17932 - Our grasp of star formation, feedback, and galaxy evolution is incomplete without a JWST+HST look at the HI-dominated, outer disk of a spiral galaxy

Cycle: 32, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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Name	*Institution*
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Dr. Rowan Smith (CoI) (ESA Member)	University of Manchester Institute of Science and Technology
Dr. Jessica Sutter (CoI)	Whitman College
Dr. Antonio Usero (CoI) (ESA Member)	Observatorio Astronomico Nacional
Dr. Thomas Williams (CoI) (ESA Member)	University of Manchester

VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
09	(4) NGC628RADIALSTRIP-01	WFC3/UVIS	3	22-Sep-2025 18:00:18.0	yes
10	(3) NGC628RADIALSTRIP-02	WFC3/UVIS	3	22-Sep-2025 18:00:19.0	yes
11	(2) NGC628RADIALSTRIP-03	WFC3/UVIS	3	22-Sep-2025 18:00:21.0	yes
12	(1) NGC628RADIALSTRIP-04	WFC3/UVIS	3	22-Sep-2025 18:00:22.0	yes
21	(2) NGC628RADIALSTRIP-03	WFC3/UVIS	2	22-Sep-2025 18:00:23.0	yes
22	(1) NGC628RADIALSTRIP-04	WFC3/UVIS	1	22-Sep-2025 18:00:23.0	yes
17	(4) NGC628RADIALSTRIP-01	WFC3/UVIS	1	22-Sep-2025 18:00:24.0	yes
18	(3) NGC628RADIALSTRIP-02	WFC3/UVIS	1	22-Sep-2025 18:00:25.0	yes
19	(2) NGC628RADIALSTRIP-03	WFC3/UVIS	1	22-Sep-2025 18:00:25.0	yes
20	(1) NGC628RADIALSTRIP-04	WFC3/UVIS	1	22-Sep-2025 18:00:25.0	yes
23	(2) NGC628RADIALSTRIP-03	WFC3/UVIS	1	22-Sep-2025 18:00:25.0	yes
24	(1) NGC628RADIALSTRIP-04	WFC3/UVIS	1	22-Sep-2025 18:00:26.0	yes

21 Total Orbits Used

ABSTRACT

Outer disks of galaxies, so easily overlooked in the glare of their spectacular central regions, offer unique information regarding: the physics of the interstellar medium (ISM) and of the star formation (SF) process; the intimate relation between stellar populations and the conditions of the surrounding ISM; and the evolution of galaxies. Analysis of outer disks is required for fully understanding the physics of SF, as the low-density environment provides a stress test. We propose JWST's first detailed look at the outer disk ecosystem of a spiral galaxy, NGC 628 (M 74), paired

with commensurate joint HST UV-visible imaging, to document dusty ISM and stellar components of the matter cycle. This project crucially informs studies of the Milky Way for which we lack an external perspective. As a nearby, face-on galaxy with an extended HI/UV-disk hosting low-level SF, and with existing inner disk JWST imaging, the benefit of leveraging the Cycle 1 dataset is clear. Our goals are two-fold: (1) tracing diffuse and structured ISM properties (via morphology metrics, spectral energy distribution) as a function of estimated SF feedback strength from the galaxy center to the atomic-dominated, low SFR surface density, outer disk regime; (2) looking for elusive ingredients of SF -- a novel PAH-based search for the yet undetected cold neutral medium (CNM) clouds supporting outer disk SF. Pursuing these topics will test current model predictions, advancing theory and simulations with rare constraint in a regime not yet sampled.

OBSERVING DESCRIPTION

This is a joint JWST + HST imaging project to examine the physical conditions of the outer disk ISM in NGC 628, specifically including a detailed connection to the stellar populations that have managed to form in this extreme environment.

We build on the PHANGS-JWST coverage of NGC 628's inner disk, adding a seven MIRI tile radial extension to the NW for the entire radial extent of the detected HI disk ($\Sigma_{\rm HI}\sim1$~M$_{\odot}\,$pc^{-2}), oriented to align with Herschel/PACS spectroscopic mapping. This strip (reaching to $1.8~r_{25}$, 25.8 kpc) broadens the range of physical conditions probed by JWST in several ways, reaching $f_{\rm mol}\sim0$, $Z\sim0.2~Z_\odot$, log~$\Sigma_{\rm SFR}\sim-4$ [M$_{\odot}$~yr^{-1}~kpc^{-2}]. The decline in SF activity corresponds to a order-of-magnitude reduction in the interstellar radiation field (ISRF). Each MIRI tile is paired with NIRCam and HST imaging.

HST DETAILS:

For HST imaging, we fit the NGC628 radial strip observations into a 3 orbit visit per field for broadband imaging and a 1 orbit visit per field for narrowband H-alpha imaging. There are 4 mosaic tiles; so the entire program takes 16 orbits total. We opt for the well-established LEGUS and PHANGS-HST filter set for our WFC3/UVIS observations, obtaining F275W, F336W, F438W, F555W, F658N, and F814W. We plan coadded exposure times of 2075 s (F275W), 1000 s (F336W), 1050 s (F438W), 630 s (F555W), 2195 s (F658N), 750 s (F814W). We choose F658N rather than F657N due to its narrower bandpass, which is compatible with the velocity of NGC628 and will thus achieve higher sensitivity. Three dithered exposures in each band will be obtained. Based on comparison with PHANGS-HST imaging of the NGC628 central region, the achieved exposure times are deep enough to identify and physically characterize the cluster/association population, using H-alpha to break age/reddening degeneracy. Surface brightness levels in H-alpha of 6e-16 erg s-1 cm-2 arcsec-2 will be recovered. We utilize POS-TARGs offsets constituting a three-point sub-pixel dither pattern to cover the WFC3 chip gap, remove CRs, and improve sampling of the PSF. Orient constraints (222-227d, SAME ORIENT)

along with tile offsets (pre-mosaic-conversion) are required in order to provide acceptable WFC3/UVIS and JWST NIRCAM+MIRI overlap.

Visit

Proposal 17932, Tile NGC0628STRIP01_BB (09), completed Mon Sep 22 22:00:26 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 100%; ORIENT 222.0D TO 227.0 D

Diagnostics

(Tile NGC0628STRIP01_BB (09)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Tile NGC0628STRIP01_BB (09)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Tile NGC0628STRIP01_BB (09)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	NGC628RADIALSTRIP-01	RA: 01 36 38.1205 (24.1588354d) Dec: +15 49 8.79 (15.81911d) Equinox: J2000	Proper Motion RA: 2.3831898376226163E-5 sec of time/yr Proper Motion Dec: -2.2900010208104504E-4 arcsec/yr Epoch of Position: 2015.5	V=9.46	Reference Frame: SIMBAD

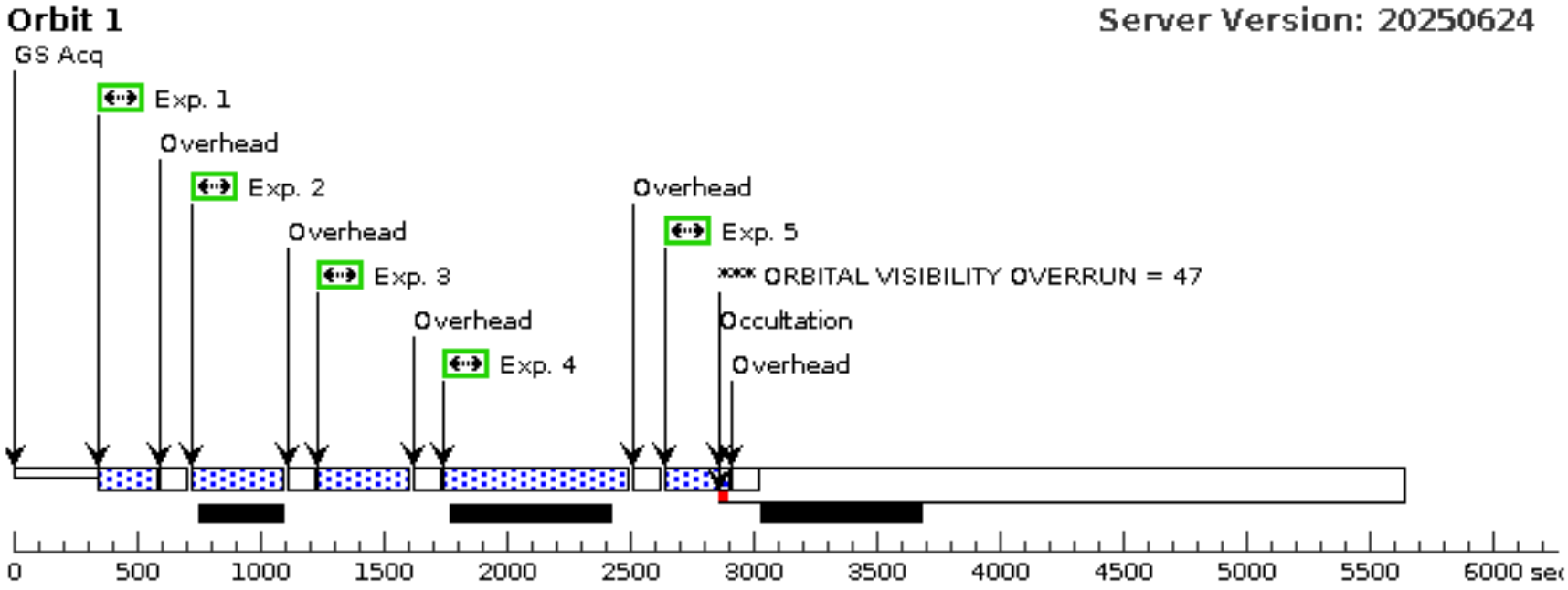
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[DISK, LSB, SPIRAL, SPIRAL ARM, STAR FORMING REGION]

