



# 15824 - UV spectroscopy of He stars: the elusive stripped-envelope supernova progenitors

Cycle: 27, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

## INVESTIGATORS

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## VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) LMC079-1	COS/FUV	1	05-Jun-2020 14:00:52.0	yes
02	(2) LMC170-2	COS/FUV	1	05-Jun-2020 14:00:53.0	yes
03	(3) LMC172-1	COS/FUV	1	05-Jun-2020 14:00:54.0	yes
04	(4) LMC174-1	COS/FUV	1	05-Jun-2020 14:00:55.0	yes
05	(5) LMC199-1	COS/FUV	1	05-Jun-2020 14:00:56.0	yes
06	(6) LMC277-2	COS/FUV	1	05-Jun-2020 14:00:57.0	yes
07	(7) LMCE159-1	COS/FUV	1	05-Jun-2020 14:00:58.0	yes

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
08	(8) LMCE169-1	COS/FUV COS/NUV	1	05-Jun-2020 14:00:59.0	yes
09	(9) LMCE078-3	COS/FUV COS/NUV	1	05-Jun-2020 14:00:59.0	yes
10	(10) LMCE055-1	COS/FUV	1	05-Jun-2020 14:01:00.0	yes

10 Total Orbits Used

### **ABSTRACT**

We propose to obtain UV spectra of 10 stars in the LMC that represent a new subtype of Wolf-Rayet (WR) star. These stars, classified as WN3/O3 stars, were identified in a recent narrow-band survey. They represent a major puzzle because they are less luminous and hotter than traditional WR stars, which models usually explain by either wind mass-loss or rapid rotation, yet their winds are very weak. These WN3/O3 stars may be examples of the long-sought He stars at relatively low initial mass (10-20 Msun) that have had their H envelopes stripped in binary systems. This explanation may be favored because (1) their locations are far from O-type stars, requiring long lifetimes and low initial masses of 10-20 Msun, and (2) their spectra and approximate locus on the HR diagram are matched well by stripped binary models. Such binary He stars are extremely important: they have become leading candidates for the progenitors of stripped-envelope supernovae (SNe with no H), they are candidate progenitors of kilonovae/NS+NS mergers, and they may play a critical role in cosmic reionization. Even though they should be quite common, they are elusive because they are too hot and faint to detect in visual photometry nearby galaxies, and they are hard to see locally because their mass-gainer secondary star usually outshines them. If they are binaries, these particular 10 stars are readily observable because they may have low-mass main-sequence companions that did not accrete much mass. Space-based UV spectroscopy can tightly constrain their fundamental parameters. - especially their mass-loss rates, which regulate their escaping ionizing photons, and help determine their eventual fate.

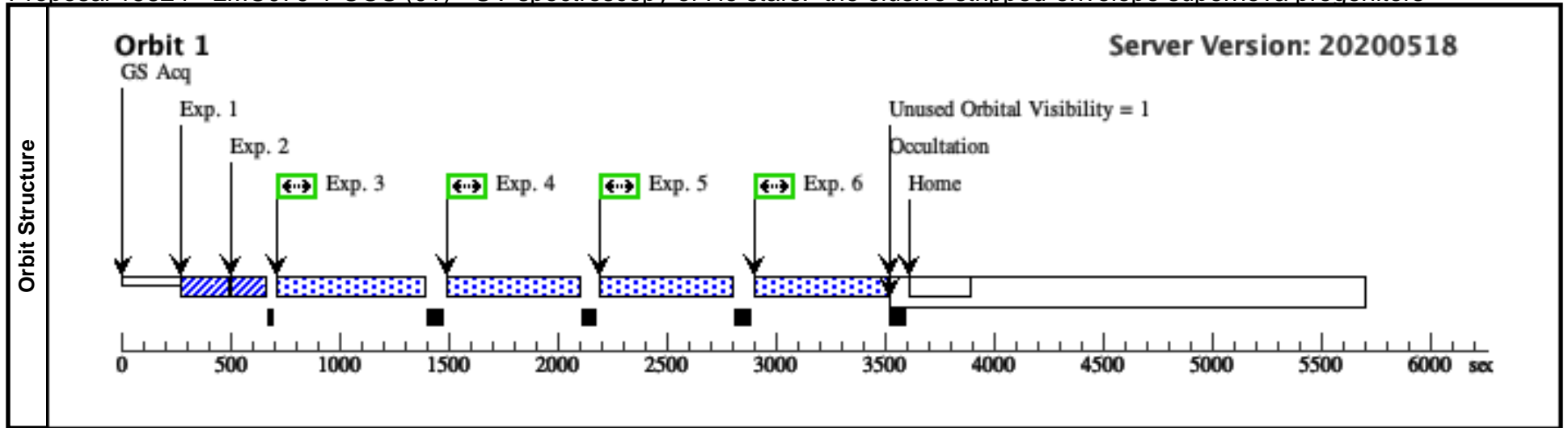
### **OBSERVING DESCRIPTION**

This program will obtain UV spectra for 10 targets in the LMC that are a class of Wolf-Rayet stars called WN3/O3 stars, which exhibit both wind emission lines of WR stars but also absorption lines of hot O-type atmospheres. The goal is to obtain UV spectra and SEDs that can be modeled to more tightly constrain the physical parameters of the stars. Spectra will be obtained in the FUV G160M setting, centered on 1577 AA, with the maximum expore time available in one CVZ orbit per star using all 4 FP positions.

