



7833 - Planet Authentication in White-dwarf Systems (PAWS): Revealing the Demographics of Exoplanets Orbiting White Dwarfs

Cycle: 4, Proposal Category: GO

INVESTIGATORS

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OBSERVATIONS

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
Observation Folder				
	1		MIRI Imaging	(1) WD1748
	2		MIRI Imaging	(2) WD0752
	3		MIRI Imaging	(3) WD0839
	4		MIRI Imaging	(17) LAWD-37
	5		MIRI Imaging	(5) EGGR-250
	7		MIRI Imaging	(7) SCR-J0821-6703
	9		MIRI Imaging	(9) G-227-28
	10		MIRI Imaging	(10) LP-726-1

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
	11		MIRI Imaging	(11) UCAC4-398-010797
	12		MIRI Imaging	(12) VB-3
	14		MIRI Imaging	(14) EGGR-350
	15		MIRI Imaging	(15) EGGR-199
	16		MIRI Imaging	(16) EGGR-436

ABSTRACT

Understanding how post-main-sequence stellar evolution affects exoplanet populations is a key question in the field today, but so far, relatively few planets have been confidently detected around white dwarfs. Recent JWST observations have detected numerous planet candidates in white dwarf systems, but these discoveries require additional observations before they can be confirmed. We request MIRI imaging observations of an unbiased, volume-limited sample of 16 nearby white dwarfs with directly imaged planet candidates from Cycle 2 JWST observations. Our additional MIRI observations will let us measure each candidate's proper motion and distinguish real planets from background contaminants. Our program will result in the confirmation of numerous giant planet candidates (likely including some of the coldest exoplanets ever imaged) and a first measurement of the occurrence rate of giant planets around white dwarfs. Based on main-sequence planet occurrence rates, we expect to confirm 5 +/- 2 planets in our sample (with 99.6% probability of detecting at least one planet). If our actual number of detected planets differs from this estimate significantly, it would suggest that our understanding of post-main-sequence planetary evolution is incomplete.

OBSERVING DESCRIPTION

We will collect MIRI imaging for 16 white dwarf systems using the same filters and exposure times as in the first epoch: F2100W: 12 min, F1800W: 5 min, and F770W: 1 min. A 4-point cycling dither pattern will be employed to mitigate bad pixels and enable background correction, consistent with the first epoch of observations. This consistent approach ensures the detection of the same sources at the same SNR that was achieved in the first epoch and gives multiple independent checks (in each filter) on the proper motion measurements. The charged time for this program, including overheads, is 24.1 hours.

Due to the proximity of the white dwarf systems in the sample, all exhibit high or very high proper motion (up to 3.6 arcsec/year). The white dwarfs in this sample will have shifted on the detector by 2-65 pixels between the two epochs. Using PSF fitting, we are capable of measuring the positions of the faintest exoplanet targets within the sample to <0.4 pixels. Therefore, with a two-year baseline between the epochs we can achieved >5 sigma detection of proper motion even for the faintest candidates in the field of view.

JWST Proposal 7833 (Created: Friday, November 7, 2025, 4:00:09PM Eastern Standard Time) - Overview

Since there are currently no high-precision distortion maps for the MIRI 18 and 21 micron imagery, we will constrain the PA of the second epoch of observation to match the first (± 1 degree). This ensures that the lack of a high-fidelity distortion correction does not compromise our ability to conduct high-precision proper motion measurements. Additionally, keeping the PA consistent ensures that we capture the same candidates at wide angular separations near the edge of the field of view, which might otherwise be cut off the detector if the field rotation differs from the first epoch.

Proposal 7833 - Targets - Planet Authentication in White-dwarf Systems (PAWS): Revealing the Demographics of Exoplanets Orbiting...