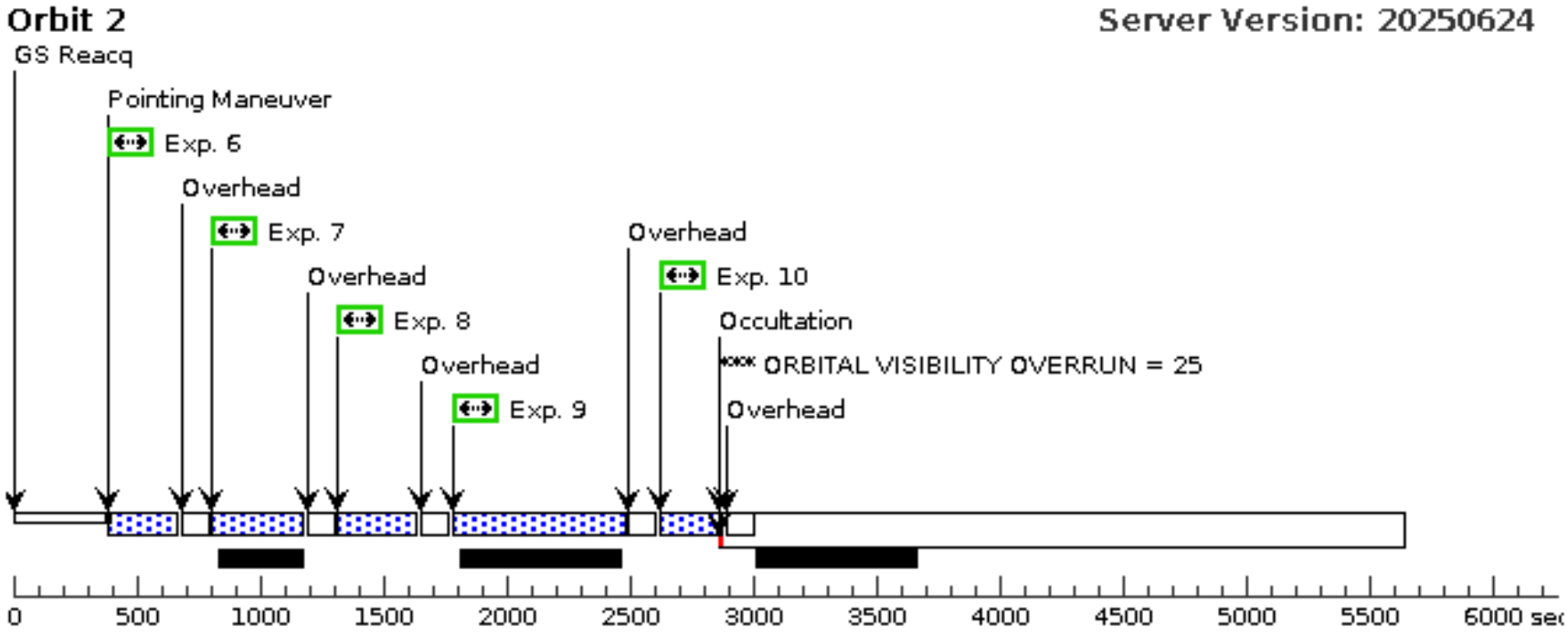
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F814W_NGC628RADIALSTRIP-01	(4) NGC628RADIALSTRIP-01	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=15	POS TARG 0.0,0.0		210 Secs (210 Secs) *[==>]*	***[1]***
2	F438W_NGC628RADIALSTRIP-01	(4) NGC628RADIALSTRIP-01	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=17	POS TARG 0.0,0.0		350 Secs (350 Secs) *[==>]*	***[1]***
3	F336W_NGC628RADIALSTRIP-01	(4) NGC628RADIALSTRIP-01	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=20	POS TARG 0.0,0.0		350 Secs (350 Secs) *[==>]*	***[1]***
4	F275W_NGC628RADIALSTRIP-01	(4) NGC628RADIALSTRIP-01	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=20	POS TARG 0.0,0.0		730 Secs (730 Secs) *[==>]*	***[1]***
5	F555W_NGC628RADIALSTRIP-01	(4) NGC628RADIALSTRIP-01	WFC3/UVIS, ACCUM, UVIS-CENTER	F555W	FLASH=15	POS TARG 0.0,0.0		200 Secs (237 Secs) *[==>237.0 Secs]*	***[1]***
6	F814W_NGC628RADIALSTRIP-01	(4) NGC628RADIALSTRIP-01	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=15	POS TARG 0.092,1.803		270 Secs (270 Secs) *[==>]*	***[2]***
7	F438W_NGC628RADIALSTRIP-01	(4) NGC628RADIALSTRIP-01	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=17	POS TARG 0.092,1.803		350 Secs (350 Secs) *[==>]*	***[2]***
8	F336W_NGC628RADIALSTRIP-01	(4) NGC628RADIALSTRIP-01	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=20	POS TARG 0.092,1.803		300 Secs (300 Secs) *[==>]*	***[2]***
9	F275W_NGC628RADIALSTRIP-01	(4) NGC628RADIALSTRIP-01	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=20	POS TARG 0.092,1.803		680 Secs (680 Secs) *[==>]*	***[2]***
10	F555W_NGC628RADIALSTRIP-01	(4) NGC628RADIALSTRIP-01	WFC3/UVIS, ACCUM, UVIS-CENTER	F555W	FLASH=15	POS TARG 0.092,1.803		233 Secs (233 Secs) *[==>]*	***[2]***
11	F814W_NGC628RADIALSTRIP-01	(4) NGC628RADIALSTRIP-01	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=15	POS TARG 0.185,3.606		270 Secs (313 Secs) *[==>313.0 Secs]*	***[3]***
12	F438W_NGC628RADIALSTRIP-01	(4) NGC628RADIALSTRIP-01	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=17	POS TARG 0.185,3.606		350 Secs (350 Secs) *[==>]*	***[3]***
13	F336W_NGC628RADIALSTRIP-01	(4) NGC628RADIALSTRIP-01	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=20	POS TARG 0.185,3.606		350 Secs (350 Secs) *[==>]*	***[3]***
14	F275W_NGC628RADIALSTRIP-01	(4) NGC628RADIALSTRIP-01	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=20	POS TARG 0.185,3.606		665 Secs (665 Secs) *[==>]*	***[3]***

	15	F555W_NGC628RADIALSTRIP-01	(4) NGC628RADIALSTRIP-01	WFC3/UVIS, ACCUM, UVIS-CENTER	F555W	FLASH=15	POS TARG 0.185,3.606	197 Secs (197 Secs) *[==>]*	 ***[3]***

Orbit Structure

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Server Version: 20250624
GS Reacq
Pointing Maneuver
Exp. 6
Overhead
Exp. 7
Overhead
Exp. 8
Overhead
Exp. 9
Overhead
Exp. 10
Occultation
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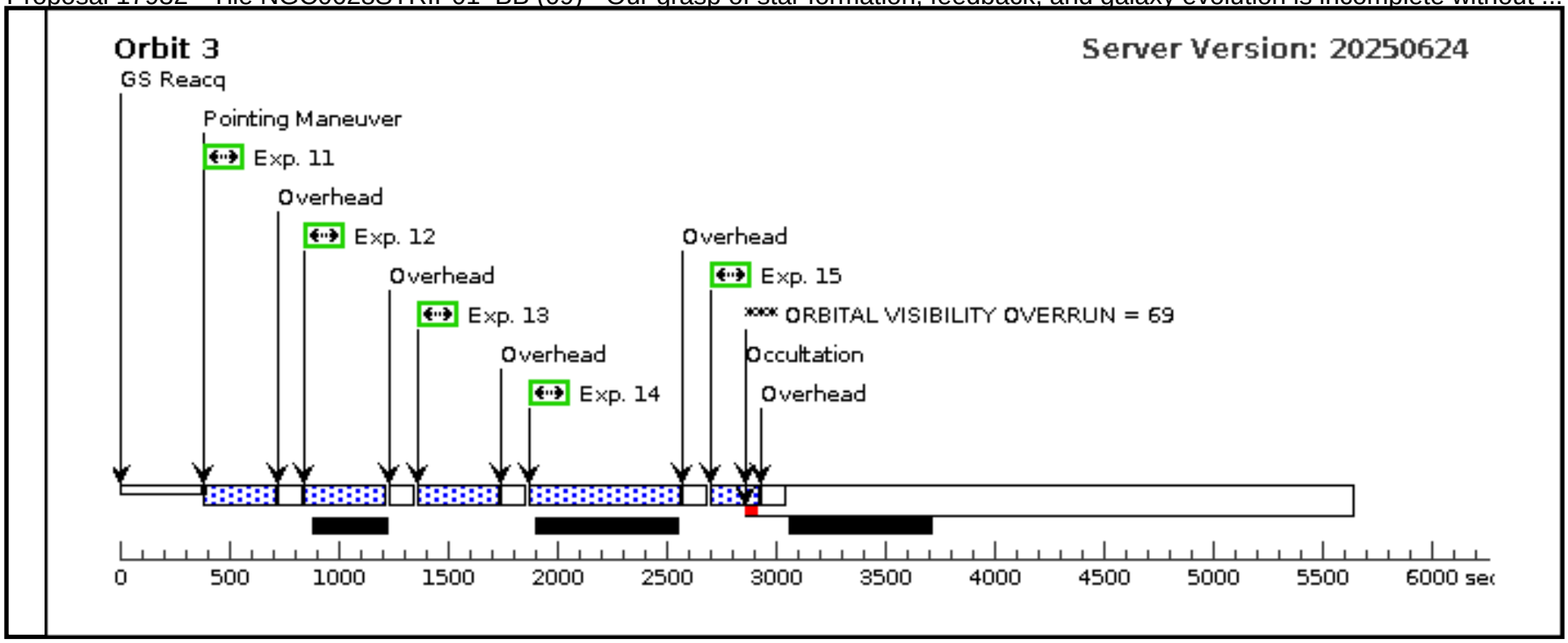
Orbit 3
Server Version: 20250624
GS Reacq
Pointing Maneuver
Exp. 11
Overhead
Exp. 12
Overhead
Exp. 13
Overhead
Exp. 14
Overhead
Exp. 15
**** ORBITAL VISIBILITY OVERRUN = 69
Occultation
Overhead
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2000
2500
3000
3500
4000
4500
5000
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6000 sec

Visit

Proposal 17932, Tile NGC0628STRIP02_BB (10), completed Mon Sep 22 22:00:26 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 100%; SAME ORIENT AS 09

Diagnostics

(Tile NGC0628STRIP02_BB (10)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Tile NGC0628STRIP02_BB (10)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Tile NGC0628STRIP02_BB (10)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	NGC628RADIALSTRIP-02	RA: 01 36 35.2255 (24.1467729d) Dec: +15 51 23.39 (15.85650d) Equinox: J2000	Proper Motion RA: 2.3831898376226163E-5 sec of time/yr Proper Motion Dec: -2.2900010208104504E-4 arcsec/yr Epoch of Position: 2015.5	V=9.46	Reference Frame: SIMBAD

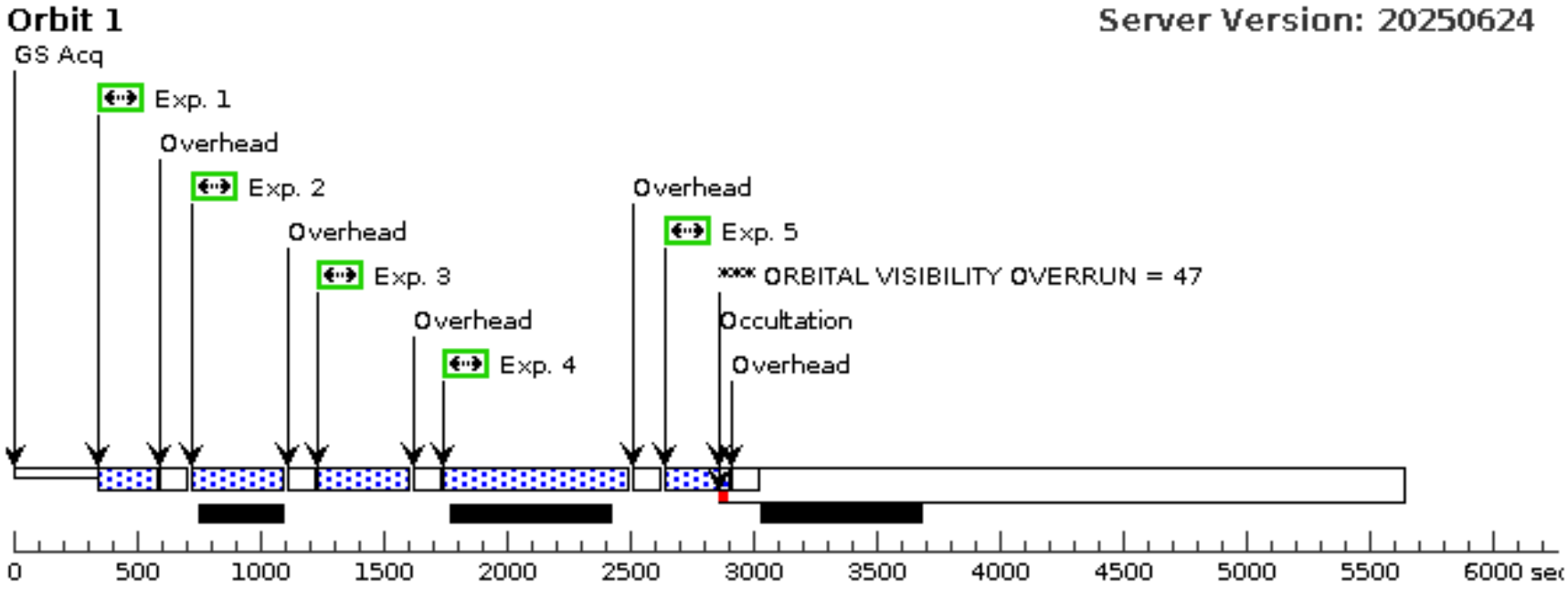
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[DISK, LSB, SPIRAL, SPIRAL ARM, STAR FORMING REGION]

