12722 - COS NUV Internal/External Wavelength Scale Monitor

Cycle: 19, Proposal Category: CAL/COS

(Availability Mode: RESTRICTED)

INVESTIGATORS

Name	*Institution*	*E-Mail*
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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) HD-6655	COS/NUV	1	02-Sep-2011 21:40:27.0	yes
02	(1) HD-6655	COS/NUV	1	02-Sep-2011 21:40:35.0	yes
03	(1) HD-6655	COS/NUV	1	02-Sep-2011 21:40:45.0	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 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 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.

Proposal 12722 - Visit 01 - COS NUV Internal/External Wavelength Scale Monitor

Visit

Proposal 12722, Visit 01 Sat Sep 03 01:40:49 GMT 2011

Diagnostic Status: Warning

Scientific Instruments: COS/NUV

Special Requirements: BETWEEN 01-JAN-2012:00:01:01 AND 29-FEB-2012:00:01:01

Diagnostics

(Visit 01) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/PEAKXD.

(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.

(Exposure 1 (Visit 01)) Warning (Form): Sensitive exposures should have an ETC run number provided.

(Exposure 2 (Visit 01)) Warning (Form): Sensitive exposures should have an ETC run number provided.

(Exposure 3 (Visit 01)) Warning (Form): Sensitive exposures should have an ETC run number provided.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-6655	RA: 01 05 18.2073 (16.3258637d) Dec: -72 33 14.47 (-72.55402d) Equinox: J2000	Proper Motion RA: 0.01101 sec of time/yr Proper Motion Dec: -0.118 arcsec/yr Epoch of Position: 2000 Radial Velocity: 19.5 km/sec	V=8.05+/-0.05	Reference Frame: ICRS

Comments: This object was generated by the target selector and retrieved from the SIMBAD database.

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) HD-6655	COS/NUV, ACQ/PEAKXD, PSA	G230L 2635 A	STRIPE=MEDIUM			1.5 Secs *[==>]*	 ***[1]***
2		(1) HD-6655	COS/NUV, ACQ/PEAKXD, PSA	G230L 2635 A	STRIPE=MEDIUM			1.5 Secs *[==>]*	 ***[1]***
3		(1) HD-6655	COS/NUV, ACQ/PEAKD, PSA	G230L 2635 A	NUM-POS=5; STEP-SIZE=1; CENTER=FLUX-WT-FLR			1 Secs *[==>]*	 ***[1]***
4	(COS.A362587)	(1) HD-6655	COS/NUV, TIME-TAG, PSA	G230L 2635 A	BUFFER-TIME=80.; FP-POS=3			80 Secs *[==>]*	 ***[1]***
Comments: COS.A362587 *Brightest Pixel (2655.03 Å) 10.805* *Count rate entire detector 9,828.322* *Count rate stripe A 2.744* *Count rate stripe B 9,511.006* *Stripe C contains only second order light not calculated* *Buffer time (sec) 240*									
5	(COS.A362589)	(1) HD-6655	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=80.; FP-POS=3			80 Secs *[==>]*	 ***[1]***
Comments: COS.A362589 *Brightest Pixel (2909.99 Å) 9.608* *Count rate entire detector 13,042.264* *Count rate stripe A 373.473* *Count rate stripe B 12,354.219* *Stripe C contains only second order light not calculated* *Buffer time (sec) 180*									
6	(COS.A362590)	(1) HD-6655	COS/NUV, TIME-TAG, PSA	G230L 3000 A	BUFFER-TIME=80.; FP-POS=3			80 Secs *[==>]*	 ***[1]***
Comments: COS.A362590 *Brightest Pixel (2910.09 Å) 9.588* *Count rate entire detector 13,121.299* *Count rate stripe A 778.505* *Count rate stripe B 12,028.221* *Stripe C contains only second order light not calculated* *Buffer time (sec) 179*									
7	(COS.A362591)	(1) HD-6655	COS/NUV, TIME-TAG, PSA	G285M 2676 A	BUFFER-TIME=90.; FP-POS=3			90 Secs *[==>]*	 ***[1]***
Comments: COS.A362591 *Brightest Pixel (2655.52 Å) 0.613* *Count rate entire detector 2,137.870* *Count rate stripe A 367.971* *Count rate stripe B 1,044.932* *Count rate stripe C 410.395* *Buffer time (sec) 1103*									

