17103 - GO: Calibrating the Black-Hole Mass Scaling Relations using Reverberation-Mapped Active Galaxies with Velocity-Resolved Measurements

Cycle: 30, Proposal Category: GO

(Availability Mode: AVAILABLE)

INVESTIGATORS

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) MRK335	WFC3/UVIS	1	24-Apr-2023 09:00:17.0	yes
02	(2) IRAS09149-6206	WFC3/UVIS	1	24-Apr-2023 09:00:18.0	yes
03	(3) MRK141	WFC3/UVIS	1	24-Apr-2023 09:00:19.0	yes
04	(4) PG1310-108	WFC3/UVIS	1	24-Apr-2023 09:00:20.0	yes
05	(5) RBS1303	WFC3/UVIS	1	24-Apr-2023 09:00:21.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
55	(5) RBS1303	WFC3/UVIS	1	24-Apr-2023 09:00:22.0	yes
06	(6) MRK279	WFC3/UVIS	1	24-Apr-2023 09:00:22.0	yes
56	(6) MRK279	WFC3/UVIS	1	24-Apr-2023 09:00:23.0	yes
57	(6) MRK279	WFC3/UVIS	1	24-Apr-2023 09:00:24.0	yes
07	(7) MRK841	WFC3/UVIS	1	24-Apr-2023 09:00:25.0	yes
08	(8) MRK1392	WFC3/UVIS	1	24-Apr-2023 09:00:26.0	yes
09	(9) NPM1G+27.0587	WFC3/UVIS	1	24-Apr-2023 09:00:26.0	yes
10	(10) PG2209+184	WFC3/UVIS	1	24-Apr-2023 09:00:27.0	yes
11	(11) RBS1917	WFC3/UVIS	1	24-Apr-2023 09:00:28.0	yes

14 Total Orbits Used

ABSTRACT

Reverberation mapping (RM) determines the mass of black holes (MBH) in active galactic nuclei (AGNs) by resolving the BH gravitational sphere of influence "in time". The resulting relationship between broad-line region (BLR) radius and AGN luminosity (the "R-L relation") is the foundation of virtually all MBH measurements beyond the local universe. Recent RM campaigns with high-quality data (cadence and S/N) yielded velocity-resolved time lags and independent BH masses for a sample of 29 objects, spanning a wide range of AGN luminosities and BH masses (6.4<log MBH/Msun<9.1). Integral-field spectroscopy was obtained with state-of-the-art instruments (Keck/KCWI and VLT/MUSE) for 11 objects for a robust measurement of stellar-velocity dispersion. HST images are essential to: (i) separate the nuclear luminosity from that of the host and thus calibrate the R-L relation over a wide mass range; (ii) determine the correlations between MBH and host-galaxy properties, such as bulge and host-galaxy luminosities, bulge effective-radii, and morphology (frequency of pseudo-bulges, bars, and mergers). Archival HST images are available for 18 objects (see our AR proposal ID 3094), we propose here for the remaining 11. This sample has the most accurate MBH measurements beyond the local universe and will provide a fundamental local benchmark for studies of the evolution of massive black holes and their host galaxies across cosmic time. Measuring the distribution and scatter of f factors and looking for other dependencies to go beyond the sample-average f factor will help to better constrain the single-epoch BH mass.

OBSERVING DESCRIPTION

11 objects will be observed with WFC3/UVIS in F814W to maximize the contrast between AGN and host, avoiding strong AGN emission lines, while taking full advantage of the high resolution of UVIS. The ETC indicates saturation for the brightest objects after 10-70s. To obtain the dynamic range needed for an accurate decomposition of the host galaxy and the AGN, the long exposures will be complemented by short, unsaturated ones. A two-point dither pattern with semi-integer pixel offsets will be used which allow to reject cosmic rays and hot pixels and increase the sampling of the PSF and to bridge the gap between the WFC3 UVIS detectors. To allow for individual flash settings, we will use Pos Targ for dithering rather than the default dither pattern (WFC3-UVIS-GAP-LINE). One short (10 sec) and two long exposures (~500-600 sec depending on orbital visibility) at both dither locations will be taken. The short exposure will be taken with Blade=A. A sequence of "short-long-long-dither-long-long-short" will result in minimal additional overhead as the buffer can be dumped during the long exposure or at the end of the orbit.

Our program does not have any orient restrictions. All objects will be observed with one orbit each. All visits have multiple scheduling opportunities during cycle 30. Thus, we expect any impact of potentially going to reduced-gyro mode to be minimal.