Proposal 15824 - LMC079-1-COS (01) - UV spectroscopy of He stars: the elusive stripped-envelope supernova progenitors

Fri Jun 05 18:01:01 GMT 2020

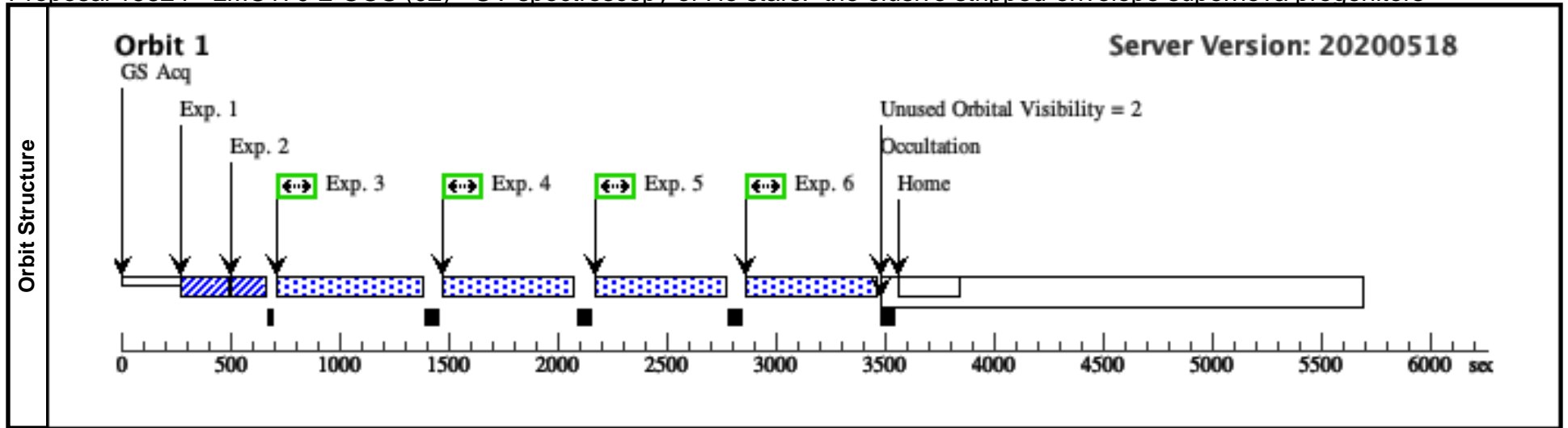
Visit	Proposal 15824, LMC079-1-COS (01), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	LMC079-1	RA: 05 07 13.3300 (76.8055417d) Dec: -70 33 33.90 (-70.55942d) Equinox: J2000		V=15.7	Reference Frame: ICRS				
	Comments: Category=STAR Description=[WOLF RAYET] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	LMC079-1-ACQ/PEAKXD (COS.sa.1440913)	(1) LMC079-1	COS/FUV, ACQ/PEAKXD, PSA	G160M 1577 A				2 Secs (2 Secs) [==>]	[1]
	2	LMC079-1-ACQ/PEAKD (COS.sa.1440913)	(1) LMC079-1	COS/FUV, ACQ/PEAKD, PSA	G160M 1577 A	NUM-POS=5; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			2 Secs (2 Secs) [==>]	[1]
	3	LMC079-1-1577-FP1 (COS.sp.412090)	(1) LMC079-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 00; FP-POS=1			557 Secs (557 Secs) [==>]	[1]
	4	LMC079-1-1577-FP2 (COS.sp.412090)	(1) LMC079-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 90; FP-POS=2			557 Secs (557 Secs) [==>]	[1]
	5	LMC079-1-1577-FP3 (COS.sp.412090)	(1) LMC079-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 00; FP-POS=3			557 Secs (557 Secs) [==>]	[1]
	6	LMC079-1-1577-FP4 (COS.sp.412090)	(1) LMC079-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 00; FP-POS=4			557 Secs (557 Secs) [==>]	[1]



Proposal 15824 - LMC170-2-COS (02) - UV spectroscopy of He stars: the elusive stripped-envelope supernova progenitors