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	WD1748	RA: 17 48 7.9928 (267.0333033d) Dec: +70 52 35.92 (70.87664d) Equinox: J2000	Proper Motion RA: -1266.387 mas/yr Proper Motion Dec: 1108.801 mas/yr Parallax: 0.1609952" Epoch of Position: 2000	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p>Category=Star Description=[White dwarfs]</p>				
(2)	WD0752	RA: 07 53 8.1439 (118.2839329d) Dec: -67 47 31.38 (-67.79205d) Equinox: J2000	Proper Motion RA: 1467.123 mas/yr Proper Motion Dec: -1489.7210000754058 mas/yr Parallax: 0.122413" Epoch of Position: 2000	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p>Category=Star Description=[White dwarfs]</p>				
(3)	WD0839	RA: 08 41 32.4291 (130.3851212d) Dec: -32 56 32.92 (-32.94248d) Equinox: J2000	Proper Motion RA: -1061.158 mas/yr Proper Motion Dec: 1345.9 mas/yr Parallax: 0.1173961" Epoch of Position: 2000	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p>Category=Star Description=[White dwarfs]</p>				
(4)	LAWD-25	RA: 07 40 20.7887 (115.0866196d) Dec: -17 24 49.16 (-17.41366d) Equinox: J2000	Proper Motion RA: 1138.69 mas/yr Proper Motion Dec: -542.5560000503538 mas/yr Parallax: 0.109344" Epoch of Position: 2000	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p>Category=Star Description=[White dwarfs]</p>				
(5)	EGGR-250	RA: 09 15 56.0774 (138.9836558d) Dec: +53 25 23.86 (53.42329d) Equinox: J2000	Proper Motion RA: -1086.388 mas/yr Proper Motion Dec: -1121.280999927876 mas/yr Parallax: 0.097345" Epoch of Position: 2000	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p>Category=Star Description=[White dwarfs]</p>				

Fixed Targets

Proposal 7833 - Targets - Planet Authentication in White-dwarf Systems (PAWS): Revealing the Demographics of Exoplanets Orbiting...

(7)	SCR-J0821-6703	RA: 08 21 26.7016 (125.3612567d) Dec: -67 03 20.02 (-67.05556d) Equinox: J2000	Proper Motion RA: -397.343 mas/yr Proper Motion Dec: 660.191 mas/yr Parallax: 0.0936719999999999" Epoch of Position: 2000
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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=Star
 Description=[White dwarfs]

(9)	G-227-28	RA: 18 21 19.8310 (275.3326292d) Dec: +61 01 7.38 (61.01872d) Equinox: J2000	Proper Motion RA: 147.94 mas/yr Proper Motion Dec: -698.5109999277483 mas/yr Parallax: 0.0729516" Epoch of Position: 2000
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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=Star
 Description=[White dwarfs]

(10)	LP-726-1	RA: 08 42 48.4648 (130.7019367d) Dec: -13 47 13.21 (-13.78700d) Equinox: J2000	Proper Motion RA: -266.007 mas/yr Proper Motion Dec: -24.84599999661441 mas/yr Parallax: 0.0675216" Epoch of Position: 2000
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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=Star
 Description=[White dwarfs]

(11)	UCAC4-398-010797	RA: 05 54 43.0381 (88.6793254d) Dec: -10 35 21.34 (-10.58926d) Equinox: J2000	Proper Motion RA: -64.178 mas/yr Proper Motion Dec: -152.8359999838358 mas/yr Parallax: 0.0654097" Epoch of Position: 2000
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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=Star
 Description=[White dwarfs]

(12)	VB-3	RA: 07 45 38.4275 (116.4101146d) Dec: -33 55 51.34 (-33.93093d) Equinox: J2000	Proper Motion RA: -276.113 mas/yr Proper Motion Dec: 1680.502 mas/yr Parallax: 0.0648179" Epoch of Position: 2000
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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=Star
 Description=[White dwarfs]

Proposal 7833 - Targets - Planet Authentication in White-dwarf Systems (PAWS): Revealing the Demographics of Exoplanets Orbiting...

(14)	EGGR-350	RA: 10 23 9.0630 (155.7877625d) Dec: +63 27 41.49 (63.46153d) Equinox: J2000	Proper Motion RA: 299.941 mas/yr Proper Motion Dec: 222.028 mas/yr Parallax: 0.0627324" Epoch of Position: 2000
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p>Category=Star Description=[White dwarfs]</p>			
(15)	EGGR-199	RA: 17 49 50.1475 (267.4589479d) Dec: +82 46 26.06 (82.77391d) Equinox: J2000	Proper Motion RA: -1436.908 mas/yr Proper Motion Dec: 3314.437 mas/yr Parallax: 0.0611753" Epoch of Position: 2000
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p>Category=Star Description=[White dwarfs]</p>			
(16)	EGGR-436	RA: 13 08 41.1945 (197.1716437d) Dec: +85 02 28.16 (85.04116d) Equinox: J2000	Proper Motion RA: 214.43 mas/yr Proper Motion Dec: -250.71200002457772 mas/yr Parallax: 0.060711" Epoch of Position: 2000
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p>Category=Star Description=[White dwarfs]</p>			
(17)	LAWD-37	RA: 11 45 42.9169 (176.4288204d) Dec: -64 50 29.46 (-64.84152d) Equinox: J2000	Proper Motion RA: 2661.64 mas/yr Proper Motion Dec: -344.9329999739348 mas/yr Parallax: 0.2156753" Epoch of Position: 2000
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p>Category=Star Description=[White dwarfs]</p>			