Visit

Proposal 17103, Mrk335 (01), scheduling Mon Apr 24 13:00:29 GMT 2023

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Fixed Targets

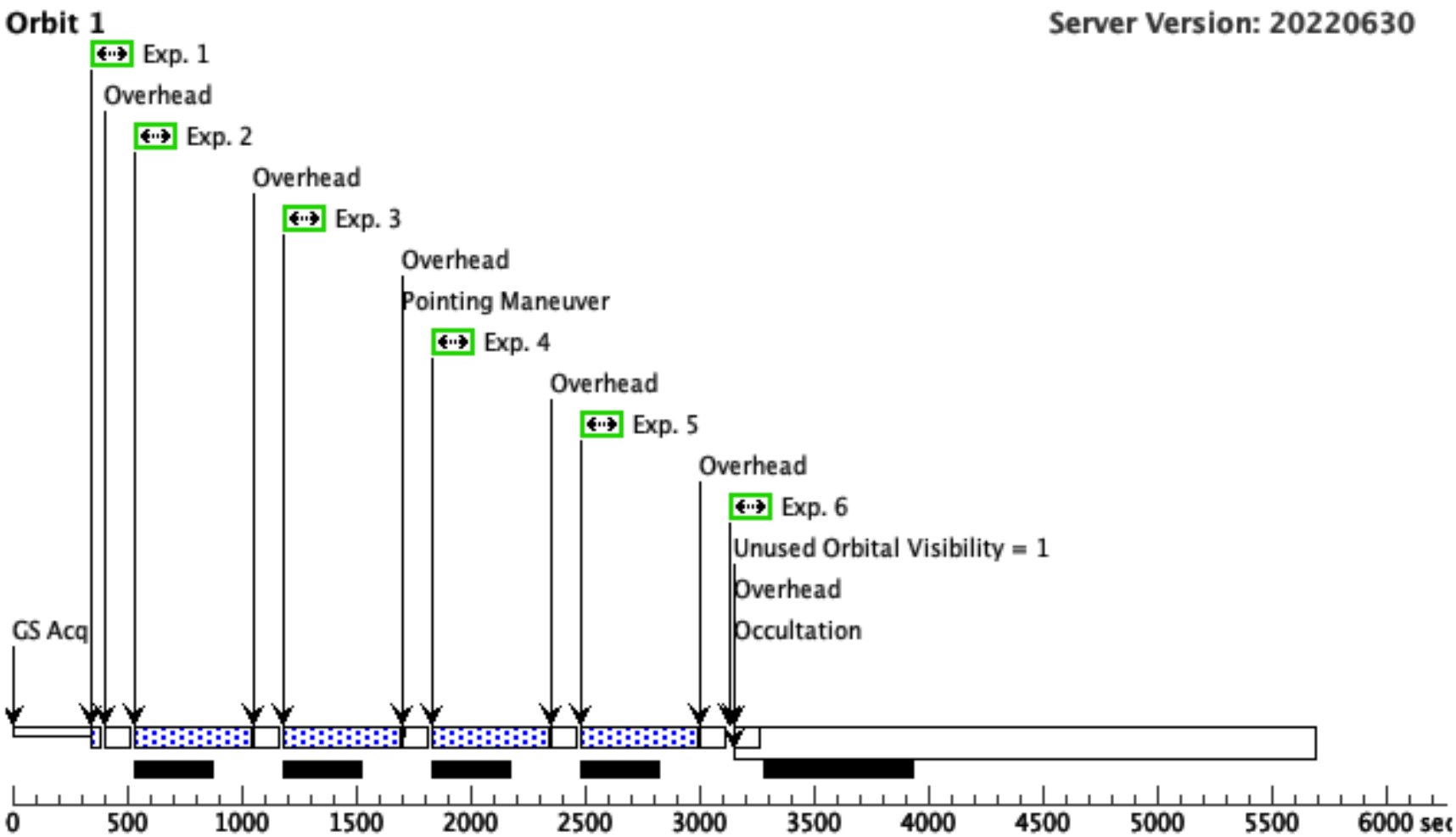
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	MRK335	RA: 00 06 19.5372 (1.5814050d) Dec: +20 12 10.62 (20.20295d) Equinox: J2000		V=13.85 z=0.026; log MBH/Msun = 7.25	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[SEYFERT]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) MRK335	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	POS TARG -0.089,-1.203		10 Secs (10 Secs) *[==>]*	*[1]*
2		(1) MRK335	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 1		517 Secs (517 Secs) *[==>]*	*[1]*
3		(1) MRK335	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 1		517 Secs (517 Secs) *[==>]*	*[1]*
4		(1) MRK335	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	POS TARG 0.089,1.203		517 Secs (517 Secs) *[==>]*	*[1]*
5		(1) MRK335	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 4		517 Secs (517 Secs) *[==>]*	*[1]*
6		(1) MRK335	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	SAME POS AS 4		10 Secs (10 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17103, IRAS09149-6206 (02), completed Mon Apr 24 13:00:29 GMT 2023