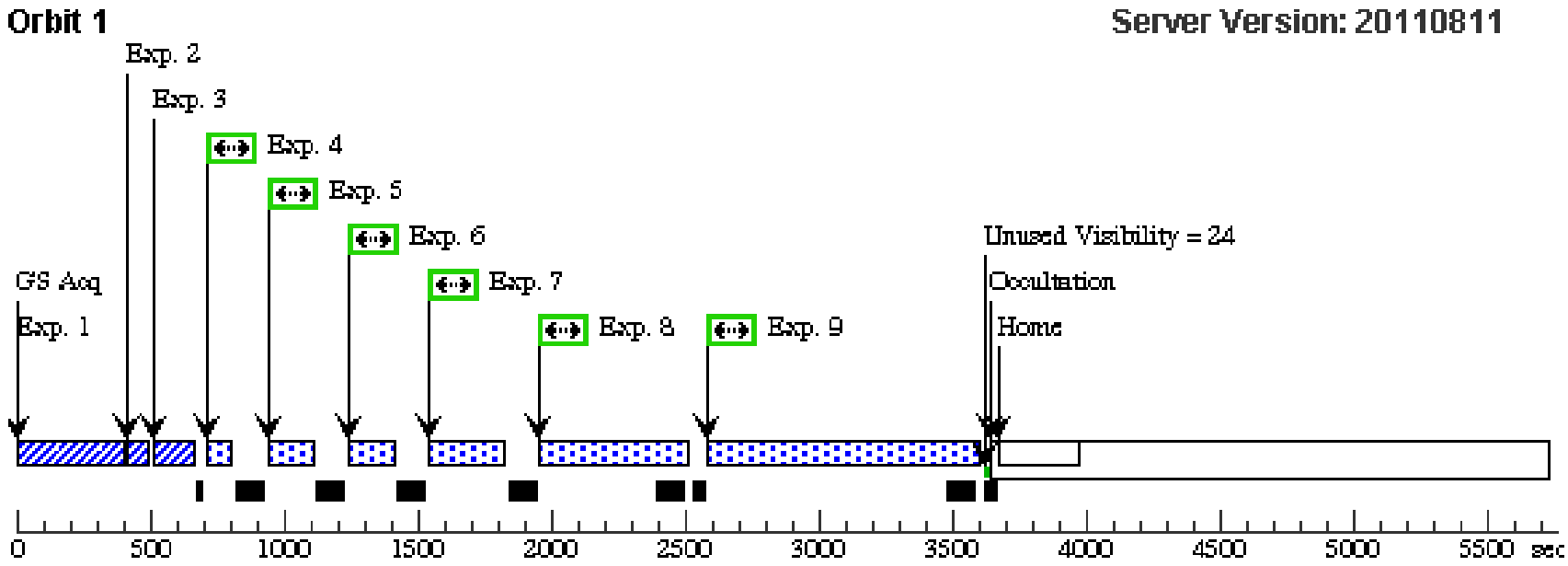
8	(COS.A362582) (1) HD-6655	COS/NUV, TIME-TAG, PSA	G225M 2217 A	BUFFER-TIME=3330; FP-POS=3	440 Secs [==>]	[1]

Comments: COS.A362582
Brightest Pixel (2304.99 Å) 0.280
Count rate entire detector 1,391.818
Count rate stripe A 204.828
Count rate stripe B 382.514
Count rate stripe C 489.903
Buffer time (sec) 1694

9	(COS.A362597) (1) HD-6655	COS/NUV, TIME-TAG, PSA	G185M 2010 A	BUFFER-TIME=750; FP-POS=3	860 Secs [==>]	[1]