Fri Jun 05 18:01:01 GMT 2020

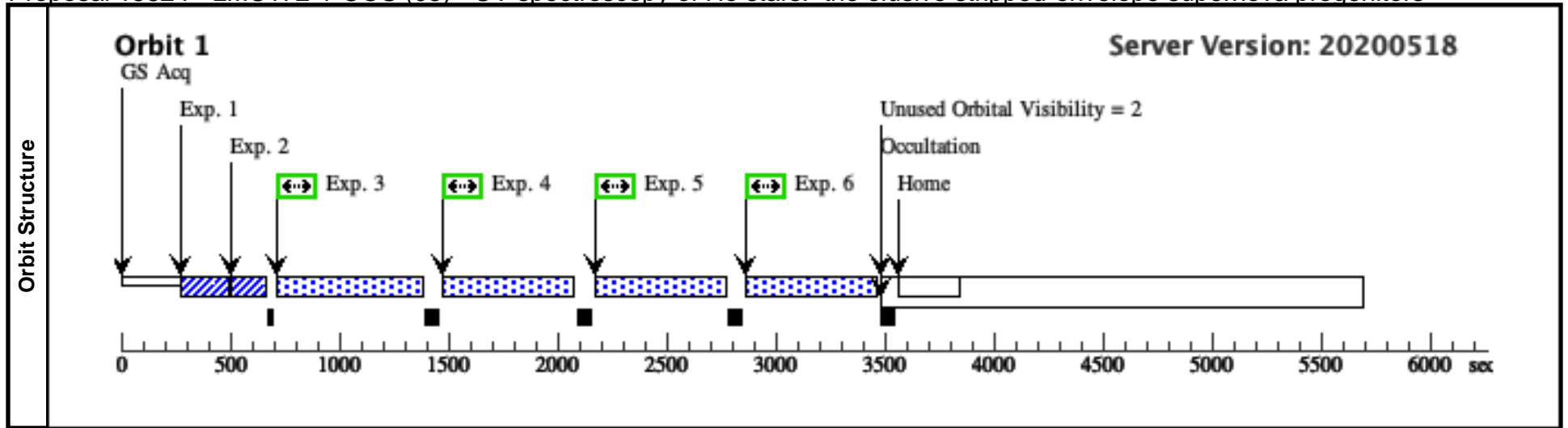
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	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(2)	LMC170-2	RA: 05 29 18.1800 (82.3257500d) Dec: -69 19 43.20 (-69.32867d) Equinox: J2000		V=15.6	Reference Frame: ICRS				
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Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	LMC170-2-ACQ/PEAKXD (COS.sa.1440912)	(2) LMC170-2	COS/FUV, ACQ/PEAKXD, PSA	G160M 1577 A				2 Secs (2 Secs) [==>]	[1]
	2	LMC170-2-ACQ/PEAKD (COS.sa.1440912)	(2) LMC170-2	COS/FUV, ACQ/PEAKD, PSA	G160M 1577 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			2 Secs (2 Secs) [==>]	[1]
	3	LMC170-2-1 1577-FP1 (COS.sp.412090)	(2) LMC170-2	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=1000; FP-POS=1			552 Secs (552 Secs) [==>]	[1]
	4	LMC170-2-1 1577-FP2 (COS.sp.412090)	(2) LMC170-2	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=1090; FP-POS=2			552 Secs (552 Secs) [==>]	[1]
	5	LMC170-2-1 1577-FP3 (COS.sp.412090)	(2) LMC170-2	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=1000; FP-POS=3			552 Secs (552 Secs) [==>]	[1]
	6	LMC170-2-1 1577-FP4 (COS.sp.412090)	(2) LMC170-2	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=1000; FP-POS=4			552 Secs (552 Secs) [==>]	[1]



Proposal 15824 - LMC172-1-COS (03) - UV spectroscopy of He stars: the elusive stripped-envelope supernova progenitors