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Fixed Targets

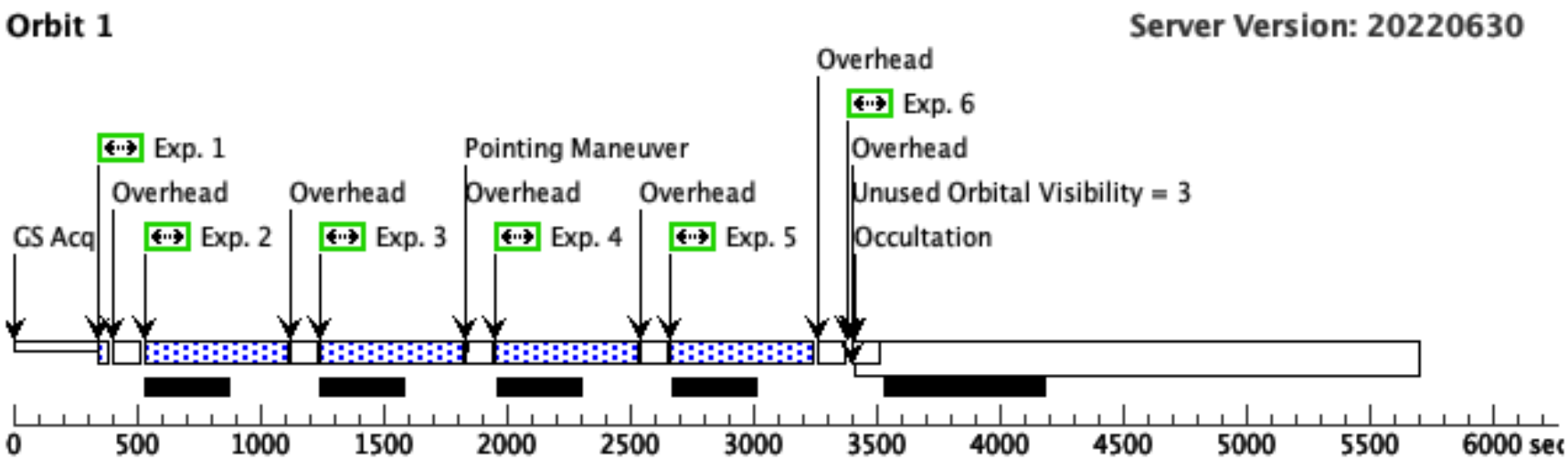
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	IRAS09149-6206	RA: 09 16 9.3662 (139.0390258d) Dec: -62 19 29.56 (-62.32488d) Equinox: J2000		V=(?) z=0.0573; log MBH/Msun = 8.0	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[SEYFERT]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) IRAS09149-6206	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	POS TARG -0.089,-1.203		10 Secs (10 Secs) *[==>]*	*[1]*
2		(2) IRAS09149-6206	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	SAME POS AS 1		581 Secs (581 Secs) *[==>]*	*[1]*
3		(2) IRAS09149-6206	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	SAME POS AS 1		581 Secs (581 Secs) *[==>]*	*[1]*
4		(2) IRAS09149-6206	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	POS TARG 0.089,1.203		581 Secs (581 Secs) *[==>]*	*[1]*
5		(2) IRAS09149-6206	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	SAME POS AS 4		581 Secs (581 Secs) *[==>]*	*[1]*
6		(2) IRAS09149-6206	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	SAME POS AS 4		10 Secs (10 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17103, Mrk141 (03), completed Mon Apr 24 13:00:29 GMT 2023

