



16573 - WFC3 UVIS CTE Monitor (Star Cluster)

Cycle: 29, Proposal Category: CAL/WFC3

(Availability Mode: RESTRICTED)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
Benjamin Kuhn (PI) (Contact)	Space Telescope Science Institute	bkuhn@stsci.edu
Varun Bajaj (CoI) (Contact)	Space Telescope Science Institute	vbajaj@stsci.edu
Dr. Sylvia M. Baggett (CoI) (Contact)	Space Telescope Science Institute	sbaggett@stsci.edu
Dr. Jay Anderson (CoI) (Contact)	Space Telescope Science Institute	jayander@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) OMEGACEN	WFC3/UVIS	2	02-Dec-2022 15:00:28.0	yes
51	(1) OMEGACEN	WFC3/UVIS	2	02-Dec-2022 15:00:31.0	yes
02	(2) NGC-104	WFC3/UVIS	2	02-Dec-2022 15:00:32.0	yes
03	(1) OMEGACEN	WFC3/UVIS	2	02-Dec-2022 15:00:34.0	yes
04	(2) NGC-104	WFC3/UVIS	2	02-Dec-2022 15:00:36.0	yes
54	(54) NGC-104-OFFSET	WFC3/UVIS	2	02-Dec-2022 15:00:38.0	yes

12 Total Orbits Used

ABSTRACT

This program is a recurring UVIS calibration monitor that will observe two stellar clusters (Omega Centauri, and 47 Tuc) to measure the flux loss of point sources as a function of detector row number due to degrading Charge Transfer

Efficiency (CTE). Because CTE fluctuates with characteristics such as source flux and background level, this program is designed to take short and long exposures, at various commanded post-flash levels with the F502N filter. We will compare the results from these new observations with previous external CTE calibration programs and update the aperture photometry-based CTE model. Furthermore, ACS has an external CTE calibration program that observes NGC 104 at various post-flash levels that can also be used for direct comparison. Lastly, these data will be used to help monitor/improve the empirical pixel-based CTE correction (FLC/DRC).

OBSERVING DESCRIPTION

Using clusters to measure the UVIS CTE relies on image pairs that have a ~2000 pixel (~ 1 chip height) dither. Each field is first observed in UVIS2, and then dithered in the y-direction by a 81.6 arcsecond step (UVIS pixel scale ~ 0.04 arcsec/pixel), and then an identical exposure of the same field is taken in UVIS1. This allows a source that is near an amplifier in one chip (exposure) to be further from an amplifier in the other chip (exposure) enabling an absolute measure of the CTE. With varying field density, post flash, and exposure length, we build and maintain a CTE model based on many parameters.

In the past, the external CTE monitor has observed globular cluster NGC 104 (47 Tuc), and open cluster NGC 6791. The sparseness of NGC 6791 compared to 47 Tuc was used to test the effects of self-shielding on CTE-induced flux losses. However, the CTE trending between the two targets has not shown a significant difference. Therefore, starting cycle (28) we have swapped out NGC 6791 for Omega Centauri. Switching to Omega Centauri provides significantly more stars, particularly at the faint end, which improves the CTE measurements. Each cluster will have long and short exposures taken. NGC 104 short exposures will have 0 and 12 e-/pixel post-flash (0.1 and 12 e- total background)

and Omega Centauri will have 0 and 11 e-/pixel post-flash (1 and 12 e- total background). The long exposure Omega Centauri images will be taken with a 4, 10, 15, 23, 43, 75, and, 98 e-/pixel post-flash (13, 20, 25, 34, 56, 92, and 117 e- total background). NGC 104 long exposures will use post-flash levels: 0, 12, 18, 24, 33, 55, 91, and 116 e-/pixel. (1, 13, 19, 25, 34, 56, 92, 117 e- total background). All observations use the F502N filter.

Because of the ~2000 pixel dither any warnings about the target being outside of the aperture can be ignored. Any warnings regarding post-flash may also be ignored since we're trying to simulate background levels with low/high commanded post-flashes.

----- Scheduling -----

The CTE long-term monitoring observations are taken at two epochs each cycle, starting approximately six months after the previous cycle's epoch. The first epoch should be scheduled in January-February 2022, the second epoch in July-August 2022.

We request that both pairs of Omega Centauri and 47 Tuc observations (Visits 01-02, Visits 03-04) are taken within seven days from each other in order to sample the CTE at similar epochs. We have set the visit-level timing requirements for visit groups accordingly.

----- Calibration Justification -----

These data will be used to determine the evolution of CTE with epoch, position on the detector, and flash-level (i.e. background). Varying the background levels via post-flash will allow us to monitor the effects of

post-flash to mitigate CTE. Results will be compared to Cycles 17-28 CTE measurements for WFC3/UVIS CCDs.

The analysis of the data will be used to continue calibrating a model of CTE-induced losses in both FLT and DRZ UVIS images, with a precision of better than 1% for stellar photometry and less than 5% for astrometric effects from CTE-induced source centroid shifts. Additionally, all exposures taken in this program will also be used to test and improve the pixel-based UVIS CTE correction algorithm developed by J. Anderson.

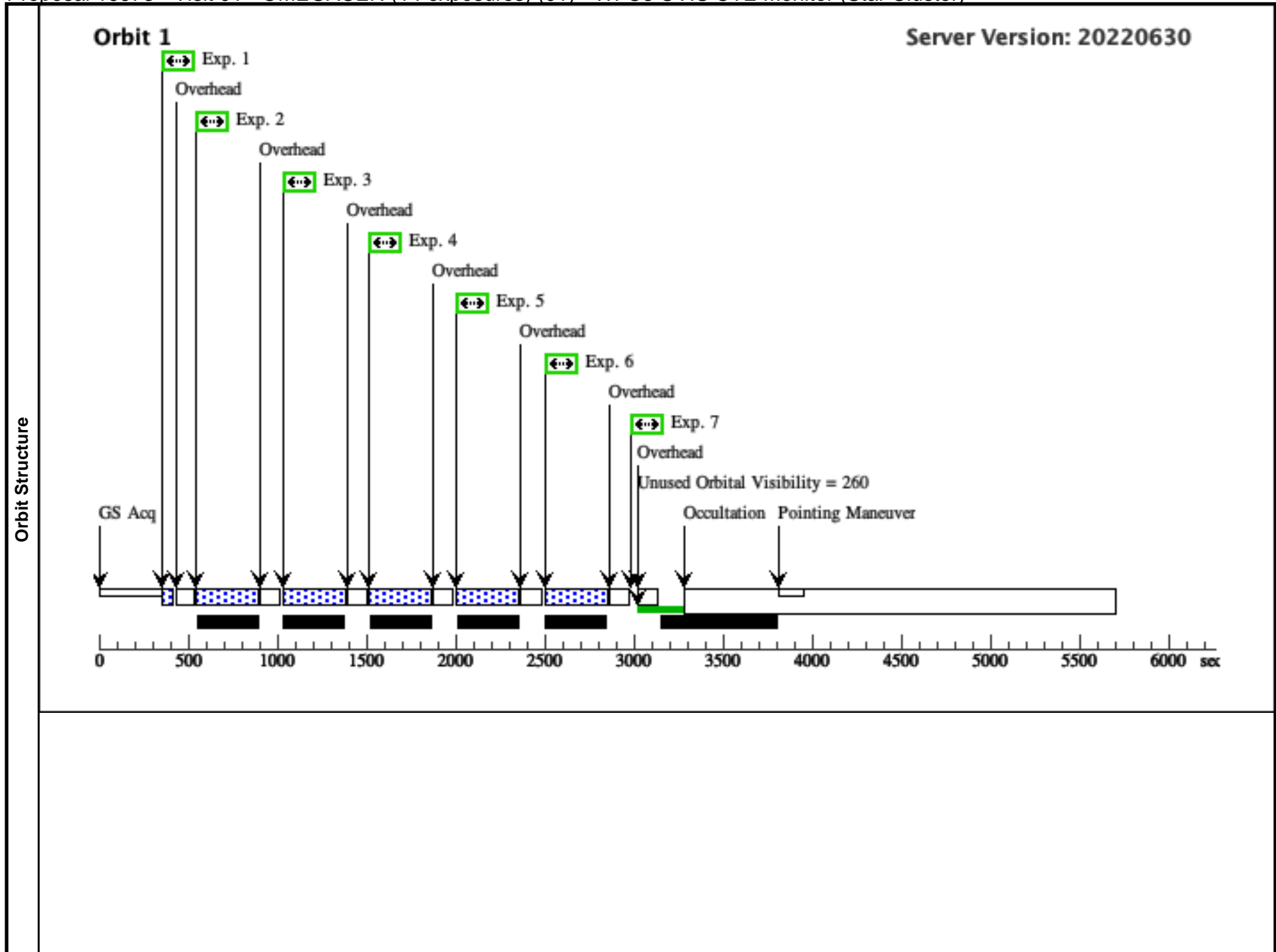
Proposal 16573 - Visit 01 - OMEGACEN (14 exposures) (01) - WFC3 UVIS CTE Monitor (Star Cluster)