Fri Jun 05 18:01:01 GMT 2020

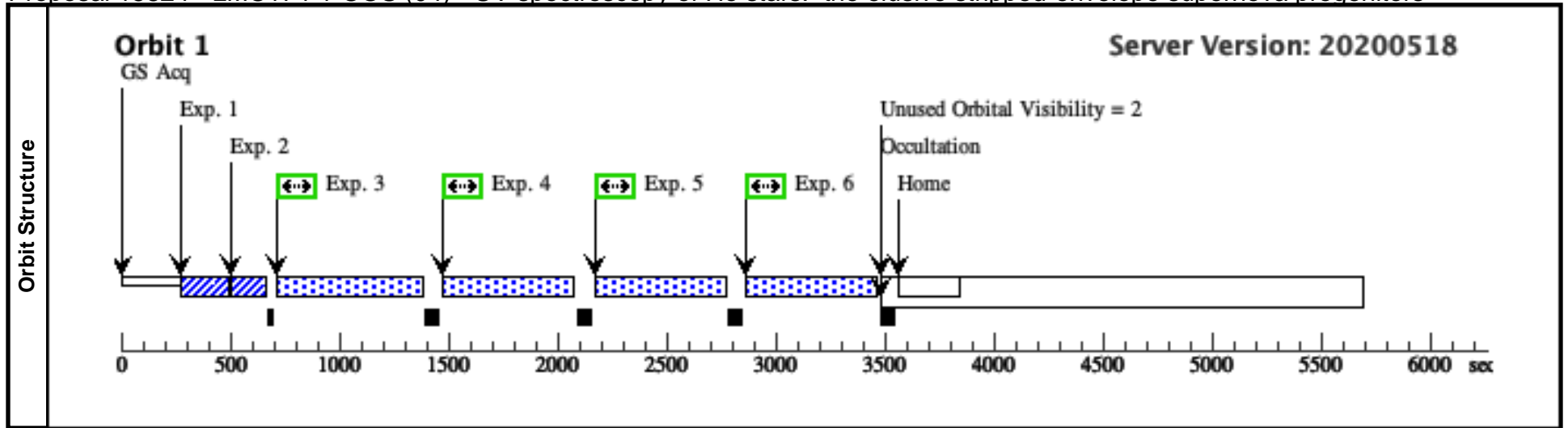
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	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(3)	LMC172-1	RA: 05 35 0.9000 (83.7537500d) Dec: -69 21 20.20 (-69.35561d) Equinox: J2000		V=15.5	Reference Frame: ICRS				
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Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	LMC172-1-ACQ/PEAKXD (COS.sa.1440911)	(3) LMC172-1	COS/FUV, ACQ/PEAKXD, PSA	G160M 1577 A				2 Secs (2 Secs) [==>]	[1]
	2	LMC172-1-ACQ/PEAKD (COS.sa.1440911)	(3) LMC172-1	COS/FUV, ACQ/PEAKD, PSA	G160M 1577 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			2 Secs (2 Secs) [==>]	[1]
	3	LMC172-1-1577-FP1 (COS.sp.412090)	(3) LMC172-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=1000; FP-POS=1			552 Secs (552 Secs) [==>]	[1]
	4	LMC172-1-1577-FP2 (COS.sp.412090)	(3) LMC172-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=1090; FP-POS=2			552 Secs (552 Secs) [==>]	[1]
	5	LMC172-1-1577-FP3 (COS.sp.412090)	(3) LMC172-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=1000; FP-POS=3			552 Secs (552 Secs) [==>]	[1]
	6	LMC172-1-1577-FP4 (COS.sp.412090)	(3) LMC172-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=1000; FP-POS=4			552 Secs (552 Secs) [==>]	[1]



Proposal 15824 - LMC174-1-COS (04) - UV spectroscopy of He stars: the elusive stripped-envelope supernova progenitors

Fri Jun 05 18:01:01 GMT 2020

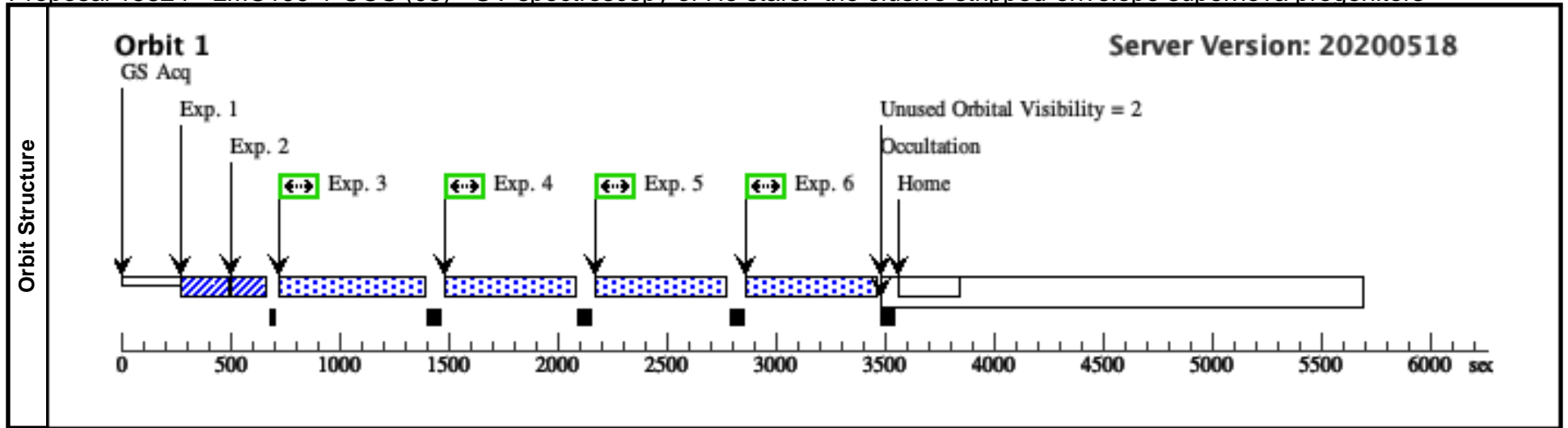
Visit	Proposal 15824, LMC174-1-COS (04), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(4)	LMC174-1	RA: 05 40 3.5700 (85.0148750d) Dec: -69 37 53.10 (-69.63142d) Equinox: J2000		V=15.5	Reference Frame: ICRS				
	Comments: Category=STAR Description=[WOLF RAYET] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	LMC174-1-ACQ/PEAKXD (COS.sa.1440911)	(4) LMC174-1	COS/FUV, ACQ/PEAKXD, PSA	G160M 1577 A				2 Secs (2 Secs) [==>]	[1]
	2	LMC174-1-ACQ/PEAKD (COS.sa.1440911)	(4) LMC174-1	COS/FUV, ACQ/PEAKD, PSA	G160M 1577 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			2 Secs (2 Secs) [==>]	[1]
	3	LMC174-1-1577-FP1 (COS.sp.412090)	(4) LMC174-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=1000; FP-POS=1			552 Secs (552 Secs) [==>]	[1]
	4	LMC174-1-1577-FP2 (COS.sp.412090)	(4) LMC174-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=1090; FP-POS=2			552 Secs (552 Secs) [==>]	[1]
	5	LMC174-1-1577-FP3 (COS.sp.412090)	(4) LMC174-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=1000; FP-POS=3			552 Secs (552 Secs) [==>]	[1]
	6	LMC174-1-1577-FP4 (COS.sp.412090)	(4) LMC174-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=1000; FP-POS=4			552 Secs (552 Secs) [==>]	[1]



