Proposal 15388 (STScI Edit Number: 2, Created: Wednesday, September 5, 2018 12:00:42 PM EST) - Overview



15388 - COS NUV Wavelength Scale Monitor

Cycle: 25, 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		OP Current with Visit?
01	(1) HD-6655	COS/NUV	1	05-Sep-2018 13:00:39.0	yes
51	(1) HD-6655	COS/NUV	1	05-Sep-2018 13:00:41.0	yes

² Total Orbits Used

ABSTRACT

This program monitors the stability of the constant terms in the NUV dispersion solutions. To monitor for any changes, the program observes HD 6655 at selected cenwaves for the three NUV gratings that have seen use since Cycle 21. Via cross-correlation, spectra are compared to those obtained in previous iterations of the program and to STIS spectra obtained in-orbit.

OBSERVING DESCRIPTION

To monitor the constant terms in the COS/NUV dispersion solutions in Cycle 25, we continue the approach of Cycle 24 program 14859. This includes taking spectra with the cenwaves 2635, 2950, and 3000 in G230L, cenwave 2217 in G225M, and cenwave 2010 in G185M. The previously monitored G285M grating was dropped from the program due to its declining sensitivity and lack of use since Cycle 21. All data are obtained at FP-POS 3. Due to past GS acquisition issues (e.g., Visit 02 of Cycle 22 program 13975; see HOPR 81649), we use an ACQ/SEARCH, ACQ/PEAKXD, and ACQ/PEAKD sequence. The available GS pairs need to be carefully vetted, as optimum target centering is critical to this program. The proper

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motions were modified to reflect the latest GAIA measurements. Data from previous iterations of this program were used to update the ETC calculations for Cycle 25. This program has been reduced to one visit in Cycle 25 from the previous two visits, since this has been deemed sufficient for the monitoring. To maintain a regular interval of about 12 months between visits, the program will ideally be carried out in the window that spans late August and early September 2018. The schedulability is set to 60% to fit all the observations in one orbit.

Proposal 15388 - Visit 01 - COS NUV Wavelength Scale Monitor

Proposal 15388, Visit 01, failed Wed Sep 05 17:00:42 GMT 2018

Diagnostic Status: Warning

Scientific Instruments: COS/NUV

Special Requirements: SCHED 60%; BETWEEN 15-AUG-2018:00:00:00 AND 30-SEP-2018:00:00:00

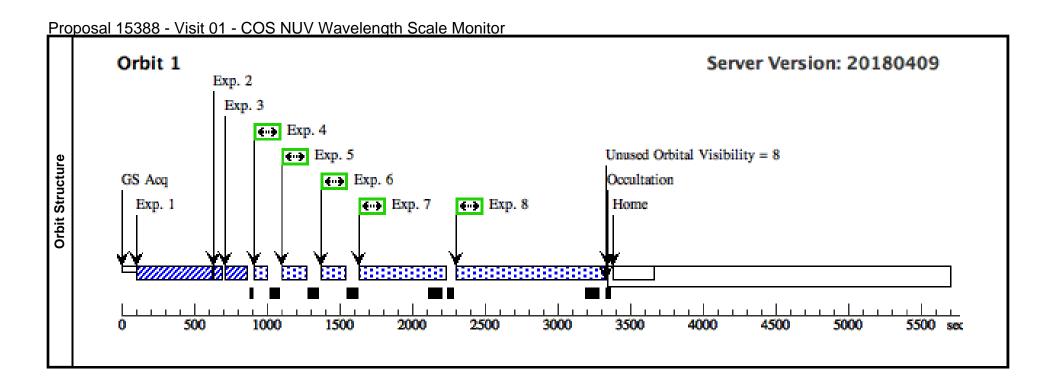
Comments: The 31 day window in August/September 2018 is preferred to maintain a pattern of about 12 months between visits. The schedulability is set to 60% to fit all the observations in one orbit.

(Visit 01) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details. **Diagnostics**

	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	
ts	(1)	HD-6655	RA: 01 05 18.2073 (16.3258637d)	Proper Motion RA: 49.5 mas/yr	V=8.05+/-0.05	Reference Frame: ICRS	
ge			Dec: -72 33 14.47 (-72.55402d)	Proper Motion Dec: -120.0 mas/yr			
a			Equinox: J2000	Epoch of Position: 2000			
Ь				Radial Velocity: 19.5 km/sec			
xe	Comments: This object was generated by the target selector and retrieved from the SIM			BAD database.			
证	Category=STAR						