Proposal 7833 - Observation 1 - Planet Authentication in White-dwarf Systems (PAWS): Revealing the Demographics of Exoplanets O...

Fri Nov 07 21:00:09 GMT 2025

Observation	<p>Proposal 7833, Observation 1</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</p>										
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)	WD1748	RA: 17 48 7.9928 (267.0333033d) Dec: +70 52 35.92 (70.87664d) Equinox: J2000			Proper Motion RA: -1266.387 mas/yr Proper Motion Dec: 1108.801 mas/yr Parallax: 0.1609952" Epoch of Position: 2000					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[White dwarfs]</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	CYCLING	1	4						DEFAULT	
Spectral Elements	#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1	F770W	FASTR1	5	1	1	Dither 1	4	4	55.501	
	2	F1800W	FASTR1	12	2	1	Dither 1	4	8	277.504	
	3	F2100W	FASTR1	12	5	1	Dither 1	4	20	710.41	
Special Requirements	Aperture PA Range 94.83544897 to 96.83544897 Degrees (V3 90.0 to 92.0)										

Proposal 7833 - Observation 2 - Planet Authentication in White-dwarf Systems (PAWS): Revealing the Demographics of Exoplanets O...

Fri Nov 07 21:00:09 GMT 2025

Observation	<p>Proposal 7833, Observation 2</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI 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)	WD0752	RA: 07 53 8.1439 (118.2839329d) Dec: -67 47 31.38 (-67.79205d) Equinox: J2000			Proper Motion RA: 1467.123 mas/yr Proper Motion Dec: -1489.7210000754058 mas/yr Parallax: 0.122413" Epoch of Position: 2000					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[White dwarfs]</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	CYCLING	1	4						DEFAULT	
Spectral Elements	#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1	F770W	FASTR1	5	1	1	Dither 1	4	4	55.501	
	2	F1800W	FASTR1	12	2	1	Dither 1	4	8	277.504	
	3	F2100W	FASTR1	12	5	1	Dither 1	4	20	710.41	
Special Requirements	Aperture PA Range 62.73544897 to 64.73544897 Degrees (V3 57.9 to 59.9)										

Proposal 7833 - Observation 3 - Planet Authentication in White-dwarf Systems (PAWS): Revealing the Demographics of Exoplanets O...

Fri Nov 07 21:00:09 GMT 2025

Observation	<p>Proposal 7833, Observation 3</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</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		
	(3)	WD0839	RA: 08 41 32.4291 (130.3851212d) Dec: -32 56 32.92 (-32.94248d) Equinox: J2000			Proper Motion RA: -1061.158 mas/yr Proper Motion Dec: 1345.9 mas/yr Parallax: 0.1173961" Epoch of Position: 2000					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[White dwarfs]</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	CYCLING	1	4						DEFAULT	
Spectral Elements	#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1	F770W	FASTR1	5	1	1	Dither 1	4	4	55.501	
	2	F1800W	FASTR1	12	2	1	Dither 1	4	8	277.504	
	3	F2100W	FASTR1	12	5	1	Dither 1	4	20	710.41	
Special Requirements	Aperture PA Range 88.43544897 to 90.43544897 Degrees (V3 83.6 to 85.6)										

Proposal 7833 - Observation 4 - Planet Authentication in White-dwarf Systems (PAWS): Revealing the Demographics of Exoplanets O...

