



13529 - COS NUV Internal/External Wavelength Scale Monitor

Cycle: 21, Proposal Category: CAL/COS

(Availability Mode: RESTRICTED)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
Dr. Paule G. Sonnetrucker (PI) (ESA Member) (Contact)	Space Telescope Science Institute - ESA	sonnetr@stsci.edu

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-6655	COS/NUV	1	10-Oct-2013 22:33:33.0	yes
02	(1) HD-6655	COS/NUV	1	10-Oct-2013 22:33:48.0	yes
03	(1) HD-6655	COS/NUV	1	10-Oct-2013 22:34:01.0	yes

3 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-

Proposal 13529 (STScI Edit Number: 1, Created: Thursday, October 10, 2013 9:34:09 PM EST) - Overview

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.

Proposal 13529 - Visit 01 - COS NUV Internal/External Wavelength Scale Monitor

Visit	Proposal 13529, Visit 01, implementation Fri Oct 11 02:34:10 GMT 2013 Diagnostic Status: Warning Scientific Instruments: COS/NUV Special Requirements: BETWEEN 01-JAN-2014:00:00:00 AND 28-FEB-2014:00:00:00																	
	Diagnosics (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.																	
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<i>Comments: This object was generated by the target selector and retrieved from the SIMBAD database.</i>																		

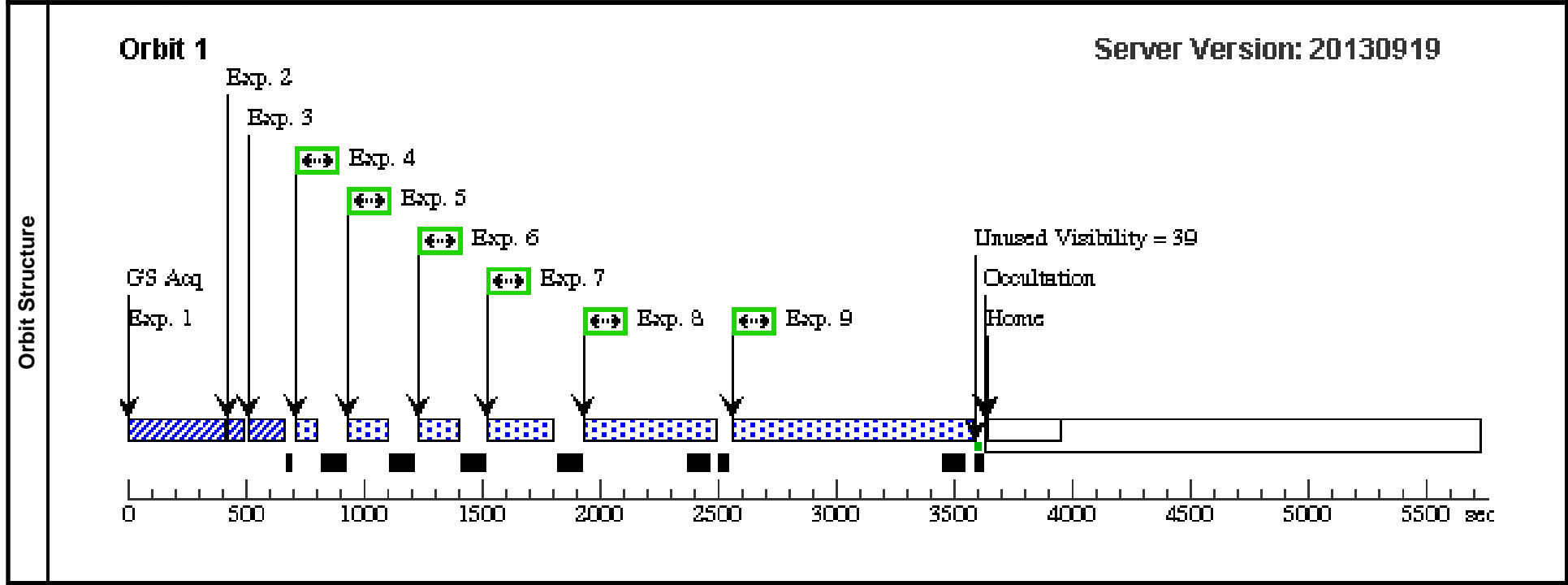
Proposal 13529 - Visit 01 - COS NUV Internal/External Wavelength Scale Monitor

