18097 - Breaking the mass sheet degeneracy in strong lensing time delay cosmology with a new sample of double source plane lenses.

Cycle: 33, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

Name	*Institution*
Mr. Tian Li (PI) (ESA Member) (Contact)	**Portsmouth University/ICG**
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Mr. Leon Roman Ecker (CoI) (ESA Member)	Ludwig Maximilian Universitat of Munich
Dr. Conor O'Riordan (CoI) (ESA Member)	Max Planck Institute for Astrophysics

VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) TEAPOTLENS	WFC3/UVIS	1	02-Apr-2026 14:00:53.0	yes
02	(1) TEAPOTLENS	WFC3/UVIS	1	02-Apr-2026 14:00:54.0	yes
03	(2) DARTBOARD	WFC3/UVIS	1	02-Apr-2026 14:00:54.0	yes
04	(2) DARTBOARD	WFC3/UVIS	1	02-Apr-2026 14:00:54.0	yes
19	(2) DARTBOARD	WFC3/UVIS	1	02-Apr-2026 14:00:55.0	yes
05	(3) AMMONITE	WFC3/UVIS	1	02-Apr-2026 14:00:55.0	yes
06	(3) AMMONITE	WFC3/UVIS	1	02-Apr-2026 14:00:55.0	yes
07	(4) GALILEO	WFC3/UVIS	1	02-Apr-2026 14:00:56.0	yes
08	(4) GALILEO	WFC3/UVIS	1	02-Apr-2026 14:00:56.0	yes
09	(5) EUCLIDDSPL115943+673249	WFC3/UVIS	1	02-Apr-2026 14:00:56.0	yes
10	(5) EUCLIDDSPL115943+673249	WFC3/UVIS	1	02-Apr-2026 14:00:57.0	yes
11	(6) EUCLIDDSPL125718+640613	WFC3/UVIS	1	02-Apr-2026 14:00:57.0	yes
12	(6) EUCLIDDSPL125718+640613	WFC3/UVIS	1	02-Apr-2026 14:00:57.0	yes
13	(7) EUCLIDDSPL235319-602119	WFC3/UVIS	1	02-Apr-2026 14:00:57.0	yes
14	(7) EUCLIDDSPL235319-602119	WFC3/UVIS	1	02-Apr-2026 14:00:58.0	yes
15	(8) EUCLIDDSPL044453-380845	WFC3/UVIS	1	02-Apr-2026 14:00:58.0	yes
16	(8) EUCLIDDSPL044453-380845	WFC3/UVIS	1	02-Apr-2026 14:00:58.0	yes
17	(9) EUCLIDDSPL053233-371545	WFC3/UVIS	1	02-Apr-2026 14:00:59.0	yes
18	(9) EUCLIDDSPL053233-371545	WFC3/UVIS	1	02-Apr-2026 14:00:59.0	yes

19 Total Orbits Used

ABSTRACT

Despite years of scrutiny, the measurement of H0 from SH0ES is still at 5-sigma tension with early-Universe probes. If the 8% difference is real it implies physics beyond LCDM. It is essential to develop independent methods with sufficient precision and accuracy to confirm or rule out the tension. A number of collaborations used gravitational time delays to measure H0 to 2% precision assuming that the mass density profiles of massive elliptical galaxies are described by a power-law or stars + Navarro Frenk White dark matter halos. However, if the assumption is relaxed under the

mass sheet transformation, the precision of H0 from time delays drops to 8%.

Strong lenses with two background sources at different redshifts (double source plane lens, DSPL) allow tight constraints on the main degeneracy of the Hubble constant measurement from time-delay cosmography. We have discovered 9 new galaxy-scale candidates from a combination of Euclid lens searches, and we plan to observe them with HST WFC3. HST is the BEST telescope suitable for this science due to its wavelength coverage and resolution. With our new samples, we are able to increase the measurement of H0 from Time Delay lenses from 6-8% to 2-4%.

In addition, due to the second ring providing an extra aperture within which the mass is well constrained, DSPLs are better compared to lens systems with a single ring in almost every other science category involving galaxy scale strong lensing.

OBSERVING DESCRIPTION

The main goal of the proposed HST program is to obtain high-resolution images of nine double-source-plane strong-lensing systems, allocating two orbits per system. Combined with spectroscopic redshifts and stellar kinematics, these data will enable detailed lens modeling and a decomposition of the stellar and dark-matter mass components. This, in turn, allows us to quantify and break the mass-sheet degeneracy that would persist if the lens were constrained by a single power-law mass profile alone. HST imaging in F475W and F814W maximizes wavelength coverage, and the angular resolution is improved compared with Euclid. The bluer filter enhances the signal from the blue arcs while suppressing shot noise from the red foreground lens galaxy.

We will need one full orbit each in F475W and F814W, employing a four-point dither pattern to carry out the proposed measurements.

Visit

Proposal 18097, teapot 475 (01), completed

Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

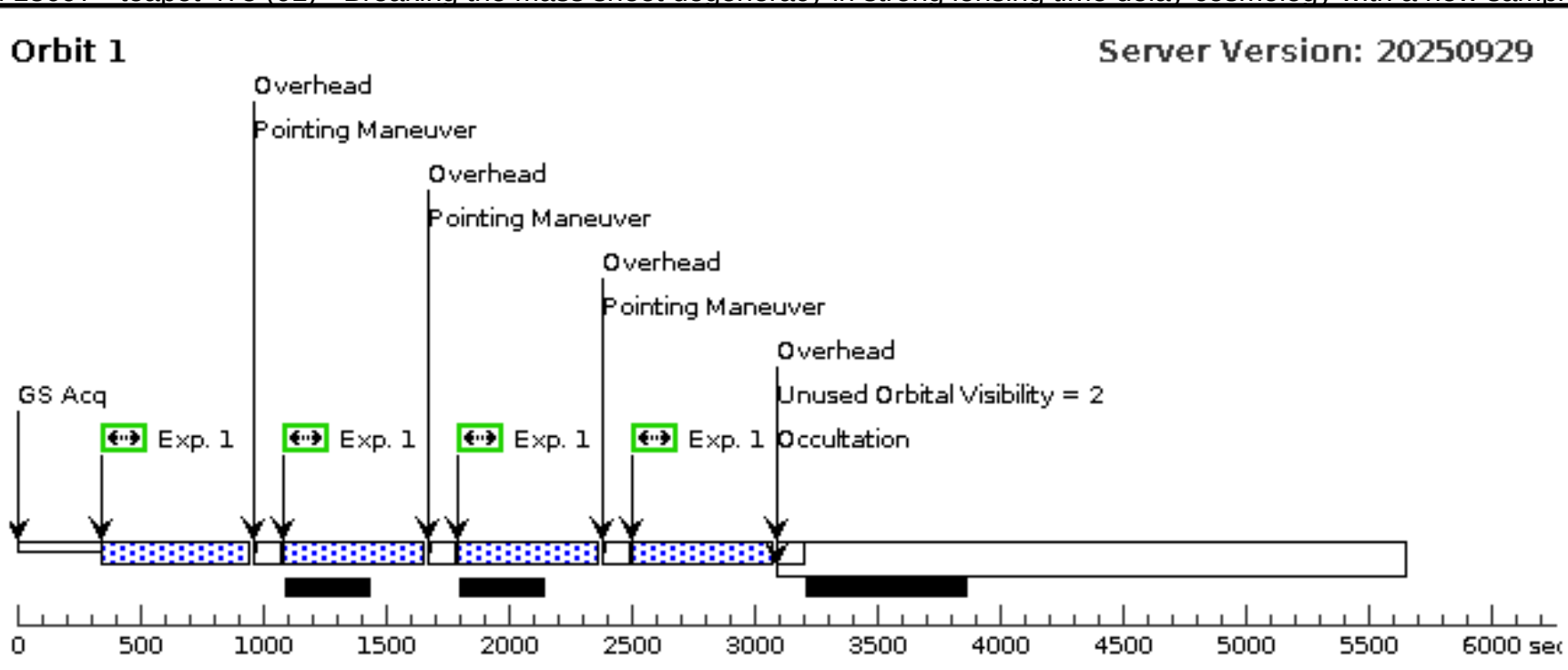
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	TEAPOTLENS	RA: 18 14 22.7160 (273.5946500d) Dec: +67 08 16.26 (67.13785d) Equinox: J2000		V=21	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) TEAPOTLENS	WFC3/UVIS, ACCUM, UVIS2	F475W	FLASH=9		Pattern 1, Exps 1-1 in teapot 475 (01) (1)	575 Secs (2300 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	***[1]***