Description=[F3-F9] Extended=NO

#	Label Target (ETC Run)	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(COS.sa.102 (1) HD-6655	COS/NUV, ACQ/SEARCH, PSA	G230L	SCAN-SIZE=3;	GSPAIR S0XG0644		1 Secs (1 Secs)	
	5837)		2635 A	STEP-SIZE=1.767;	88F2S0XJ067306F1		I = = > J	
				CENTER=FLUX-W T-FLR	I			[1]
2	(COS.sa.102 (1) HD-6655	COS/NUV, ACQ/PEAKXD, PSA	G230L	STRIPE=MEDIUM			1 Secs (1 Secs)	
L	5839)		2635 A				[==>]	[1]
3	(COS.sa.102 (1) HD-6655	COS/NUV, ACQ/PEAKD, PSA	G230L	NUM-POS=5;			1 Secs (1 Secs)	
	5837)		2635 A	STEP-SIZE=1;			I = = > J	
sə.				CENTER=FLUX-W T-FLR	<i>I</i>			[1]
Jns 4	(COS.sp.102 (1) HD-6655 COS/NUV, TIME-TAG, PS/ 5840)	COS/NUV, TIME-TAG, PSA	G230L	BUFFER-TIME=17	BUFFER-TIME=17		80 Secs (80 Secs)	
Exposures			2635 A	7; FP-POS=3			[==>]	[1]
ш 5	(COS.sp.102 (1) HD-6655	COS/NUV, TIME-TAG, PSA		BUFFER-TIME=12			80 Secs (80 Secs)	
	5842)		2950 A	3; FP-POS=3			[==>]	[1]
6	(COS.sp.102 (1) HD-6655	COS/NUV, TIME-TAG, PSA	G230L	BUFFER-TIME=12			80 Secs (80 Secs)	
	5843)	3000 A	4; FP-POS=3			[==>]	[1]	
7	(COS.sp.102 (1) HD-6655	COS/NUV, TIME-TAG, PSA	G225M BUFFER-TIME=33		440 Secs (440 Secs)			
	5846)		2217 A	0; FP-POS=3			[==>]	[1]
8	(COS.sp.102 (1) HD-6655	COS/NUV, TIME-TAG, PSA	G185M	BUFFER-TIME=75			860 Secs (860 Secs)	
	5857)		2010 A	0; FP-POS=3			[==>]	[1]



Proposal 15388 - Visit 51 - COS NUV Wavelength Scale Monitor

Proposal 15388, Visit 51 Wed Sep 05 17:00:42 GMT 2018

Diagnostic Status: Warning Scientific Instruments: COS/NUV

Special Requirements: SCHED 60%; BETWEEN 15-AUG-2018:00:00:00 AND 30-SEP-2018:00:00:00

Comments: The 31 day window in August/September 2018 is preferred to maintain a pattern of about 12 months between visits. The schedulability is set to 60% to fit all the observations in one orbit.

(Visit 51) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.

	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
ts	RA: 01 05 18.2073 (16.3258637d) Dec: -72 33 14.47 (-72.55402d)		Proper Motion RA: 49.5 mas/yr	V=8.05+/-0.05	Reference Frame: ICRS	
ge			Dec: -72 33 14.47 (-72.55402d)	Proper Motion Dec: -120.0 mas/yr		
<u>a</u>			Equinox: J2000	Epoch of Position: 2000		
١Ę	- 5			Radial Velocity: 19.5 km/sec		
×	Comments	: This object was generated	d by the target selector and retrieved from the SIM	BAD database.		

Category=STAR
Description=[F3-F9]
Extended=NO

i	#	Label Target (ETC Run)	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(COS.sa.102 (1) HD-6655	COS/NUV, ACQ/SEARCH, PSA	G230L	SCAN-SIZE=3;	GSPAIR S0XG0644	GSPAIR S0XG0644 88F2S0XJ067306F1	1 Secs (1 Secs)	
		5837)		2635 A	STEP-SIZE=1.767;	88F2S0XJ067306F1		[==>]	
					CENTER=FLUX-W T-FLR	<i>I</i>			[1]
2	2	(COS.sa.102 (1) HD-6655	COS/NUV, ACQ/PEAKXD, PSA	G230L	STRIPE=MEDIUM			1 Secs (1 Secs)	
		5839)		2635 A				[==>]	[1]
3	3	(COS.sa.102 (1) HD-6655	COS/NUV, ACQ/PEAKD, PSA	G230L	NUM-POS=5;			1 Secs (1 Secs)	
		5837)		2635 A	STEP-SIZE=1;			[==>]	
es					CENTER=FLUX-W T-FLR	I			[1]
ן אָן [4	(COS.sp.102 (1) HD-6655	COS/NUV, TIME-TAG, PSA	G230L	BUFFER-TIME=17			80 Secs (80 Secs)	
Exposures		5840)		2635 A	7; FP-POS=3			[==>]	[1]
W	5	(COS.sp.102 (1) HD-6655	COS/NUV, TIME-TAG, PSA	G230L	BUFFER-TIME=12			80 Secs (80 Secs)	
		5842)		2950 A	3; FP-POS=3			[==>]	[1]
(6	(COS.sp.102 (1) HD-6655	COS/NUV, TIME-TAG, PSA	G230L	BUFFER-TIME=12			80 Secs (80 Secs)	
		5843)		3000 A	4; FP-POS=3			[==>]	[1]
•	7	(COS.sp.102 (1) HD-6655	COS/NUV, TIME-TAG, PSA	G225M	BUFFER-TIME=33			440 Secs (440 Secs)	
		5846)		2217 A	0; FP-POS=3			[==>]	[1]
	8	(COS.sp.102 (1) HD-6655	COS/NUV, TIME-TAG, PSA	G185M	BUFFER-TIME=75			860 Secs (860 Secs)	
		5857)	, -, -, -,	2010 A	0; FP-POS=3			[==>]	[1]