Fri Nov 07 21:00:09 GMT 2025

Observation	<p>Proposal 7833, Observation 4</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		
	(17)	LAWD-37	RA: 11 45 42.9169 (176.4288204d) Dec: -64 50 29.46 (-64.84152d) Equinox: J2000			Proper Motion RA: 2661.64 mas/yr Proper Motion Dec: -344.9329999739348 mas/yr Parallax: 0.2156753" Epoch of Position: 2000					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[White dwarfs]</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	CYCLING	1	4						DEFAULT	
Spectral Elements	#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1	F770W	FASTR1	5	1	1	Dither 1	4	4	55.501	
	2	F1800W	FASTR1	12	2	1	Dither 1	4	8	277.504	
	3	F2100W	FASTR1	12	5	1	Dither 1	4	20	710.41	
Special Requirements	Aperture PA Range 125.03544897 to 127.03544897 Degrees (V3 120.2 to 122.2)										

Proposal 7833 - Observation 5 - Planet Authentication in White-dwarf Systems (PAWS): Revealing the Demographics of Exoplanets O...

Fri Nov 07 21:00:09 GMT 2025

Observation	<p>Proposal 7833, Observation 5</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</p>										
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		
	(5)	EGGR-250	RA: 09 15 56.0774 (138.9836558d) Dec: +53 25 23.86 (53.42329d) Equinox: J2000			Proper Motion RA: -1086.388 mas/yr Proper Motion Dec: -1121.280999927876 mas/yr Parallax: 0.097345" Epoch of Position: 2000					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[White dwarfs]</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	CYCLING	1	4						DEFAULT	
Spectral Elements	#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1	F770W	FASTR1	5	1	1	Dither 1	4	4	55.501	
	2	F1800W	FASTR1	12	2	1	Dither 1	4	8	277.504	
	3	F2100W	FASTR1	12	5	1	Dither 1	4	20	710.41	
Special Requirements	Aperture PA Range 122.13544897 to 124.13544897 Degrees (V3 117.3 to 119.3)										

Proposal 7833 - Observation 7 - Planet Authentication in White-dwarf Systems (PAWS): Revealing the Demographics of Exoplanets O...

Fri Nov 07 21:00:09 GMT 2025

Observation	<p>Proposal 7833, Observation 7</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</p>										
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		
	(7)	SCR-J0821-6703	RA: 08 21 26.7016 (125.3612567d) Dec: -67 03 20.02 (-67.05556d) Equinox: J2000			Proper Motion RA: -397.343 mas/yr Proper Motion Dec: 660.191 mas/yr Parallax: 0.0936719999999999" Epoch of Position: 2000					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[White dwarfs]</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	CYCLING	1	4						DEFAULT	
Spectral Elements	#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1	F770W	FASTR1	5	1	1	Dither 1	4	4	55.501	
	2	F1800W	FASTR1	12	2	1	Dither 1	4	8	277.504	
	3	F2100W	FASTR1	12	5	1	Dither 1	4	20	710.41	
Special Requirements	Aperture PA Range 51.63544897 to 53.63544897 Degrees (V3 46.8 to 48.8)										

Proposal 7833 - Observation 9 - Planet Authentication in White-dwarf Systems (PAWS): Revealing the Demographics of Exoplanets O...