Orbit Structure



Visit

Proposal 18097, teapot 814 (02), completed Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

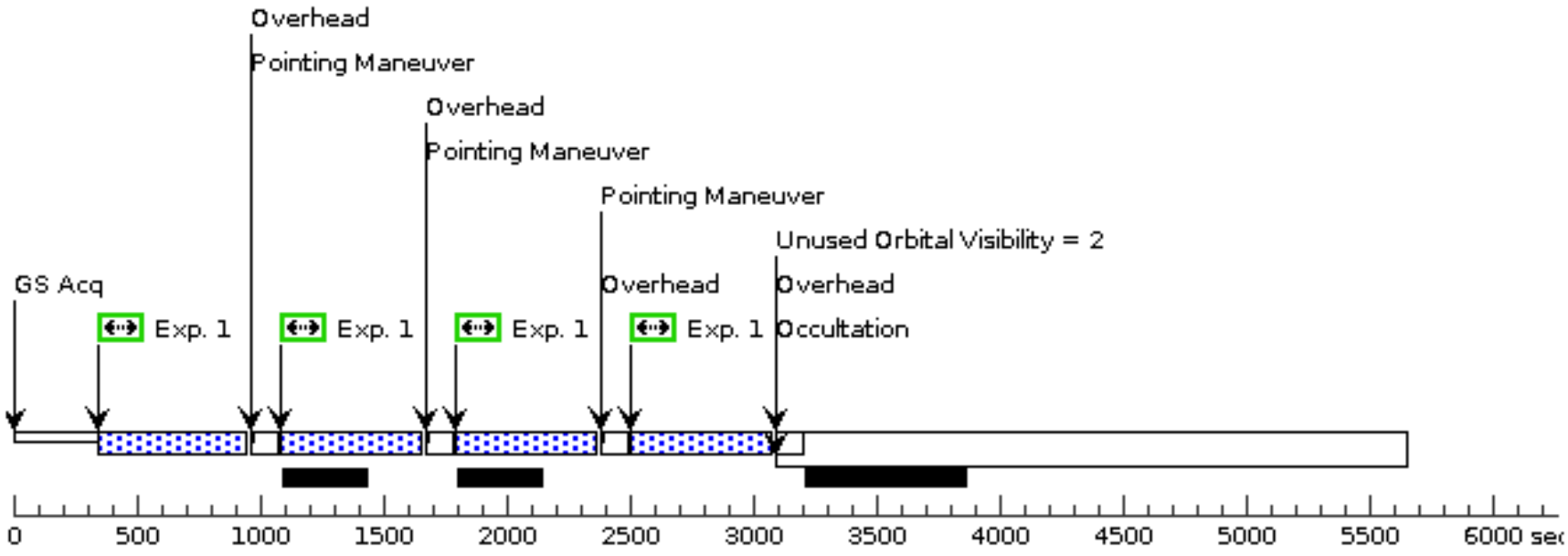
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	TEAPOTLENS	RA: 18 14 22.7160 (273.5946500d) Dec: +67 08 16.26 (67.13785d) Equinox: J2000		V=21	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) TEAPOTLENS	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=8		Pattern 1, Exps 1-1 in teapot 814 (02) (1)	575 Secs (2300 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	***[1]***

Orbit Structure



Visit

Proposal 18097, dartboard 475 (03), completed Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

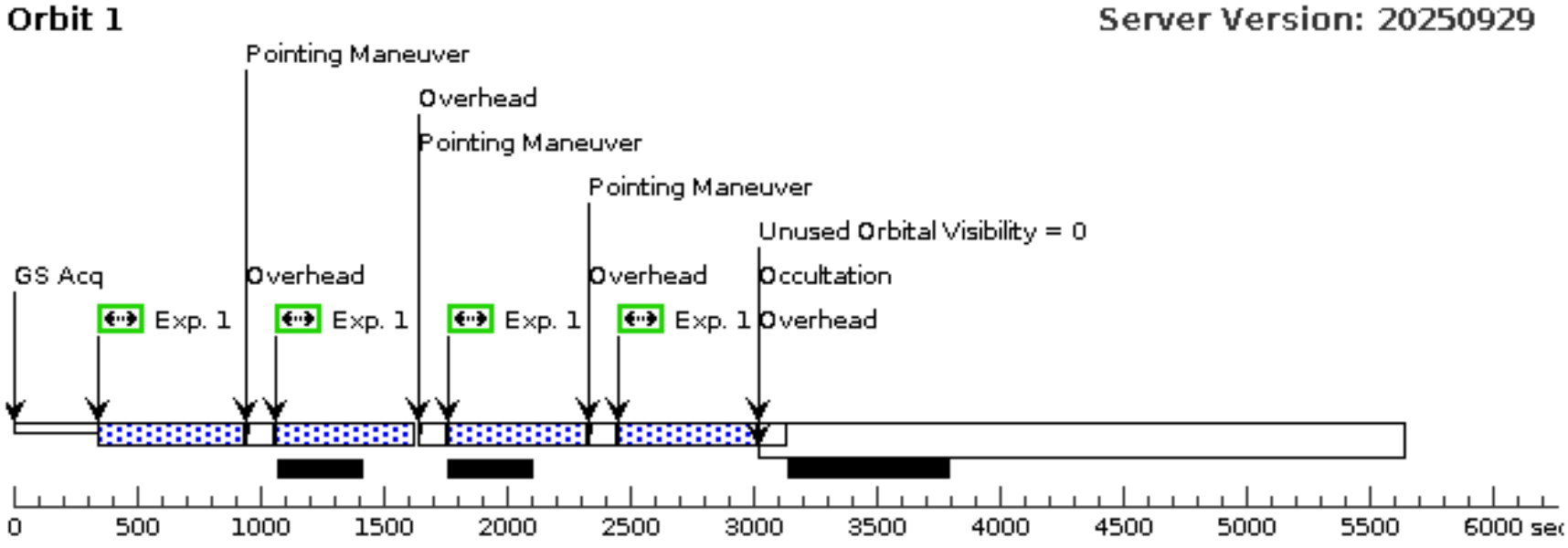
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	DARTBOARD	RA: 03 58 15.5160 (59.5646500d) Dec: -50 56 48.84 (-50.94690d) Equinox: J2000		V=22	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) DARTBOARD	WFC3/UVIS, ACCUM, UVIS2	F475W	FLASH=9		Pattern 1, Exps 1-1 in dartboard 475 (03) (1)	559 Secs (2236 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	***[1]***

Orbit Structure



Visit

Proposal 18097, dartboard814W (04), failed

Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

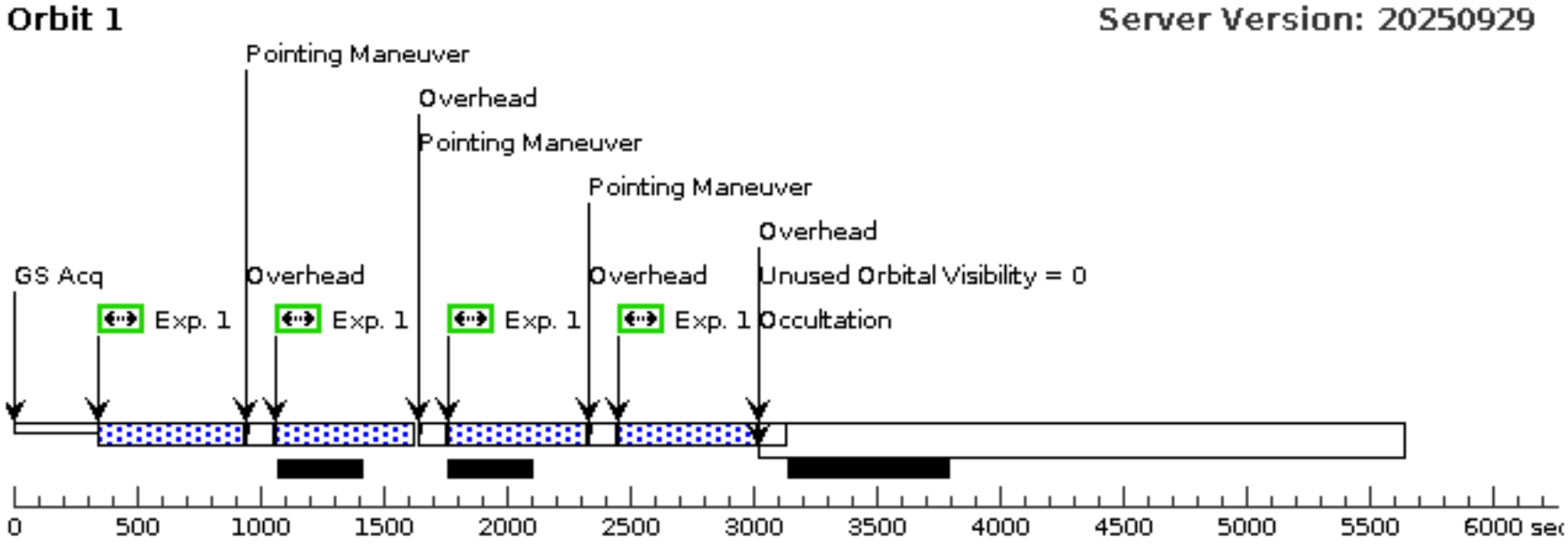
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	DARTBOARD	RA: 03 58 15.5160 (59.5646500d) Dec: -50 56 48.84 (-50.94690d) Equinox: J2000		V=22	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) DARTBOARD	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=8		Pattern 1, Exps 1-1 in dartboard814W (04) (1)	559 Secs (2236 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	*[1]*