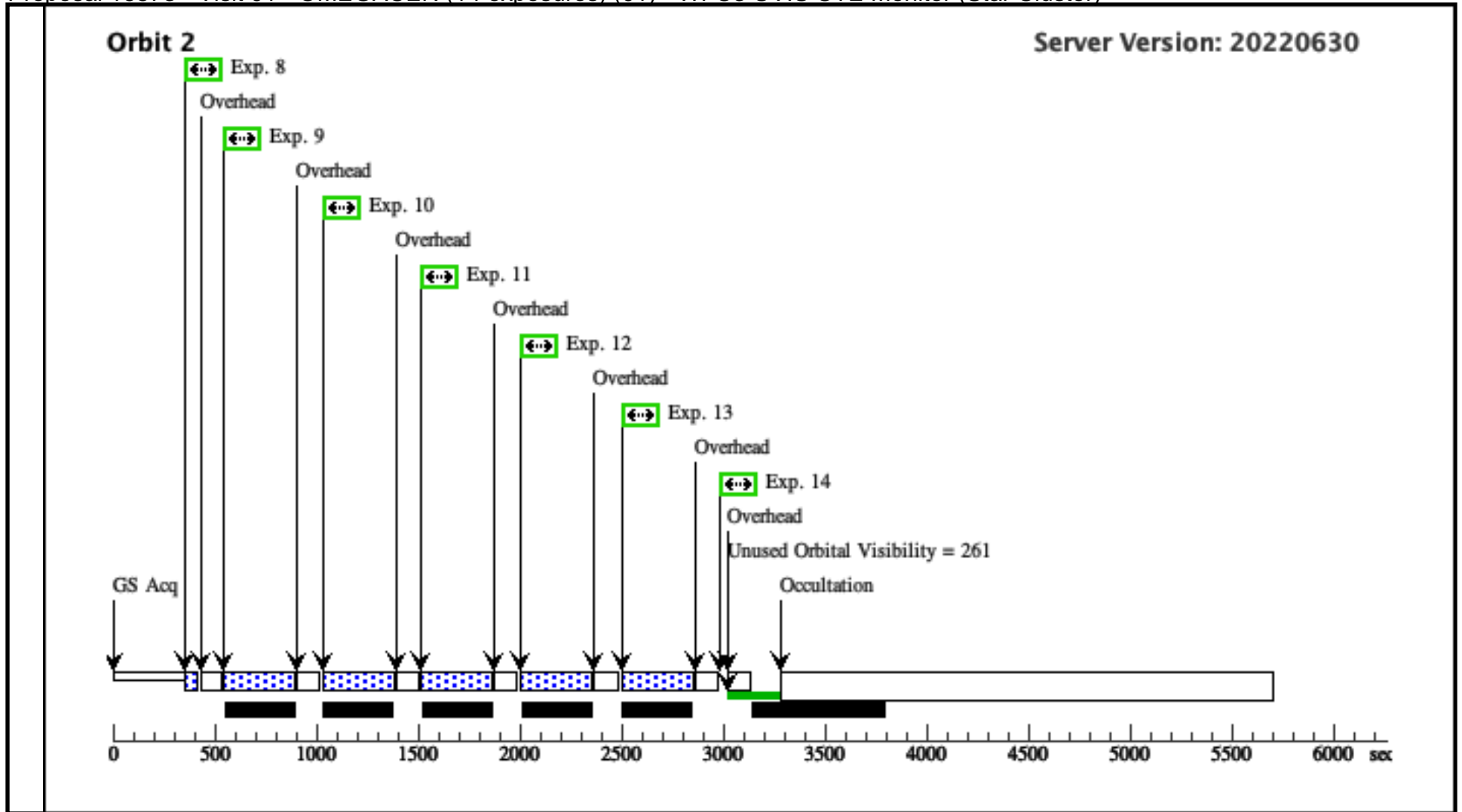
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Visit	<p>Proposal 16573, Visit 01 - OMEGACEN (14 exposures) (01), failed</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: WFC3/UVIS</p> <p>Special Requirements: BETWEEN 28-MAR-2022:00:00:00 AND 01-MAY-2022:00:00:00</p> <p><i>Comments: USE SAME GUIDE STAR THROUGHOUT VISIT. USE SAME ORIENTATION THROUGHOUT VISIT.</i></p>																	
	Diagnostics	<p>(Visit 01 - OMEGACEN (14 exposures) (01)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 01 - OMEGACEN (14 exposures) (01)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 01 - OMEGACEN (14 exposures) (01)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 01 - OMEGACEN (14 exposures) (01)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 01 - OMEGACEN (14 exposures) (01)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 01 - OMEGACEN (14 exposures) (01)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 01 - OMEGACEN (14 exposures) (01)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 01 - OMEGACEN (14 exposures) (01)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 01 - OMEGACEN (14 exposures) (01)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 01 - OMEGACEN (14 exposures) (01)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 01 - OMEGACEN (14 exposures) (01)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 01 - OMEGACEN (14 exposures) (01)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 01 - OMEGACEN (14 exposures) (01)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 01 - OMEGACEN (14 exposures) (01)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 01 - OMEGACEN (14 exposures) (01)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 01 - OMEGACEN (14 exposures) (01)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Exposure 1 - 30s BKG 1 (01.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 2 - 348s BKG 20 (01.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 3 - 348s BKG 25 (01.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 5 - 348s BKG 56 (01.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 6 - 348s BKG 117 (01.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 7 - 30s BKG 12 (01.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 8 - 30s BKG 1 (01.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 9 - 348s BKG 20 (01.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 10 - 348s BKG 25 (01.010)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 12 - 348s BKG 56 (01.012)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 13 - 348s BKG 117 (01.013)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 14 - 30s BKG 12 (01.014)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p>																
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		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous											
(1)		OMEGACEN	RA: 13 26 46.2800 (201.6928333d) Dec: -47 28 44.60 (-47.47906d) Equinox: J2000		V=16.8	Reference Frame: ICRS												

Proposal 16573 - Visit 01 - OMEGACEN (14 exposures) (01) - WFC3 UVIS CTE Monitor (Star Cluster)

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Exposure 1 - 30s BKG 1	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO	POS TARG 0,0; GS ACQ SCENARI O BASE1BE		30 Secs (30 Secs) [==>]	[1]
	2	Exposure 2 - 348s BKG 2 0	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=10	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	3	Exposure 3 - 348s BKG 2 5	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=15	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	4	Exposure 4 - 348s BKG 3 4	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=23	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	5	Exposure 5 - 348s BKG 5 6	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=LOW; FLASHHEXP=17.24	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	6	Exposure 6 - 348s BKG 1 17	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=MEDI UM; FLASHHEXP=1.34	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	7	Exposure 7 - 30s BKG 12	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=11	POS TARG 0,0		30 Secs (30 Secs) [==>]	[1]
	8	Exposure 8 - 30s BKG 1	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO	POS TARG 0,81.6; NEW OBSET FULL ACQ		30 Secs (30 Secs) [==>]	[2]
	9	Exposure 9 - 348s BKG 2 0	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=10	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	10	Exposure 10 - 348s BKG 25	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=15	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	11	Exposure 11 - 348s BKG 34	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=23	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	12	Exposure 12 - 348s BKG 56	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=LOW; FLASHHEXP=17.24	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	13	Exposure 13 - 348s BKG 117	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=MEDI UM; FLASHHEXP=1.34	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
14	Exposure 14 - 30s BKG 1 2	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=11	POS TARG 0,81.6		30 Secs (30 Secs) [==>]	[2]	





