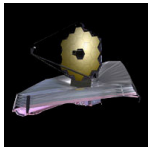

9266 - CAL-MIRI-465 MIRI LRS wavelength calibration

Cycle: 3, Proposal Category: CAL/MIRI

INVESTIGATORS

Name	*Institution*
Andreea Petric (PI)	**Space Telescope Science Institute**
Dr. Bryan Jason Holler (CoI)	Space Telescope Science Institute
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OBSERVATIONS

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
Observation Folder				
	1	HD 76534 box 1 center	MIRI External Flat	(1) HD76534
	2	HD 76534 box 2 top right	MIRI External Flat	(1) HD76534
	3	HD 76534 box 3 bottom right	MIRI External Flat	(1) HD76534
	4	HD 76534 box 4 bottom left	MIRI External Flat	(1) HD76534
	5	HD 76534 box 5 top left	MIRI External Flat	(1) HD76534

ABSTRACT

OBJECTIVE:This activity aims to search for systematic differences in thewavelength calibration and spectral resolution in the WFSS mode.

METHOD:We will place a wavelength calibrator at five positions along the MIRIdetector in the center and each corner. We will follow the same

methods of wavelength calibration as MIRI LRS, whichconsists of detecting narrow emission lines and comparing them with models,previous observations, and, where possible, higher-resolution observations. Wewill apply the same techniques but also compare our results with those for MIRILRS slitless data in the slitless subarray and with methods developed by Xuan etal. 2024 who include a quadratic wavelength correction to the typical Gaussian kernel, to improve the wavelength solution accuracy.We will use point source calibrators employed in the LRS calibration method toensure that the extended emission does not add to the complexity of the analysis.Specifically, we will use HD 76534, a Be star with a hydrogen recombinationspectrum, which has been successfully used for LRS slitless calibration

OBSERVING DESCRIPTION

Obs 1 - along-slit nod observation of Be star HD 76534

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	HD76534	RA: 08 55 8.6992 (133.7862467d) Dec: -43 27 59.79 (-43.46661d) Equinox: J2000	Proper Motion RA: -5.5467 mas/yr Proper Motion Dec: 5.4670 mas/yr Parallax: 0.00113" Epoch of Position: 2016	

Comments: Am keeping the text below for record.

If I look on the ESA Gaia archive I find the same position but a slightly dfiferent proper motion, but these are in 2016 coordinates, so am going to put this in 2016 coordinates.

Gaia DR3 5332070987385762304

Description
Value
Unit
Equatorial ICRS (RA,DEC) at epoch 2016 133.7862466719, -43.4666071740 deg
Galactic (l, b) at epoch 2016 264.4189081459, 1.0477496573 deg
Parallax 1.1299 ± 0.0294 mas
RA proper motion -5.5467 ± 0.0297 mas yr-1
DEC proper motion 5.4670 ± 0.0309 mas yr-1
Renormalised unit weight error 1.529

======
Position from Hipparcos (Leeuwen 2007)
Checked with Simbad
Uncertainity in RA is estimated from uncertainty in proper motion

HD 76534 -- Be Star
*Other object types: otypes_help * (HD,ALS,...), ** (**,CCDM,...), V* (2012A&A,V*,...), UV (CEL,TD1), MIR (WISEA,WISE), Be* (1982IAUS), Ae? (2003AJ), Em* (Hen), NIR (2MASS), IR (IRAS)*
ICRS coord. (ep=J2000) : 08 55 08.70673 -43 27 59.8852 (Optical) [8.69 8.09 90] A 2007A&A...474..653V
FK4 coord. (ep=B1950 eq=1950) : 08 53 20.74694 -43 16 29.3115 [8.69 8.09 90]
Gal coord. (ep=J2000) : 264.41895018 +01.04774849 [8.69 8.09 90]
Proper motions mas/yr : -6.98 4.03 [0.99 0.92 0] A 2007A&A...474..653V
Radial velocity / Redshift / cz : V(km/s) 17.00 [5] / z(~) 0.000057 [0.000017] / cz 17.00 [5.00]
C 2006AstL....32..759G
Parallaxes (mas): 1.02 [1.00] A 2007A&A...474..653V
Spectral type: B2Vn C 1978MSS...C02....0H
Fluxes (7) :
U 7.04 [~] C 2002yCat.2237....0D
B 7.62 [~] C 2002yCat.2237....0D
V 7.50 [~] C 2002yCat.2237....0D
R 8.94 [0.10] E 2012yCat.1322....0Z
J 7.818 [0.024] C 2003yCat.2246....0C
H 7.858 [0.040] C 2003yCat.2246....0C
K 7.804 [0.015] C 2003yCat.2246....0C
Category=Star
Description=[B stars, Emission line stars]
Extended=NO