Orbit Structure



Visit

Proposal 18097, dartboard814W (19) Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

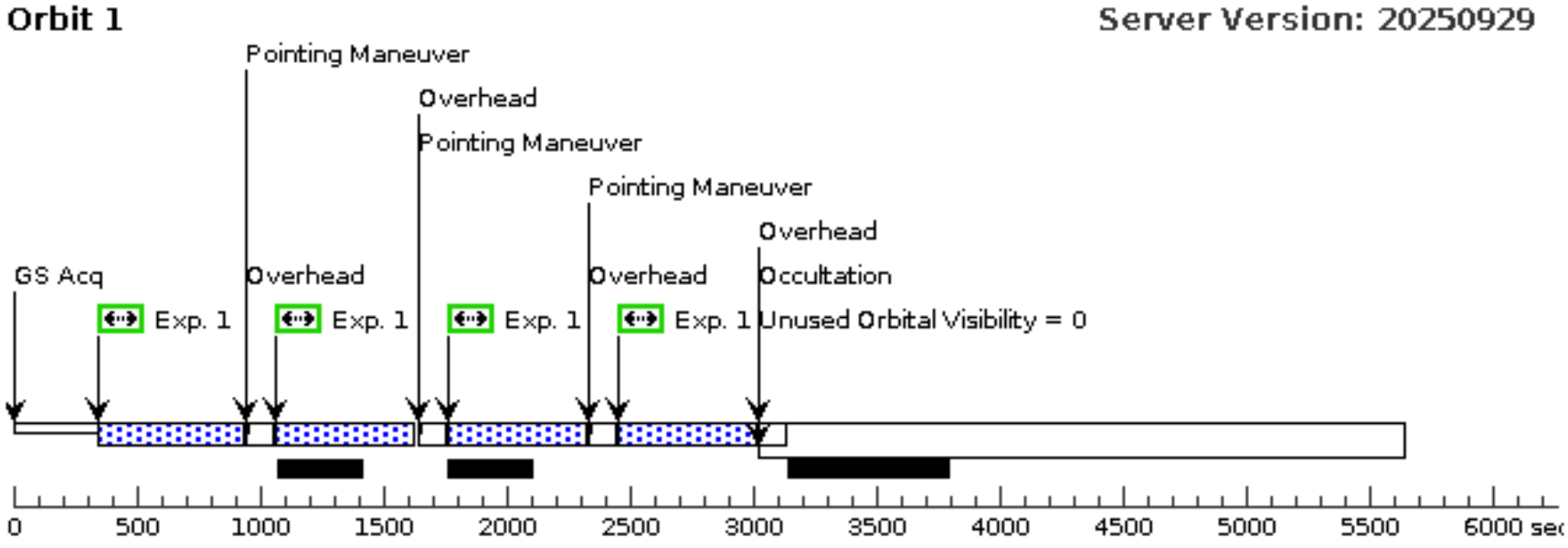
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	DARTBOARD	RA: 03 58 15.5160 (59.5646500d) Dec: -50 56 48.84 (-50.94690d) Equinox: J2000		V=22	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) DARTBOARD	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=8		Pattern 1, Exps 1-1 in dartboard814W (19) (1)	559 Secs (2236 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	*[1]*

Orbit Structure



Visit

Proposal 18097, ammonite 475 (05), scheduling Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

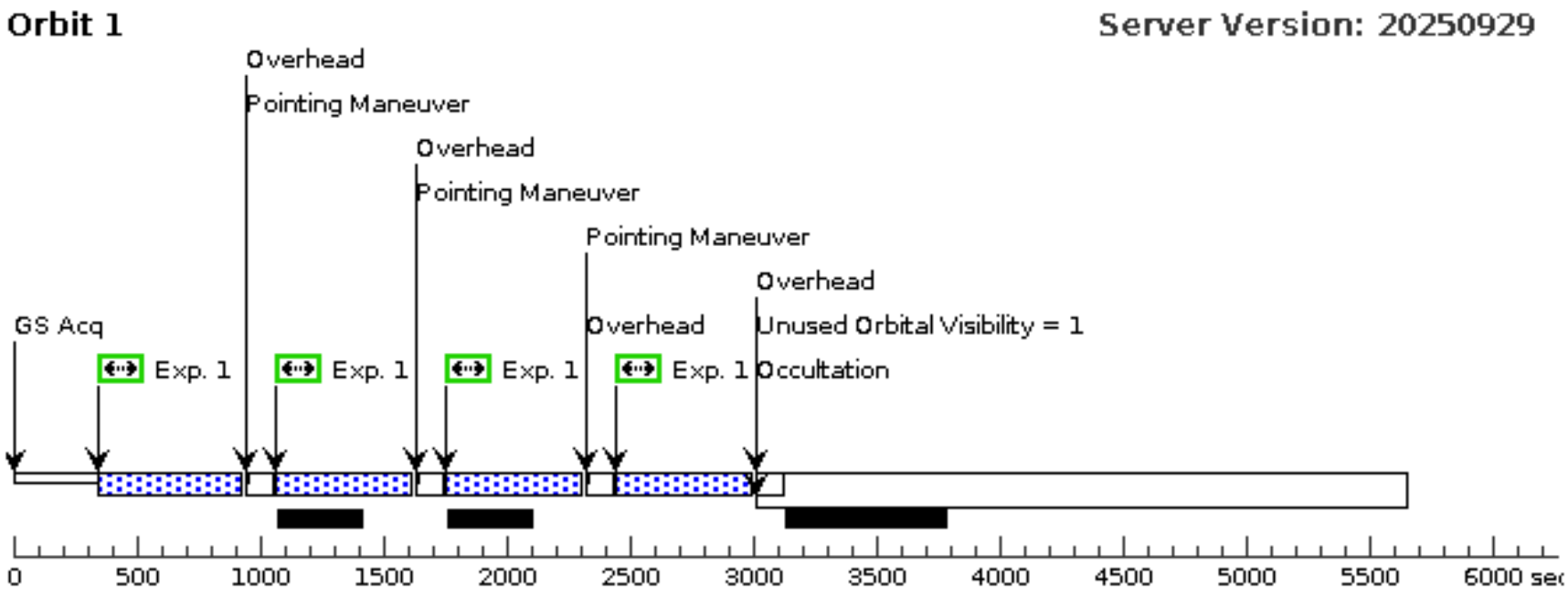
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	AMMONITE	RA: 04 04 57.3240 (61.2388500d) Dec: -49 22 21.54 (-49.37265d) Equinox: J2000		V=21	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(3) AMMONITE	WFC3/UVIS, ACCUM, UVIS2	F475W	FLASH=9		Pattern 1, Exps 1-1 in ammonite 475 (05) (1)	555 Secs (2220 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	***[1]***

Orbit Structure



Visit

Proposal 18097, ammonite 814W (06), scheduling Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