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Fixed Targets

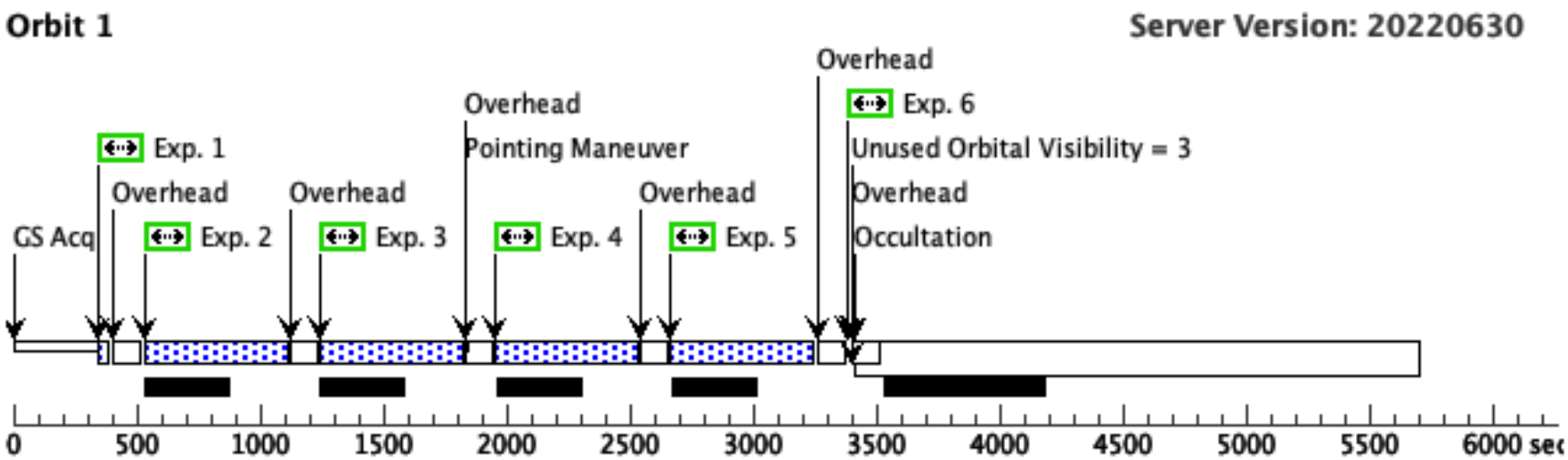
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	MRK141	RA: 10 19 12.5653 (154.8023554d) Dec: +63 58 2.63 (63.96740d) Equinox: J2000		V=15.0 z=0.0417; log MBH/Msun=7.5	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[SEYFERT]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(3) MRK141	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	POS TARG -0.089,-1.203		10 Secs (10 Secs) *[==>]*	*[1]*
2		(3) MRK141	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	SAME POS AS 1		581 Secs (581 Secs) *[==>]*	*[1]*
3		(3) MRK141	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	SAME POS AS 1		581 Secs (581 Secs) *[==>]*	*[1]*
4		(3) MRK141	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	POS TARG 0.089,1.203		581 Secs (581 Secs) *[==>]*	*[1]*
5		(3) MRK141	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	SAME POS AS 4		581 Secs (581 Secs) *[==>]*	*[1]*
6		(3) MRK141	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	SAME POS AS 4		10 Secs (10 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17103, PG1310-108 (04), scheduling Mon Apr 24 13:00:29 GMT 2023

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: ORIENT 80D TO 130 D; ORIENT 210D TO 0 D