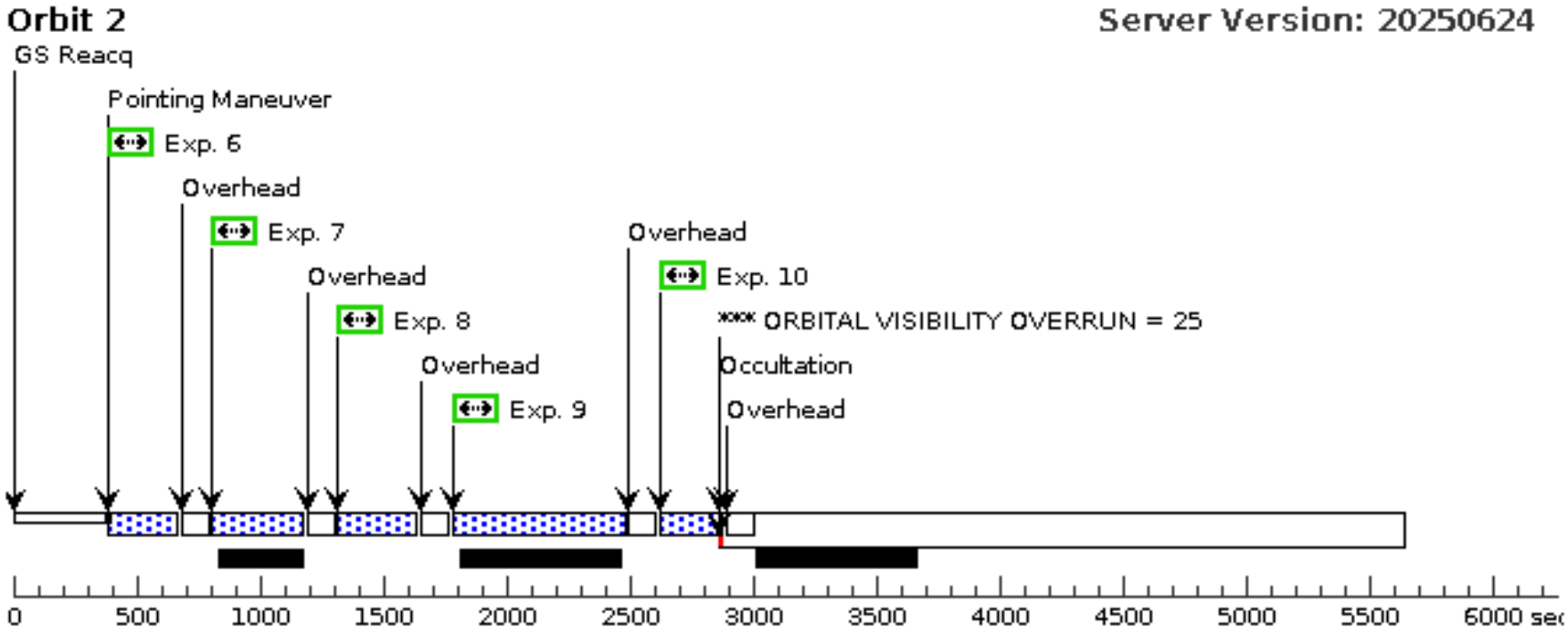
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F814W_NGC628RADIALSTRIP-02	(3) NGC628RADIALSTRIP-02	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=15	POS TARG 0.0,0.0		210 Secs (210 Secs) *[==>]*	***[1]***
2	F438W_NGC628RADIALSTRIP-02	(3) NGC628RADIALSTRIP-02	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=17	POS TARG 0.0,0.0		350 Secs (350 Secs) *[==>]*	***[1]***
3	F336W_NGC628RADIALSTRIP-02	(3) NGC628RADIALSTRIP-02	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=20	POS TARG 0.0,0.0		350 Secs (350 Secs) *[==>]*	***[1]***
4	F275W_NGC628RADIALSTRIP-02	(3) NGC628RADIALSTRIP-02	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=20	POS TARG 0.0,0.0		730 Secs (730 Secs) *[==>]*	***[1]***
5	F555W_NGC628RADIALSTRIP-02	(3) NGC628RADIALSTRIP-02	WFC3/UVIS, ACCUM, UVIS-CENTER	F555W	FLASH=15	POS TARG 0.0,0.0		200 Secs (237 Secs) *[==>237.0 Secs]*	***[1]***
6	F814W_NGC628RADIALSTRIP-02	(3) NGC628RADIALSTRIP-02	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=15	POS TARG 0.092,1.803		270 Secs (270 Secs) *[==>]*	***[2]***
7	F438W_NGC628RADIALSTRIP-02	(3) NGC628RADIALSTRIP-02	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=17	POS TARG 0.092,1.803		350 Secs (350 Secs) *[==>]*	***[2]***
8	F336W_NGC628RADIALSTRIP-02	(3) NGC628RADIALSTRIP-02	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=20	POS TARG 0.092,1.803		300 Secs (300 Secs) *[==>]*	***[2]***
9	F275W_NGC628RADIALSTRIP-02	(3) NGC628RADIALSTRIP-02	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=20	POS TARG 0.092,1.803		680 Secs (680 Secs) *[==>]*	***[2]***
10	F555W_NGC628RADIALSTRIP-02	(3) NGC628RADIALSTRIP-02	WFC3/UVIS, ACCUM, UVIS-CENTER	F555W	FLASH=15	POS TARG 0.092,1.803		233 Secs (233 Secs) *[==>]*	***[2]***
11	F814W_NGC628RADIALSTRIP-02	(3) NGC628RADIALSTRIP-02	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=15	POS TARG 0.185,3.606		270 Secs (313 Secs) *[==>313.0 Secs]*	***[3]***
12	F438W_NGC628RADIALSTRIP-02	(3) NGC628RADIALSTRIP-02	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=17	POS TARG 0.185,3.606		350 Secs (350 Secs) *[==>]*	***[3]***
13	F336W_NGC628RADIALSTRIP-02	(3) NGC628RADIALSTRIP-02	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=20	POS TARG 0.185,3.606		350 Secs (350 Secs) *[==>]*	***[3]***
14	F275W_NGC628RADIALSTRIP-02	(3) NGC628RADIALSTRIP-02	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=20	POS TARG 0.185,3.606		665 Secs (665 Secs) *[==>]*	***[3]***

	15	F555W_NGC628RADIALSTRIP-02	(3) NGC628RADIALSTRIP-02	WFC3/UVIS, ACCUM, UVIS-CENTER	F555W	FLASH=15	POS TARG 0.185,3.606	197 Secs (197 Secs) *[==>]*	 ***[3]***

Orbit Structure




Orbit 2
Server Version: 20250624
GS Reacq
Pointing Maneuver
Exp. 6
Overhead
Exp. 7
Overhead
Exp. 8
Overhead
Exp. 9
Overhead
Exp. 10
*** ORBITAL VISIBILITY OVERRUN = 25
Occultation
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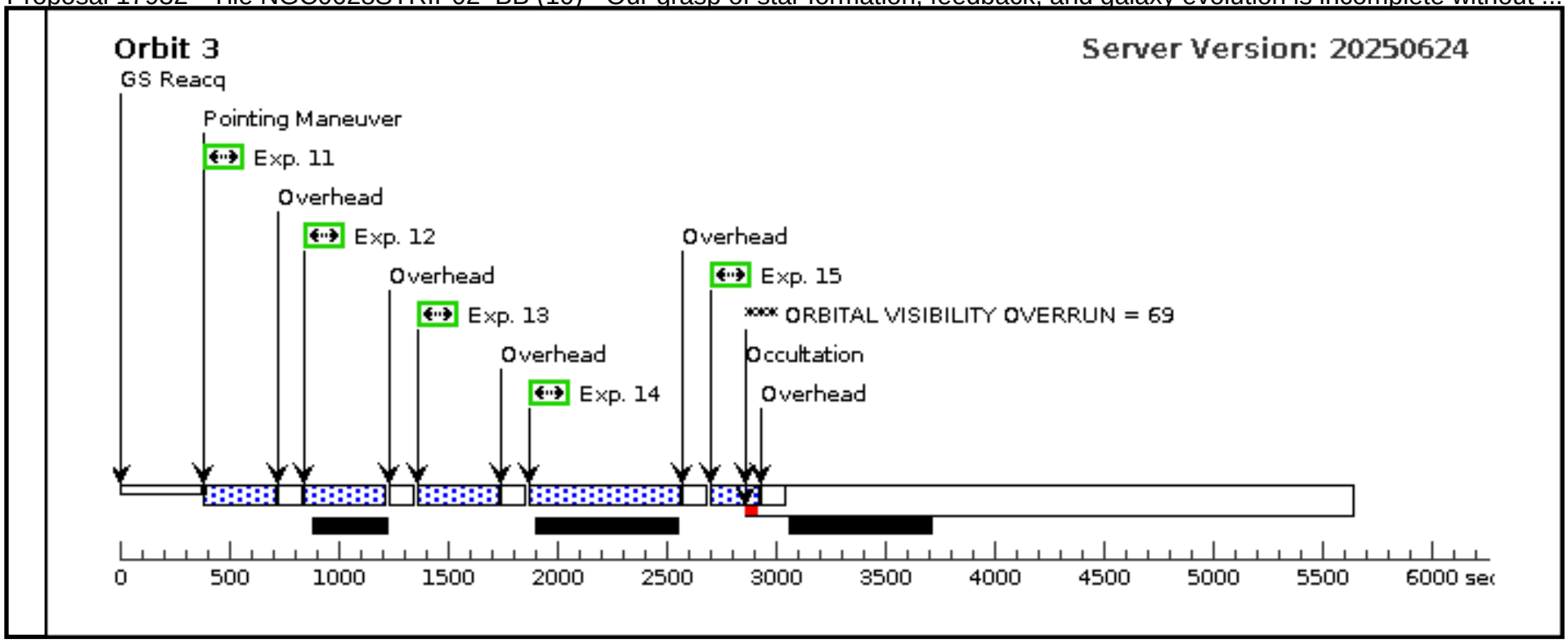
Orbit 3
Server Version: 20250624
GS Reacq
Pointing Maneuver
Exp. 11
Overhead
Exp. 12
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Exp. 13
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Exp. 14
Overhead
Exp. 15
**** ORBITAL VISIBILITY OVERRUN = 69
Occultation
Overhead
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3500
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Visit

Proposal 17932, Tile NGC0628STRIP03_BB (11), failed Mon Sep 22 22:00:26 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 100%; SAME ORIENT AS 09

Diagnostics

(Tile NGC0628STRIP03_BB (11)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Tile NGC0628STRIP03_BB (11)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Tile NGC0628STRIP03_BB (11)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	NGC628RADIALSTRIP-03	RA: 01 36 32.3304 (24.1347100d) Dec: +15 53 37.99 (15.89389d) Equinox: J2000	Proper Motion RA: 2.3831898376226163E-5 sec of time/yr Proper Motion Dec: -2.2900010208104504E-4 arcsec/yr Epoch of Position: 2015.5	V=9.46	Reference Frame: SIMBAD

