0 arcsec No Parallel Attachments Group Observations 4, 5, 6, 14, Non-interruptible

Observation

Proposal 8384, Observation 6: F1140C

Tue Mar 31 06:00:14 GMT 2026

Diagnostic Status: Warning

Observing Template: MIRI Coronagraphic Photometric Calibration

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
(2)	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: 3.7590000000000003 mas/yr Parallax: 0.0017825" Epoch of Position: 2000	

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

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=Calibration
Description=[A stars]
Extended=NO

Template

Subarray
MASK1140

Dithers

#	Starting Set	Number of Sets	Optimized For	Direction
1	1	1	POINT SOURCE	POSITIVE

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
1	F1140C	FASTR1	100	1	1	4	4	95.872	

Special Requirements	Group Observations 4, 5, 6, 14, Non-interruptible

Observation

Proposal 8384, Observation 7: F1800W F2100W (5x5) Tue Mar 31 06:00:14 GMT 2026

Diagnostic Status: Warning

Observing Template: MIRI External Flat

Diagnostics

(Visit 7:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(Visit 7:2) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(Visit 7:3) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(3)	HD-37725	RA: 05 41 54.3698 (85.4765408d) Dec: +29 17 50.95 (29.29749d) Equinox: J2000	Proper Motion RA: 14.970000000000002 mas/yr Proper Motion Dec: -26.79200001693971 mas/yr Parallax: 0.0062607" Epoch of Position: 2000	

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

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
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	FULL	Allow Auto Reorder

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
5	5	80.0	80.0	0.0	0.0	HILBERT_CURVE

Spectral Elements

#	Detector	MRS Subarray	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/ Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
1	IMAGER		F1800W			FASTR1	10	1	1	1	1	27.75	
2	IMAGER		F2100W			FASTR1	10	1	1	1	1	27.75	

Special Requirements	
	Group Visits within 53.0 Days Visits Same PA No Parallel Attachments Group Observations 7, 8, Non-interruptible

Observation

Proposal 8384, Observation 8: F1800W F2100W LYOT Tue Mar 31 06:00:14 GMT 2026

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)	HD-37725	RA: 05 41 54.3698 (85.4765408d) Dec: +29 17 50.95 (29.29749d) Equinox: J2000	Proper Motion RA: 14.970000000000002 mas/yr Proper Motion Dec: -26.79200001693971 mas/yr Parallax: 0.0062607" Epoch of Position: 2000	

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

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
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	FULL	Allow Auto Reorder

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
2	2	85.0	80.0	0.0	0.0	DEFAULT

Spectral Elements

#	Detector	MRS Subarray	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/ Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
1	IMAGER		F1800W			FASTR1	10	1	1	1	1	27.75	
2	IMAGER		F2100W			FASTR1	10	1	1	1	1	27.75	

Special Requirements	
	Offset -60.0 arcsec, 40.0 arcsec No Parallel Attachments Group Observations 7, 8, Non-interruptible

Observation

Proposal 8384, Observation 9: F1550C F2300C F2550W (5x5) Tue Mar 31 06:00:14 GMT 2026

Diagnostic Status: Warning

Observing Template: MIRI External Flat

Diagnostics

(Visit 9:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 9:2) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 9:3) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 9:4) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 9:5) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 9:6) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 9:7) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 9:8) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(4)	HD-128998	RA: 14 38 15.2215 (219.5634229d) Dec: +54 01 24.03 (54.02334d) Equinox: J2000	Proper Motion RA: 16.88 mas/yr Proper Motion Dec: -18.610999973134312 mas/yr Parallax: 0.0088279" Epoch of Position: 2000	

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

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
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	FULL	Allow Auto Reorder

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
5	5	80.0	80.0	0.0	0.0	HILBERT_CURVE

Spectral Elements

#	Detector	MRS Subarray	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/ Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
1	IMAGER		F1550C			FASTR1	10	1	1	1	1	27.75	
2	IMAGER		F2300C			FASTR1	15	1	1	1	1	41.626	
3	IMAGER		F2550W			FASTR1	10	1	1	1	1	27.75	

