



15432 - The nature of the current outburst of the Be star HD 6226

Cycle: 25, 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) HD-6226 WAVE	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	2	03-Jan-2018 15:02:48.0	yes

2 Total Orbits Used

ABSTRACT

The Be star HD 6226 has shown quasi-regular photometric outbursts with peaks every ~ 630 d. These episodes have been shown to correspond to epochs where the star builds an equatorial decretion disk, the signature of classical Be stars. Although the outburst can be anticipated, the exact time of the onset and duration of the episode differ every cycle. During the current disk-building epoch, amateur spectroscopists caught the very beginning of the disk-building through time-resolved H-alpha spectroscopy during 2017 August. This has allowed us to probe the disk evolution both spectroscopically and polarimetrically. We will use the results of this variability campaign to constrain the process by which Be stars build their disks using the viscous decretion disk model, but this can only be accomplished with strong constraints on the stellar parameters and ultraviolet flux. Therefore, we request time with HST to observe HD 6226 with STIS in order to obtain accurate flux measurements and high-resolution spectroscopy in the near future so that the models can be appropriately developed.

OBSERVING DESCRIPTION

Our plan is to obtain a STIS echelle spectrum of the Be star HD6226. The first orbit will consist of acquisition of the star and the NUV setups with the E230M centered at 2707 and 1978A. The second orbit will consist of the FUV setup with the E140M grating.

Proposal 15432 - Visit 01 - The nature of the current outburst of the Be star HD 6226

Wed Jan 03 20:02:49 GMT 2018

Fixed Targets	#		Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)		HD-6226	RA: 01 03 53.3583 (15.9723263d)		V=6.82	Reference Frame: ICRS			
		Alt Name1: HD6226	Dec: +47 38 32.26 (47.64229d)							
			Equinox: J2000							
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[B3-B5 V-IV]									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(1036822)	(1) HD-6226	STIS/CCD, ACQ, F25ND5	MIRROR				9 Secs (9 Secs)	
									[==>]	[1]
	2	(1036822)	(1) HD-6226	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				9 Secs (9 Secs)	
									[==>]	[1]
	3	(1036887)	(1) HD-6226	STIS/NUV-MAMA, ACCUM, 0.2X0.05ND	E230M 2707 A				900 Secs (572 Secs)	
									[==>572.0 Secs]	[1]
	4		WAVE	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				[==>]	[1]
	5	(1036888)	(1) HD-6226	STIS/NUV-MAMA, ACCUM, 0.2X0.05ND	E230M 1978 A	WAVECAL=NO			1190 Secs (862 Secs)	
									[==>862.0 Secs]	[1]
6		WAVE	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 1978 A				[==>]	[1]	
7	(1036889)	(1) HD-6226	STIS/FUV-MAMA, ACCUM, 0.2X0.05ND	E140M 1425 A				2900 Secs (2919 Secs)		
								[==>2919.0 Secs]	[2]	
8		WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.06	E140M 1425 A				[==>]	[2]	

