



12717 - COS FUV Internal/External Wavelength Scale Monitor

Cycle: 19, Proposal Category: CAL/COS

(Availability Mode: RESTRICTED)

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) SK191	COS/FUV	1	02-Sep-2011 21:38:54.0	yes
02	(2) CL-NGC-330-ELS-4	COS/FUV	1	02-Sep-2011 21:39:03.0	yes

2 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 some cenwaves at different FPPOS.

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

Proposal 12717 (STScI Edit Number: 1, Created: Friday, September 2, 2011 8:39:07 PM EST) - Overview

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 some cenwaves at different FPPOS.

3 visits with G130M + G160M, using SK 191, each visit to execute every 4 months.

3 visits with G140L using NGC330-B37, each visit executing every 4 months.

Proposal 12717 - Visit 01 - COS FUV Internal/External Wavelength Scale Monitor

Sat Sep 03 01:39:08 GMT 2011

Visit	<p>Proposal 12717, Visit 01</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: COS/FUV</p> <p>Special Requirements: BETWEEN 01-JAN-2012:00:00:00 AND 29-FEB-2012:00:00:00</p>																		
Diagnostics	<p>(Visit 01) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/PEAKXD.</p> <p>(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.</p> <p>(Exposure 1 (Visit 01)) Warning (Form): Sensitive exposures should have an ETC run number provided.</p> <p>(Exposure 2 (Visit 01)) Warning (Form): Sensitive exposures should have an ETC run number provided.</p> <p>(Exposure 3 (Visit 01)) Warning (Form): Sensitive exposures should have an ETC run number provided.</p>																		
Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>SK191</td> <td>RA: 01 41 42.0723 (25.4253012d) Dec: -73 50 38.20 (-73.84394d) Equinox: J2000</td> <td>Proper Motion RA: 3.19 mas/yr Proper Motion Dec: -2.90 mas/yr Epoch of Position: 1991.25</td> <td>V=11.84</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td colspan="6"><i>Comments: This object was generated by the target selector and retrieved from the SIMBAD database.</i></td> </tr> </tbody> </table>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	SK191	RA: 01 41 42.0723 (25.4253012d) Dec: -73 50 38.20 (-73.84394d) Equinox: J2000	Proper Motion RA: 3.19 mas/yr Proper Motion Dec: -2.90 mas/yr Epoch of Position: 1991.25	V=11.84	Reference Frame: ICRS	<i>Comments: This object was generated by the target selector and retrieved from the SIMBAD database.</i>					
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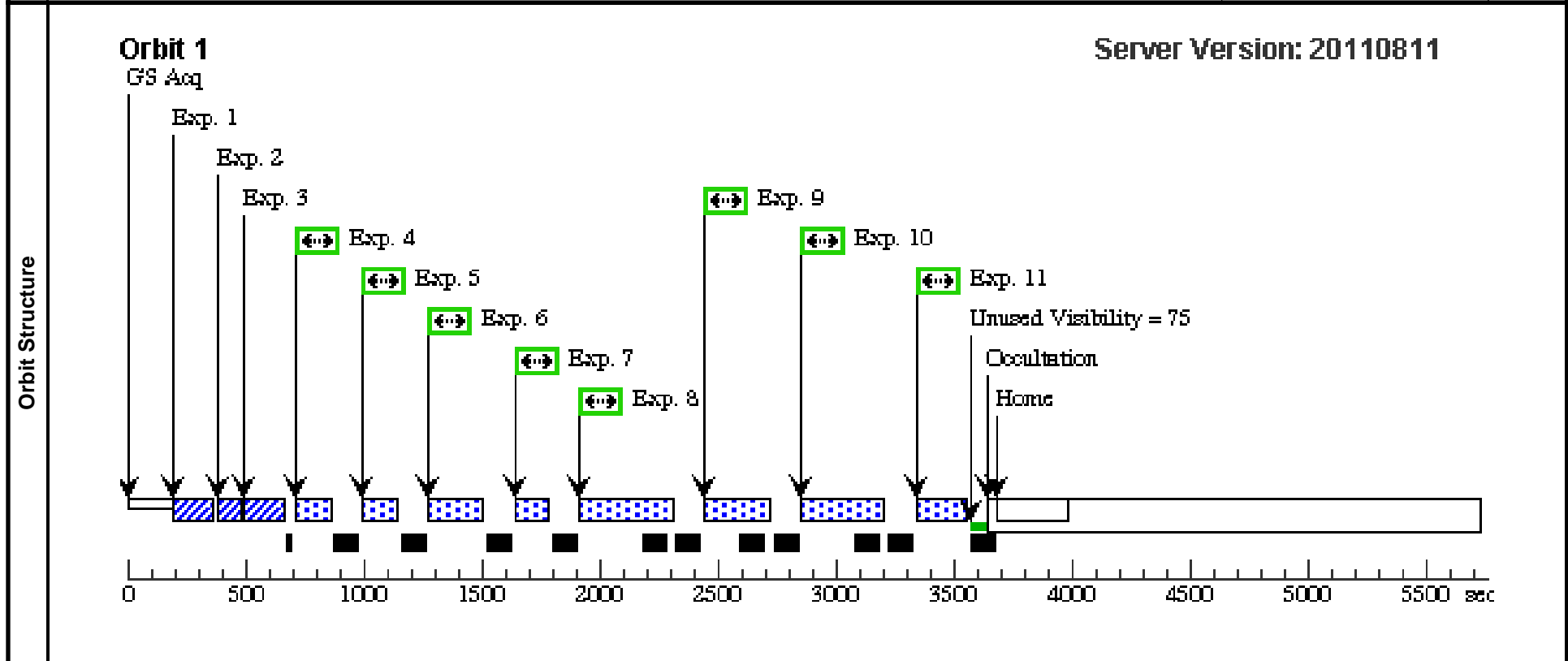
Proposal 12717 - Visit 01 - COS FUV Internal/External Wavelength Scale Monitor