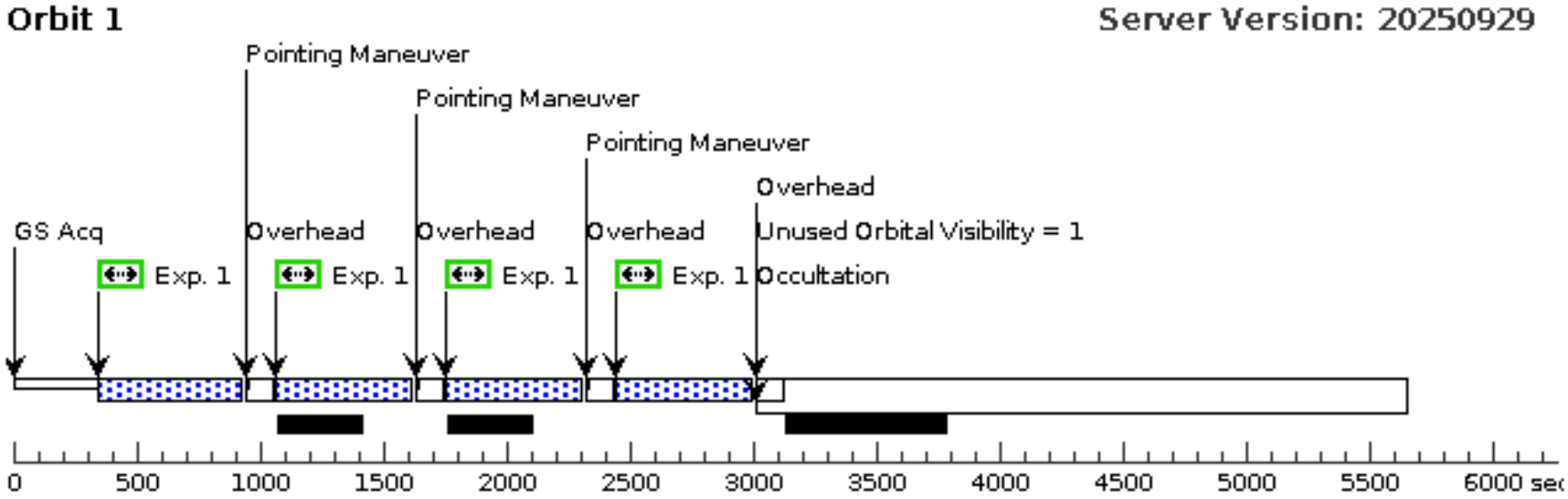
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	AMMONITE	RA: 04 04 57.3240 (61.2388500d) Dec: -49 22 21.54 (-49.37265d) Equinox: J2000		V=21	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(3) AMMONITE	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=8		Pattern 1, Exps 1-1 in ammonite 814W (06) (1)	555 Secs (2220 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	*[1]*

Orbit Structure



Visit

Proposal 18097, galileo 475 (07), scheduling Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

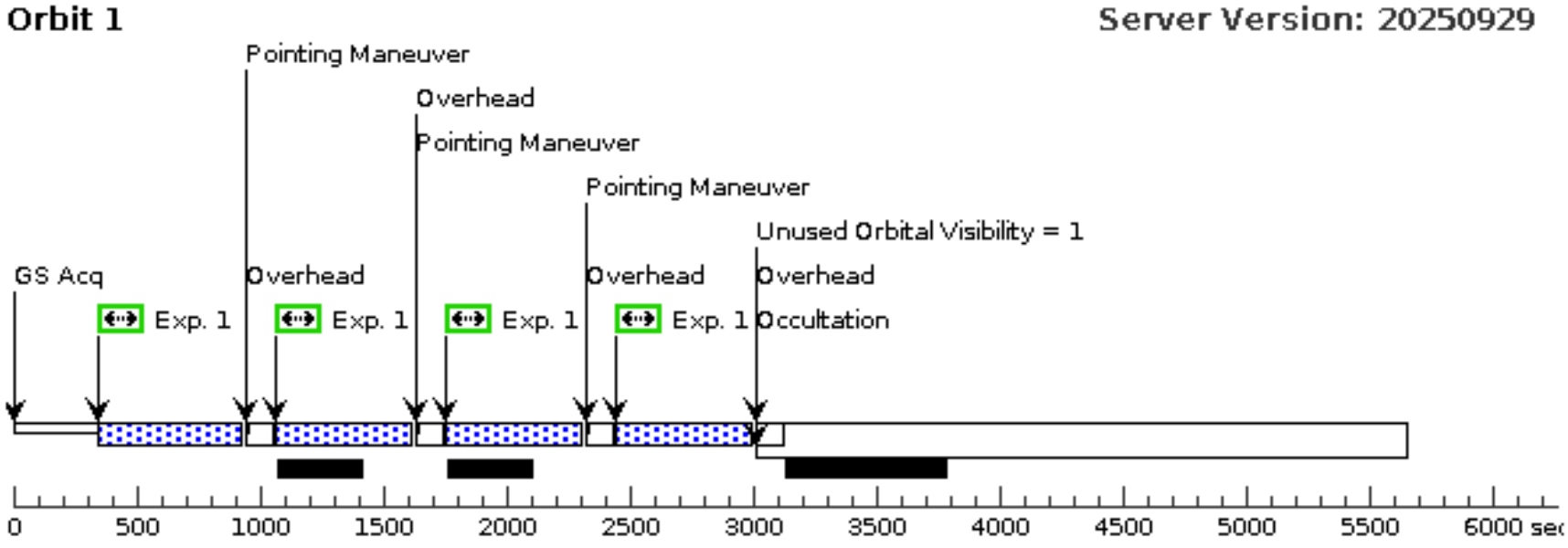
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	GALILEO	RA: 04 26 44.2992 (66.6845800d) Dec: -48 06 38.70 (-48.11075d) Equinox: J2000		V=22.7	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(4) GALILEO	WFC3/UVIS, ACCUM, UVIS2	F475W	FLASH=9		Pattern 1, Exps 1-1 in galileo 475 (07) (1)	555 Secs (2220 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	*[1]*

Orbit Structure



Visit

Proposal 18097, galileo 814 (08), scheduling Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

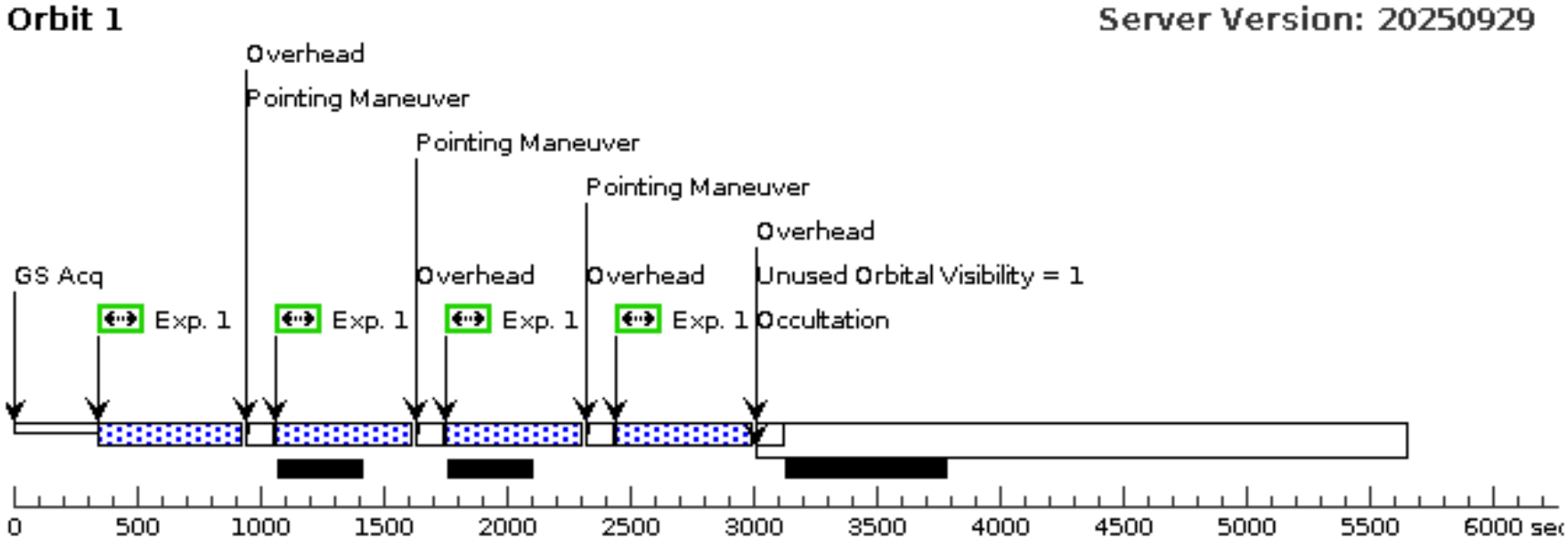
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	GALILEO	RA: 04 26 44.2992 (66.6845800d) Dec: -48 06 38.70 (-48.11075d) Equinox: J2000		V=22.7	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(4) GALILEO	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=8		Pattern 1, Exps 1-1 in galileo 814 (08) (1)	555 Secs (2220 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	*[1]*