Fri Nov 07 21:00:09 GMT 2025

Observation	<p>Proposal 7833, Observation 9</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</p>																																																					
Diagnostics	(Visit 9:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.																																																					
Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th colspan="3">Targ. Coord. Corrections</th> <th colspan="4">Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(9)</td> <td>G-227-28</td> <td>RA: 18 21 19.8310 (275.3326292d) Dec: +61 01 7.38 (61.01872d) Equinox: J2000</td> <td colspan="3">Proper Motion RA: 147.94 mas/yr Proper Motion Dec: -698.5109999277483 mas/yr Parallax: 0.0729516" Epoch of Position: 2000</td> <td colspan="4"></td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p><i>Category=Star</i> <i>Description=[White dwarfs]</i></p>										#	Name	Target Coordinates	Targ. Coord. Corrections			Miscellaneous				(9)	G-227-28	RA: 18 21 19.8310 (275.3326292d) Dec: +61 01 7.38 (61.01872d) Equinox: J2000	Proper Motion RA: 147.94 mas/yr Proper Motion Dec: -698.5109999277483 mas/yr Parallax: 0.0729516" Epoch of Position: 2000																														
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Template	<p>Subarray</p> <p>FULL</p>																																																					
Dithers	<table border="1"> <thead> <tr> <th>#</th> <th>Dither Type</th> <th>Starting Point</th> <th>Number of Points</th> <th>Points</th> <th>Starting Set</th> <th>Number of Sets</th> <th>Optimized For</th> <th>Direction</th> <th>Pattern Size</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CYCLING</td> <td>1</td> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>DEFAULT</td> </tr> </tbody> </table>										#	Dither Type	Starting Point	Number of Points	Points	Starting Set	Number of Sets	Optimized For	Direction	Pattern Size	1	CYCLING	1	4						DEFAULT																								
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Spectral Elements	<table border="1"> <thead> <tr> <th>#</th> <th>Filter</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/Exp</th> <th>Exposures/Dith</th> <th>Dither</th> <th>Total Dithers</th> <th>Total Integrations</th> <th>Total Exposure Time</th> <th>Optional ETC ID</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>F770W</td> <td>FASTR1</td> <td>5</td> <td>1</td> <td>1</td> <td>Dither 1</td> <td>4</td> <td>4</td> <td>55.501</td> <td></td> </tr> <tr> <td>2</td> <td>F1800W</td> <td>FASTR1</td> <td>12</td> <td>2</td> <td>1</td> <td>Dither 1</td> <td>4</td> <td>8</td> <td>277.504</td> <td></td> </tr> <tr> <td>3</td> <td>F2100W</td> <td>FASTR1</td> <td>12</td> <td>5</td> <td>1</td> <td>Dither 1</td> <td>4</td> <td>20</td> <td>710.41</td> <td></td> </tr> </tbody> </table>										#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID	1	F770W	FASTR1	5	1	1	Dither 1	4	4	55.501		2	F1800W	FASTR1	12	2	1	Dither 1	4	8	277.504		3	F2100W	FASTR1	12	5	1	Dither 1	4	20	710.41	
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2	F1800W	FASTR1	12	2	1	Dither 1	4	8	277.504																																													
3	F2100W	FASTR1	12	5	1	Dither 1	4	20	710.41																																													
Special Requirements	Aperture PA Range 251.33544897 to 253.33544897 Degrees (V3 246.5 to 248.5)																																																					

Proposal 7833 - Observation 10 - Planet Authentication in White-dwarf Systems (PAWS): Revealing the Demographics of Exoplanets ...

Fri Nov 07 21:00:09 GMT 2025

Observation	<p>Proposal 7833, Observation 10</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</p>										
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		
	(10)	LP-726-1	RA: 08 42 48.4648 (130.7019367d) Dec: -13 47 13.21 (-13.78700d) Equinox: J2000			Proper Motion RA: -266.007 mas/yr Proper Motion Dec: -24.8459999661441 mas/yr Parallax: 0.0675216" Epoch of Position: 2000					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[White dwarfs]</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	CYCLING	1	4						DEFAULT	
Spectral Elements	#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1	F770W	FASTR1	5	1	1	Dither 1	4	4	55.501	
	2	F1800W	FASTR1	12	2	1	Dither 1	4	8	277.504	
	3	F2100W	FASTR1	12	5	1	Dither 1	4	20	710.41	
Special Requirements	Aperture PA Range 109.83544897 to 111.83544897 Degrees (V3 105.0 to 107.0)										

Proposal 7833 - Observation 11 - Planet Authentication in White-dwarf Systems (PAWS): Revealing the Demographics of Exoplanets ...

Fri Nov 07 21:00:09 GMT 2025

Observation	<p>Proposal 7833, Observation 11</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</p>										
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		
	(11)	UCAC4-398-010797	RA: 05 54 43.0381 (88.6793254d) Dec: -10 35 21.34 (-10.58926d) Equinox: J2000			Proper Motion RA: -64.178 mas/yr Proper Motion Dec: -152.8359999838358 mas/yr Parallax: 0.0654097" Epoch of Position: 2000					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[White dwarfs]</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	CYCLING	1	4						DEFAULT	
Spectral Elements	#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1	F770W	FASTR1	5	1	1	Dither 1	4	4	55.501	
	2	F1800W	FASTR1	12	2	1	Dither 1	4	8	277.504	
	3	F2100W	FASTR1	12	5	1	Dither 1	4	20	710.41	
Special Requirements	Aperture PA Range 92.13544897 to 94.13544897 Degrees (V3 87.3 to 89.3)										

Proposal 7833 - Observation 12 - Planet Authentication in White-dwarf Systems (PAWS): Revealing the Demographics of Exoplanets ...

Fri Nov 07 21:00:09 GMT 2025

Observation	<p>Proposal 7833, Observation 12</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</p>										
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		
	(12)	VB-3	RA: 07 45 38.4275 (116.4101146d) Dec: -33 55 51.34 (-33.93093d) Equinox: J2000			Proper Motion RA: -276.113 mas/yr Proper Motion Dec: 1680.502 mas/yr Parallax: 0.0648179" Epoch of Position: 2000					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[White dwarfs]</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	CYCLING	1	4						DEFAULT	
Spectral Elements	#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1	F770W	FASTR1	5	1	1	Dither 1	4	4	55.501	
	2	F1800W	FASTR1	12	2	1	Dither 1	4	8	277.504	
	3	F2100W	FASTR1	12	5	1	Dither 1	4	20	710.41	
Special Requirements	Aperture PA Range 69.43544897 to 71.43544897 Degrees (V3 64.6 to 66.6)										

Proposal 7833 - Observation 14 - Planet Authentication in White-dwarf Systems (PAWS): Revealing the Demographics of Exoplanets ...

Fri Nov 07 21:00:09 GMT 2025

Observation	<p>Proposal 7833, Observation 14</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</p>										
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		
	(14)	EGGR-350	RA: 10 23 9.0630 (155.7877625d) Dec: +63 27 41.49 (63.46153d) Equinox: J2000			Proper Motion RA: 299.941 mas/yr Proper Motion Dec: 222.028 mas/yr Parallax: 0.0627324" Epoch of Position: 2000					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[White dwarfs]</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	CYCLING	1	4						DEFAULT	
Spectral Elements	#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1	F770W	FASTR1	5	1	1	Dither 1	4	4	55.501	
	2	F1800W	FASTR1	12	2	1	Dither 1	4	8	277.504	
	3	F2100W	FASTR1	12	5	1	Dither 1	4	20	710.41	
Special Requirements	Aperture PA Range 185.73544897 to 187.73544897 Degrees (V3 180.9 to 182.9)										

Proposal 7833 - Observation 15 - Planet Authentication in White-dwarf Systems (PAWS): Revealing the Demographics of Exoplanets ...

Fri Nov 07 21:00:09 GMT 2025

Observation	<p>Proposal 7833, Observation 15</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</p>										
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		
	(15)	EGGR-199	RA: 17 49 50.1475 (267.4589479d) Dec: +82 46 26.06 (82.77391d) Equinox: J2000			Proper Motion RA: -1436.908 mas/yr Proper Motion Dec: 3314.437 mas/yr Parallax: 0.0611753" Epoch of Position: 2000					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[White dwarfs]</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	CYCLING	1	4						DEFAULT	
Spectral Elements	#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1	F770W	FASTR1	5	1	1	Dither 1	4	4	55.501	
	2	F1800W	FASTR1	12	2	1	Dither 1	4	8	277.504	
	3	F2100W	FASTR1	12	5	1	Dither 1	4	20	710.41	
Special Requirements	Aperture PA Range 252.13544897 to 254.13544897 Degrees (V3 247.3 to 249.3)										

Proposal 7833 - Observation 16 - Planet Authentication in White-dwarf Systems (PAWS): Revealing the Demographics of Exoplanets ...

Fri Nov 07 21:00:09 GMT 2025

Observation	<p>Proposal 7833, Observation 16</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</p>										
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		
	(16)	EGGR-436	RA: 13 08 41.1945 (197.1716437d) Dec: +85 02 28.16 (85.04116d) Equinox: J2000			Proper Motion RA: 214.43 mas/yr Proper Motion Dec: -250.71200002457772 mas/yr Parallax: 0.060711" Epoch of Position: 2000					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>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.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[White dwarfs]</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	CYCLING	1	4						DEFAULT	
Spectral Elements	#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1	F770W	FASTR1	5	1	1	Dither 1	4	4	55.501	
	2	F1800W	FASTR1	12	2	1	Dither 1	4	8	277.504	
	3	F2100W	FASTR1	12	5	1	Dither 1	4	20	710.41	
Special Requirements	Aperture PA Range 177.93544897 to 179.93544897 Degrees (V3 173.1 to 175.1)										