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	(COS.sa.534 (1) HD-6655 873)	COS/NUV, ACQ/PEAKXD, PSA	G230L 2635 A	STRIPE=MEDIUM			1.5 Secs (1.5 Secs) [==>]	[1]
	2	(COS.sa.534 (1) HD-6655 873)	COS/NUV, ACQ/PEAKXD, PSA	G230L 2635 A	STRIPE=MEDIUM			1.5 Secs (1.5 Secs) [==>]	[1]
	3	(COS.sa.534 (1) HD-6655 873)	COS/NUV, ACQ/PEAKD, PSA	G230L 2635 A	NUM-POS=5; STEP-SIZE=1; CENTER=FLUX-W T-FLR			1 Secs (1 Secs) [==>]	[1]
	4	(COS.sp.534 (1) HD-6655 878)	COS/NUV, TIME-TAG, PSA	G230L 2635 A	BUFFER-TIME=80. ; FP-POS=3			80 Secs (80 Secs) [==>]	[1]
	<i>Comments: Brightest Pixel (2655.03 A) 9.490 Count rate entire detector 8,865.626 Count rate stripe A 11.778 Count rate stripe B 7,840.924 Stripe C contains only second order light not calculated Buffer time (sec) 266</i>								
	5	(COS.sp.534 (1) HD-6655 884)	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=80. ; FP-POS=3			80 Secs (80 Secs) [==>]	[1]
	<i>Comments: Brightest Pixel (at 2913.11 A) 10.681 Count rate entire detector 12,976.588 Count rate Stripe A 824.170 Count rate Stripe B 11,139.494 Stripe C contains only second order light not calculated Buffer time (sec) 181</i>								
	6	(COS.sp.534 (1) HD-6655 927)	COS/NUV, TIME-TAG, PSA	G230L 3000 A	BUFFER-TIME=80. ; FP-POS=3			80 Secs (80 Secs) [==>]	[1]
<i>Comments: Brightest Pixel (at 2905.81A) 10.182 Count rate entire detector 12,837.172 Count rate Stripe A 1,346.372 Count rate Stripe B 10,477.876 Stripe C contains only second order light not calculated Buffer time (sec) 183</i>									
7	(COS.sp.534 (1) HD-6655 960)	COS/NUV, TIME-TAG, PSA	G285M 2676 A	BUFFER-TIME=90. ; FP-POS=3			90 Secs (90 Secs) [==>]	[1]	
<i>Comments: Brightest Pixel (at 2668.63 A) 0.388 Count rate entire detector 1,722.603 Count rate Stripe A 145.923 Count rate Stripe B 412.895 Count rate Stripe C 150.860 Buffer time (sec) 1,369</i>									
8	(COS.sp.534 (1) HD-6655 993)	COS/NUV, TIME-TAG, PSA	G225M 2217 A	BUFFER-TIME=33 0; FP-POS=3			440 Secs (440 Secs) [==>]	[1]	
<i>Comments: Brightest Pixel (at 2324.59 A) 0.349 Count rate entire detector 1,695.677 Count rate Stripe A 129.112 Count rate Stripe B 263.639 Count rate Stripe C 290.002 Buffer time (sec) 1,391</i>									

Proposal 13529 - Visit 01 - COS NUV Internal/External Wavelength Scale Monitor

9	(COS.sp.535 (1) HD-6655 023)	COS/NUV, TIME-TAG, PSA	G185M 2010 A	BUFFER-TIME=75 0; FP-POS=3	860 Secs (860 Secs) [==>]	[1]
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Comments: Brightest Pixel (at 2120.91 A) 0.246
 Count rate entire detector 1,277.970
 Count rate Stripe A 30.765
 Count rate Stripe B 57.459
 Count rate Stripe C 176.822
 Buffer time (sec) 1,845