(2)	LHA-120-N-133	RA: 05 24 20.7552 (81.0864800d) Dec: -70 05 1.60 (-70.08378d) Equinox: J2000	Proper Motion RA: 1.767 mas/yr Proper Motion Dec: 0.245 mas/yr 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=[Line spread function, Planetary nebulae]
Extended=YES

Observation	**Proposal 9266, Observation 1: HD 76534 box 1 center** Thu Nov 20 19:03:23 GMT 2025 **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
(1)	HD76534	RA: 08 55 8.6992 (133.7862467d)	Proper Motion RA: -5.5467 mas/yr	
		Dec: -43 27 59.79 (-43.46661d)	Proper Motion Dec: 5.4670 mas/yr	
		Equinox: J2000	Parallax: 0.00113"	
			Epoch of Position: 2016	

Comments: Am keeping the text below for record.

If I look on the ESA Gaia archive I find the same position but a slightly dfiferent proper motion, but these are in 2016 coordinates, so am going to put this in 2016 coordinates.

Gaia DR3 5332070987385762304

Description
Value
Unit
Equatorial ICRS (RA,DEC) at epoch 2016 133.7862466719, -43.4666071740 deg
Galactic (l, b) at epoch 2016 264.4189081459, 1.0477496573 deg
Parallax 1.1299 ± 0.0294 mas
RA proper motion -5.5467 ± 0.0297 mas yr-1
DEC proper motion 5.4670 ± 0.0309 mas yr-1
Renormalised unit weight error 1.529

======
Position from Hipparcos (Leeuwen 2007)
Checked with Simbad
Uncertainity in RA is estimated from uncertainty in proper motion

HD 76534 -- Be Star
*Other object types: otypes_help * (HD,ALS,...), ** (**,CCDM,...), V* (2012A&A,V*,...), UV (CEL,TD1), MIR (WISEA,WISE), Be* (1982IAUS), Ae? (2003AJ), Em* (Hen), NIR (2MASS), IR (IRAS)*
ICRS coord. (ep=J2000) : 08 55 08.70673 -43 27 59.8852 (Optical) [8.69 8.09 90] A 2007A&A...474..653V
FK4 coord. (ep=B1950 eq=1950) : 08 53 20.74694 -43 16 29.3115 [8.69 8.09 90]
Gal coord. (ep=J2000) : 264.41895018 +01.04774849 [8.69 8.09 90]
Proper motions mas/yr : -6.98 4.03 [0.99 0.92 0] A 2007A&A...474..653V
Radial velocity / Redshift / cz : V(km/s) 17.00 [5] / z(~) 0.000057 [0.000017] / cz 17.00 [5.00]
C 2006AstL....32..759G
Parallaxes (mas): 1.02 [1.00] A 2007A&A...474..653V
Spectral type: B2Vn C 1978MSS...C02....0H
Fluxes (7) :
U 7.04 [~] C 2002yCat.2237....0D
B 7.62 [~] C 2002yCat.2237....0D
V 7.50 [~] C 2002yCat.2237....0D
R 8.94 [0.10] E 2012yCat.1322....0Z
J 7.818 [0.024] C 2003yCat.2246....0C
H 7.858 [0.040] C 2003yCat.2246....0C
K 7.804 [0.015] C 2003yCat.2246....0C
Category=Star
Description=[B stars, Emission line stars]
Extended=NO

Template

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

Dithers

#	Dither Type	Starting Point	Number of Points	Pattern Size
1	CYCLING	1	4	LARGE

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	Optional ETC ID
1	IMAGER	P750L			FASTR1	5	36	1	4	144	2386.534	
2	IMAGER	F1800W			FASTR1	5	1	1	4	4	55.501	

Special Requirements

No Parallel Attachments

Group Observations 1, 2, 3, 4, 5, Non-interruptible

Observation	**Proposal 9266, Observation 2: HD 76534 box 2 top right** Thu Nov 20 19:03:23 GMT 2025 **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)	HD76534	RA: 08 55 8.6992 (133.7862467d)	Proper Motion RA: -5.5467 mas/yr	
		Dec: -43 27 59.79 (-43.46661d)	Proper Motion Dec: 5.4670 mas/yr	
		Equinox: J2000	Parallax: 0.00113"	
			Epoch of Position: 2016	

Comments: Am keeping the text below for record.

