

# 13127 - COS NUV Internal/External Wavelength Scale Monitor

Cycle: 20, Proposal Category: CAL/COS (Availability Mode: RESTRICTED)

#### **INVESTIGATORS**

H ( ) ESTIBILITIES		
Name	Institution	E-Mail
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### **VISITS**

Visit	Targets used in Visit	Configurations used in Visit	Orbits Used		OP Current with Visit?
01	(1) HD-6655	COS/NUV	1	11-Jul-2013 12:07:07.0	yes

<sup>1</sup> Total Orbits Used

## **ABSTRACT**

This program monitors the offset between the internal and external wavelength scales: this offset is referred to as "DELTA" in the wavelength dispersion reference file and corrects for the shift between the WCA and PSA in TV03 versus the shift between the WCA and PSA in orbit: (WCA-PSA\_)\_TV03 - (WCA - PSA)\_orbit. Analysis of TV data indicates that this DELTA (offset) is cenwave and FPPOS independent for a particular grating, but it is grating and stripe dependent. To verify and monitor this, this program observes various cenwaves.

## **OBSERVING DESCRIPTION**

This program monitors the offset between the internal and external wavelength scales: this offset is referred to as "DELTA" in the wavelength dispersion reference file and corrects for the shift between the WCA and PSA in TV03 versus the shift between the WCA and PSA in orbit: (WCA-PSA\_)\_TV03 - (WCA - PSA)\_orbit. Analysis of TV data indicates that this DELTA (offset) is cenwave and FPPOS independent for a particular grating, but it is grating and stripe dependent. To verify and monitor this, this program observes various cenwaves.

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	Proposal 13127, Visit 01, implementation	Thu Jul 11 16:07:15 GMT 2013
Sit	Diagnostic Status: Warning	
5	Scientific Instruments: COS/NUV	
	Special Requirements: BETWEEN 02-AUG-2013:00:00:00 AND 20-AUG-2013:00:00:00	
Diagnostics	(Visit 01) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.	

ts	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	
l g	(1)	HD-6655	RA: 01 05 18.2073 (16.3258637d)	Proper Motion RA: 0.01101 sec of time/yr	V=8.05+/-0.05	Reference Frame: ICRS	
<u>a</u>			Dec: -72 33 14.47 (-72.55402d)	Proper Motion Dec: -0.118 arcsec/yr			
15			Equinox: J2000	Epoch of Position: 2000			
×				Radial Velocity: 19.5 km/sec			
诓	Comments: This object was generated by the target selector and retrieved from the SIMBAD database.						

Proposal 13127 - Visit 01 - COS NUV Internal/External Wavelength Scale Monitor

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(COS.sa.431	(1) HD-6655	COS/NUV, ACQ/PEAKXD, PSA	G230L	STRIPE=MEDIUM			1.5 Secs (1.5 Secs)	
	349)			2635 A				[==>]	[1]
2		(1) HD-6655	COS/NUV, ACQ/PEAKXD, PSA	G230L	STRIPE=MEDIUM			1.5 Secs (1.5 Secs)	
	349)			2635 A				[==>]	[1]
3		(1) HD-6655	COS/NUV, ACQ/PEAKD, PSA	G230L	NUM-POS=5;			1 Secs (1 Secs)	
	349)			2635 A	STEP-SIZE=1;			[==>]	
					CENTER=FLUX-W T-FLR	V			[1]
4		(1) HD-6655	COS/NUV, TIME-TAG, PSA	G230L	BUFFER-TIME=80.			80 Secs (80 Secs)	
	336)			2635 A	; FP-POS=3			[==>]	[1]
C. St	ount rate stripe ount rate stripe ripe C contain. er time (sec) 2 (COS.sp.431	e B 9,354.643 s only second orde 29	cr light not calculated  COS/NUV, TIME-TAG, PSA	G230L	BUFFER-TIME=80.			80 Secs (80 Secs)	
	337)	( )		2950 A	;			[==>]	£17
					FP-POS=3				[1]
Course Course St Buffs 6	(COS.sp.431 339)	61	COS/NUV, TIME-TAG, PSA	G230L 3000 A	BUFFER-TIME=80: ; FP-POS=3			80 Secs (80 Secs) $I = = > J$	[1]
Cour Cour Cour St	nt rate entire d ount rate stripe ount rate stripe	e B 12,991.322 s only second orde	Å) 10.327 8 er light not calculated						
7	(COS.sp.431	(1) HD-6655	COS/NUV, TIME-TAG, PSA	G285M	BUFFER-TIME=90	•		90 Secs (90 Secs)	
	344)			2676 A	; FP-POS=3			[==>]	[1]
Cour Cour Cour Cour	nments: Brighte nt rate entire d ount rate stripe ount rate stripe ount rate stripe er time (sec) 1	e B 777.690 e C 308.492	Å) 0.460						
8	(COS.sp.431		COS/NUV, TIME-TAG, PSA	G225M	BUFFER-TIME=33			440 Secs (440 Secs)	
	343)			2217 A	0; FP-POS=3			[==>]	[1]
Cour Cour Cour Cour		2 B 343.197 2 C 452.629	Å) 0.260						
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Proposal 13127 - Visit 01 - COS NUV Internal/External Wavelength Scale Monitor (COS.sp.431 (1) HD-6655 347) BUFFER-TIME=75 COS/NUV, TIME-TAG, PSA G185M 860 Secs (860 Secs) 2010 A [==>] [1] FP-POS=3 Comments: Brightest Pixel (2114.99 Å) 0.141 Count rate entire detector 1,331.211 Count rate stripe A 37.395 Count rate stripe B 73.006 Count rate stripe C 287.578 Buffer time (sec) 1,772 Orbit 1 Server Version: 20130502 Exp. 2 Exp. 3 ۥ• Exp. 4 **ۥ** • Exp. 5 **Orbit Structure €**--**>** Exp. 6 Unused Visibility = 39 Occultation GS Acq ۥ• Exp. 7 Exp. 1 Home **ۥ••** Exp. 8 ۥ• Exp. 9 1000 1500 500 2000 2500 3000 3500 4000 4500 5000 5500 sec