Proposal 15824 - LMC199-1-COS (05) - UV spectroscopy of He stars: the elusive stripped-envelope supernova progenitors

Fri Jun 05 18:01:01 GMT 2020

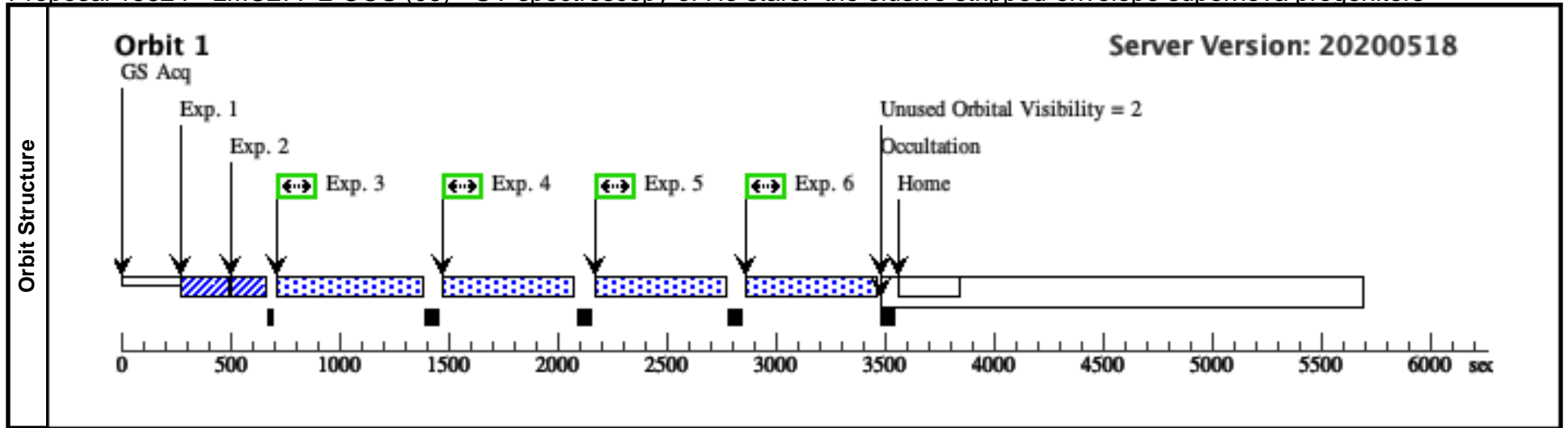
Visit	Proposal 15824, LMC199-1-COS (05), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(5)	LMC199-1	RA: 05 28 27.1200 (82.1130000d) Dec: -69 06 36.20 (-69.11006d) Equinox: J2000		V=16.2	Reference Frame: ICRS				
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Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	LMC199-1-ACQ/PEAKXD (COS.sa.1440915)	(5) LMC199-1	COS/FUV, ACQ/PEAKXD, PSA	G160M 1577 A				3 Secs (3 Secs) [==>]	[1]
	2	LMC199-1-ACQ/PEAKD (COS.sa.1440915)	(5) LMC199-1	COS/FUV, ACQ/PEAKD, PSA	G160M 1577 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			3 Secs (3 Secs) [==>]	[1]
	3	LMC199-1-1577-FP1 (COS.sp.412090)	(5) LMC199-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=1000; FP-POS=1			550 Secs (550 Secs) [==>]	[1]
	4	LMC199-1-1577-FP2 (COS.sp.412090)	(5) LMC199-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=1090; FP-POS=2			550 Secs (550 Secs) [==>]	[1]
	5	LMC199-1-1577-FP3 (COS.sp.412090)	(5) LMC199-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=1000; FP-POS=3			550 Secs (550 Secs) [==>]	[1]
	6	LMC199-1-1577-FP4 (COS.sp.412090)	(5) LMC199-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=1000; FP-POS=4			550 Secs (550 Secs) [==>]	[1]