If I look on the ESA Gaia archive I find the same position but a slightly dfiferent proper motion, but these are in 2016 coordinates, so am going to put this in 2016 coordinates.

Gaia DR3 5332070987385762304

Description
Value
Unit
Equatorial ICRS (RA,DEC) at epoch 2016 133.7862466719, -43.4666071740 deg
Galactic (l, b) at epoch 2016 264.4189081459, 1.0477496573 deg
Parallax 1.1299 ± 0.0294 mas
RA proper motion -5.5467 ± 0.0297 mas yr-1
DEC proper motion 5.4670 ± 0.0309 mas yr-1
Renormalised unit weight error 1.529

======
Position from Hipparcos (Leeuwen 2007)
Checked with Simbad
Uncertainity in RA is estimated from uncertainty in proper motion

HD 76534 -- Be Star
*Other object types: otypes_help * (HD,ALS,...), ** (**,CCDM,...), V* (2012A&A,V*,...), UV (CEL,TD1), MIR (WISEA,WISE), Be* (1982IAUS), Ae? (2003AJ), Em* (Hen), NIR (2MASS), IR (IRAS)*
ICRS coord. (ep=J2000) : 08 55 08.70673 -43 27 59.8852 (Optical) [8.69 8.09 90] A 2007A&A...474..653V
FK4 coord. (ep=B1950 eq=1950) : 08 53 20.74694 -43 16 29.3115 [8.69 8.09 90]
Gal coord. (ep=J2000) : 264.41895018 +01.04774849 [8.69 8.09 90]
Proper motions mas/yr : -6.98 4.03 [0.99 0.92 0] A 2007A&A...474..653V
Radial velocity / Redshift / cz : V(km/s) 17.00 [5] / z(~) 0.000057 [0.000017] / cz 17.00 [5.00]
C 2006AstL....32..759G
Parallaxes (mas): 1.02 [1.00] A 2007A&A...474..653V
Spectral type: B2Vn C 1978MSS...C02....0H
Fluxes (7) :
U 7.04 [~] C 2002yCat.2237....0D
B 7.62 [~] C 2002yCat.2237....0D
V 7.50 [~] C 2002yCat.2237....0D
R 8.94 [0.10] E 2012yCat.1322....0Z
J 7.818 [0.024] C 2003yCat.2246....0C
H 7.858 [0.040] C 2003yCat.2246....0C
K 7.804 [0.015] C 2003yCat.2246....0C
Category=Star
Description=[B stars, Emission line stars]
Extended=NO

Template

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

Dithers

#	Dither Type	Starting Point	Number of Points	Pattern Size
1	CYCLING	1	4	LARGE

Proposal 9266 - Observation 2 - CAL-MIRI-465 MIRI LRS wavelength calibration

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	Optional ETC ID
1	IMAGER	P750L			FASTR1	5	36	1	4	144	2386.534	
2	IMAGER	F1800W			FASTR1	5	1	1	4	4	55.501	

Special Requirements

Offset 20.0 arcsec, 29.0 arcsec
No Parallel Attachments

Group Observations 1, 2, 3, 4, 5, Non-interruptible

Observation	**Proposal 9266, Observation 3: HD 76534 box 3 bottom right** Thu Nov 20 19:03:23 GMT 2025 **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
(1)	HD76534	RA: 08 55 8.6992 (133.7862467d)	Proper Motion RA: -5.5467 mas/yr	
		Dec: -43 27 59.79 (-43.46661d)	Proper Motion Dec: 5.4670 mas/yr	
		Equinox: J2000	Parallax: 0.00113"	
			Epoch of Position: 2016	

Comments: Am keeping the text below for record.

If I look on the ESA Gaia archive I find the same position but a slightly dfiferent proper motion, but these are in 2016 coordinates, so am going to put this in 2016 coordinates.

Gaia DR3 5332070987385762304

Description
Value
Unit
Equatorial ICRS (RA,DEC) at epoch 2016 133.7862466719, -43.4666071740 deg
Galactic (l, b) at epoch 2016 264.4189081459, 1.0477496573 deg
Parallax 1.1299 ± 0.0294 mas
RA proper motion -5.5467 ± 0.0297 mas yr-1
DEC proper motion 5.4670 ± 0.0309 mas yr-1
Renormalised unit weight error 1.529

======
Position from Hipparcos (Leeuwen 2007)
Checked with Simbad
Uncertainity in RA is estimated from uncertainty in proper motion