Fixed Targets

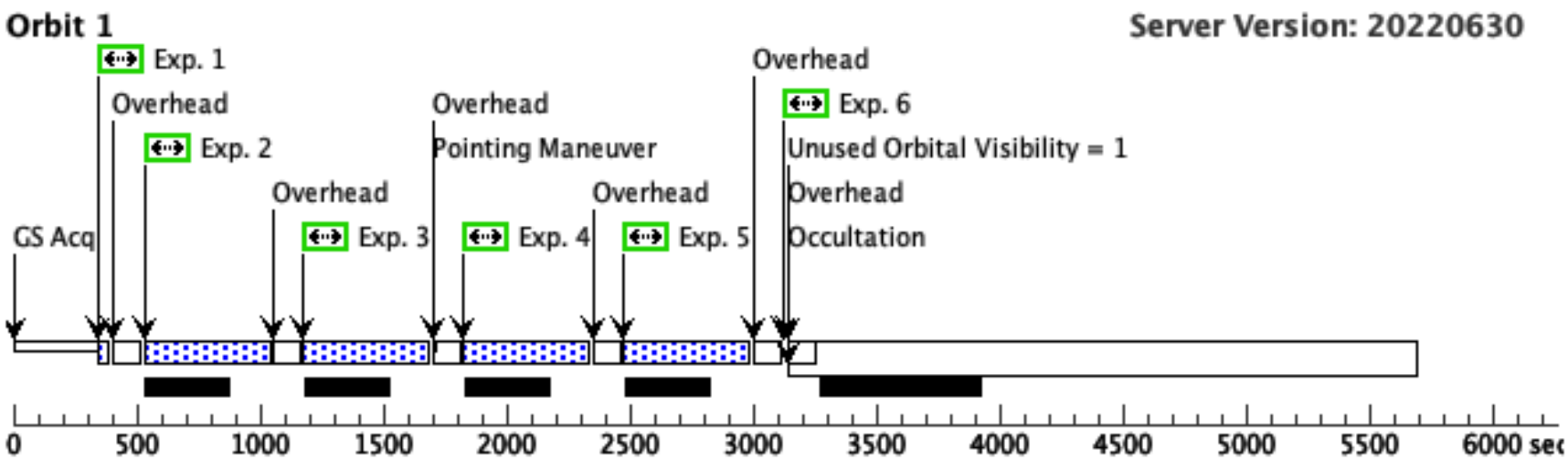
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	PG1310-108	RA: 13 13 5.7811 (198.2740879d) Dec: -11 07 42.37 (-11.12844d) Equinox: J2000		V=14.9 z=0.034; log MBH/Msun = 6.94	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[SEYFERT]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(4) PG1310-108	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	POS TARG -0.089,-1.203		10 Secs (10 Secs) *[==>]*	*[1]*
2		(4) PG1310-108	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 1		515 Secs (515 Secs) *[==>]*	*[1]*
3		(4) PG1310-108	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 1		515 Secs (515 Secs) *[==>]*	*[1]*
4		(4) PG1310-108	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	POS TARG 0.089,1.203		515 Secs (515 Secs) *[==>]*	*[1]*
5		(4) PG1310-108	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 4		515 Secs (515 Secs) *[==>]*	*[1]*
6		(4) PG1310-108	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	SAME POS AS 4		10 Secs (10 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17103, RBS1303 (05), failed — Mon Apr 24 13:00:29 GMT 2023

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Fixed Targets

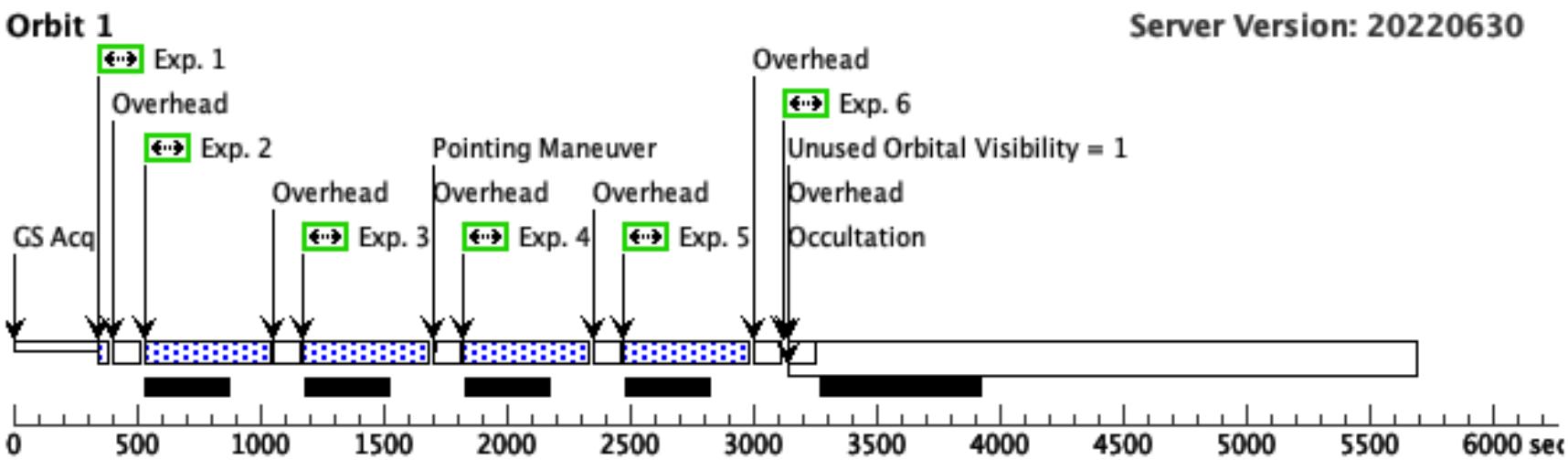
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	RBS1303	RA: 13 41 12.8836 (205.3036817d) Dec: -14 38 40.25 (-14.64451d) Equinox: J2000		V=14.63 z=0.0418; log MBH/Msun=7.40	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[SEYFERT]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(5) RBS1303	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	POS TARG -0.089,-1.203		10 Secs (10 Secs) *[==>]*	*[1]*
2		(5) RBS1303	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 1		515 Secs (515 Secs) *[==>]*	*[1]*
3		(5) RBS1303	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 1		515 Secs (515 Secs) *[==>]*	*[1]*
4		(5) RBS1303	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	POS TARG 0.089,1.203		515 Secs (515 Secs) *[==>]*	*[1]*
5		(5) RBS1303	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 4		515 Secs (515 Secs) *[==>]*	*[1]*
6		(5) RBS1303	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	SAME POS AS 4		10 Secs (10 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17103, RBS1303 (55), implementation Mon Apr 24 13:00:29 GMT 2023