Comments: COS.A362597
Brightest Pixel (2114.99 Å) 0.155
Count rate entire detector 752.667
Count rate stripe A 39.808
Count rate stripe B 79.303
Count rate stripe C 318.983
Buffer time (sec) 3134

Orbit Structure



Proposal 12722 - Visit 02 - COS NUV Internal/External Wavelength Scale Monitor

Visit

Proposal 12722, Visit 02 Sat Sep 03 01:40:51 GMT 2011

Diagnostic Status: Warning

Scientific Instruments: COS/NUV

Special Requirements: BETWEEN 01-MAY-2012:00:01:01 AND 01-JUN-2012:00:01:01

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
(1)	HD-6655	RA: 01 05 18.2073 (16.3258637d) Dec: -72 33 14.47 (-72.55402d) Equinox: J2000	Proper Motion RA: 0.01101 sec of time/yr Proper Motion Dec: -0.118 arcsec/yr Epoch of Position: 2000 Radial Velocity: 19.5 km/sec	V=8.05+/-0.05	Reference Frame: ICRS

Comments: This object was generated by the target selector and retrieved from the SIMBAD database.

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) HD-6655	COS/NUV, ACQ/PEAKXD, PSA	G230L 2635 A	STRIPE=MEDIUM			1.5 Secs *[==>]*	 ***[1]***
2		(1) HD-6655	COS/NUV, ACQ/PEAKXD, PSA	G230L 2635 A	STRIPE=MEDIUM			1.5 Secs *[==>]*	 ***[1]***
3		(1) HD-6655	COS/NUV, ACQ/PEAKD, PSA	G230L 2635 A	NUM-POS=5; STEP-SIZE=1; CENTER=FLUX-WT-FLR			1 Secs *[==>]*	 ***[1]***
4	(COS.A362587)	(1) HD-6655	COS/NUV, TIME-TAG, PSA	G230L 2635 A	BUFFER-TIME=80.; FP-POS=3			80 Secs *[==>]*	 ***[1]***
Comments: COS.A362587 *Brightest Pixel (2655.03 Å) 10.805* *Count rate entire detector 9,828.322* *Count rate stripe A 2.744* *Count rate stripe B 9,511.006* *Stripe C contains only second order light not calculated* *Buffer time (sec) 240*									
5	(COS.A362589)	(1) HD-6655	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=80.; FP-POS=3			80 Secs *[==>]*	 ***[1]***
Comments: COS.A362589 *Brightest Pixel (2909.99 Å) 9.608* *Count rate entire detector 13,042.264* *Count rate stripe A 373.473* *Count rate stripe B 12,354.219* *Stripe C contains only second order light not calculated* *Buffer time (sec) 180*									
6	(COS.A362590)	(1) HD-6655	COS/NUV, TIME-TAG, PSA	G230L 3000 A	BUFFER-TIME=80.; FP-POS=3			80 Secs *[==>]*	 ***[1]***
Comments: COS.A362590 *Brightest Pixel (2910.09 Å) 9.588* *Count rate entire detector 13,121.299* *Count rate stripe A 778.505* *Count rate stripe B 12,028.221* *Stripe C contains only second order light not calculated* *Buffer time (sec) 179*									
7	(COS.A362591)	(1) HD-6655	COS/NUV, TIME-TAG, PSA	G285M 2676 A	BUFFER-TIME=90.; FP-POS=3			90 Secs *[==>]*	 ***[1]***
Comments: COS.A362591 *Brightest Pixel (2655.52 Å) 0.613* *Count rate entire detector 2,137.870* *Count rate stripe A 367.971* *Count rate stripe B 1,044.932* *Count rate stripe C 410.395* *Buffer time (sec) 1103*									