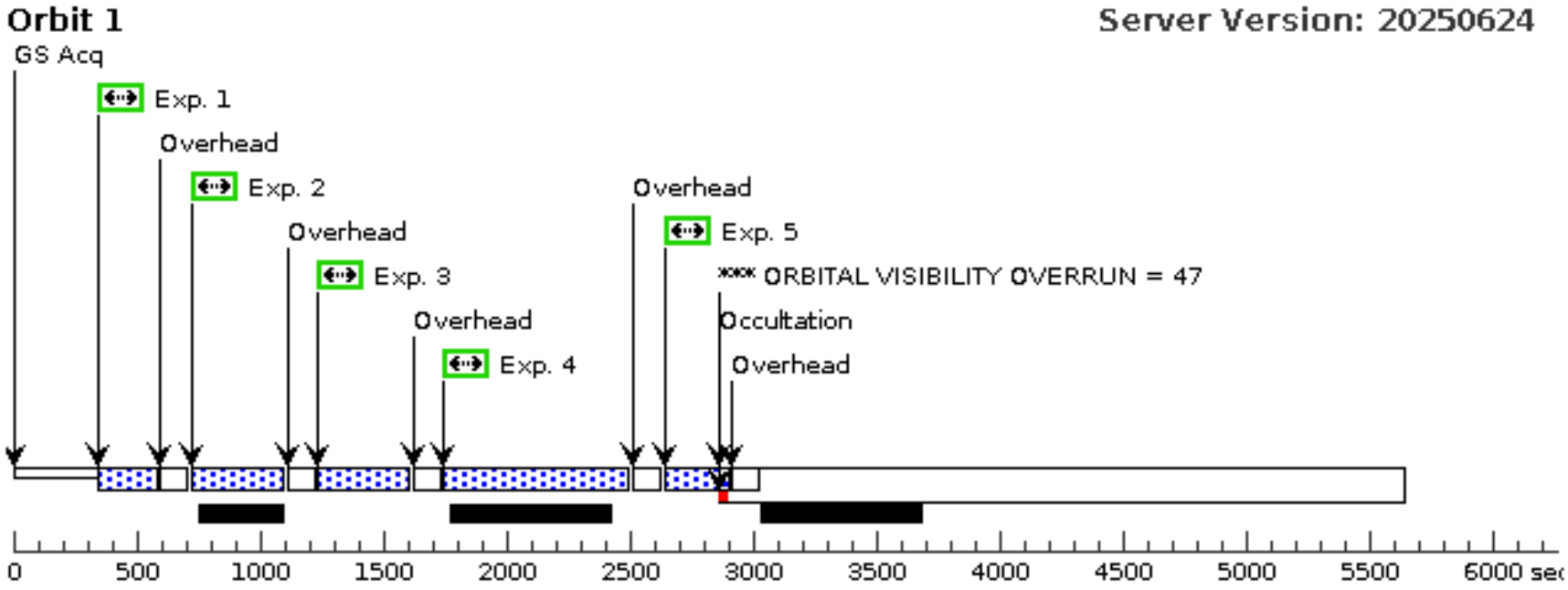
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[DISK, LSB, SPIRAL, SPIRAL ARM, STAR FORMING REGION]

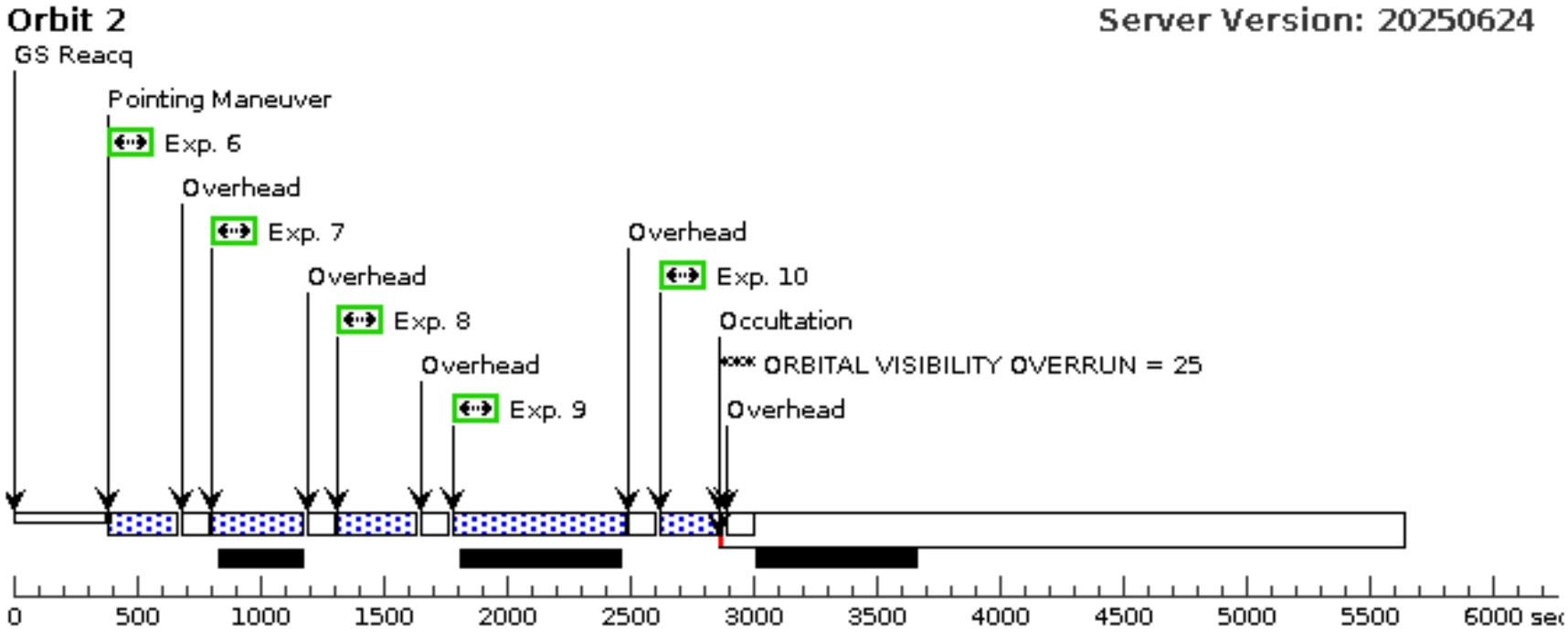
Exposures

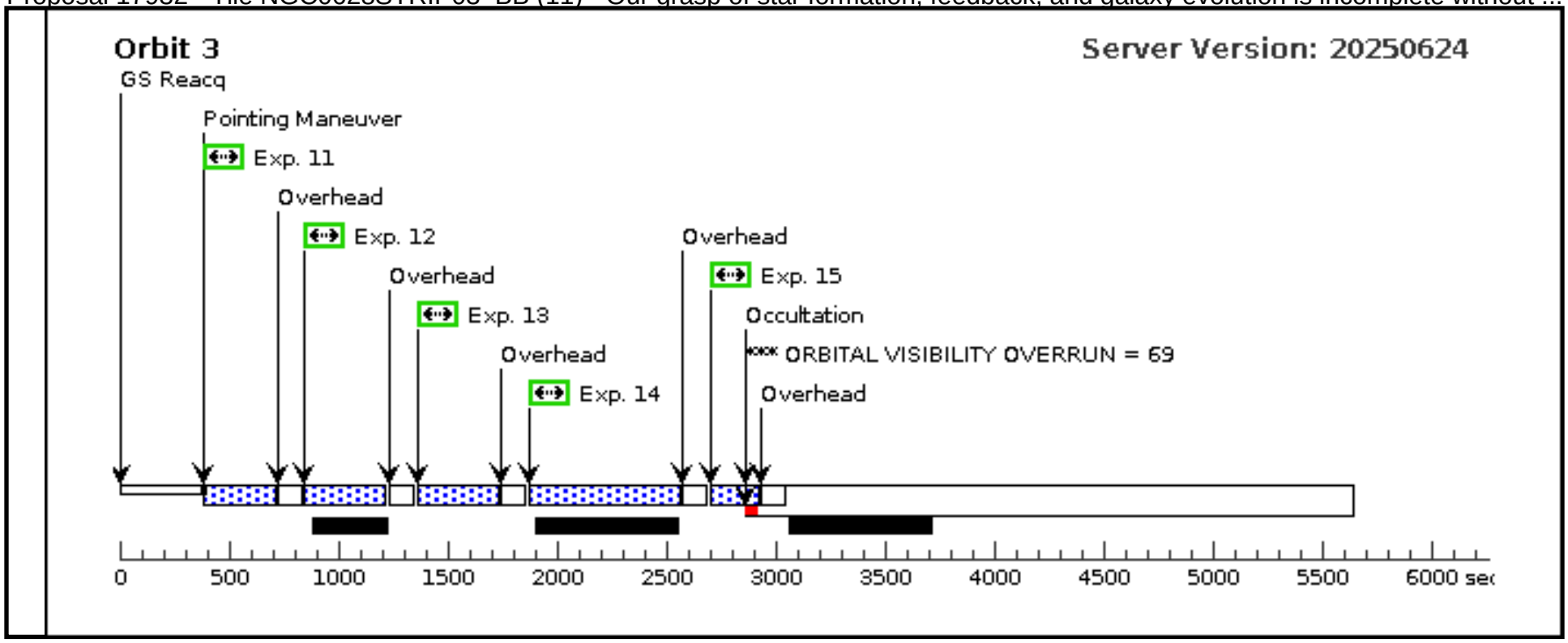
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F814W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=15	POS TARG 0.0,0.0		210 Secs (210 Secs) *[==>]*	*[1]*
2	F438W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=17	POS TARG 0.0,0.0		350 Secs (350 Secs) *[==>]*	*[1]*
3	F336W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=20	POS TARG 0.0,0.0		350 Secs (350 Secs) *[==>]*	*[1]*
4	F275W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=20	POS TARG 0.0,0.0		730 Secs (730 Secs) *[==>]*	*[1]*
5	F555W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F555W	FLASH=15	POS TARG 0.0,0.0		200 Secs (237 Secs) *[==>237.0 Secs]*	*[1]*
6	F814W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=15	POS TARG 0.092,1.803		270 Secs (270 Secs) *[==>]*	*[2]*
7	F438W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=17	POS TARG 0.092,1.803		350 Secs (350 Secs) *[==>]*	*[2]*
8	F336W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=20	POS TARG 0.092,1.803		300 Secs (300 Secs) *[==>]*	*[2]*
9	F275W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=20	POS TARG 0.092,1.803		680 Secs (680 Secs) *[==>]*	*[2]*
10	F555W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F555W	FLASH=15	POS TARG 0.092,1.803		233 Secs (233 Secs) *[==>]*	*[2]*
11	F814W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=15	POS TARG 0.185,3.606		270 Secs (313 Secs) *[==>313.0 Secs]*	*[3]*
12	F438W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=17	POS TARG 0.185,3.606		350 Secs (350 Secs) *[==>]*	*[3]*
13	F336W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=20	POS TARG 0.185,3.606		350 Secs (350 Secs) *[==>]*	*[3]*
14	F275W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=20	POS TARG 0.185,3.606		665 Secs (665 Secs) *[==>]*	*[3]*

	15	F555W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F555W	FLASH=15	POS TARG 0.185,3.606	197 Secs (197 Secs) *[==>]*	 ***[3]***

Orbit Structure




Orbit 2
Server Version: 20250624
GS Reacq
Pointing Maneuver
Exp. 6
Overhead
Exp. 7
Overhead
Exp. 8
Overhead
Exp. 9
Overhead
Exp. 10
Occultation
**** ORBITAL VISIBILITY OVERRUN = 25
Overhead
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec


Orbit 3
Server Version: 20250624
GS Reacq
Pointing Maneuver
Exp. 11
Overhead
Exp. 12
Overhead
Exp. 13
Overhead
Exp. 14
Overhead
Exp. 15
Occultation
**** ORBITAL VISIBILITY OVERRUN = 69
Overhead
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17932, Tile NGC0628STRIP04_BB (12), failed Mon Sep 22 22:00:27 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 100%; SAME ORIENT AS 09

Diagnostics

(Tile NGC0628STRIP04_BB (12)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Tile NGC0628STRIP04_BB (12)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Tile NGC0628STRIP04_BB (12)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NGC628RADIALSTRIP-04	RA: 01 36 29.4354 (24.1226475d) Dec: +15 55 52.58 (15.93127d) Equinox: J2000	Proper Motion RA: 2.3831898376226163E-5 sec of time/yr Proper Motion Dec: -2.2900010208104504E-4 arcsec/yr Epoch of Position: 2015.5	V=9.46	Reference Frame: SIMBAD