Proposal 15824 - LMC277-2-COS (06) - UV spectroscopy of He stars: the elusive stripped-envelope supernova progenitors

Fri Jun 05 18:01:01 GMT 2020

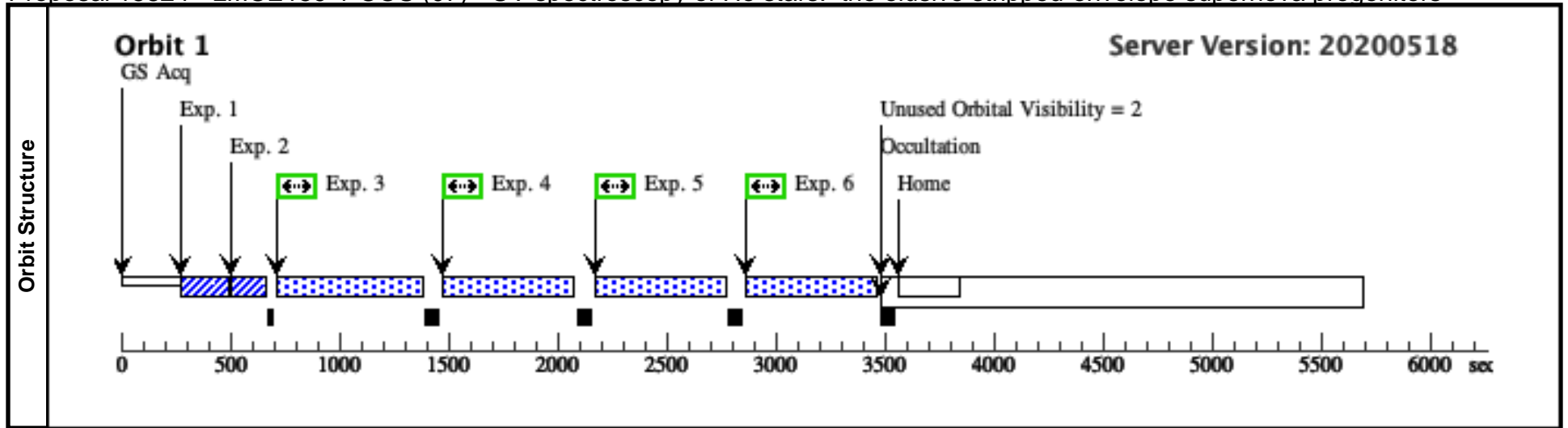
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	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(6)	LMC277-2	RA: 05 04 32.6500 (76.1360417d) Dec: -68 00 59.70 (-68.01658d) Equinox: J2000		V=15.4	Reference Frame: ICRS				
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Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	LMC277-2-ACQ/PEAKXD (COS.sa.1440909)	(6) LMC277-2	COS/FUV, ACQ/PEAKXD, PSA	G160M 1577 A				2 Secs (2 Secs) [==>]	[1]
	2	LMC277-2-ACQ/PEAKD (COS.sa.1440909)	(6) LMC277-2	COS/FUV, ACQ/PEAKD, PSA	G160M 1577 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			2 Secs (2 Secs) [==>]	[1]
	3	LMC277-2-1 1577-FP1 (COS.sp.412090)	(6) LMC277-2	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 00; FP-POS=1			552 Secs (552 Secs) [==>]	[1]
	4	LMC277-2-1 1577-FP2 (COS.sp.412090)	(6) LMC277-2	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 90; FP-POS=2			552 Secs (552 Secs) [==>]	[1]
	5	LMC277-2-1 1577-FP3 (COS.sp.412090)	(6) LMC277-2	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 00; FP-POS=3			552 Secs (552 Secs) [==>]	[1]
	6	LMC277-2-1 1577-FP4 (COS.sp.412090)	(6) LMC277-2	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 00; FP-POS=4			552 Secs (552 Secs) [==>]	[1]



Proposal 15824 - LMCE159-1-COS (07) - UV spectroscopy of He stars: the elusive stripped-envelope supernova progenitors

Fri Jun 05 18:01:01 GMT 2020

Visit	Proposal 15824, LMCE159-1-COS (07), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(7)	LMCE159-1	RA: 05 24 56.8900 (81.2370417d) Dec: -66 26 44.50 (-66.44569d) Equinox: J2000		V=15.9	Reference Frame: ICRS				
	Comments: Category=STAR Description=[WOLF RAYET] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	LMCE159-1 -ACQ/PEA KXD (COS.sa.144 0914)	(7) LMCE159-1	COS/FUV, ACQ/PEAKXD, PSA	G160M 1577 A				2 Secs (2 Secs) [==>]	[1]
	2	LMCE159-1 -ACQ/PEA KD (COS.sa.144 0914)	(7) LMCE159-1	COS/FUV, ACQ/PEAKD, PSA	G160M 1577 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			2 Secs (2 Secs) [==>]	[1]
	3	LMCE159-1 -11577-FP1 (COS.sp.412 090)	(7) LMCE159-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 00; FP-POS=1			552 Secs (552 Secs) [==>]	[1]
	4	LMCE159-1 -11577-FP2 (COS.sp.412 090)	(7) LMCE159-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 90; FP-POS=2			552 Secs (552 Secs) [==>]	[1]
	5	LMCE159-1 -11577-FP3 (COS.sp.412 090)	(7) LMCE159-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 00; FP-POS=3			552 Secs (552 Secs) [==>]	[1]
	6	LMCE159-1 -11577-FP4 (COS.sp.412 090)	(7) LMCE159-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 00; FP-POS=4			552 Secs (552 Secs) [==>]	[1]



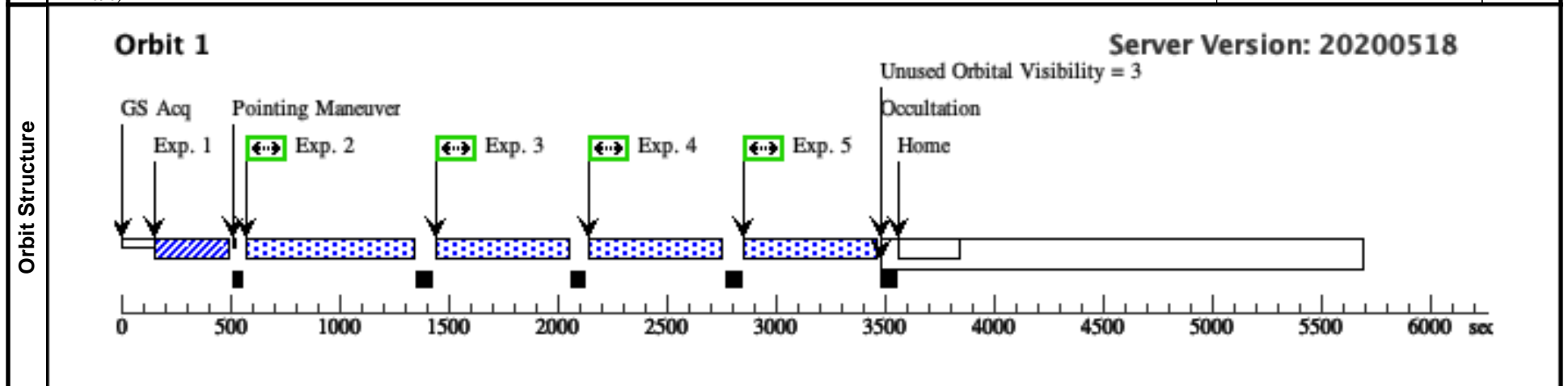
Proposal 15824 - LMCE169-1-COS (08) - UV spectroscopy of He stars: the elusive stripped-envelope supernova progenitors

Fri Jun 05 18:01:01 GMT 2020

<b>Visit</b>	<b>Proposal 15824, LMCE169-1-COS (08), completed</b>				
	<b>Diagnostic Status: No Diagnostics</b>				
	Scientific Instruments: COS/FUV, COS/NUV				
	Special Requirements: (none)				

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(8)	LMCE169-1	RA: 05 21 22.8400 (80.3451667d) Dec: -65 52 49.00 (-65.88028d) Equinox: J2000		V=16.7	Reference Frame: ICRS
	<i>Comments:</i>					
	Category=STAR Description=[WOLF RAYET] Extended=NO					

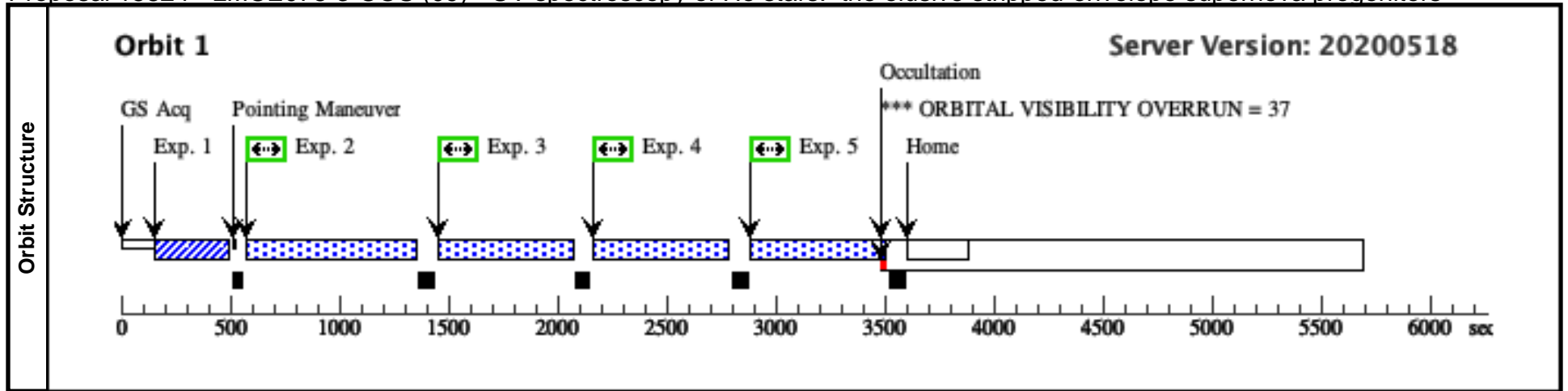
<b>Exposures</b>	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	LMCE169-1 (8) LMCE169-1 -ACQ/IMAGE GE (COS.ta.411 261)	(8) LMCE169-1	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				24 Secs (24 Secs) [==>]	[1]
	2	LMCE169-1 (8) LMCE169-1 -11577-FP1 (COS.sp.412 090)	(8) LMCE169-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 00; FP-POS=1			560 Secs (560 Secs) [==>]	[1]
	3	LMCE169-1 (8) LMCE169-1 -11577-FP2 (COS.sp.412 090)	(8) LMCE169-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 90; FP-POS=2			560 Secs (560 Secs) [==>]	[1]
	4	LMCE169-1 (8) LMCE169-1 -11577-FP3 (COS.sp.412 090)	(8) LMCE169-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 00; FP-POS=3			560 Secs (560 Secs) [==>]	[1]
	5	LMCE169-1 (8) LMCE169-1 -11577-FP4 (COS.sp.412 090)	(8) LMCE169-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 00; FP-POS=4			560 Secs (560 Secs) [==>]	[1]