Proposal 13529 - Visit 02 - COS NUV Internal/External Wavelength Scale Monitor

Visit	Proposal 13529, Visit 02 Fri Oct 11 02:34:12 GMT 2013 Diagnostic Status: Warning Scientific Instruments: COS/NUV Special Requirements: BETWEEN 01-MAY-2014:00:00:00 AND 01-JUN-2014:00:00:00																	
	(Visit 02) 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.																	
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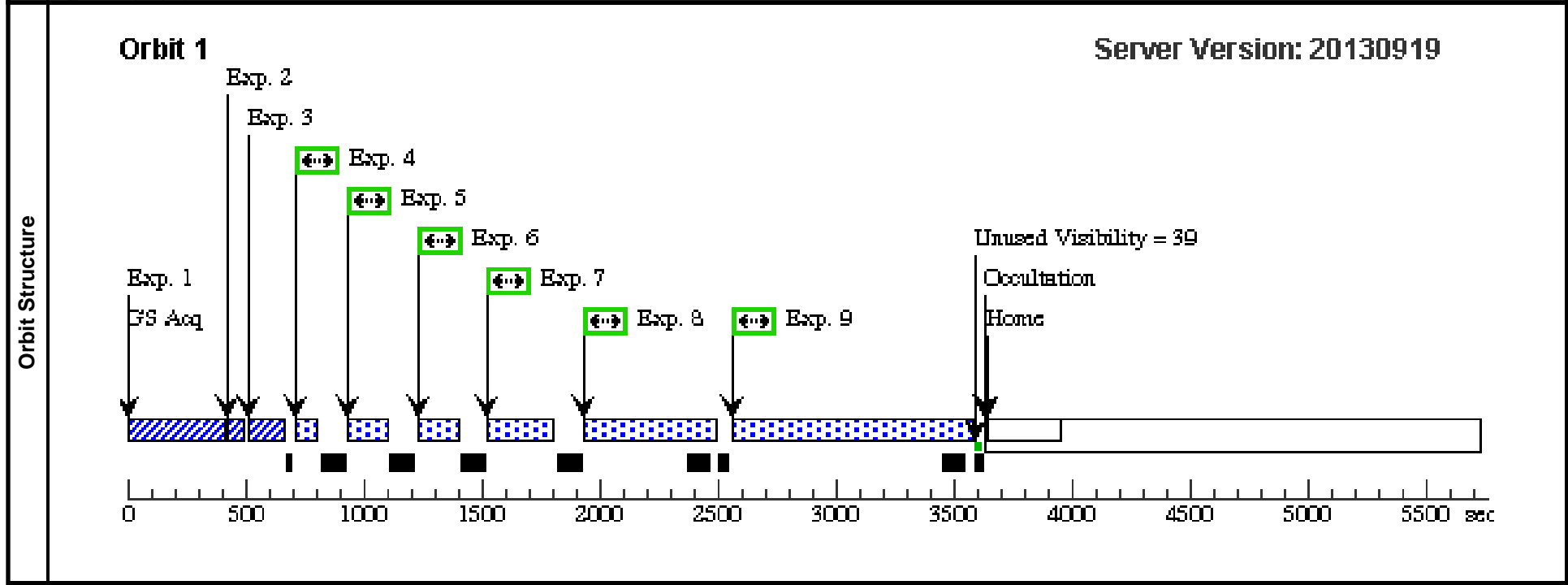
Proposal 13529 - Visit 02 - COS NUV Internal/External Wavelength Scale Monitor

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	(COS.sa.534 (1) HD-6655 873)	COS/NUV, ACQ/PEAKXD, PSA	G230L 2635 A	STRIPE=MEDIUM			1.5 Secs (1.5 Secs) [==>]	[1]	
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	5	(COS.sp.534 (1) HD-6655 884)	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=80. ; FP-POS=3			80 Secs (80 Secs) [==>]	[1]	
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Proposal 13529 - Visit 02 - COS NUV Internal/External Wavelength Scale Monitor

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Proposal 13529 - Visit 03 - COS NUV Internal/External Wavelength Scale Monitor

Visit	<p>Proposal 13529, Visit 03 Fri Oct 11 02:34:14 GMT 2013 Diagnostic Status: Warning Scientific Instruments: COS/NUV Special Requirements: BETWEEN 01-SEP-2014:00:00:00 AND 01-OCT-2014:00:00:00</p>																	
	<p>(Visit 03) 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.</p>																	
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Proposal 13529 - Visit 03 - COS NUV Internal/External Wavelength Scale Monitor

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