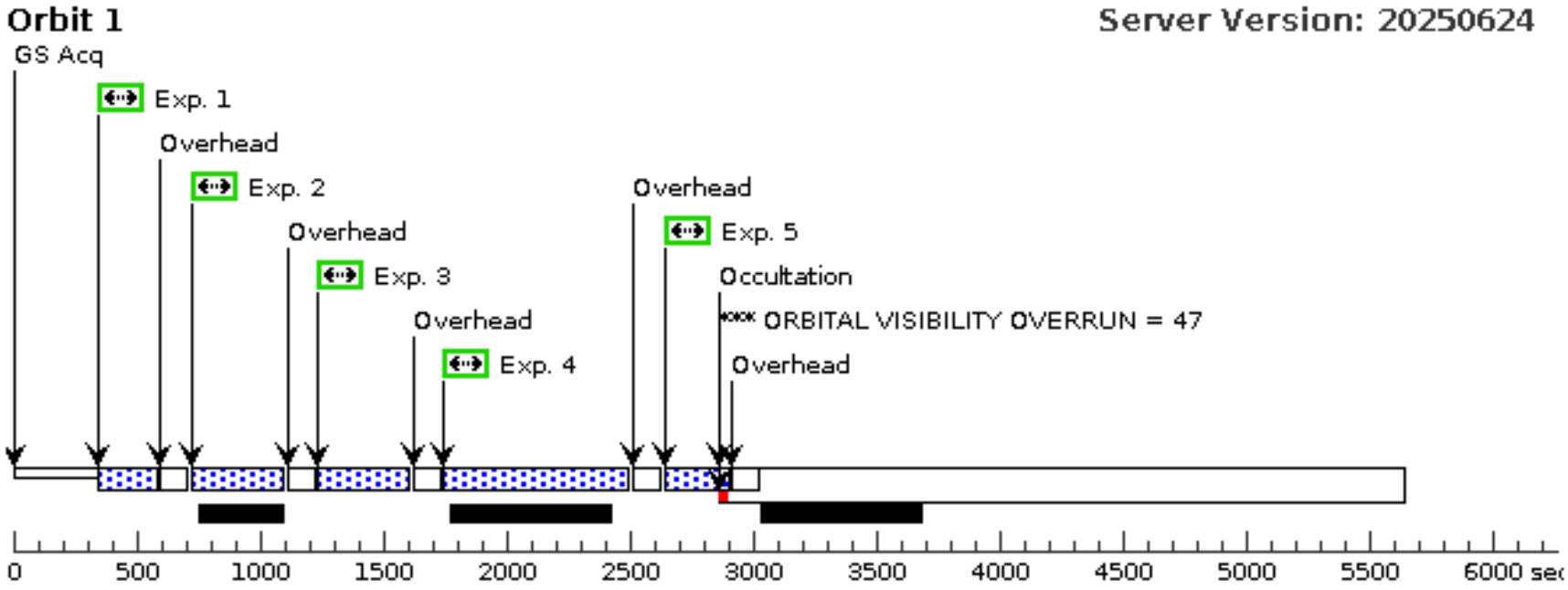
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[DISK, LSB, SPIRAL, SPIRAL ARM, STAR FORMING REGION]

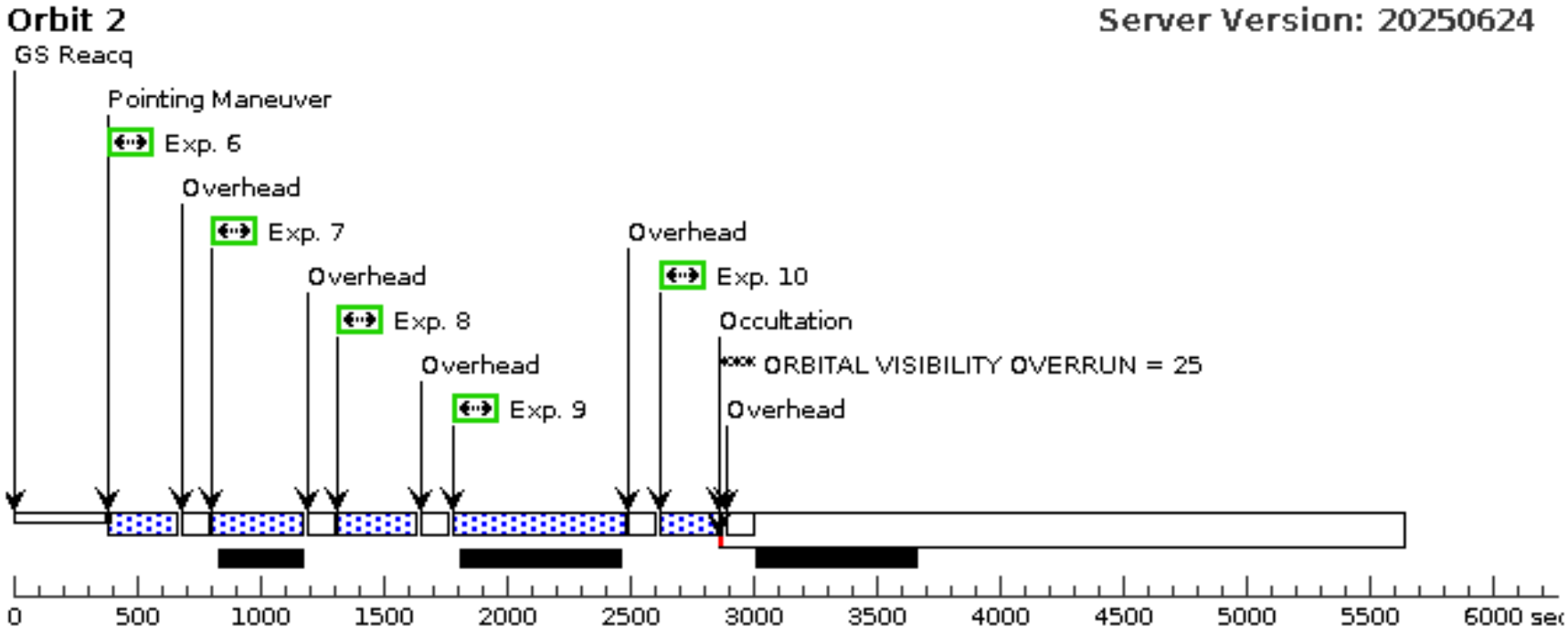
Exposures

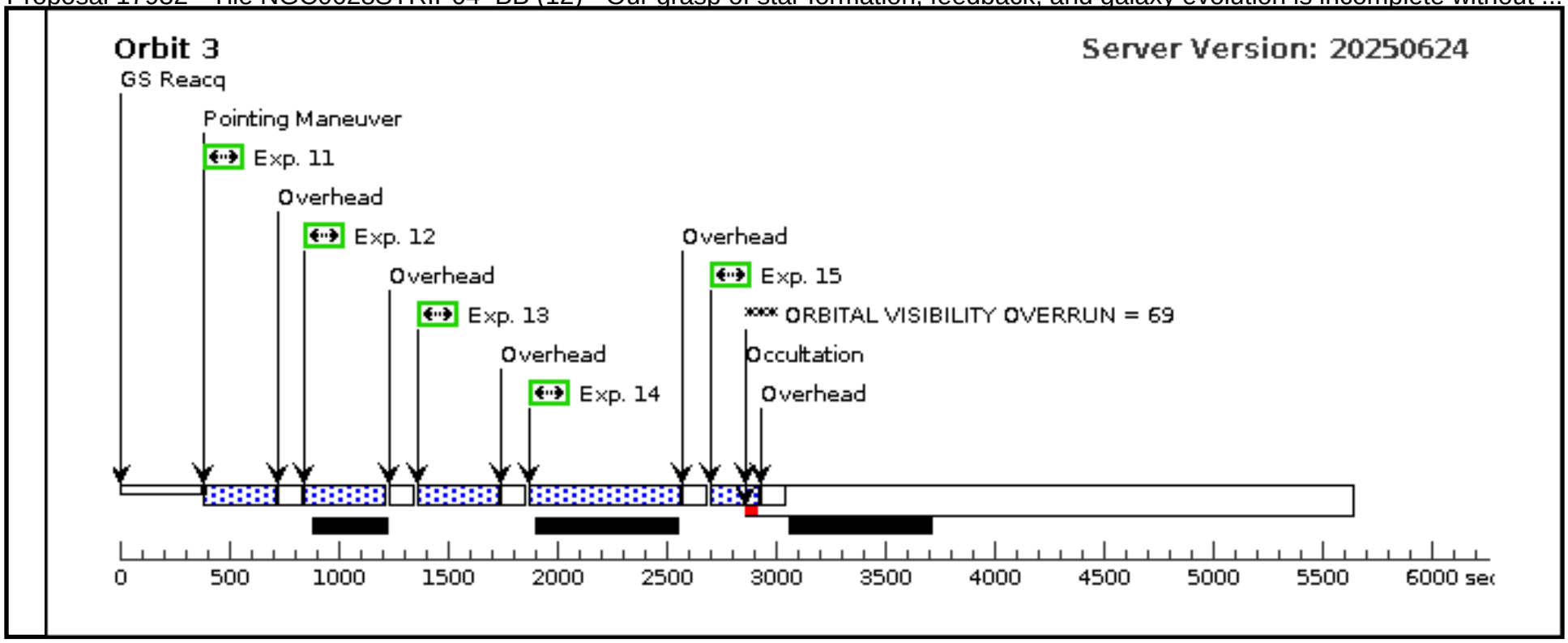
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F814W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=15	POS TARG 0.0,0.0		210 Secs (210 Secs) *[==>]*	***[1]***
2	F438W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=17	POS TARG 0.0,0.0		350 Secs (350 Secs) *[==>]*	***[1]***
3	F336W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=20	POS TARG 0.0,0.0		350 Secs (350 Secs) *[==>]*	***[1]***
4	F275W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=20	POS TARG 0.0,0.0		730 Secs (730 Secs) *[==>]*	***[1]***
5	F555W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F555W	FLASH=15	POS TARG 0.0,0.0		200 Secs (237 Secs) *[==>237.0 Secs]*	***[1]***
6	F814W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=15	POS TARG 0.092,1.803		270 Secs (270 Secs) *[==>]*	***[2]***
7	F438W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=17	POS TARG 0.092,1.803		350 Secs (350 Secs) *[==>]*	***[2]***
8	F336W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=20	POS TARG 0.092,1.803		300 Secs (300 Secs) *[==>]*	***[2]***
9	F275W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=20	POS TARG 0.092,1.803		680 Secs (680 Secs) *[==>]*	***[2]***
10	F555W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F555W	FLASH=15	POS TARG 0.092,1.803		233 Secs (233 Secs) *[==>]*	***[2]***
11	F814W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=15	POS TARG 0.185,3.606		270 Secs (313 Secs) *[==>313.0 Secs]*	***[3]***
12	F438W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=17	POS TARG 0.185,3.606		350 Secs (350 Secs) *[==>]*	***[3]***
13	F336W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=20	POS TARG 0.185,3.606		350 Secs (350 Secs) *[==>]*	***[3]***
14	F275W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=20	POS TARG 0.185,3.606		665 Secs (665 Secs) *[==>]*	***[3]***

	15	F555W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F555W	FLASH=15	POS TARG 0.185,3.606	197 Secs (197 Secs) *[==>]*	 ***[3]***

Orbit Structure




Orbit 2
Server Version: 20250624
GS Reacq
Pointing Maneuver
Exp. 6
Overhead
Exp. 7
Overhead
Exp. 8
Overhead
Exp. 9
Overhead
Exp. 10
Occultation
**** ORBITAL VISIBILITY OVERRUN = 25
Overhead
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec


Orbit 3
Server Version: 20250624
GS Reacq
Pointing Maneuver
Exp. 11
Overhead
Exp. 12
Overhead
Exp. 13
Overhead
Exp. 14
Overhead
Exp. 15
**** ORBITAL VISIBILITY OVERRUN = 69
Occultation
Overhead
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17932, Tile NGC0628STRIP03_BB (21), implementation Mon Sep 22 22:00:27 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 100%; SAME ORIENT AS 09

Comments: Repeat of orbits #1 and #3 from failed Visit 11 (HOPR 93347)

Diagnostics

(Tile NGC0628STRIP03_BB (21)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Tile NGC0628STRIP03_BB (21)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