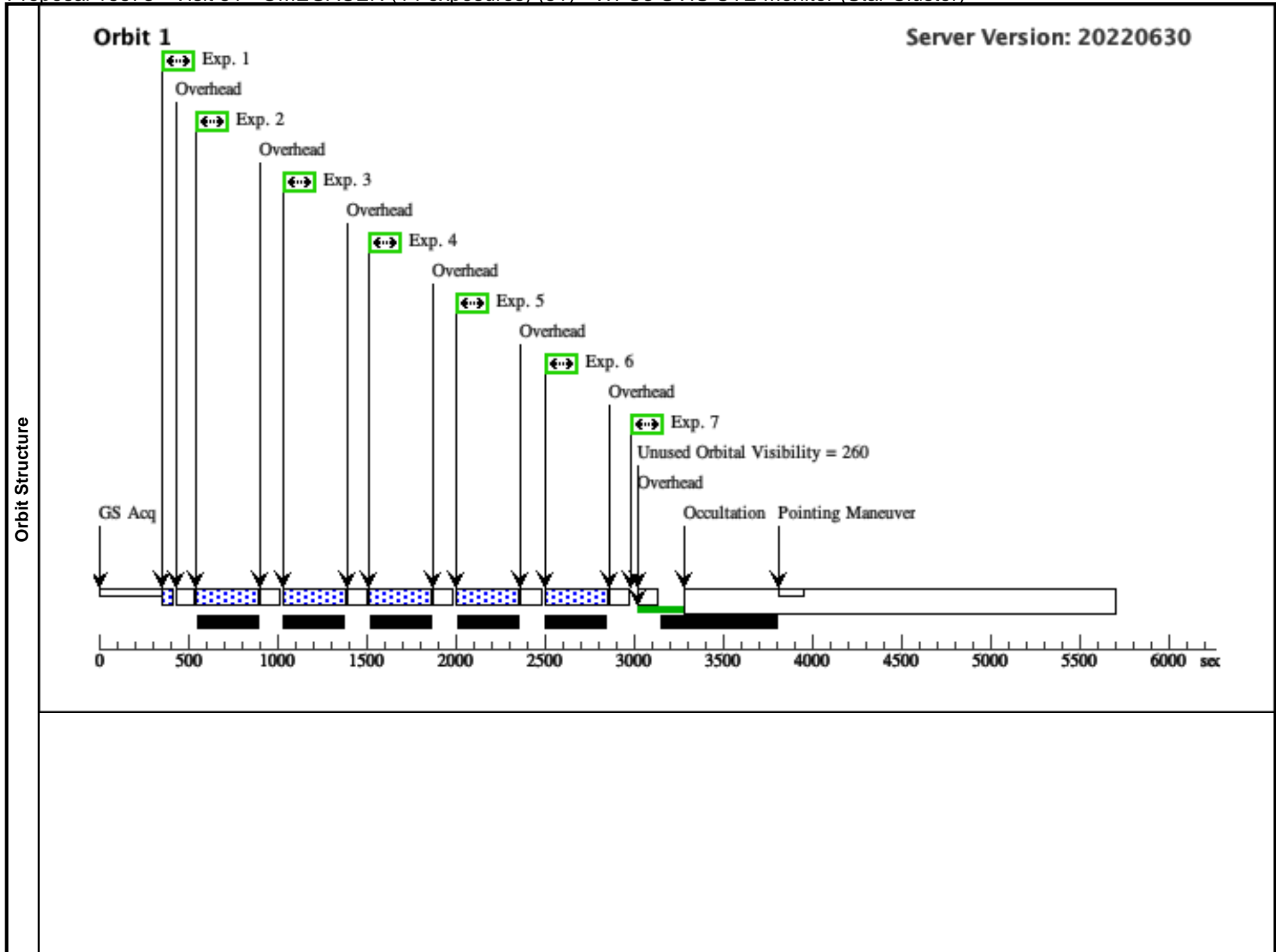
Proposal 16573 - Visit 51 - OMEGACEN (14 exposures) (51) - WFC3 UVIS CTE Monitor (Star Cluster)

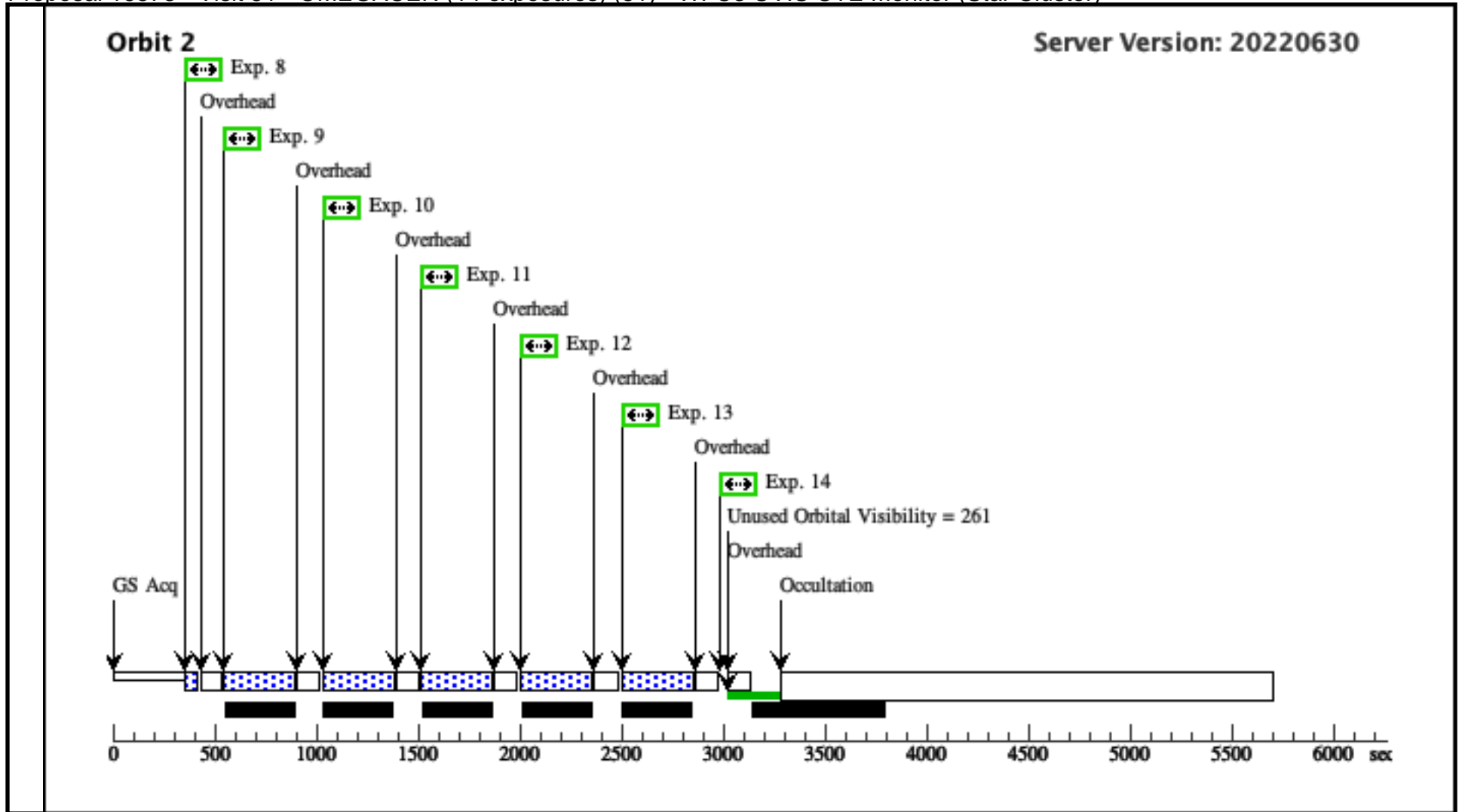
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Visit	<p>Proposal 16573, Visit 51 - OMEGACEN (14 exposures) (51), completed</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: WFC3/UVIS</p> <p>Special Requirements: BETWEEN 18-MAY-2022:00:00:00 AND 01-JUL-2022:00:00:00</p> <p><i>Comments: USE SAME GUIDE STAR THROUGHOUT VISIT. USE SAME ORIENTATION THROUGHOUT VISIT.</i></p>																	
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Proposal 16573 - Visit 51 - OMEGACEN (14 exposures) (51) - WFC3 UVIS CTE Monitor (Star Cluster)

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Exposure 1 - 30s BKG 1	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO	POS TARG 0,0; GS ACQ SCENARI O BASE1BE		30 Secs (30 Secs) [==>]	[1]
	2	Exposure 2 - 348s BKG 2 0	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=10	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	3	Exposure 3 - 348s BKG 2 5	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=15	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	4	Exposure 4 - 348s BKG 3 4	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=23	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	5	Exposure 5 - 348s BKG 5 6	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=LOW; FLASHEXP=17.24	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	6	Exposure 6 - 348s BKG 1 17	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=MEDI UM; FLASHEXP=1.34	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	7	Exposure 7 - 30s BKG 12	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=11	POS TARG 0,0		30 Secs (30 Secs) [==>]	[1]
	8	Exposure 8 - 30s BKG 1	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO	POS TARG 0,81.6; NEW OBSET FULL ACQ		30 Secs (30 Secs) [==>]	[2]
	9	Exposure 9 - 348s BKG 2 0	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=10	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	10	Exposure 10 - 348s BKG 25	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=15	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	11	Exposure 11 - 348s BKG 34	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=23	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	12	Exposure 12 - 348s BKG 56	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=LOW; FLASHEXP=17.24	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	13	Exposure 13 - 348s BKG 117	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=MEDI UM; FLASHEXP=1.34	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
14	Exposure 14 - 30s BKG 1 2	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=11	POS TARG 0,81.6		30 Secs (30 Secs) [==>]	[2]	