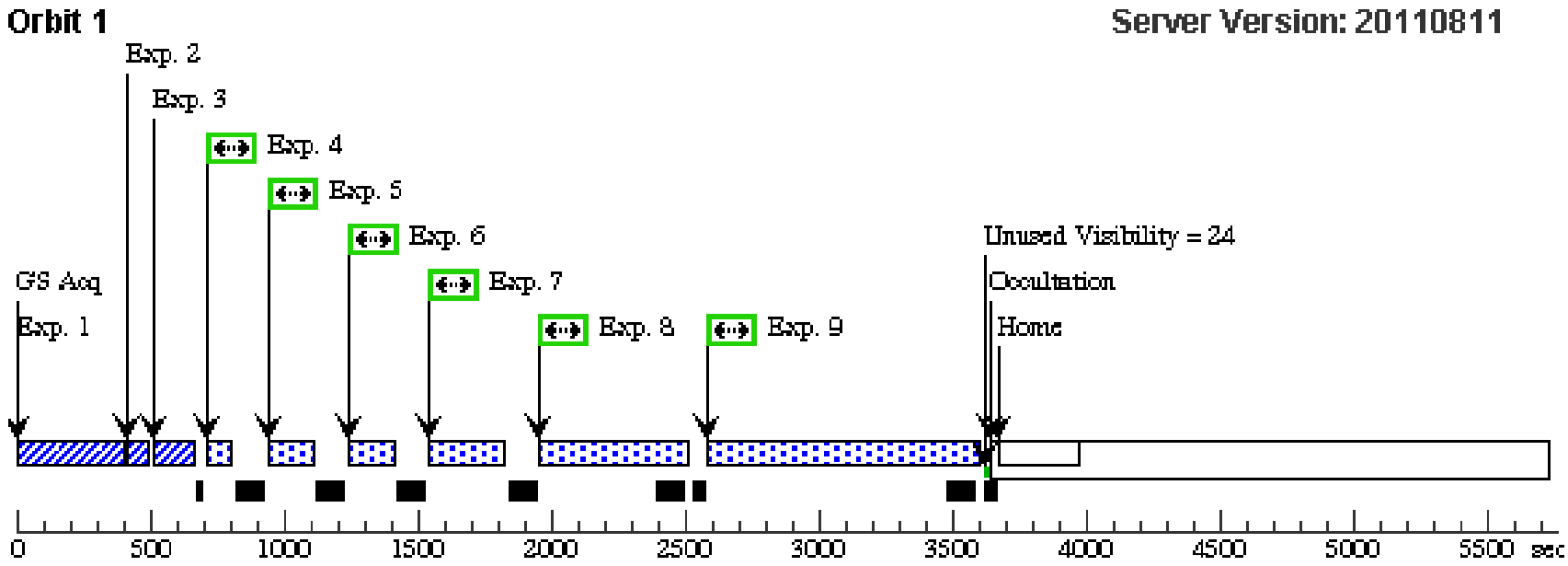
8	(COS.A362 582) (1) HD-6655	COS/NUV, TIME-TAG, PSA	G225M 2217 A	BUFFER-TIME=3300; FP-POS=3	440 Secs [==>]	[1]

Comments: COS.A362582
Brightest Pixel (2304.99 Å) 0.280
Count rate entire detector 1,391.818
Count rate stripe A 204.828
Count rate stripe B 382.514
Count rate stripe C 489.903
Buffer time (sec) 1694

9	(COS.A362 597) (1) HD-6655	COS/NUV, TIME-TAG, PSA	G185M 2010 A	BUFFER-TIME=7500; FP-POS=3	860 Secs [==>]	[1]

Comments: COS.A362597
Brightest Pixel (2114.99 Å) 0.155
Count rate entire detector 752.667
Count rate stripe A 39.808
Count rate stripe B 79.303
Count rate stripe C 318.983
Buffer time (sec) 3134

Orbit Structure



Proposal 12722 - Visit 03 - COS NUV Internal/External Wavelength Scale Monitor

Visit

Proposal 12722, Visit 03 Sat Sep 03 01:40:52 GMT 2011

Diagnostic Status: Warning

Scientific Instruments: COS/NUV

Special Requirements: BETWEEN 01-SEP-2012:00:01:01 AND 01-OCT-2012:00:01:01

Diagnostics

(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.

(Visit 03) 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 03)) Warning (Form): Sensitive exposures should have an ETC run number provided.