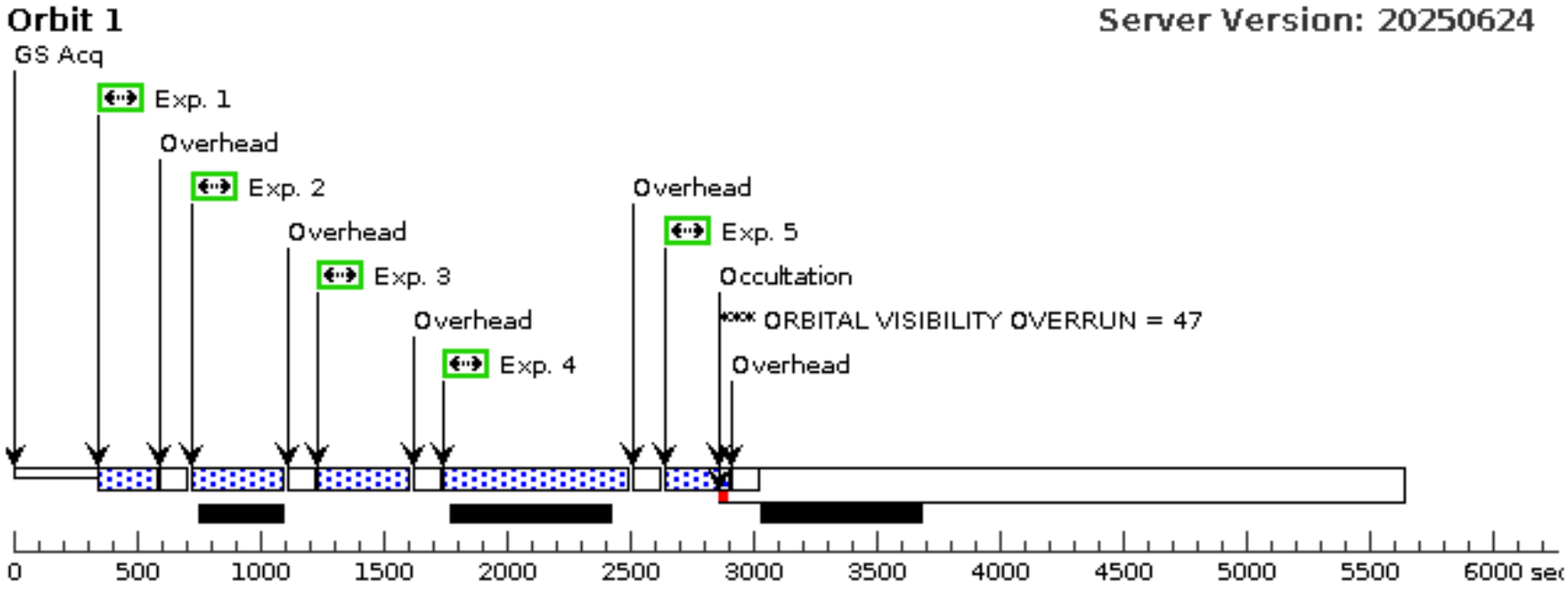
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	NGC628RADIALSTRIP-03	RA: 01 36 32.3304 (24.1347100d) Dec: +15 53 37.99 (15.89389d) Equinox: J2000	Proper Motion RA: 2.3831898376226163E-5 sec of time/yr Proper Motion Dec: -2.2900010208104504E-4 arcsec/yr Epoch of Position: 2015.5	V=9.46	Reference Frame: SIMBAD

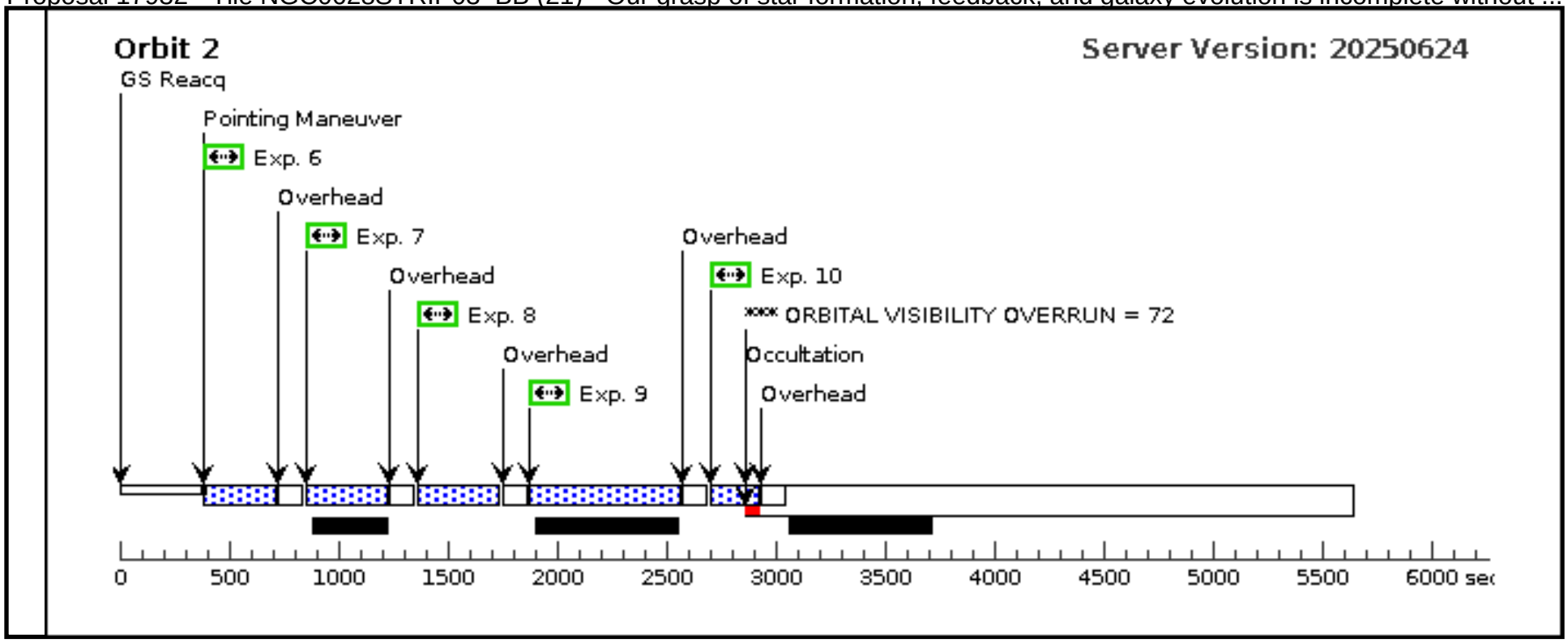
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[DISK, LSB, SPIRAL, SPIRAL ARM, STAR FORMING REGION]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F814W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=15	POS TARG 0.0,0.0		210 Secs (210 Secs) *[==>]*	***[1]***
2	F438W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=17	POS TARG 0.0,0.0		350 Secs (350 Secs) *[==>]*	***[1]***
3	F336W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=20	POS TARG 0.0,0.0		350 Secs (350 Secs) *[==>]*	***[1]***
4	F275W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=20	POS TARG 0.0,0.0		730 Secs (730 Secs) *[==>]*	***[1]***
5	F555W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F555W	FLASH=15	POS TARG 0.0,0.0		200 Secs (237 Secs) *[==>237.0 Secs]*	***[1]***
6	F814W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=15	POS TARG 0.185,3.606		270 Secs (313 Secs) *[==>313.0 Secs]*	***[2]***
7	F438W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=17	POS TARG 0.185,3.606		350 Secs (350 Secs) *[==>]*	***[2]***
8	F336W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=20	POS TARG 0.185,3.606		350 Secs (350 Secs) *[==>]*	***[2]***
9	F275W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=20	POS TARG 0.185,3.606		665 Secs (665 Secs) *[==>]*	***[2]***
10	F555W_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F555W	FLASH=15	POS TARG 0.185,3.606		197 Secs (197 Secs) *[==>]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20250624
GS Reacq
Pointing Maneuver
Exp. 6
Overhead
Exp. 7
Overhead
Exp. 8
Overhead
Exp. 9
Overhead
Exp. 10
**** ORBITAL VISIBILITY OVERRUN = 72
Occultation
Overhead
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17932, Tile NGC0628STRIP04_BB (22), implementation Mon Sep 22 22:00:27 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 100%; SAME ORIENT AS 09

Comments: Repeat of orbit #3 from failed Visit 12 (HOPR 93347)

Diagnostics

(Tile NGC0628STRIP04_BB (22)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

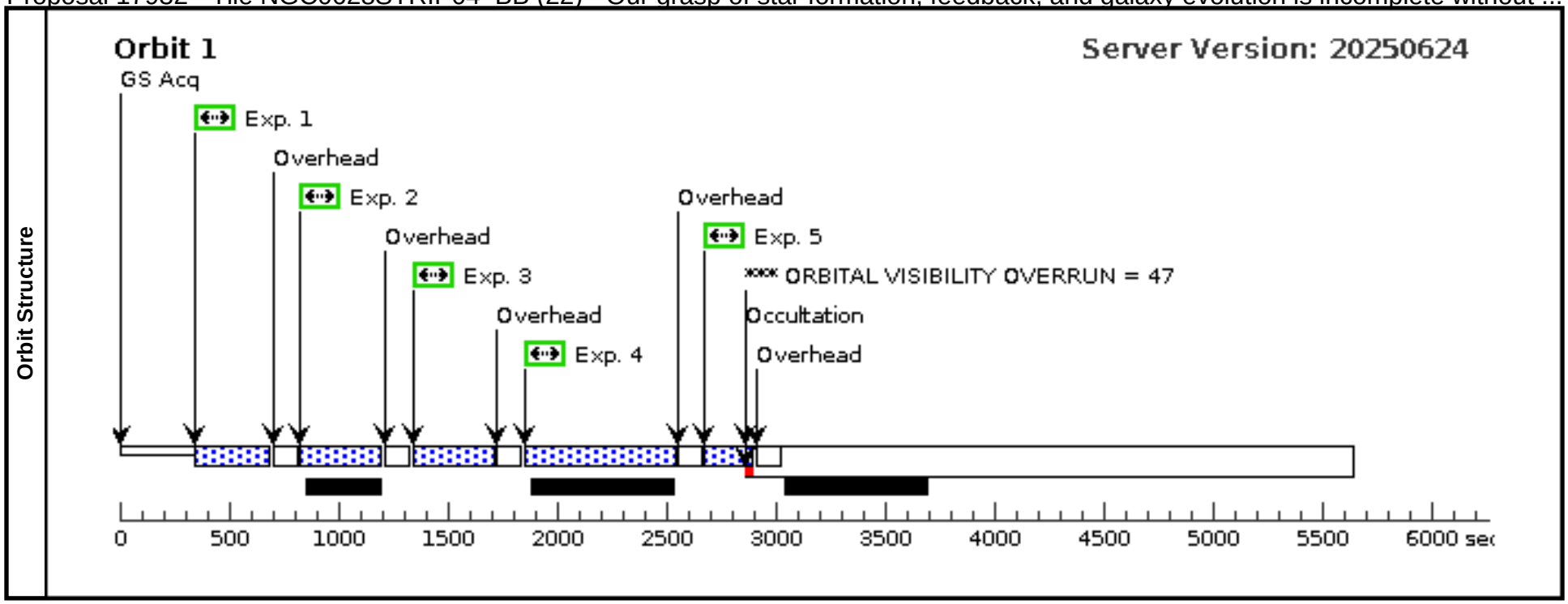
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NGC628RADIALSTRIP-04	RA: 01 36 29.4354 (24.1226475d) Dec: +15 55 52.58 (15.93127d) Equinox: J2000	Proper Motion RA: 2.3831898376226163E-5 sec of time/yr Proper Motion Dec: -2.2900010208104504E-4 arcsec/yr Epoch of Position: 2015.5	V=9.46	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[DISK, LSB, SPIRAL, SPIRAL ARM, STAR FORMING REGION]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F814W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	FLASH=15	POS TARG 0.185,3.606		270 Secs (313 Secs) *[==>313.0 Secs]*	 ***[1]***
2	F438W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=17	POS TARG 0.185,3.606		350 Secs (350 Secs) *[==>]*	 ***[1]***
3	F336W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=20	POS TARG 0.185,3.606		350 Secs (350 Secs) *[==>]*	 ***[1]***
4	F275W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=20	POS TARG 0.185,3.606		665 Secs (665 Secs) *[==>]*	 ***[1]***
5	F555W_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F555W	FLASH=15	POS TARG 0.185,3.606		197 Secs (197 Secs) *[==>]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20250624
GS Acq
Exp. 1
Overhead
Exp. 2
Overhead
Exp. 3
Overhead
Exp. 4
Overhead
Exp. 5
**** ORBITAL VISIBILITY OVERRUN = 47
Occultation
Overhead
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17932, Tile NGC0628STRIP01_NB (17), completed Mon Sep 22 22:00:27 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 100%; SAME ORIENT AS 09