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) SK191	COS/FUV, ACQ/PEAKXD, PSA	G130M 1291 A				2 Secs [==>]	[1]
2		(1) SK191	COS/FUV, ACQ/PEAKXD, PSA	G130M 1291 A				2 Secs [==>]	[1]
3		(1) SK191	COS/FUV, ACQ/PEAKD, PSA	G130M 1291 A	NUM-POS=5; STEP-SIZE=1.0			2 Secs [==>]	[1]
4	(COS.A362 630)	(1) SK191	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=10 0; FP-POS=3			100 Secs [==>]	[1]
<p>Comments: Using spectrum derived from STIS data for this target COS.A362630 Brightest Pixel (1215.65 Å) 0.189 Count rate entire detector 13,355.821 Count rate segment A 8,373.917 Count rate segment B 4,981.904 Buffer time (sec) 176</p>									
5	(COS.A362 630)	(1) SK191	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=10 0; FP-POS=4			100 Secs [==>]	[1]
6	(COS.A362 641)	(1) SK191	COS/FUV, TIME-TAG, PSA	G130M 1309 A	BUFFER-TIME=10 8; FP-POS=3			108 Secs [==>]	[1]
<p>Comments: COS.A362641 Brightest Pixel (1215.65 Å) 0.190 Count rate entire detector 14,318.587 Count rate segment A 8,188.685 Count rate segment B 6,129.902 Buffer time (sec) 164</p>									
7	(COS.A362 641)	(1) SK191	COS/FUV, TIME-TAG, PSA	G130M 1309 A	BUFFER-TIME=90; FP-POS=4			90 Secs [==>]	[1]
8	(COS.A362 632)	(1) SK191	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=12 0; FP-POS=3			230 Secs [==>]	[1]
<p>Comments: Using spectrum derived from STIS data for this target COS.A362632 Brightest Pixel (1412.45 Å) 0.126 Count rate entire detector 10,755.794 Count rate segment A 3,050.377 Count rate segment B 7,705.417 Buffer time (sec) 219</p>									
9	(COS.A362 632)	(1) SK191	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=12 0; FP-POS=4			230 Secs [==>]	[1]
10	(COS.A362 640)	(1) SK191	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=12 0; FP-POS=3			230 Secs [==>]	[1]
<p>Comments: Using spectrum derived from STIS data for this target COS.A362640 Brightest Pixel (1440.90 Å) 0.123 Count rate entire detector 9,790.270 Count rate segment A 2,874.857 Count rate segment B 6,915.413 Buffer time (sec) 240</p>									