HD 76534 -- Be Star
*Other object types: otypes_help * (HD,ALS,...), ** (**,CCDM,...), V* (2012A&A,V*,...), UV (CEL,TD1), MIR (WISEA,WISE), Be* (1982IAUS), Ae? (2003AJ), Em* (Hen), NIR (2MASS), IR (IRAS)*
ICRS coord. (ep=J2000) : 08 55 08.70673 -43 27 59.8852 (Optical) [8.69 8.09 90] A 2007A&A...474..653V
FK4 coord. (ep=B1950 eq=1950) : 08 53 20.74694 -43 16 29.3115 [8.69 8.09 90]
Gal coord. (ep=J2000) : 264.41895018 +01.04774849 [8.69 8.09 90]
Proper motions mas/yr : -6.98 4.03 [0.99 0.92 0] A 2007A&A...474..653V
Radial velocity / Redshift / cz : V(km/s) 17.00 [5] / z(~) 0.000057 [0.000017] / cz 17.00 [5.00]
C 2006AstL....32..759G
Parallaxes (mas): 1.02 [1.00] A 2007A&A...474..653V
Spectral type: B2Vn C 1978MSS...C02....0H
Fluxes (7) :
U 7.04 [~] C 2002yCat.2237....0D
B 7.62 [~] C 2002yCat.2237....0D
V 7.50 [~] C 2002yCat.2237....0D
R 8.94 [0.10] E 2012yCat.1322....0Z
J 7.818 [0.024] C 2003yCat.2246....0C
H 7.858 [0.040] C 2003yCat.2246....0C
K 7.804 [0.015] C 2003yCat.2246....0C
Category=Star
Description=[B stars, Emission line stars]
Extended=NO

Template

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

Dithers

#	Dither Type	Starting Point	Number of Points	Pattern Size
1	CYCLING	1	4	LARGE

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	Optional ETC ID
1	IMAGER	P750L			FASTR1	5	36	1	4	144	2386.534	
2	IMAGER	F1800W			FASTR1	5	1	1	4	4	55.501	

Special Requirements

Offset 10.0 arcsec, -10.0 arcsec
No Parallel Attachments

Group Observations 1, 2, 3, 4, 5, Non-interruptible

Observation	**Proposal 9266, Observation 4: HD 76534 box 4 bottom left** Thu Nov 20 19:03:23 GMT 2025 **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
(1)	HD76534	RA: 08 55 8.6992 (133.7862467d)	Proper Motion RA: -5.5467 mas/yr	
		Dec: -43 27 59.79 (-43.46661d)	Proper Motion Dec: 5.4670 mas/yr	
		Equinox: J2000	Parallax: 0.00113"	
			Epoch of Position: 2016	

Comments: Am keeping the text below for record.

If I look on the ESA Gaia archive I find the same position but a slightly dfiferent proper motion, but these are in 2016 coordinates, so am going to put this in 2016 coordinates.

Gaia DR3 5332070987385762304

Description
Value
Unit
Equatorial ICRS (RA,DEC) at epoch 2016 133.7862466719, -43.4666071740 deg
Galactic (l, b) at epoch 2016 264.4189081459, 1.0477496573 deg
Parallax 1.1299 ± 0.0294 mas
RA proper motion -5.5467 ± 0.0297 mas yr-1
DEC proper motion 5.4670 ± 0.0309 mas yr-1
Renormalised unit weight error 1.529

======
Position from Hipparcos (Leeuwen 2007)
Checked with Simbad
Uncertainity in RA is estimated from uncertainty in proper motion

HD 76534 -- Be Star
*Other object types: otypes_help * (HD,ALS,...), ** (**,CCDM,...), V* (2012A&A,V*,...), UV (CEL,TD1), MIR (WISEA,WISE), Be* (1982IAUS), Ae? (2003AJ), Em* (Hen), NIR (2MASS), IR (IRAS)*
ICRS coord. (ep=J2000) : 08 55 08.70673 -43 27 59.8852 (Optical) [8.69 8.09 90] A 2007A&A...474..653V
FK4 coord. (ep=B1950 eq=1950) : 08 53 20.74694 -43 16 29.3115 [8.69 8.09 90]
Gal coord. (ep=J2000) : 264.41895018 +01.04774849 [8.69 8.09 90]
Proper motions mas/yr : -6.98 4.03 [0.99 0.92 0] A 2007A&A...474..653V
Radial velocity / Redshift / cz : V(km/s) 17.00 [5] / z(~) 0.000057 [0.000017] / cz 17.00 [5.00]
C 2006AstL....32..759G
Parallaxes (mas): 1.02 [1.00] A 2007A&A...474..653V
Spectral type: B2Vn C 1978MSS...C02....0H
Fluxes (7) :
U 7.04 [~] C 2002yCat.2237....0D
B 7.62 [~] C 2002yCat.2237....0D
V 7.50 [~] C 2002yCat.2237....0D
R 8.94 [0.10] E 2012yCat.1322....0Z
J 7.818 [0.024] C 2003yCat.2246....0C
H 7.858 [0.040] C 2003yCat.2246....0C
K 7.804 [0.015] C 2003yCat.2246....0C
Category=Star
Description=[B stars, Emission line stars]
Extended=NO

