



1276 - Spectroscopic Observations of WD 0806-661B

Cycle: 1, Proposal Category: GTO

INVESTIGATORS

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OBSERVATIONS

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
WD0806 Observations				
	1	NIRSPEC IFU	NIRSpec IFU Spectroscopy	(1) WD0806-661B
	2	WD search narrow	NIRCam Imaging	(2) LAWD-27-OFFSET
	3	MIRI LRS	MIRI Low Resolution Spectroscopy	(1) WD0806-661B
	4	MIRI imaging	MIRI Imaging	(1) WD0806-661B

ABSTRACT

We plan to characterize the atmosphere of the substellar mass object WD 0806-661 B by spectroscopic and photometric observations. We will also look for new companions or members of the system.

OBSERVING DESCRIPTION

Four observation types:

- 1) NIRSpec IFU spectra also allow search for nearby companions.
- 2) NIRCam image in four colors also looks for new members of the system. This image field is not centered on either the WD or BD, but instead is offset a bit from the WD in the direction of the BD, searching along the "ecliptic plane" of the system. However, the field also does include the WD itself to look for nearby companions to that object.

3) MIRI LRS spectrum of WD

4) MIRI imaging observations to cover the wavelength range beyond 12 microns, not accessible to LRS (F1280W, F1500W, F1800W, F2100W) .

These observations will also allow searching for cold companions.

Proposal 1276 - Targets - Spectroscopic Observations of WD 0806-661B

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	WD0806-661B	RA: 08 07 14.6750 (121.8111458d) Dec: -66 18 48.68 (-66.31352d) Equinox: J2000	Proper Motion RA: 340.3 mas/yr Proper Motion Dec: -289.6 mas/yr Parallax: 0.052" Epoch of Position: 2000	
<i>Comments: Large proper motion</i> <i>Category=Star</i> <i>Description=[Brown dwarfs]</i> <i>Extended=NO</i>				
(2)	LAWD-27-OFFSET	RA: 08 06 58.0000 (121.7416667d) Dec: -66 18 26.74 (-66.30743d) Equinox: J2000	Proper Motion RA: 340 mas/yr Proper Motion Dec: -289 mas/yr Parallax: 0.052" Epoch of Position: 2000	
<i>Comments:</i> <i>Category=Star</i> <i>Description=[White dwarfs]</i> <i>Extended=NO</i>				

Proposal 1276 - Observation 1 - Spectroscopic Observations of WD 0806-661B

Wed Sep 22 00:00:09 GMT 2021

Observation	<p>Proposal 1276, Observation 1: NIRSPEC IFU</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRSpec IFU Spectroscopy</p>											
Diagnostics	<p>(NIRSPEC IFU (Obs 1)) Warning (Form): NGROUPS=1 may suffer from low calibration accuracy.</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)	WD0806-661B	RA: 08 07 14.6750 (121.8111458d) Dec: -66 18 48.68 (-66.31352d) Equinox: J2000			Proper Motion RA: 340.3 mas/yr Proper Motion Dec: -289.6 mas/yr Parallax: 0.052" Epoch of Position: 2000						
	<p><i>Comments: Large proper motion</i></p> <p><i>Category=Star</i></p> <p><i>Description=[Brown dwarfs]</i></p> <p><i>Extended=NO</i></p>											
Template	<p>TA Method</p> <p>VERIFY_ONLY</p>											
Dithers	#	Dither Type		Size	Starting Point			Number of Points	Points			
	1	4-POINT-NOD										
Pointing Verification	#	PV MSA Configuration	Filter	PV Readout Pattern	PV Groups/Int	PV Integrations/Exp	PV Total Dithers	PV Total Integrations	PV Total Exposure Time			
	1	ALLCLOSED	CLEAR	NRSIRS2RAPID	1	1	1	1	29.178			
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wbkk.Calc ID
	1	G395M/F290LP	NRSIRS2RAPID	26	4	false	true	NONE	4	16	6302.4	