Orbit Structure



Visit

Proposal 18097, DSPL1159+6732 475 (09), scheduling Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

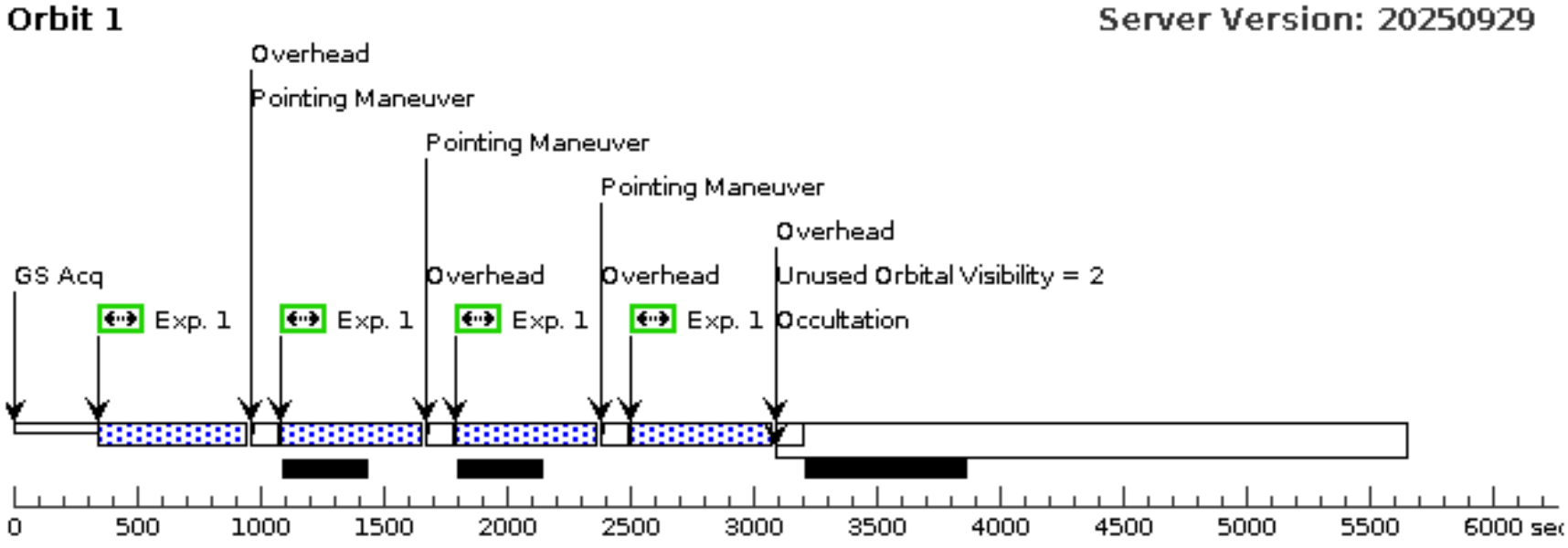
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	EUCLIDDSPL115943+673249	RA: 11 59 42.5520 (179.9273000d) Dec: +67 42 49.68 (67.71380d) Equinox: J2000		V=22	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(5) EUCLIDDSPL115943+673249	WFC3/UVIS, ACCUM, UVIS2	F475W	FLASH=9		Pattern 1, Exps 1-1 in DSPL1159+6732 475 (09) (1)	575 Secs (2300 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	*[1]*

Orbit Structure



Visit

Proposal 18097, DSPL1159+6732 814 (10), scheduling Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

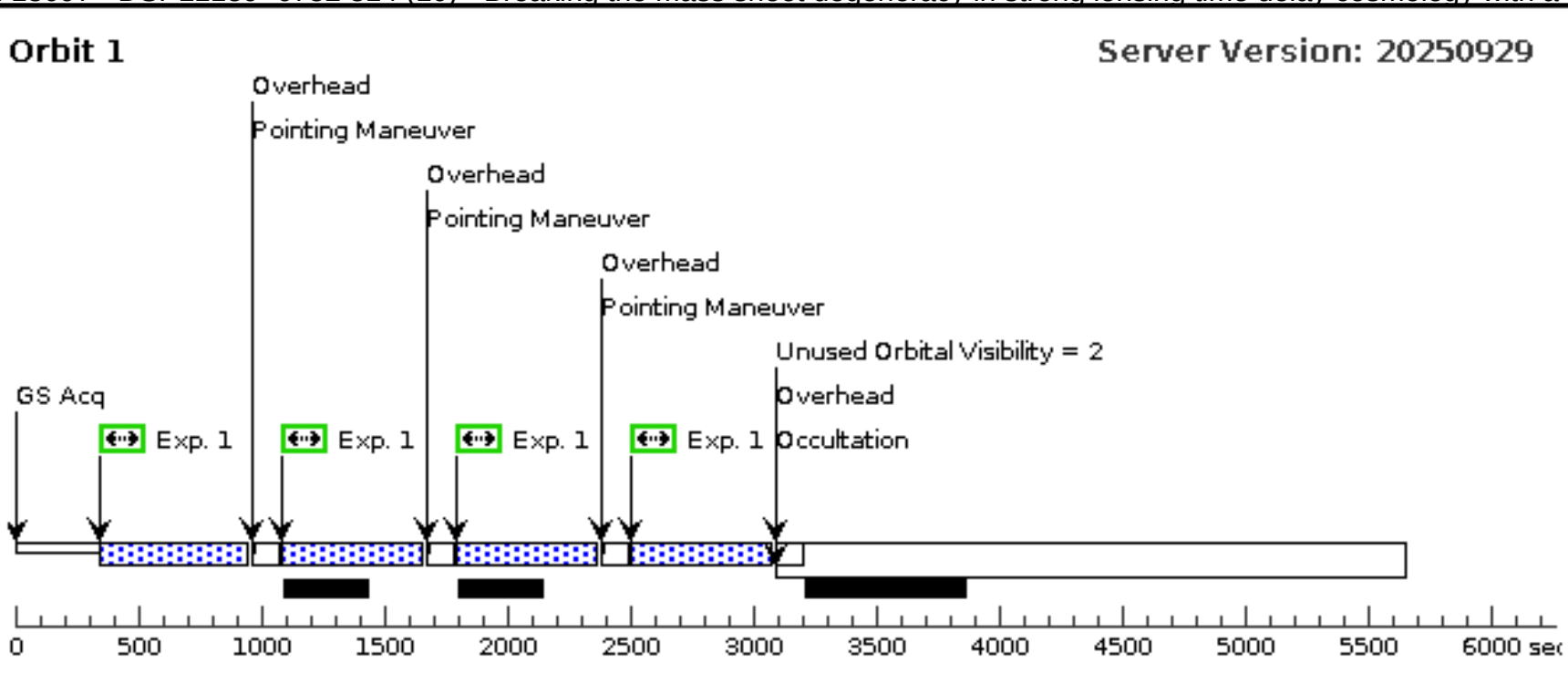
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	EUCLIDDSPL115943+673249	RA: 11 59 42.5520 (179.9273000d) Dec: +67 42 49.68 (67.71380d) Equinox: J2000		V=22	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(5) EUCLIDDSPL115943+673249	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=8		Pattern 1, Exps 1-1 in DSPL1159+6732 814 (10) (1)	575 Secs (2300 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	***[1]***

Orbit Structure



Visit

Proposal 18097, DSPL1257+6406 475 (11), completed Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