Special Requirements	
	After Date 06-APR-2026:07:00:00 Group Visits within 53.0 Days Visits Same PA No Parallel Attachments Group Observations 9, 10, 11, 12, Non-interruptible

Observation

Proposal 8384, Observation 10: F1550C F2300C F2550W LYOT Tue Mar 31 06:00:14 GMT 2026

Diagnostic Status: Warning

Observing Template: MIRI External Flat

Diagnostics

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

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(4)	HD-128998	RA: 14 38 15.2215 (219.5634229d)	Proper Motion RA: 16.88 mas/yr	
		Dec: +54 01 24.03 (54.02334d)	Proper Motion Dec: -18.610999973134312 mas/yr	
		Equinox: J2000	Parallax: 0.0088279"	
			Epoch of Position: 2000	

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

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
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	FULL	Allow Auto Reorder

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
2	2	85.0	80.0	0.0	0.0	DEFAULT

Spectral Elements

#	Detector	MRS Subarray	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/ Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
1	IMAGER		F1550C			FASTR1	10	1	1	1	1	27.75	
2	IMAGER		F2300C			FASTR1	15	1	1	1	1	41.626	
3	IMAGER		F2550W			FASTR1	10	1	1	1	1	27.75	

Special Requirements	
	Offset -60.0 arcsec, 40.0 arcsec No Parallel Attachments Group Observations 9, 10, 11, 12, Non-interruptible

Observation

Proposal 8384, Observation 11: F1550C Tue Mar 31 06:00:14 GMT 2026

Diagnostic Status: Warning

Observing Template: MIRI Coronagraphic Photometric Calibration

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
(4)	HD-128998	RA: 14 38 15.2215 (219.5634229d) Dec: +54 01 24.03 (54.02334d) Equinox: J2000	Proper Motion RA: 16.88 mas/yr Proper Motion Dec: -18.610999973134312 mas/yr Parallax: 0.0088279" Epoch of Position: 2000	

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

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=Calibration
Description=[A stars]
Extended=NO

Template

Subarray
MASK1550

Dithers

#	Starting Set	Number of Sets	Optimized For	Direction
1	1	1	POINT SOURCE	POSITIVE

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
1	F1550C	FASTR1	16	1	1	4	4	15.34	

Special Requirements	Group Observations 9, 10, 11, 12, Non-interruptible

Observation

Proposal 8384, Observation 12: F2300C Tue Mar 31 06:00:14 GMT 2026

Diagnostic Status: Warning

Observing Template: MIRI Coronagraphic Photometric Calibration

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
(4)	HD-128998	RA: 14 38 15.2215 (219.5634229d) Dec: +54 01 24.03 (54.02334d) Equinox: J2000	Proper Motion RA: 16.88 mas/yr Proper Motion Dec: -18.610999973134312 mas/yr Parallax: 0.0088279" Epoch of Position: 2000	

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

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=Calibration
Description=[A stars]
Extended=NO

Template

Subarray
MASKLYOT

Dithers

#	Starting Set	Number of Sets	Optimized For	Direction
1	1	1	POINT SOURCE	POSITIVE

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
1	F2300C	FASTR1	100	1	1	4	4	129.6	

Special Requirements	Group Observations 9, 10, 11, 12, Non-interruptible

Observation

Proposal 8384, Observation 13: F560W Lamp Flat Tue Mar 31 06:00:14 GMT 2026

Diagnostic Status: Warning

Observing Template: MIRI External Flat

Diagnostics

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

Template

Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction
PRIME	IMAGER	false	ON ONLY	1965	FULL	Allow Auto Reorder

Spectral Elements

#	Detector	MRS Subarray	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/ Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
1	IMAGER		F560W			FASTR1	120	5	1	1	5	1676.124	

Special Requirements

No Parallel Attachments