Proposal 1276 - Observation 2 - Spectroscopic Observations of WD 0806-661B

Wed Sep 22 00:00:09 GMT 2021

Observation	<p>Proposal 1276, Observation 2: WD search narrow</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Imaging</p>									
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		
	(2)	LAWD-27-OFFSET	RA: 08 06 58.0000 (121.7416667d) Dec: -66 18 26.74 (-66.30743d) Equinox: J2000		Proper Motion RA: 340 mas/yr Proper Motion Dec: -289 mas/yr Parallax: 0.052" Epoch of Position: 2000					
	<p><i>Comments:</i> <i>Category=Star</i> <i>Description=[White dwarfs]</i> <i>Extended=NO</i></p>									
Template	Module					Subarray				
	B					FULL				
Dithers	#	Primary Dither Type		Primary Dithers	Subpixel Dither Type		Dither Size	Subpixel Positions		
	1	INTRASCA		3	STANDARD		24" (LARGE)	1		
Spectral Elements	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F444W	SHALLOW4	6	1	3	3	934.099	
	2	F150W2	F356W	SHALLOW4	6	1	3	3	934.099	
Special Requirements	Offset -30.0 arcsec, -30.0 arcsec									

Proposal 1276 - Observation 3 - Spectroscopic Observations of WD 0806-661B

Wed Sep 22 00:00:09 GMT 2021

Observation	<p>Proposal 1276, Observation 3: MIRI LRS Diagnostic Status: Warning Observing Template: MIRI Low Resolution Spectroscopy</p>								
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)	WD0806-661B	RA: 08 07 14.6750 (121.8111458d) Dec: -66 18 48.68 (-66.31352d) Equinox: J2000	Proper Motion RA: 340.3 mas/yr Proper Motion Dec: -289.6 mas/yr Parallax: 0.052" Epoch of Position: 2000					
	<p><i>Comments: Large proper motion</i> <i>Category=Star</i> <i>Description=[Brown 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 WD0806-661B	F1000W	FASTGRPAVG	10	1	1	111.002	12718.1
Template	Subarray				Obtain Verification Image?				
	FULL				true				
Dithers	#	Dither Type	No. Spectral Steps	Spectral Step Offset	No. Spatial Steps	Spatial Step Offset			
	1	ALONG SLIT NOD							
Pointing Verification	#	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID		
	1	FASTGRPAVG	10	1	1	111.002	12718.1		

Proposal 1276 - Observation 3 - Spectroscopic Observations of WD 0806-661B

Spectral Elements	#	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Exposures/Dith	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
	1	FASTR1	290	8	16	1	2	12915.036	12718.2

Proposal 1276 - Observation 4 - Spectroscopic Observations of WD 0806-661B

Wed Sep 22 00:00:09 GMT 2021

Observation	<p>Proposal 1276, Observation 4: MIRI imaging</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</p>										
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)	WD0806-661B	RA: 08 07 14.6750 (121.8111458d) Dec: -66 18 48.68 (-66.31352d) Equinox: J2000			Proper Motion RA: 340.3 mas/yr Proper Motion Dec: -289.6 mas/yr Parallax: 0.052" Epoch of Position: 2000					
	<p><i>Comments: Large proper motion</i></p> <p><i>Category=Star</i></p> <p><i>Description=[Brown dwarfs]</i></p> <p><i>Extended=NO</i></p>										
Template	<p>Subarray</p> <p>FULL</p>										
Dithers	#	Dither Type	Starting Point	Number of Points	Points	Starting Set	Number of Sets	Optimized For	Direction	Pattern Size	
	1	2-Point								DEFAULT	
Spectral Elements	#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F1280W	FASTR1	50	1	1	Dither 1	2	2	277.504	12718.3
	2	F1500W	FASTR1	50	2	1	Dither 1	2	4	560.558	12718.4
	3	F1800W	FASTR1	25	2	1	Dither 1	2	4	283.054	12718.5
	4	F2100W	FASTR1	25	2	1	Dither 1	2	4	283.054	12718.6