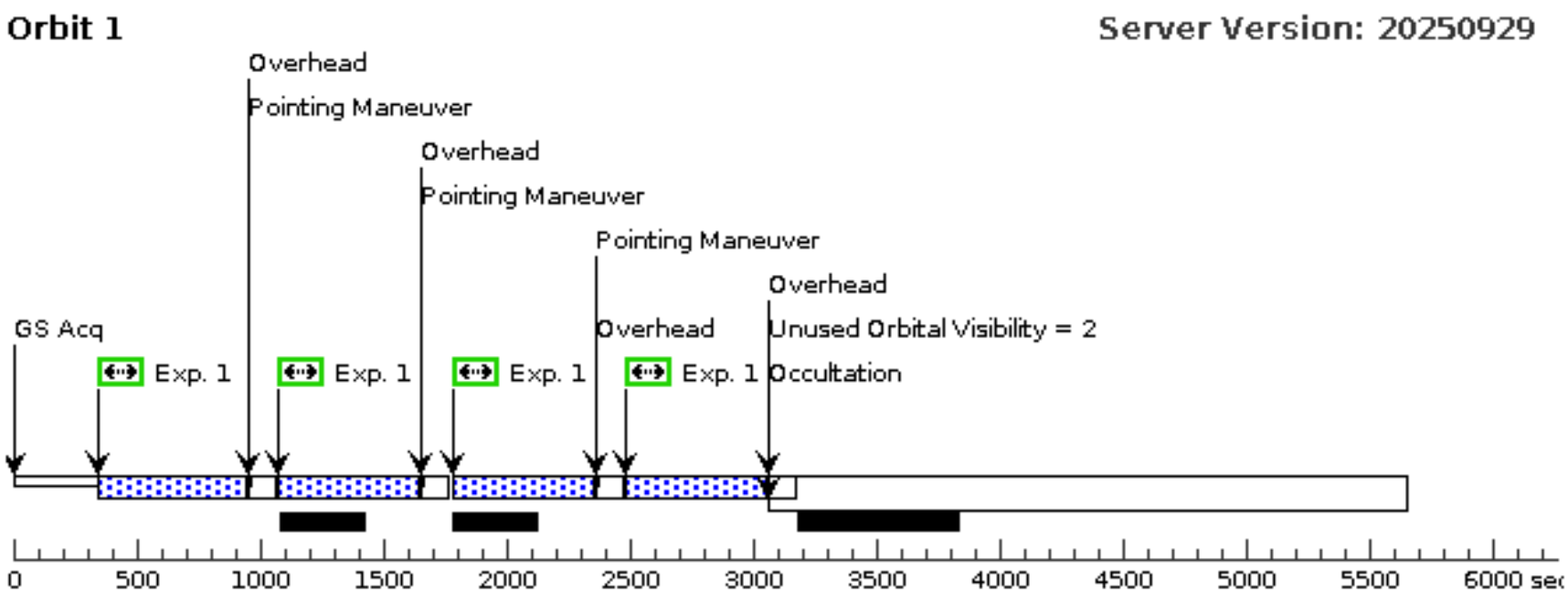
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	EUCLIDDSPL125718+640613	RA: 12 57 18.5520 (194.3273000d) Dec: +64 06 13.32 (64.10370d) Equinox: J2000		V=22	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	DSPL1257+6406 475	(6) EUCLIDDSPL125718+640613	WFC3/UVIS, ACCUM, UVIS2	F475W	FLASH=9		Pattern 1, Exps 1-1 in DSPL1257+6406 475 (11) (1)	568 Secs (2272 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	***[1]***

Orbit Structure



Visit

Proposal 18097, DSPL1257+6406 814 (12), completed Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

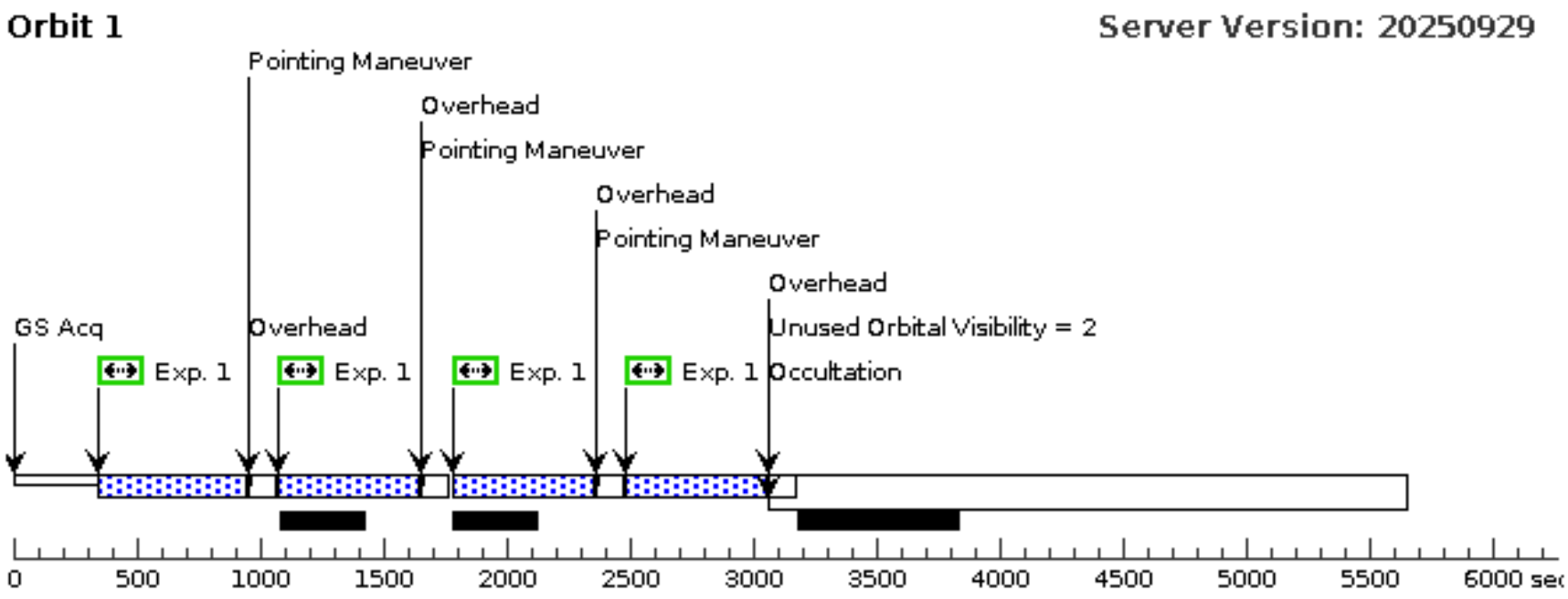
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	EUCLIDDSPL125718+640613	RA: 12 57 18.5520 (194.3273000d) Dec: +64 06 13.32 (64.10370d) Equinox: J2000		V=22	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(6) EUCLIDDSPL125718+640613	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=8		Pattern 1, Exps 1-1 in DSPL1257+6406 814 (12) (1)	568 Secs (2272 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	***[1]***

Orbit Structure



Visit

Proposal 18097, DSPL2353-6021 F475 (13), scheduling Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

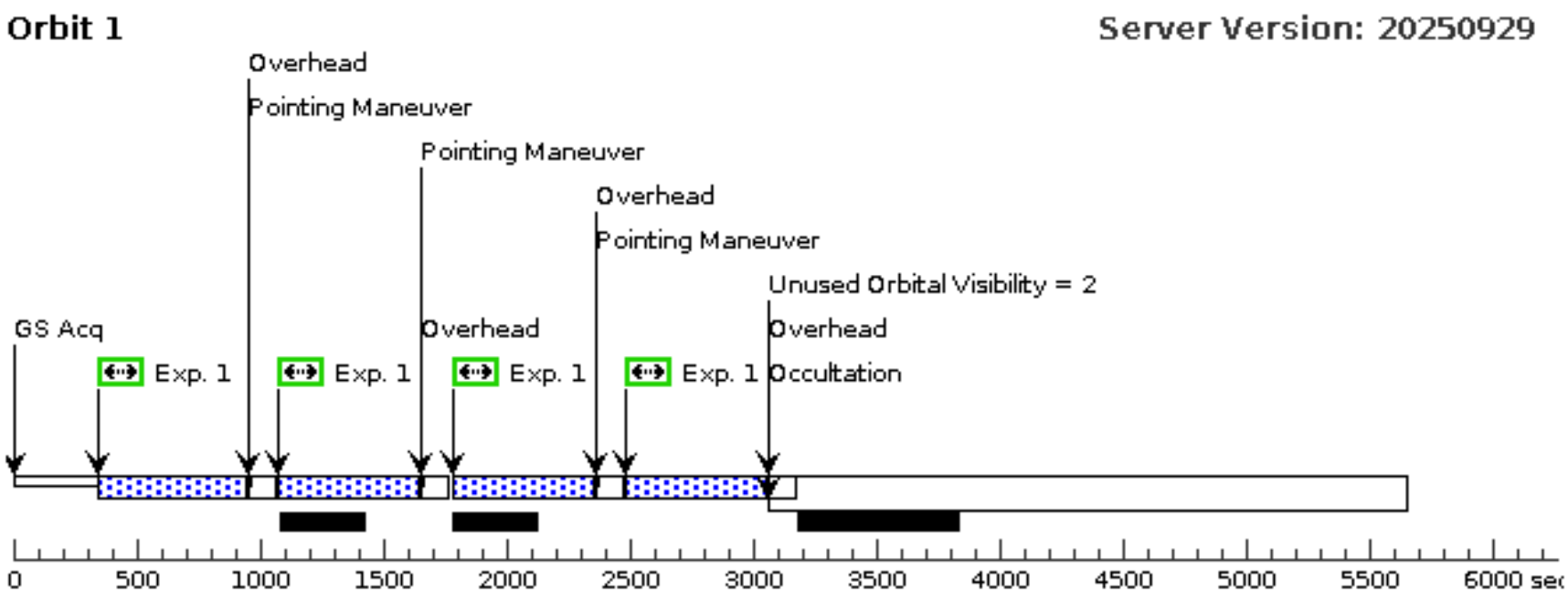
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	EUCLIDDSPL235319-602119	RA: 23 53 19.4640 (358.3311000d) Dec: -60 21 19.80 (-60.35550d) Equinox: J2000		V=22	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	DSPL2353-6021 F814	(7) EUCLIDDSPL235319-602119	WFC3/UVIS, ACCUM, UVIS2	F475W	FLASH=9		Pattern 1, Exps 1-1 in DSPL2353-6021 F475 (13) (1)	568 Secs (2272 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	***[1]***