Proposal 16573 - Visit 02 - NGC 104 (12 exposures) (02) - WFC3 UVIS CTE Monitor (Star Cluster)

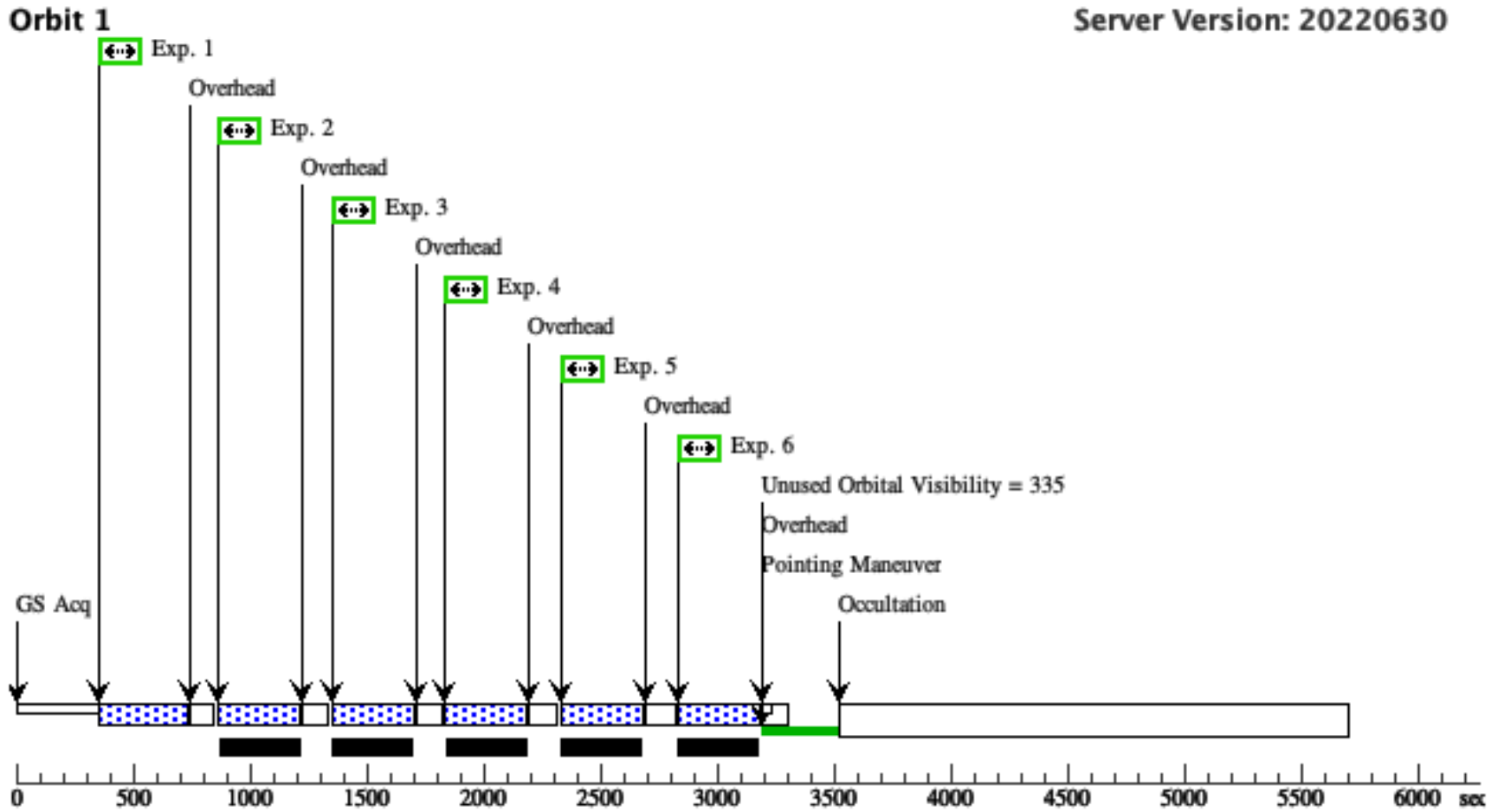
Fri Dec 02 20:00:40 GMT 2022

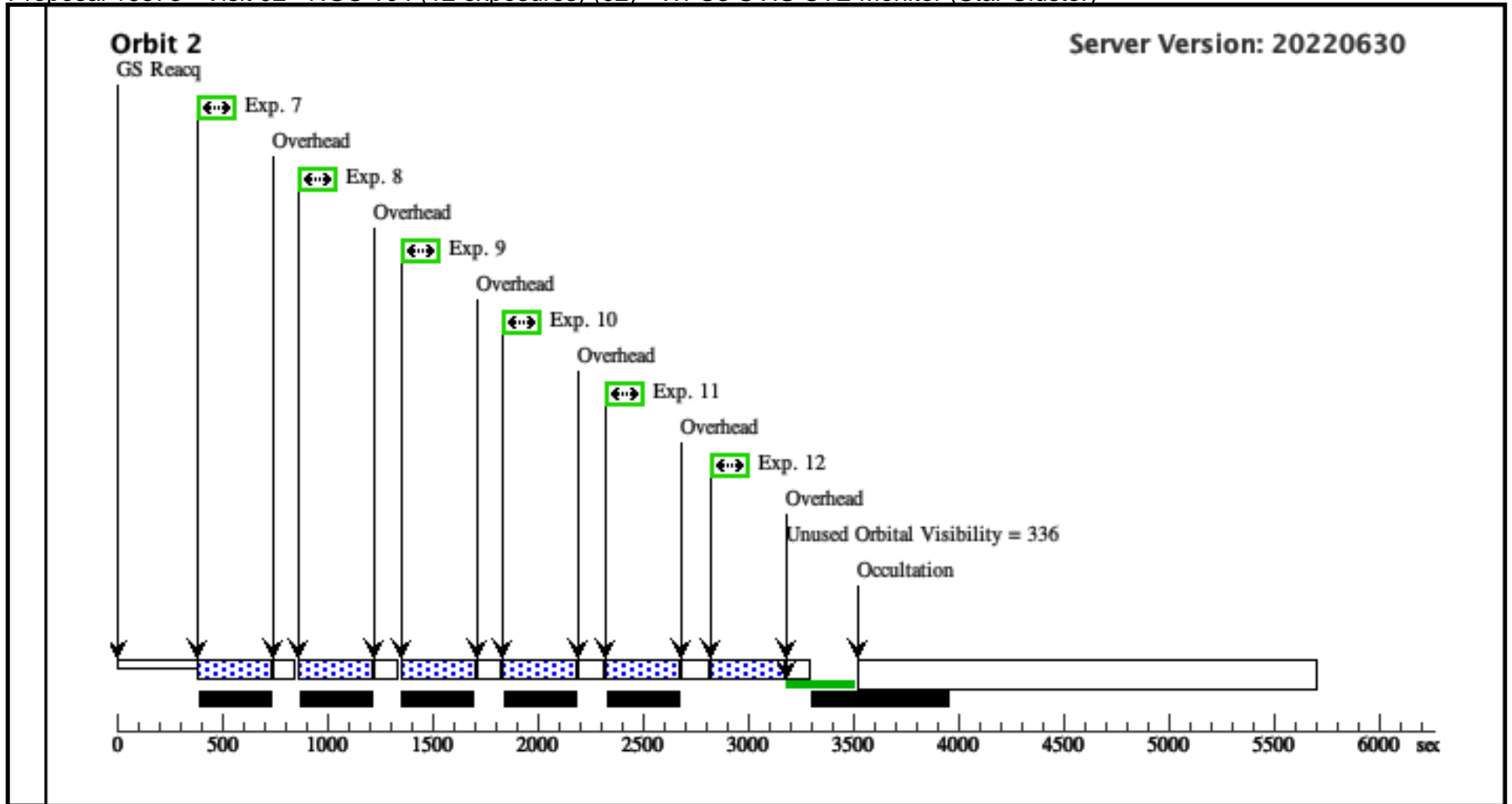
Visit	<p>Proposal 16573, Visit 02 - NGC 104 (12 exposures) (02), completed</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: WFC3/UVIS</p> <p>Special Requirements: GROUP 02,51 WITHIN 53D</p> <p><i>Comments: USE SAME GUIDE STAR THROUGHOUT VISIT. USE SAME ORIENTATION THROUGHOUT VISIT.</i></p>						
	Diagnostics	<p>(Visit 02 - NGC 104 (12 exposures) (02)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 02 - NGC 104 (12 exposures) (02)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 02 - NGC 104 (12 exposures) (02)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 02 - NGC 104 (12 exposures) (02)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 02 - NGC 104 (12 exposures) (02)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 02 - NGC 104 (12 exposures) (02)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 02 - NGC 104 (12 exposures) (02)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 02 - NGC 104 (12 exposures) (02)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 02 - NGC 104 (12 exposures) (02)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 02 - NGC 104 (12 exposures) (02)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 02 - NGC 104 (12 exposures) (02)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 02 - NGC 104 (12 exposures) (02)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Exposure 1 - 348s BKG 1 (02.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 3 - 348s BKG 25 (02.003)) Warning (Form): FLASH level may be too high for this exposure or a long subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 4 - 348s BKG 34 (02.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 5 - 348s BKG 56 (02.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 6 - 348s BKG 117 (02.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 7 - 348s BKG 1 (02.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 9 - 348s BKG 25 (02.009)) Warning (Form): FLASH level may be too high for this exposure or a long subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 10 - 348s BKG 34 (02.010)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 11 - 348s BKG 56 (02.011)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 12 - 348s BKG 117 (02.012)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p>					
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
		(2)	NGC-104 Alt Name1: 47-TUC	RA: 00 22 38.2500 (5.6593750d) Dec: -72 03 54.00 (-72.06500d) Equinox: J2000	Proper Motion RA: 0.0015731412087106966 sec of time/yr Proper Motion Dec: -0.001250000013897079 arcsec/yr Epoch of Position: 2015.5	V=4.91	Reference Frame: ICRS
<p><i>Comments:</i> Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER]</p>							

Proposal 16573 - Visit 02 - NGC 104 (12 exposures) (02) - WFC3 UVIS CTE Monitor (Star Cluster)

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Exposure 1 - 348s BKG 1	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO	GS ACQ SCENARI O BASE1BE		348 Secs (348 Secs)	[1]
	2	Exposure 2 - 348s BKG 2 0	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=18			348 Secs (348 Secs)	[1]
	3	Exposure 3 - 348s BKG 2 5	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=24			348 Secs (348 Secs)	[1]
	4	Exposure 4 - 348s BKG 3 4	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=LOW; FLASHEXP=13			348 Secs (348 Secs)	[1]
	5	Exposure 5 - 348s BKG 5 6	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=LOW; FLASHEXP=21.5			348 Secs (348 Secs)	[1]
	6	Exposure 6 - 348s BKG 1 17	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=MEDI UM; FLASHEXP=1.59			348 Secs (348 Secs)	[1]
	7	Exposure 7 - 348s BKG 1	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO	POS TARG 0,81.6		348 Secs (348 Secs)	[2]
	8	Exposure 8 - 348s BKG 2 0	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=18	POS TARG 0,81.6		348 Secs (348 Secs)	[2]
	9	Exposure 9 - 348s BKG 2 5	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=24	POS TARG 0,81.6		348 Secs (348 Secs)	[2]
	10	Exposure 10 - 348s BKG 34	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=LOW; FLASHEXP=13	POS TARG 0,81.6		348 Secs (348 Secs)	[2]
	11	Exposure 11 - 348s BKG 56	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=LOW; FLASHEXP=21.5	POS TARG 0,81.6		348 Secs (348 Secs)	[2]
12	Exposure 12 - 348s BKG 117	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=MEDI UM; FLASHEXP=1.59	POS TARG 0,81.6		348 Secs (348 Secs)	[2]	

Orbit Structure





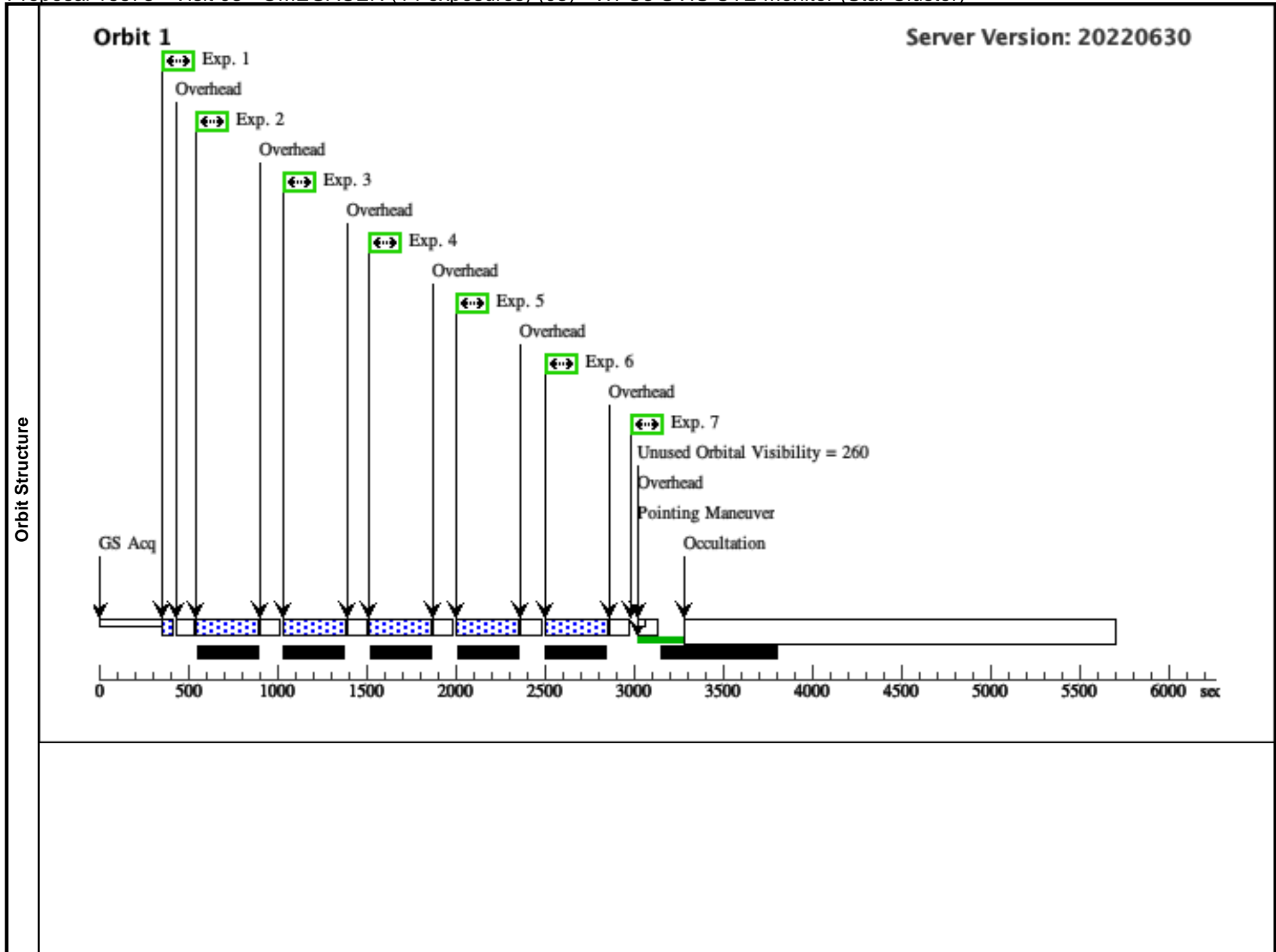
Proposal 16573 - Visit 03 - OMEGACEN (14 exposures) (03) - WFC3 UVIS CTE Monitor (Star Cluster)