(Exposure 2 (Visit 03)) Warning (Form): Sensitive exposures should have an ETC run number provided.

(Exposure 3 (Visit 03)) Warning (Form): Sensitive exposures should have an ETC run number provided.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-6655	RA: 01 05 18.2073 (16.3258637d) Dec: -72 33 14.47 (-72.55402d) Equinox: J2000	Proper Motion RA: 0.01101 sec of time/yr Proper Motion Dec: -0.118 arcsec/yr Epoch of Position: 2000 Radial Velocity: 19.5 km/sec	V=8.05+/-0.05	Reference Frame: ICRS

Comments: This object was generated by the target selector and retrieved from the SIMBAD database.

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) HD-6655	COS/NUV, ACQ/PEAKXD, PSA	G230L 2635 A	STRIPE=MEDIUM			1.5 Secs *[==>]*	***[1]***
2		(1) HD-6655	COS/NUV, ACQ/PEAKXD, PSA	G230L 2635 A	STRIPE=MEDIUM			1.5 Secs *[==>]*	***[1]***
3		(1) HD-6655	COS/NUV, ACQ/PEAKD, PSA	G230L 2635 A	NUM-POS=5; STEP-SIZE=1; CENTER=FLUX-WT-FLR			1 Secs *[==>]*	***[1]***
4	(COS.A362587)	(1) HD-6655	COS/NUV, TIME-TAG, PSA	G230L 2635 A	BUFFER-TIME=80.; FP-POS=3			80 Secs *[==>]*	***[1]***
Comments: COS.A362587 *Brightest Pixel (2655.03 Å) 10.805* *Count rate entire detector 9,828.322* *Count rate stripe A 2.744* *Count rate stripe B 9,511.006* *Stripe C contains only second order light not calculated* *Buffer time (sec) 240*									
5	(COS.A362589)	(1) HD-6655	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=80.; FP-POS=3			80 Secs *[==>]*	***[1]***
Comments: COS.A362589 *Brightest Pixel (2909.99 Å) 9.608* *Count rate entire detector 13,042.264* *Count rate stripe A 373.473* *Count rate stripe B 12,354.219* *Stripe C contains only second order light not calculated* *Buffer time (sec) 180*									
6	(COS.A362590)	(1) HD-6655	COS/NUV, TIME-TAG, PSA	G230L 3000 A	BUFFER-TIME=80.; FP-POS=3			80 Secs *[==>]*	***[1]***
Comments: COS.A362590 *Brightest Pixel (2910.09 Å) 9.588* *Count rate entire detector 13,121.299* *Count rate stripe A 778.505* *Count rate stripe B 12,028.221* *Stripe C contains only second order light not calculated* *Buffer time (sec) 179*									
7	(COS.A362591)	(1) HD-6655	COS/NUV, TIME-TAG, PSA	G285M 2676 A	BUFFER-TIME=90.; FP-POS=3			90 Secs *[==>]*	***[1]***
Comments: COS.A362591 *Brightest Pixel (2655.52 Å) 0.613* *Count rate entire detector 2,137.870* *Count rate stripe A 367.971* *Count rate stripe B 1,044.932* *Count rate stripe C 410.395* *Buffer time (sec) 1103*									

8	(COS.A362582) (1) HD-6655	COS/NUV, TIME-TAG, PSA	G225M 2217 A	BUFFER-TIME=3330; FP-POS=3	440 Secs *[==>]*	*[1]*

Comments: COS.A362582
Brightest Pixel (2304.99 Å) 0.280
Count rate entire detector 1,391.818
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9	(COS.A362597) (1) HD-6655	COS/NUV, TIME-TAG, PSA	G185M 2010 A	BUFFER-TIME=750; FP-POS=3	860 Secs *[==>]*	*[1]*

Comments: COS.A362597
Brightest Pixel (2114.99 Å) 0.155
Count rate entire detector 752.667
Count rate stripe A 39.808
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Count rate stripe C 318.983
Buffer time (sec) 3134

Orbit Structure