Diagnostics

(Tile NGC0628STRIP01_NB (17)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

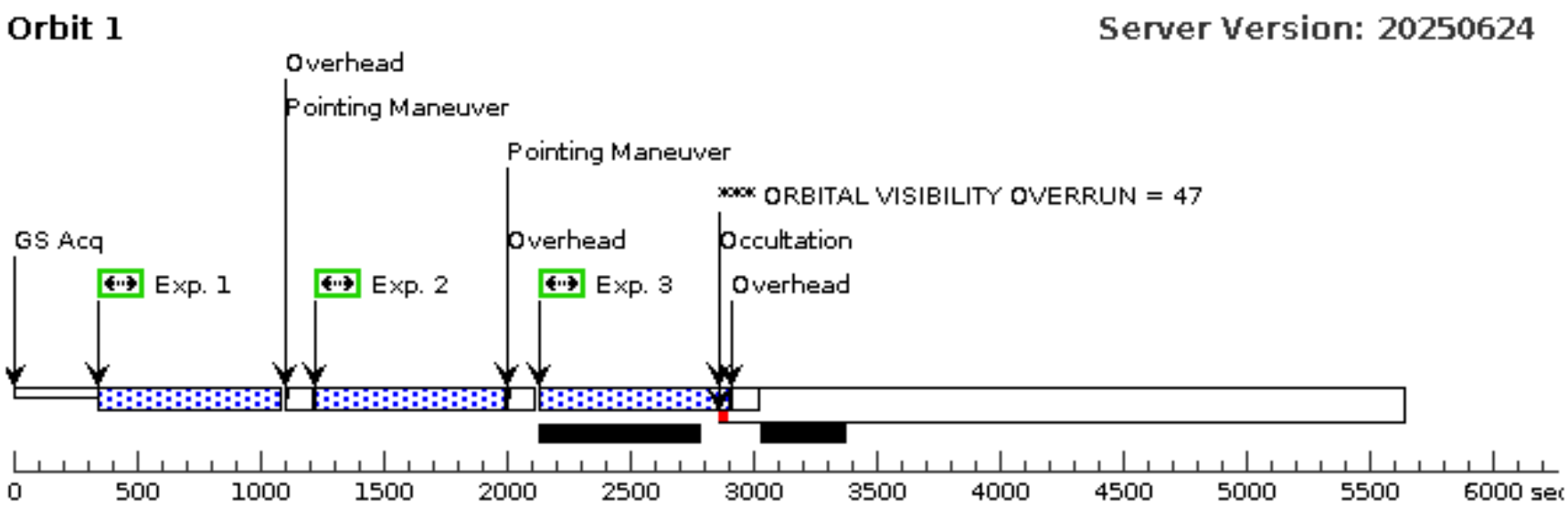
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	NGC628RADIALSTRIP-01	RA: 01 36 38.1205 (24.1588354d) Dec: +15 49 8.79 (15.81911d) Equinox: J2000	Proper Motion RA: 2.3831898376226163E-5 sec of time/yr Proper Motion Dec: -2.2900010208104504E-4 arcsec/yr Epoch of Position: 2015.5	V=9.46	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[DISK, LSB, SPIRAL, SPIRAL ARM, STAR FORMING REGION]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F658N_NGC628RADIALSTRIP-01	(4) NGC628RADIALSTRIP-01	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=18	POS TARG 0.0,0.0		695 Secs (713 Secs) *[==>713.0 Secs]*	 ***[1]***
2	F658N_NGC628RADIALSTRIP-01	(4) NGC628RADIALSTRIP-01	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=18	POS TARG 0.092,1.803		750 Secs (768 Secs) *[==>768.0 Secs]*	 ***[1]***
3	F658N_NGC628RADIALSTRIP-01	(4) NGC628RADIALSTRIP-01	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=18	POS TARG 0.185,3.606		750 Secs (768 Secs) *[==>768.0 Secs]*	 ***[1]***

Orbit Structure



Visit

Proposal 17932, Tile NGC0628STRIP02_NB (18), completed Mon Sep 22 22:00:27 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 100%; SAME ORIENT AS 09

Diagnostics

(Tile NGC0628STRIP02_NB (18)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

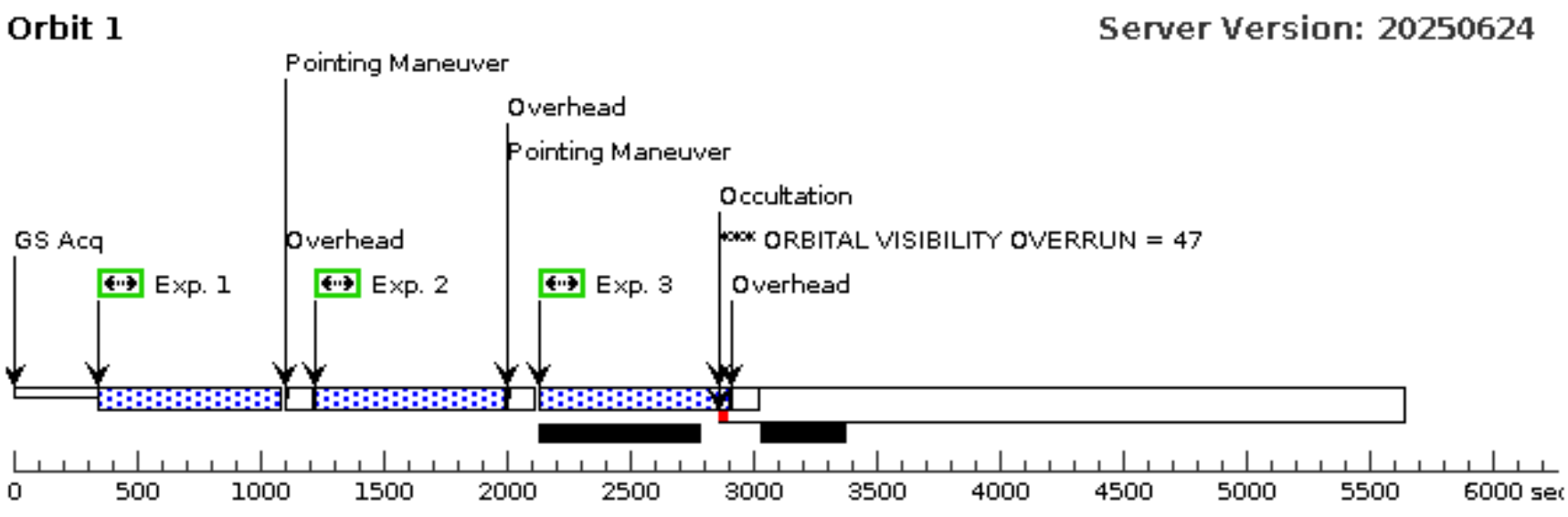
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	NGC628RADIALSTRIP-02	RA: 01 36 35.2255 (24.1467729d) Dec: +15 51 23.39 (15.85650d) Equinox: J2000	Proper Motion RA: 2.3831898376226163E-5 sec of time/yr Proper Motion Dec: -2.2900010208104504E-4 arcsec/yr Epoch of Position: 2015.5	V=9.46	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[DISK, LSB, SPIRAL, SPIRAL ARM, STAR FORMING REGION]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F658N_NGC628RADIALSTRIP-02	(3) NGC628RADIALSTRIP-02	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=18	POS TARG 0.0,0.0		695 Secs (713 Secs) *[==>713.0 Secs]*	 ***[1]***
2	F658N_NGC628RADIALSTRIP-02	(3) NGC628RADIALSTRIP-02	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=18	POS TARG 0.092,1.803		750 Secs (768 Secs) *[==>768.0 Secs]*	 ***[1]***
3	F658N_NGC628RADIALSTRIP-02	(3) NGC628RADIALSTRIP-02	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=18	POS TARG 0.185,3.606		750 Secs (768 Secs) *[==>768.0 Secs]*	 ***[1]***

Orbit Structure



Visit

Proposal 17932, Tile NGC0628STRIP03_NB (19), failed Mon Sep 22 22:00:27 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 100%; SAME ORIENT AS 09

Diagnostics

(Tile NGC0628STRIP03_NB (19)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

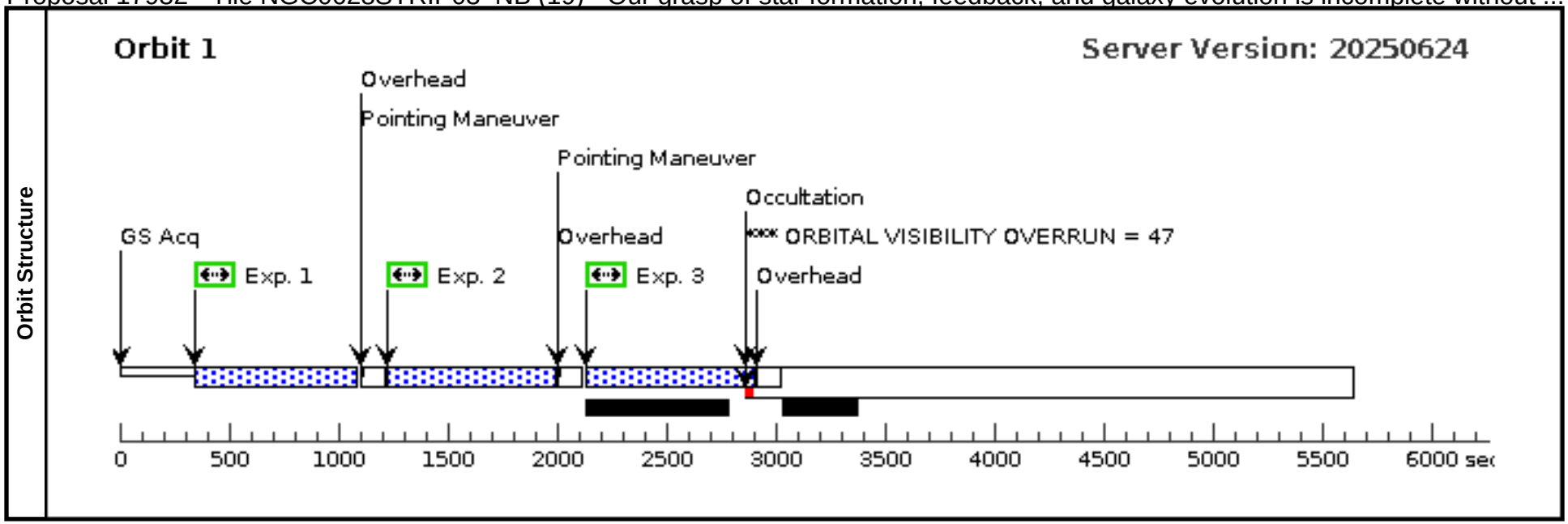
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	NGC628RADIALSTRIP-03	RA: 01 36 32.3304 (24.1347100d) Dec: +15 53 37.99 (15.89389d) Equinox: J2000	Proper Motion RA: 2.3831898376226163E-5 sec of time/yr Proper Motion Dec: -2.2900010208104504E-4 arcsec/yr Epoch of Position: 2015.5	V=9.46	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[DISK, LSB, SPIRAL, SPIRAL ARM, STAR FORMING REGION]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F658N_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=18	POS TARG 0.0,0.0		695 Secs (713 Secs) *[==>713.0 Secs]*	 ***[1]***
2	F658N_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=18	POS TARG 0.092,1.803		750 Secs (768 Secs) *[==>768.0 Secs]*	 ***[1]***
3	F658N_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=18	POS TARG 0.185,3.606		750 Secs (768 Secs) *[==>768.0 Secs]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20250624
Overhead
Pointing Maneuver
Pointing Maneuver
Occultation
GS Acq
Overhead
*** ORBITAL VISIBILITY OVERRUN = 47
Exp. 1
Exp. 2
Exp. 3
Overhead
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17932, Tile NGC0628STRIP04_NB (20), failed Mon Sep 22 22:00:27 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 100%; SAME ORIENT AS 09