Orbit Structure



Visit

Proposal 18097, DSPL2353-6021 F814 (14), scheduling Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

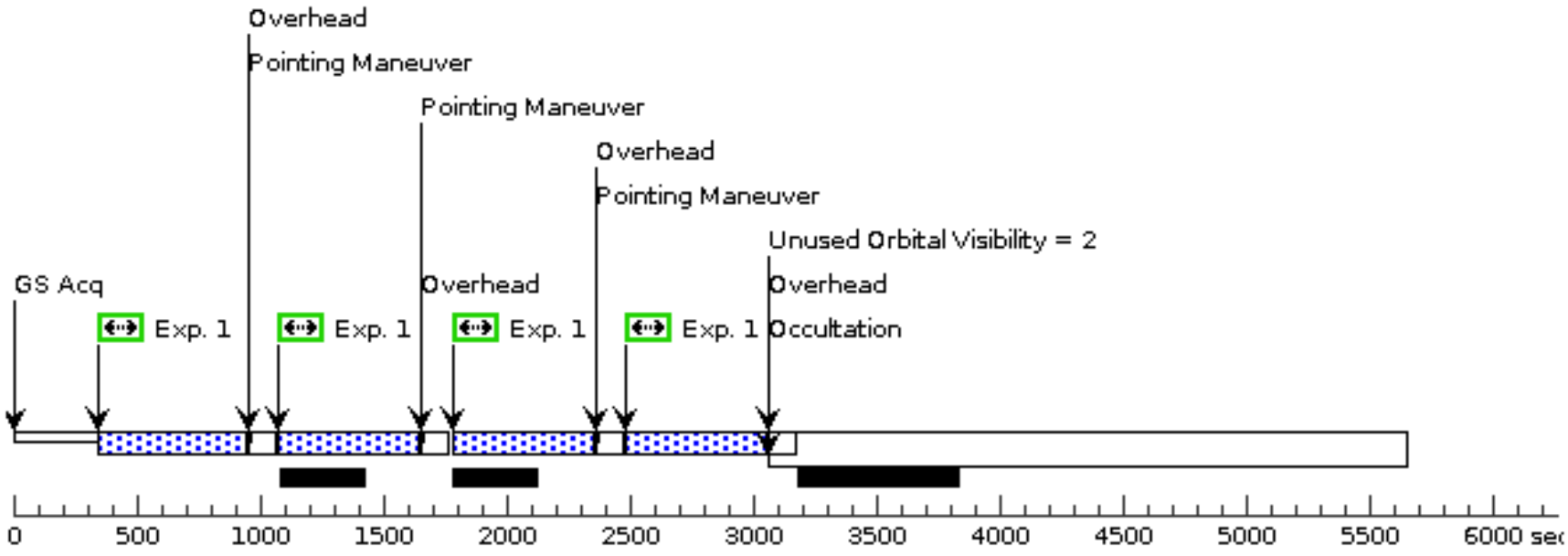
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	EUCLIDDSPL235319-602119	RA: 23 53 19.4640 (358.3311000d) Dec: -60 21 19.80 (-60.35550d) Equinox: J2000		V=22	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	DSPL2353-6021 F814	(7) EUCLIDDSPL235319-602119	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=8		Pattern 1, Exps 1-1 in DSPL2353-6021 F814 (14) (1)	568 Secs (2272 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	***[1]***

Orbit Structure



Visit

Proposal 18097, DSPL0444-3808 F475 (15), scheduling Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

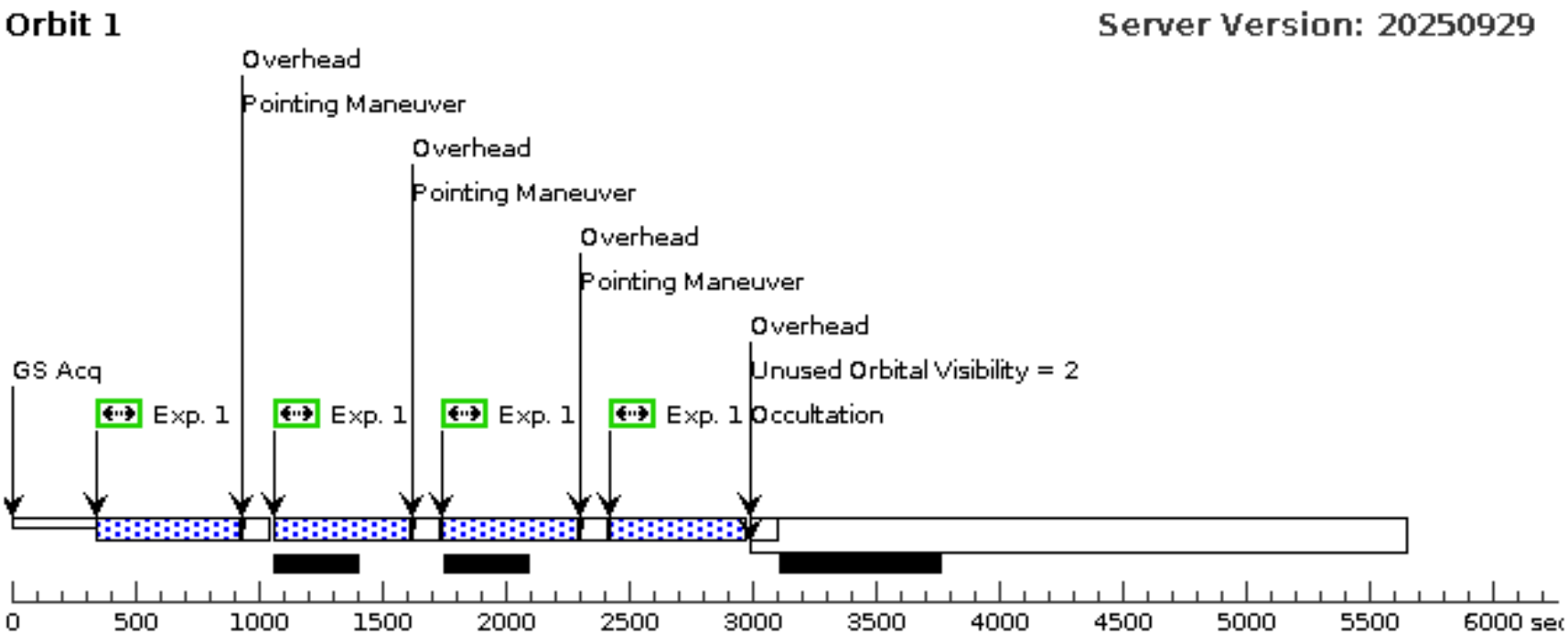
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	EUCLIDDSPL044453-380845	RA: 04 44 53.0640 (71.2211000d) Dec: -38 08 45.60 (-38.14600d) Equinox: J2000		V=22	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	DSPL0444-3808 F814	(8) EUCLIDDSPL044453-380845	WFC3/UVIS, ACCUM, UVIS2	F475W	FLASH=9		Pattern 1, Exps 1-1 in DSPL0444-3808 F475 (15) (1)	550 Secs (2200 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	***[1]***