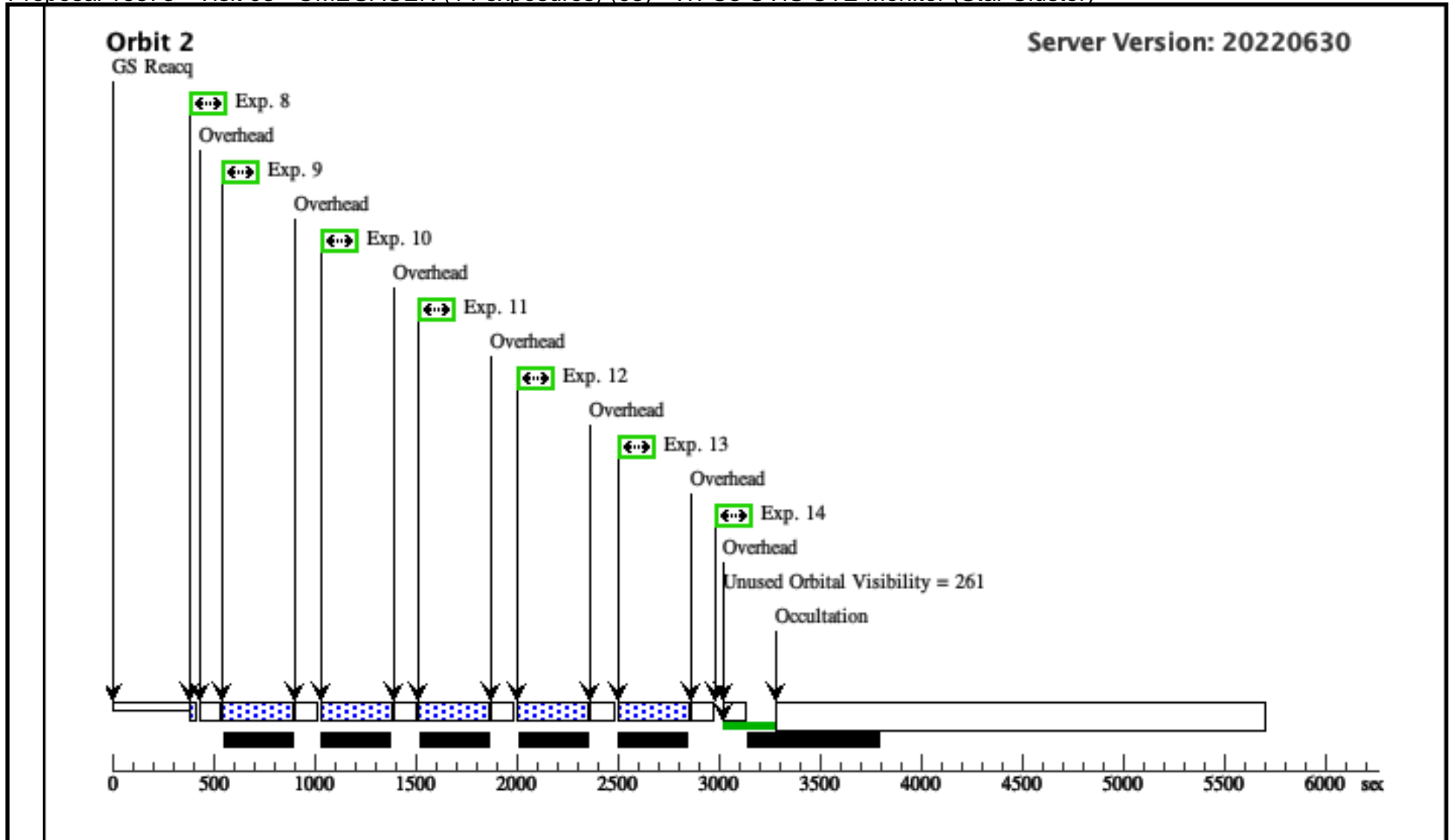
Fri Dec 02 20:00:40 GMT 2022

Visit	Proposal 16573, Visit 03 - OMEGACEN (14 exposures) (03), scheduling Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: BETWEEN 16-DEC-2022:00:00:00 AND 15-JAN-2023:00:00:00 Comments: USE SAME GUIDE STAR THROUGHOUT VISIT. USE SAME ORIENTATION THROUGHOUT VISIT.																	
	Diagnostics	(Visit 03 - OMEGACEN (14 exposures) (03)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE (Visit 03 - OMEGACEN (14 exposures) (03)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE (Visit 03 - OMEGACEN (14 exposures) (03)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE (Visit 03 - OMEGACEN (14 exposures) (03)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE (Visit 03 - OMEGACEN (14 exposures) (03)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE (Visit 03 - OMEGACEN (14 exposures) (03)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE (Visit 03 - OMEGACEN (14 exposures) (03)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE (Visit 03 - OMEGACEN (14 exposures) (03)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE (Visit 03 - OMEGACEN (14 exposures) (03)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT (Visit 03 - OMEGACEN (14 exposures) (03)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT (Visit 03 - OMEGACEN (14 exposures) (03)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT (Visit 03 - OMEGACEN (14 exposures) (03)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT (Visit 03 - OMEGACEN (14 exposures) (03)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT (Visit 03 - OMEGACEN (14 exposures) (03)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT (Visit 03 - OMEGACEN (14 exposures) (03)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT (Visit 03 - OMEGACEN (14 exposures) (03)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT (Exposure 1 - 30s BKG 1 (03.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 2 - 348s BKG 20 (03.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 3 - 348s BKG 25 (03.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 5 - 348s BKG 56 (03.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 6- 348s BKG 92 (03.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 7 - 30s BKG 12 (03.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 8 - 30s BKG 1 (03.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 9 - 348s BKG 20 (03.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 10 - 348s BKG 25 (03.010)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 12 - 348s BKG 56 (03.012)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 13- 348s BKG 92 (03.013)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 14 - 30s BKG 12 (03.014)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser																
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>OMEGACEN</td> <td>RA: 13 26 46.2800 (201.6928333d) Dec: -47 28 44.60 (-47.47906d) Equinox: J2000</td> <td></td> <td>V=16.8</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	OMEGACEN	RA: 13 26 46.2800 (201.6928333d) Dec: -47 28 44.60 (-47.47906d) Equinox: J2000		V=16.8	Reference Frame: ICRS
		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous											
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Comments: Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER]																		

Proposal 16573 - Visit 03 - OMEGACEN (14 exposures) (03) - WFC3 UVIS CTE Monitor (Star Cluster)

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Exposure 1 - 30s BKG 1	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO	GS ACQ SCENARI O BASE1BE		30 Secs (30 Secs)	[1]
	2	Exposure 2 - 348s BKG 2 0	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=10			348 Secs (348 Secs)	[1]
	3	Exposure 3 - 348s BKG 2 5	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=15			348 Secs (348 Secs)	[1]
	4	Exposure 4 - 348s BKG 3 4	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=23			348 Secs (348 Secs)	[1]
	5	Exposure 5 - 348s BKG 5 6	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=LOW; FLASHEXP=17.24			348 Secs (348 Secs)	[1]
	6	Exposure 6 - 348s BKG 9 2	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=MEDI UM; FLASHEXP=1.03			348 Secs (348 Secs)	[1]
	7	Exposure 7 - 30s BKG 12	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=11			30 Secs (30 Secs)	[1]
	8	Exposure 8 - 30s BKG 1	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO	POS TARG 0,81.6		30 Secs (30 Secs)	[2]
	9	Exposure 9 - 348s BKG 2 0	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=10	POS TARG 0,81.6		348 Secs (348 Secs)	[2]
	10	Exposure 10 - 348s BKG 25	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=15	POS TARG 0,81.6		348 Secs (348 Secs)	[2]
	11	Exposure 11 - 348s BKG 34	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=23	POS TARG 0,81.6		348 Secs (348 Secs)	[2]
	12	Exposure 12 - 348s BKG 56	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=LOW; FLASHEXP=17.24	POS TARG 0,81.6		348 Secs (348 Secs)	[2]
	13	Exposure 13 - 348s BKG 92	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=MEDI UM; FLASHEXP=1.03	POS TARG 0,81.6		348 Secs (348 Secs)	[2]
14	Exposure 14 - 30s BKG 1 2	(1) OMEGACEN	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=11	POS TARG 0,81.6		30 Secs (30 Secs)	[2]	





Proposal 16573 - Visit 04 - NGC 104 (16 exposures) (04) - WFC3 UVIS CTE Monitor (Star Cluster)