Diagnostics

(Tile NGC0628STRIP04_NB (20)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

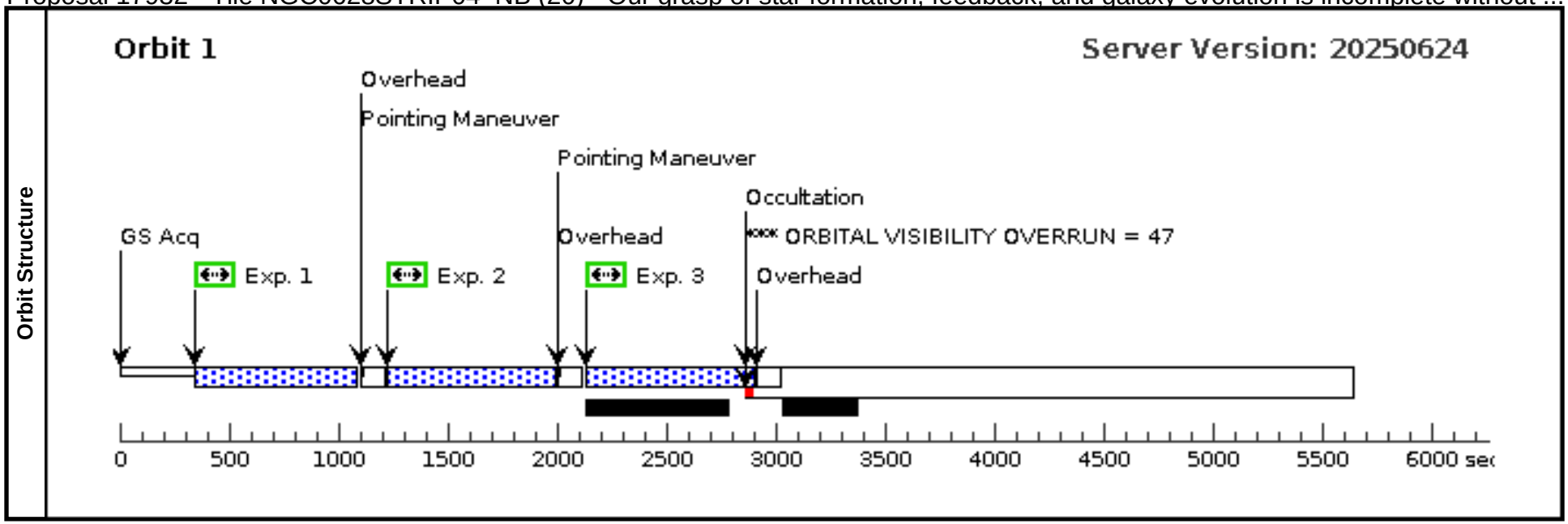
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NGC628RADIALSTRIP-04	RA: 01 36 29.4354 (24.1226475d) Dec: +15 55 52.58 (15.93127d) Equinox: J2000	Proper Motion RA: 2.3831898376226163E-5 sec of time/yr Proper Motion Dec: -2.2900010208104504E-4 arcsec/yr Epoch of Position: 2015.5	V=9.46	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[DISK, LSB, SPIRAL, SPIRAL ARM, STAR FORMING REGION]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F658N_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=18	POS TARG 0.0,0.0		695 Secs (713 Secs) *[==>713.0 Secs]*	 ***[1]***
2	F658N_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=18	POS TARG 0.092,1.803		750 Secs (768 Secs) *[==>768.0 Secs]*	 ***[1]***
3	F658N_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=18	POS TARG 0.185,3.606		750 Secs (768 Secs) *[==>768.0 Secs]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20250624
Overhead
Pointing Maneuver
Pointing Maneuver
Occultation
GS Acq
Overhead
*** ORBITAL VISIBILITY OVERRUN = 47
Exp. 1
Exp. 2
Exp. 3
Overhead
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17932, Tile NGC0628STRIP03_NB (23) Mon Sep 22 22:00:27 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 100%; SAME ORIENT AS 09

Comments: Repeat of the single orbit from failed Visit 19 (HOPR 93364)

Diagnostics

(Tile NGC0628STRIP03_NB (23)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

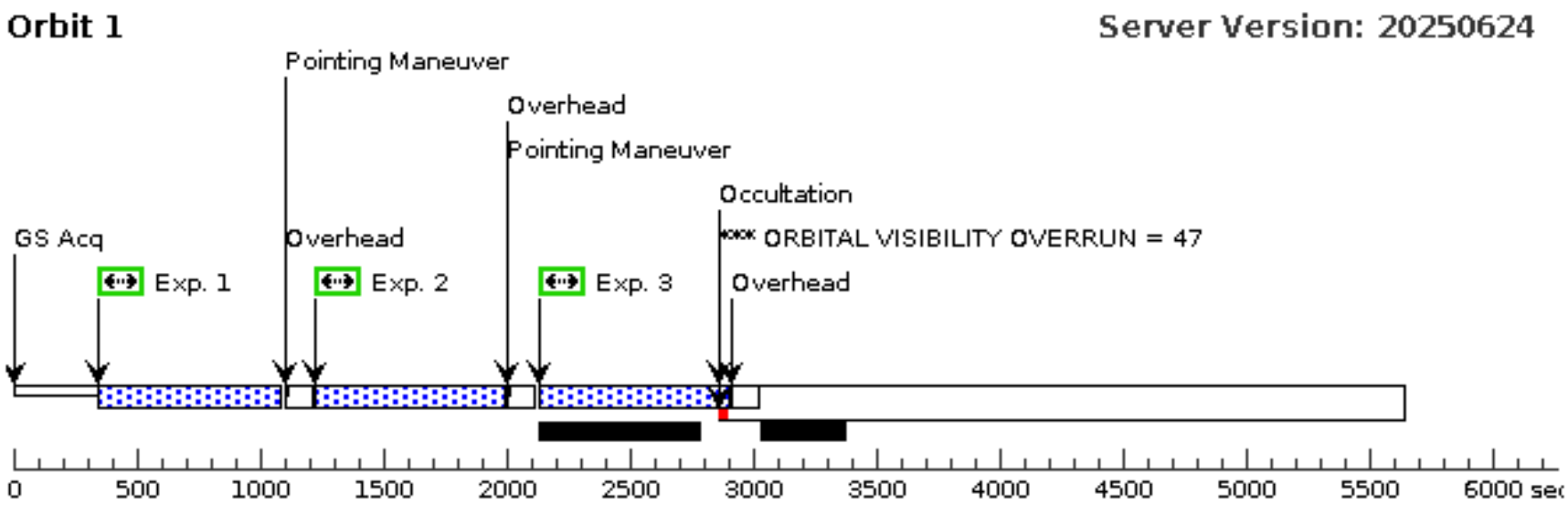
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	NGC628RADIALSTRIP-03	RA: 01 36 32.3304 (24.1347100d) Dec: +15 53 37.99 (15.89389d) Equinox: J2000	Proper Motion RA: 2.3831898376226163E-5 sec of time/yr Proper Motion Dec: -2.2900010208104504E-4 arcsec/yr Epoch of Position: 2015.5	V=9.46	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[DISK, LSB, SPIRAL, SPIRAL ARM, STAR FORMING REGION]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F658N_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=18	POS TARG 0.0,0.0		695 Secs (713 Secs) *[==>713.0 Secs]*	 ***[1]***
2	F658N_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=18	POS TARG 0.092,1.803		750 Secs (768 Secs) *[==>768.0 Secs]*	 ***[1]***
3	F658N_NGC628RADIALSTRIP-03	(2) NGC628RADIALSTRIP-03	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=18	POS TARG 0.185,3.606		750 Secs (768 Secs) *[==>768.0 Secs]*	 ***[1]***

Orbit Structure



Visit

Proposal 17932, Tile NGC0628STRIP04_NB (24) Mon Sep 22 22:00:27 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 100%; SAME ORIENT AS 09

Comments: Repeat of the single orbit from failed Visit 20 (HOPR 93364)

Diagnostics

(Tile NGC0628STRIP04_NB (24)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

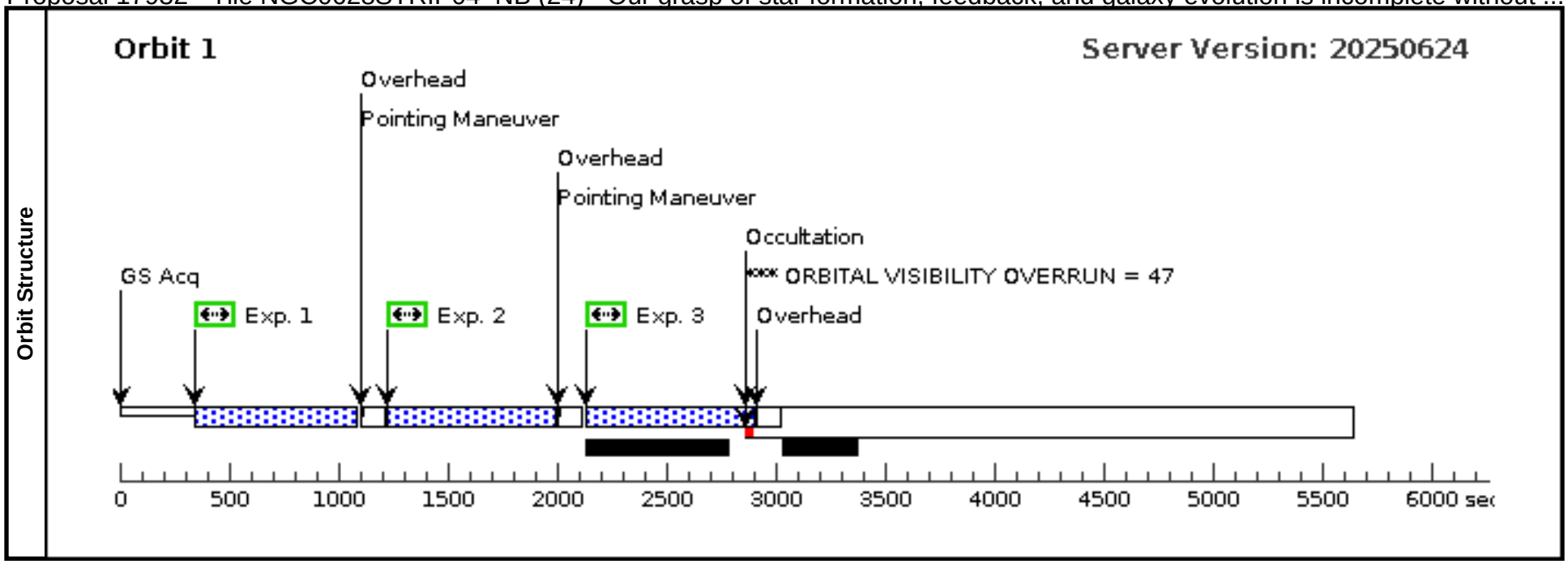
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NGC628RADIALSTRIP-04	RA: 01 36 29.4354 (24.1226475d) Dec: +15 55 52.58 (15.93127d) Equinox: J2000	Proper Motion RA: 2.3831898376226163E-5 sec of time/yr Proper Motion Dec: -2.2900010208104504E-4 arcsec/yr Epoch of Position: 2015.5	V=9.46	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[DISK, LSB, SPIRAL, SPIRAL ARM, STAR FORMING REGION]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F658N_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=18	POS TARG 0.0,0.0		695 Secs (713 Secs) *[==>713.0 Secs]*	 ***[1]***
2	F658N_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=18	POS TARG 0.092,1.803		750 Secs (768 Secs) *[==>768.0 Secs]*	 ***[1]***
3	F658N_NGC628RADIALSTRIP-04	(1) NGC628RADIALSTRIP-04	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=18	POS TARG 0.185,3.606		750 Secs (768 Secs) *[==>768.0 Secs]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20250624
Overhead
Pointing Maneuver
Overhead
Pointing Maneuver
Occultation
GS Acq
Exp. 1
Exp. 2
Exp. 3
Overhead
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec