



15489 - FUV Spectral Evolution of a Superluminous Supernova

Cycle: 25, Proposal Category: GO/DD

(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) SN2018BSZ	COS/FUV COS/NUV	4	18-Jun-2018 19:05:55.0	yes

4 Total Orbits Used

ABSTRACT

Optical transient searches have yielded a diverse sample of supernovae with peak luminosities 10-100 times greater than normal. These superluminous supernovae have been shown to be especially UV bright, which make these objects ripe for discovery at high redshifts. However, there is a dearth of rest-frame, far-UV (FUV; $\lambda < 1700\text{\AA}$) spectra of superluminous supernovae available to

enable classification of these high redshift discoveries. Here we request second-epoch COS spectroscopy of the recently discovered SN~2018bsz. These data will set a local reference point to compare against high redshift SLSN candidates from JWST.

OBSERVING DESCRIPTION

This proposal is for COS/FUV spectroscopy of SN2018bsz.

Proposal 15489 - SN2018bsz-COS (01) - FUV Spectral Evolution of a Superluminous Supernova

Mon Jun 18 23:05:56 GMT 2018

Visit	Proposal 15489, SN2018bsz-COS (01) Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: BETWEEN 17-JUL-2018 AND 25-JUL-2018									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	SN2018BSZ	RA: 16 09 39.1100 (242.4129583d) Dec: -32 03 45.63 (-32.06268d) Equinox: J2000		V=17+/-1.0	Reference Frame: ICRS				
	<i>Comments:</i> Category=EXT-STAR Description=[SUPERNOVA] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	SN2018bsz-COS-acquisition (COS.ta.1168985)	(1) SN2018BSZ	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30 Secs (30 Secs) [==>]	[1]
	2	SN2018bsz-COS-spectra (COS.sp.1168996)	(1) SN2018BSZ	COS/FUV, TIME-TAG, PSA	G140L 1105 A	FLASH=YES; BUFFER-TIME=6000; FP-POS=ALL			2500 Secs (11387 Secs) [==>2525.0 Secs (Split 1)] [==>2954.0 Secs (Split 2)] [==>2954.0 Secs (Split 3)] [==>2954.0 Secs (Split 4)]	[1] [2] [3] [4]