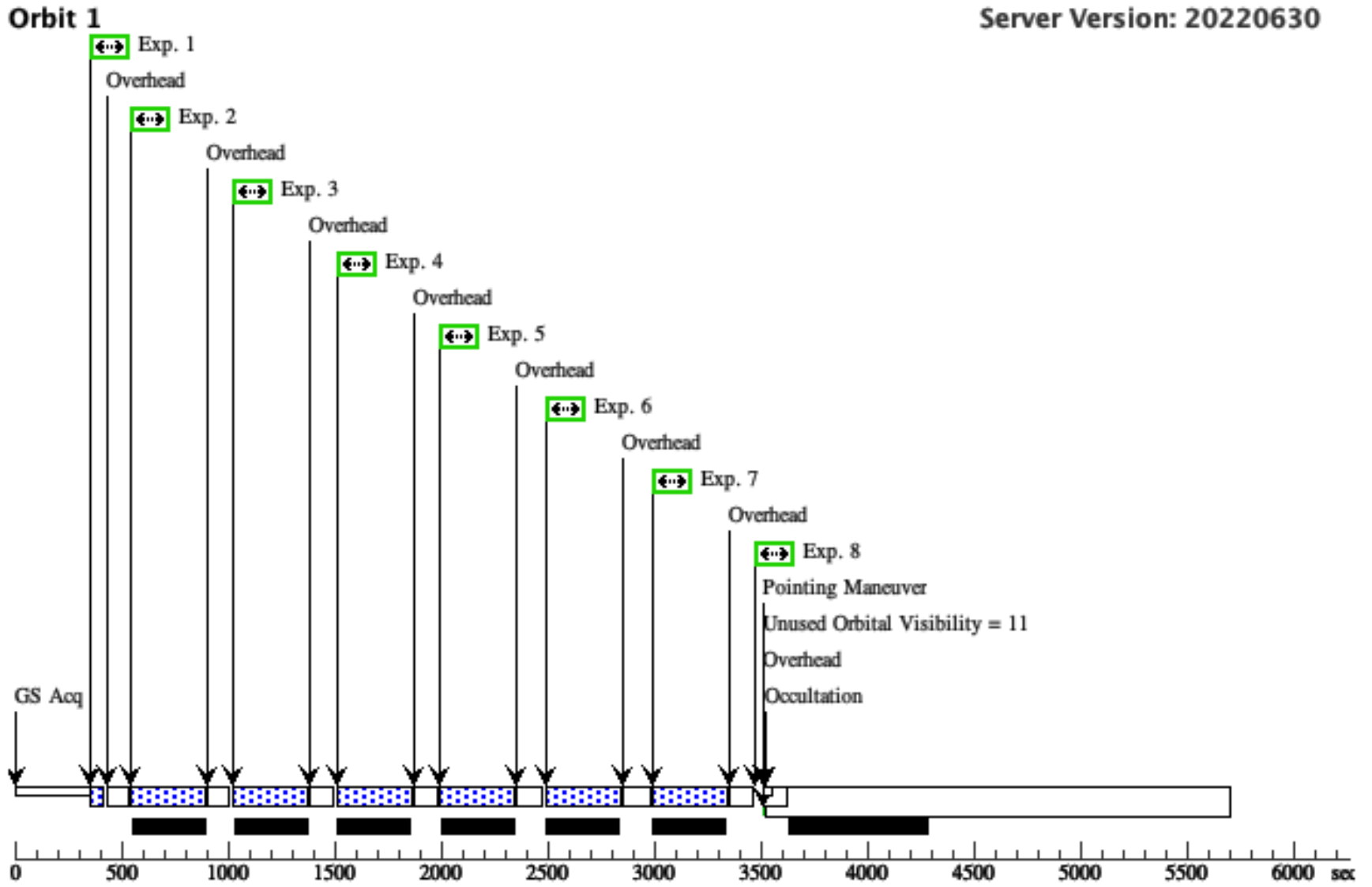
Fri Dec 02 20:00:40 GMT 2022

Visit	<p>Proposal 16573, Visit 04 - NGC 104 (16 exposures) (04), failed</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: WFC3/UVIS</p> <p>Special Requirements: BETWEEN 28-OCT-2022:00:00:00 AND 25-DEC-2022:00:00:00</p> <p><i>Comments: USE SAME GUIDE STAR THROUGHOUT VISIT. USE SAME ORIENTATION THROUGHOUT VISIT.</i></p>																												
	Diagnostics	<p>(Visit 04 - NGC 104 (16 exposures) (04)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 04 - NGC 104 (16 exposures) (04)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 04 - NGC 104 (16 exposures) (04)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 04 - NGC 104 (16 exposures) (04)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 04 - NGC 104 (16 exposures) (04)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 04 - NGC 104 (16 exposures) (04)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 04 - NGC 104 (16 exposures) (04)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 04 - NGC 104 (16 exposures) (04)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 04 - NGC 104 (16 exposures) (04)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 04 - NGC 104 (16 exposures) (04)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 04 - NGC 104 (16 exposures) (04)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 04 - NGC 104 (16 exposures) (04)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 04 - NGC 104 (16 exposures) (04)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 04 - NGC 104 (16 exposures) (04)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 04 - NGC 104 (16 exposures) (04)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 04 - NGC 104 (16 exposures) (04)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Exposure 1 - 30s BKG 0.1 (04.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 2 - 348s BKG 1 (04.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 4 - 348s BKG 25 (04.004)) Warning (Form): FLASH level may be too high for this exposure or a long subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 5 - 348s BKG 34 (04.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 6 - 348s BKG 56 (04.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 7 - 348s BKG 92 (04.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 8 - 30s BKG 12 (04.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 9 - 30s BKG 0.1 (04.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 10 - 348s BKG 1 (04.010)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 12 - 348s BKG 25 (04.012)) Warning (Form): FLASH level may be too high for this exposure or a long subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 13 - 348s BKG 34 (04.013)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 14 - 348s BKG 56 (04.014)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 15 - 348s BKG 92 (04.015)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 16 - 30s BKG 12 (04.016)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</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>(2)</td> <td>NGC-104</td> <td>RA: 00 22 38.2500 (5.6593750d)</td> <td>Proper Motion RA: 0.0015731412087106966 sec of time/yr</td> <td>V=4.91</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td></td> <td>Alt Name1: 47-TUC</td> <td>Dec: -72 03 54.00 (-72.06500d)</td> <td>Proper Motion Dec: -0.001250000013897079 arcsec/yr</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Equinox: J2000</td> <td>Epoch of Position: 2015.5</td> <td></td> <td></td> </tr> </tbody> </table> <p><i>Comments: Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER]</i></p>					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(2)	NGC-104	RA: 00 22 38.2500 (5.6593750d)	Proper Motion RA: 0.0015731412087106966 sec of time/yr	V=4.91	Reference Frame: ICRS		Alt Name1: 47-TUC	Dec: -72 03 54.00 (-72.06500d)	Proper Motion Dec: -0.001250000013897079 arcsec/yr					Equinox: J2000	Epoch of Position: 2015.5	
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																							
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Proposal 16573 - Visit 04 - NGC 104 (16 exposures) (04) - WFC3 UVIS CTE Monitor (Star Cluster)

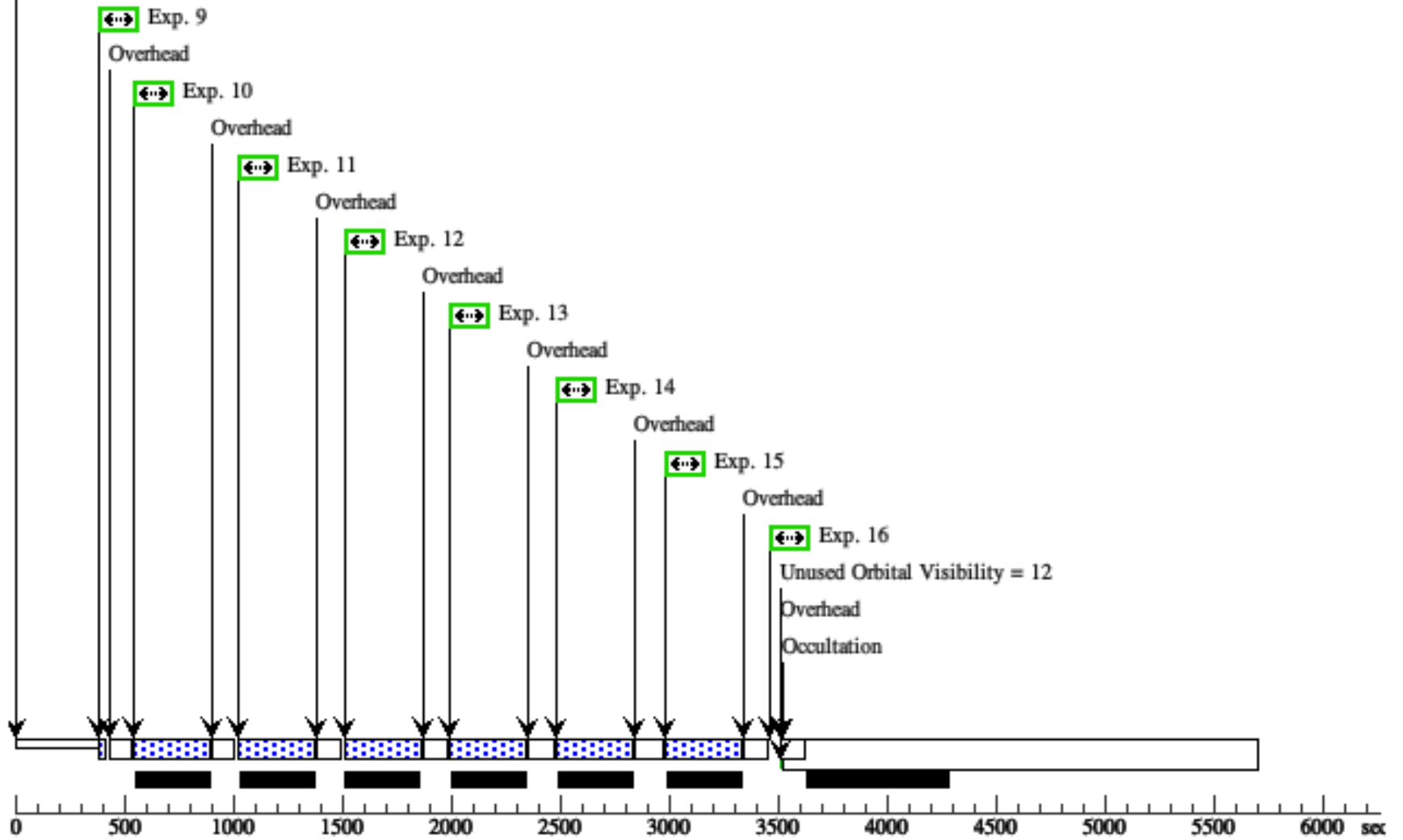
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Exposure 1 - 30s BKG 0.1	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO	POS TARG 0,0; GS ACQ SCENARI O BASE1BE		30 Secs (30 Secs) [==>]	[1]
	2	Exposure 2 - 348s BKG 1	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	3	Exposure 3 - 348s BKG 20	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=18	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	4	Exposure 4 - 348s BKG 25	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=24	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	5	Exposure 5 - 348s BKG 34	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=LOW; FLASHHEXP=13.	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	6	Exposure 6 - 348s BKG 56	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=LOW; FLASHHEXP=21.5	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	7	Exposure 7 - 348s BKG 92	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=MEDI UM; FLASHHEXP=1.24	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	8	Exposure 8 - 30s BKG 12	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=12.	POS TARG 0,0		30 Secs (30 Secs) [==>]	[1]
	9	Exposure 9 - 30s BKG 0.1	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO	POS TARG 0,81.6		30 Secs (30 Secs) [==>]	[2]
	10	Exposure 10 - 348s BKG 1	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	11	Exposure 11 - 348s BKG 20	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=18	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	12	Exposure 12 - 348s BKG 25	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=24	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	13	Exposure 13 - 348s BKG 34	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=LOW; FLASHHEXP=13.	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	14	Exposure 14 - 348s BKG 56	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=LOW; FLASHHEXP=21.5	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	15	Exposure 15 - 348s BKG 92	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=MEDI UM; FLASHHEXP=1.24	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
16	Exposure 16 - 30s BKG 12	(2) NGC-104	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=12.	POS TARG 0,81.6		30 Secs (30 Secs) [==>]	[2]	