Exposures

Proposal 12717 - Visit 01 - COS FUV Internal/External Wavelength Scale Monitor

11	(COS.A362 (1) SK191 640)	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=16 0; FP-POS=4	160 Secs [==>]	[1]
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Proposal 12717 - Visit 02 - COS FUV Internal/External Wavelength Scale Monitor

Sat Sep 03 01:39:09 GMT 2011

Visit	Proposal 12717, Visit 02
	Diagnostic Status: Warning
	Scientific Instruments: COS/FUV
	Special Requirements: BETWEEN 01-JAN-2012:00:00:00 AND 29-FEB-2012:00:00:00

Diagnostics	(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.
	(Visit 02) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/PEAKXD.
	(Exposure 1 (Visit 02)) Warning (Form): Sensitive exposures should have an ETC run number provided.
	(Exposure 2 (Visit 02)) Warning (Form): Sensitive exposures should have an ETC run number provided.
	(Exposure 3 (Visit 02)) Warning (Form): Sensitive exposures should have an ETC run number provided.

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(2)	CL-NGC-330-ELS-4	RA: 00 56 20.7900 (14.0866250d) Dec: -72 28 33.80 (-72.47606d) Equinox: J2000	Proper Motion RA: -0.00106 sec of time/yr Proper Motion Dec: 0.0015 arcsec/yr Epoch of Position: 2000	V=13.33	Reference Frame: ICRS
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>						

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1		(2) CL-NGC-330-EL S-4	COS/FUV, ACQ/PEAKXD, PSA	G140L 1280 A				1 Secs [==>]	[1]	
	2		(2) CL-NGC-330-EL S-4	COS/FUV, ACQ/PEAKXD, PSA	G140L 1280 A				1 Secs [==>]	[1]	
	3		(2) CL-NGC-330-EL S-4	COS/FUV, ACQ/PEAKD, PSA	G140L 1280 A	NUM-POS=5; STEP-SIZE=1.0			1 Secs [==>]	[1]	
	4	(COS.A362 657)	(2) CL-NGC-330-EL S-4	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=25 0; FP-POS=1			360 Secs [==>]	[1]	
	<i>Comments: COS.A362657 Brightest Pixel (1271.56 Å) 0.228 Count rate entire detector 4,066.281 Count rate segment A 4,028.472 Count rate segment B 37.808 Buffer time (sec) 580</i>										
	5	(COS.A362 657)	(2) CL-NGC-330-EL S-4	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=25 0; FP-POS=3			360 Secs [==>]	[1]	
	6	(COS.A362 657)	(2) CL-NGC-330-EL S-4	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=25 0; FP-POS=1			360 Secs [==>]	[1]	
	<i>Comments: COS.A362662 Brightest Pixel (1271.55 Å) 0.228 Count rate entire detector 4,187.960 Count rate segment A 4,187.960 Count rate segment B (not calculated) Buffer time (sec) 563</i>										
	7	(COS.A362 657)	(2) CL-NGC-330-EL S-4	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=25 0; FP-POS=3			360 Secs [==>]	[1]	
8	(COS.A362 657)	(2) CL-NGC-330-EL S-4	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=25 0; FP-POS=4			360 Secs [==>]	[1]		