Template

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

Dithers

#	Dither Type	Starting Point	Number of Points	Pattern Size
1	CYCLING	1	4	LARGE

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	Optional ETC ID
1	IMAGER	P750L			FASTR1	5	36	1	4	144	2386.534	
2	IMAGER	F1800W			FASTR1	5	1	1	4	4	55.501	

Special Requirements

Offset -20.0 arcsec, -10.0 arcsec
No Parallel Attachments

Group Observations 1, 2, 3, 4, 5, Non-interruptible

Observation	**Proposal 9266, Observation 5: HD 76534 box 5 top left** Thu Nov 20 19:03:23 GMT 2025 **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
(1)	HD76534	RA: 08 55 8.6992 (133.7862467d)	Proper Motion RA: -5.5467 mas/yr	
		Dec: -43 27 59.79 (-43.46661d)	Proper Motion Dec: 5.4670 mas/yr	
		Equinox: J2000	Parallax: 0.00113"	
			Epoch of Position: 2016	

Comments: Am keeping the text below for record.

If I look on the ESA Gaia archive I find the same position but a slightly dfiferent proper motion, but these are in 2016 coordinates, so am going to put this in 2016 coordinates.

Gaia DR3 5332070987385762304

Description
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Unit
Equatorial ICRS (RA,DEC) at epoch 2016 133.7862466719, -43.4666071740 deg
Galactic (l, b) at epoch 2016 264.4189081459, 1.0477496573 deg
Parallax 1.1299 ± 0.0294 mas
RA proper motion -5.5467 ± 0.0297 mas yr-1
DEC proper motion 5.4670 ± 0.0309 mas yr-1
Renormalised unit weight error 1.529

======
Position from Hipparcos (Leeuwen 2007)
Checked with Simbad
Uncertainity in RA is estimated from uncertainty in proper motion

HD 76534 -- Be Star
*Other object types: otypes_help * (HD,ALS,...), ** (**,CCDM,...), V* (2012A&A,V*,...), UV (CEL,TD1), MIR (WISEA,WISE), Be* (1982IAUS), Ae? (2003AJ), Em* (Hen), NIR (2MASS), IR (IRAS)*
ICRS coord. (ep=J2000) : 08 55 08.70673 -43 27 59.8852 (Optical) [8.69 8.09 90] A 2007A&A...474..653V
FK4 coord. (ep=B1950 eq=1950) : 08 53 20.74694 -43 16 29.3115 [8.69 8.09 90]
Gal coord. (ep=J2000) : 264.41895018 +01.04774849 [8.69 8.09 90]
Proper motions mas/yr : -6.98 4.03 [0.99 0.92 0] A 2007A&A...474..653V
Radial velocity / Redshift / cz : V(km/s) 17.00 [5] / z(~) 0.000057 [0.000017] / cz 17.00 [5.00]
C 2006AstL....32..759G
Parallaxes (mas): 1.02 [1.00] A 2007A&A...474..653V
Spectral type: B2Vn C 1978MSS...C02....0H
Fluxes (7) :
U 7.04 [~] C 2002yCat.2237....0D
B 7.62 [~] C 2002yCat.2237....0D
V 7.50 [~] C 2002yCat.2237....0D
R 8.94 [0.10] E 2012yCat.1322....0Z
J 7.818 [0.024] C 2003yCat.2246....0C
H 7.858 [0.040] C 2003yCat.2246....0C
K 7.804 [0.015] C 2003yCat.2246....0C
Category=Star
Description=[B stars, Emission line stars]
Extended=NO

Template

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

Dithers

#	Dither Type	Starting Point	Number of Points	Pattern Size
1	CYCLING	1	4	LARGE

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	Optional ETC ID
1	IMAGER	P750L			FASTR1	5	36	1	4	144	2386.534	
2	IMAGER	F1800W			FASTR1	5	1	1	4	4	55.501	

Special Requirements

Offset -20.0 arcsec, 20.0 arcsec
No Parallel Attachments

Group Observations 1, 2, 3, 4, 5, Non-interruptible