Orbit Structure



Visit

Proposal 18097, DSPL0444-3808 F814 (16), scheduling Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

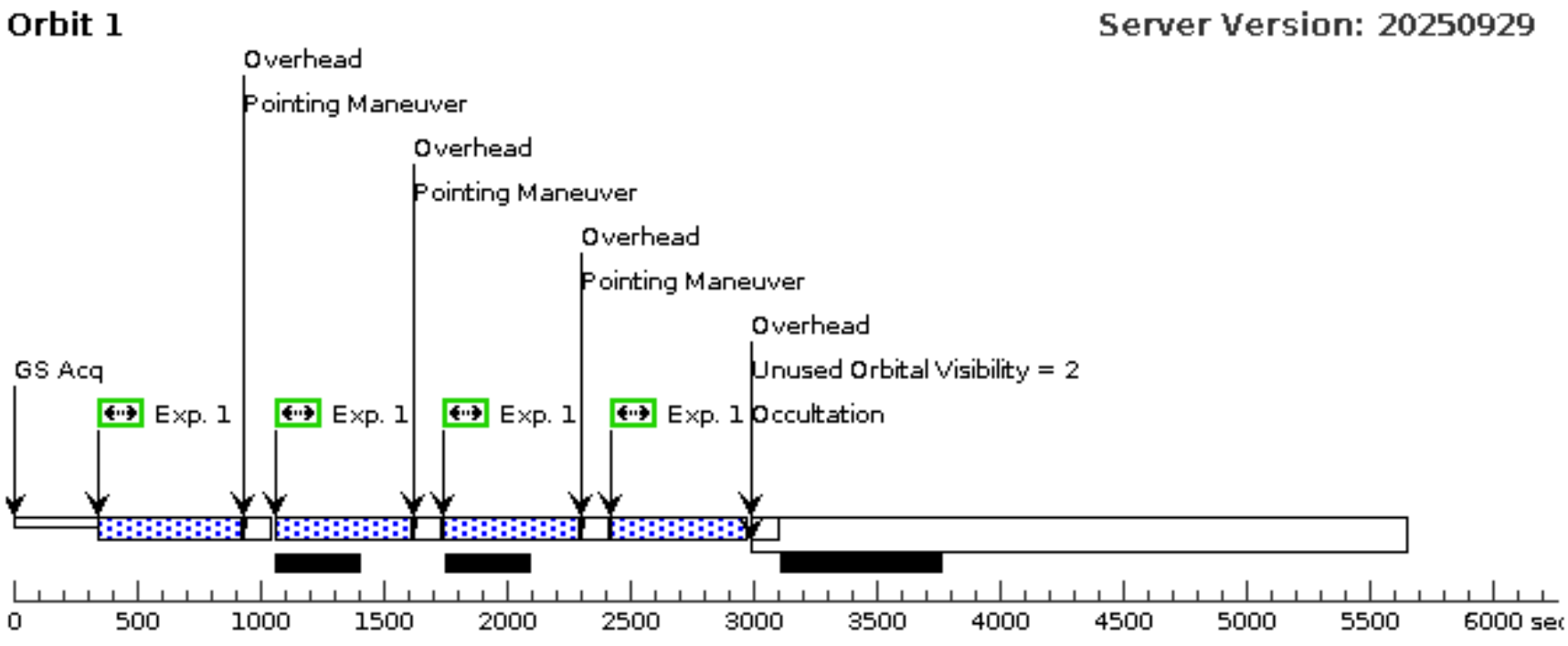
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	EUCLIDDSPL044453-380845	RA: 04 44 53.0640 (71.2211000d) Dec: -38 08 45.60 (-38.14600d) Equinox: J2000		V=22	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	DSPL0444-3808 F814	(8) EUCLIDDSPL044453-380845	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=8		Pattern 1, Exps 1-1 in DSPL0444-3808 F814 (16) (1)	550 Secs (2200 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	***[1]***

Orbit Structure



Visit

Proposal 18097, DSPL0532-3715 F475 (17), scheduling Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

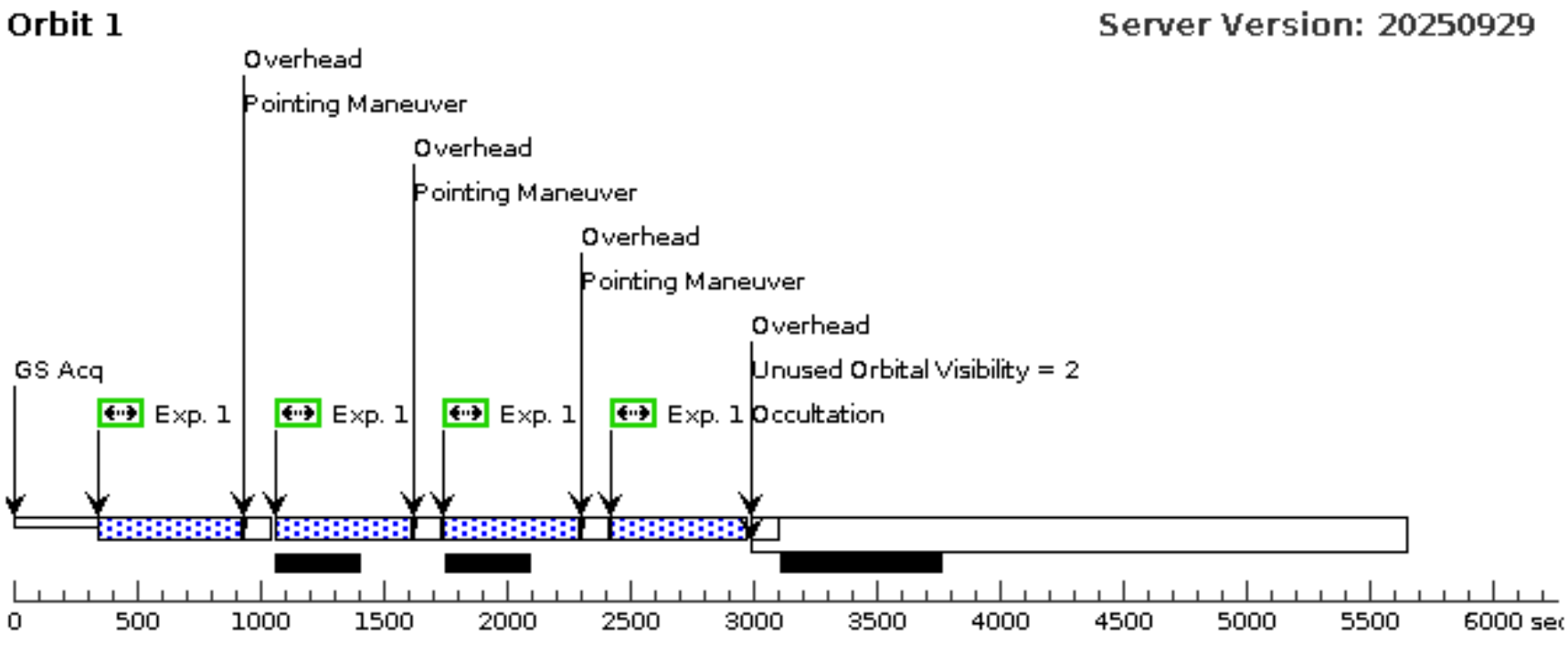
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(9)	EUCLIDDSPL053233-371545	RA: 05 32 33.6240 (83.1401000d) Dec: -37 15 45.72 (-37.26270d) Equinox: J2000		V=22	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	DSPL0532-3715 F814	(9) EUCLIDDSPL053233-371545	WFC3/UVIS, ACCUM, UVIS2	F475W	FLASH=9		Pattern 1, Exps 1-1 in DSPL0532-3715 F475 (17) (1)	550 Secs (2200 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	***[1]***

Orbit Structure



Visit

Proposal 18097, DSPL0532-3715 F814 (18), scheduling Thu Apr 02 18:01:00 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(9)	EUCLIDDSPL053233-371545	RA: 05 32 33.6240 (83.1401000d) Dec: -37 15 45.72 (-37.26270d) Equinox: J2000		V=22	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[GRAVITATIONAL LENS]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	DSPL0532-3715 F814	(9) EUCLIDDSPL053233-371545	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=8		Pattern 1, Exps 1-1 in DSPL0532-3715 F814 (18) (1)	550 Secs (2200 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	***[1]***

Orbit Structure