Orbit Structure



Orbit 2

GS Reacq



Proposal 16573 - Visit 54 - NGC 104 (16 exposures; HOPR) (54) - WFC3 UVIS CTE Monitor (Star Cluster)

Fri Dec 02 20:00:40 GMT 2022

Visit	<p>Proposal 16573, Visit 54 - NGC 104 (16 exposures; HOPR) (54), implementation</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: WFC3/UVIS</p> <p>Special Requirements: BETWEEN 28-OCT-2022:00:00:00 AND 14-MAR-2023:00:00:00</p> <p><i>Comments: USE SAME GUIDE STAR THROUGHOUT VISIT. USE SAME ORIENTATION THROUGHOUT VISIT.</i></p>																													
	Diagnostics	<p>(Visit 54 - NGC 104 (16 exposures; HOPR) (54)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 54 - NGC 104 (16 exposures; HOPR) (54)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 54 - NGC 104 (16 exposures; HOPR) (54)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 54 - NGC 104 (16 exposures; HOPR) (54)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 54 - NGC 104 (16 exposures; HOPR) (54)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 54 - NGC 104 (16 exposures; HOPR) (54)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 54 - NGC 104 (16 exposures; HOPR) (54)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 54 - NGC 104 (16 exposures; HOPR) (54)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 54 - NGC 104 (16 exposures; HOPR) (54)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE</p> <p>(Visit 54 - NGC 104 (16 exposures; HOPR) (54)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 54 - NGC 104 (16 exposures; HOPR) (54)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 54 - NGC 104 (16 exposures; HOPR) (54)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 54 - NGC 104 (16 exposures; HOPR) (54)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 54 - NGC 104 (16 exposures; HOPR) (54)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 54 - NGC 104 (16 exposures; HOPR) (54)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 54 - NGC 104 (16 exposures; HOPR) (54)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Visit 54 - NGC 104 (16 exposures; HOPR) (54)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE NO ORIENT</p> <p>(Exposure 1 - 30s BKG 0.1 (54.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 2 - 348s BKG 1 (54.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 4 - 348s BKG 25 (54.004)) Warning (Form): FLASH level may be too high for this exposure or a long subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 5 - 348s BKG 34 (54.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 6 - 348s BKG 56 (54.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 7 - 348s BKG 92 (54.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 8 - 30s BKG 12 (54.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 9 - 30s BKG 0.1 (54.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 10 - 348s BKG 1 (54.010)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 12 - 348s BKG 25 (54.012)) Warning (Form): FLASH level may be too high for this exposure or a long subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 13 - 348s BKG 34 (54.013)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 14 - 348s BKG 56 (54.014)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 15 - 348s BKG 92 (54.015)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(Exposure 16 - 30s BKG 12 (54.016)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</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>(54)</td> <td>NGC-104-OFFSET</td> <td>RA: 00 22 33.0000 (5.6375000d)</td> <td>Proper Motion RA: 0.0015731412087106966 sec of time/yr</td> <td>V=4.91</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td></td> <td>Alt Name1: 47-TUC</td> <td>Dec: -72 04 26.00 (-72.07389d)</td> <td>Proper Motion Dec: -0.001250000013897079 arcsec/yr</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Equinox: J2000</td> <td>Epoch of Position: 2015.5</td> <td></td> <td></td> </tr> </tbody> </table> <p><i>Comments: Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER]</i></p>						#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(54)	NGC-104-OFFSET	RA: 00 22 33.0000 (5.6375000d)	Proper Motion RA: 0.0015731412087106966 sec of time/yr	V=4.91	Reference Frame: ICRS		Alt Name1: 47-TUC	Dec: -72 04 26.00 (-72.07389d)	Proper Motion Dec: -0.001250000013897079 arcsec/yr					Equinox: J2000	Epoch of Position: 2015.5	
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		Equinox: J2000	Epoch of Position: 2015.5																											

Proposal 16573 - Visit 54 - NGC 104 (16 exposures: HOPR) (54) - WFC3 UVIS CTE Monitor (Star Cluster)

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	Exposure 1 - (54) NGC-104-OFFS 30s BKG 0. ET 1	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO	POS TARG 0,0; GS ACQ SCENARI O BASE1BE		30 Secs (30 Secs) [==>]	[1]
	2	Exposure 2 - (54) NGC-104-OFFS 348s BKG 1 ET	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	3	Exposure 3 - (54) NGC-104-OFFS 348s BKG 2 ET 0	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=18	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	4	Exposure 4 - (54) NGC-104-OFFS 348s BKG 2 ET 5	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=24	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	5	Exposure 5 - (54) NGC-104-OFFS 348s BKG 3 ET 4	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=LOW; FLASHHEXP=13.	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	6	Exposure 6 - (54) NGC-104-OFFS 348s BKG 5 ET 6	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=LOW; FLASHHEXP=21.5	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	7	Exposure 7 - (54) NGC-104-OFFS 348s BKG 9 ET 2	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=MEDI UM; FLASHHEXP=1.24	POS TARG 0,0		348 Secs (348 Secs) [==>]	[1]
	8	Exposure 8 - (54) NGC-104-OFFS 30s BKG 12 ET	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=12.	POS TARG 0,0		30 Secs (30 Secs) [==>]	[1]
	9	Exposure 9 - (54) NGC-104-OFFS 30s BKG 0. ET 1	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO	POS TARG 0,81.6		30 Secs (30 Secs) [==>]	[2]
	10	Exposure 10 - (54) NGC-104-OFFS - 348s BKG ET 1	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	11	Exposure 11 - (54) NGC-104-OFFS - 348s BKG ET 20	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=18	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	12	Exposure 12 - (54) NGC-104-OFFS - 348s BKG ET 25	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=24	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	13	Exposure 13 - (54) NGC-104-OFFS - 348s BKG ET 34	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=LOW; FLASHHEXP=13.	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	14	Exposure 14 - (54) NGC-104-OFFS - 348s BKG ET 56	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=LOW; FLASHHEXP=21.5	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	15	Exposure 15 - (54) NGC-104-OFFS - 348s BKG ET 92	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASHCUR=MEDI UM; FLASHHEXP=1.24	POS TARG 0,81.6		348 Secs (348 Secs) [==>]	[2]
	16	Exposure 16 - (54) NGC-104-OFFS - 30s BKG 1 ET 2	WFC3/UVIS, ACCUM, UVIS	F502N	CR-SPLIT=NO; FLASH=12.	POS TARG 0,81.6		30 Secs (30 Secs) [==>]	[2]