Proposal 15824 - LMCE078-3-COS (09) - UV spectroscopy of He stars: the elusive stripped-envelope supernova progenitors

Fri Jun 05 18:01:01 GMT 2020

<b>Visit</b>	Proposal 15824, LMCE078-3-COS (09), scheduling <b>Diagnostic Status: Warning</b> Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
	(LMCE078-3-COS (09)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(9)	LMCE078-3	RA: 05 41 17.5000 (85.3229167d) Dec: -69 06 56.20 (-69.11561d) Equinox: J2000		V=16.3	Reference Frame: ICRS				
Comments: Category=STAR Description=[WOLF RAYET] Extended=NO										
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1	LMCE078-3 (9) LMCE078-3 -ACQ/IMA GE (COS.ta.411 261)	(9) LMCE078-3	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				24 Secs (24 Secs) [==>]	[1]
	2	LMCE078-3 (9) LMCE078-3 -11577-FP1 (COS.sp.412 090)	(9) LMCE078-3	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 00; FP-POS=1			570 Secs (570 Secs) [==>]	[1]
	3	LMCE078-3 (9) LMCE078-3 -11577-FP2 (COS.sp.412 090)	(9) LMCE078-3	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 90; FP-POS=2			570 Secs (570 Secs) [==>]	[1]
	4	LMCE078-3 (9) LMCE078-3 -11577-FP3 (COS.sp.412 090)	(9) LMCE078-3	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 00; FP-POS=3			570 Secs (570 Secs) [==>]	[1]
	5	LMCE078-3 (9) LMCE078-3 -11577-FP4 (COS.sp.412 090)	(9) LMCE078-3	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 00; FP-POS=4			570 Secs (570 Secs) [==>]	[1]



Proposal 15824 - LMCE055-1-COS (10) - UV spectroscopy of He stars: the elusive stripped-envelope supernova progenitors

Fri Jun 05 18:01:01 GMT 2020

Visit	<b>Proposal 15824, LMCE055-1-COS (10), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: COS/FUV Special Requirements: (none)										
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(10)	LMCE055-1	RA: 04 56 48.7200 (74.2030000d) Dec: -69 36 40.30 (-69.61119d) Equinox: J2000			V=15.7	Reference Frame: ICRS				
	<i>Comments:</i> Category=STAR Description=[WOLF RAYET] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	LMCE055-1 -ACQ/PEA KXD (COS.sa.144 0913)	(10) LMCE055-1	COS/FUV, ACQ/PEAKXD, PSA	G160M 1577 A				2 Secs (2 Secs) [==>]	[1]	
	2	LMCE055-1 -ACQ/PEA KD (COS.sa.144 0913)	(10) LMCE055-1	COS/FUV, ACQ/PEAKD, PSA	G160M 1577 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			2 Secs (2 Secs) [==>]	[1]	
	3	LMCE055-1 -11577-FP1 (COS.sp.412 090)	(10) LMCE055-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 00; FP-POS=1			552 Secs (552 Secs) [==>]	[1]	
	4	LMCE055-1 -11577-FP2 (COS.sp.412 090)	(10) LMCE055-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 90; FP-POS=2			552 Secs (552 Secs) [==>]	[1]	
	5	LMCE055-1 -11577-FP3 (COS.sp.412 090)	(10) LMCE055-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 00; FP-POS=3			552 Secs (552 Secs) [==>]	[1]	
	6	LMCE055-1 -11577-FP4 (COS.sp.412 090)	(10) LMCE055-1	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 00; FP-POS=4			552 Secs (552 Secs) [==>]	[1]	