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Comments: HOPR repeat for visit 5.

Fixed Targets

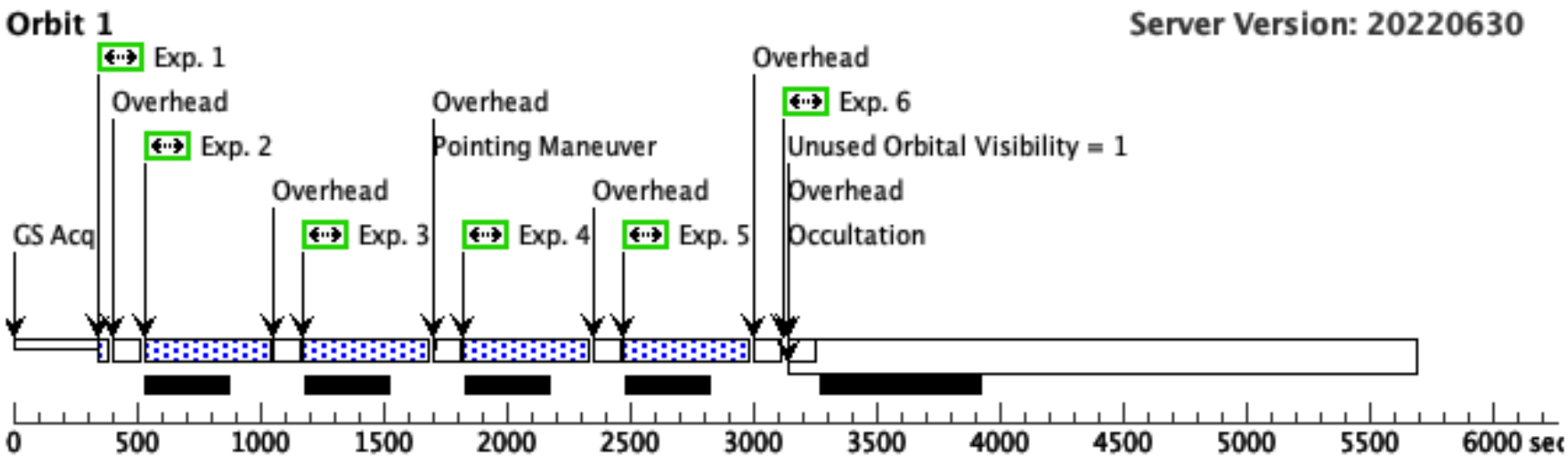
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	RBS1303	RA: 13 41 12.8836 (205.3036817d) Dec: -14 38 40.25 (-14.64451d) Equinox: J2000		V=14.63 z=0.0418; log MBH/Msun=7.40	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[SEYFERT]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(5) RBS1303	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	POS TARG -0.089,-1.203		10 Secs (10 Secs) *[==>]*	*[1]*
2		(5) RBS1303	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 1		515 Secs (515 Secs) *[==>]*	*[1]*
3		(5) RBS1303	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 1		515 Secs (515 Secs) *[==>]*	*[1]*
4		(5) RBS1303	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	POS TARG 0.089,1.203		515 Secs (515 Secs) *[==>]*	*[1]*
5		(5) RBS1303	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 4		515 Secs (515 Secs) *[==>]*	*[1]*
6		(5) RBS1303	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	SAME POS AS 4		10 Secs (10 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17103, Mrk279 (06), failed Mon Apr 24 13:00:29 GMT 2023

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: ORIENT 50D TO 350 D

Fixed Targets

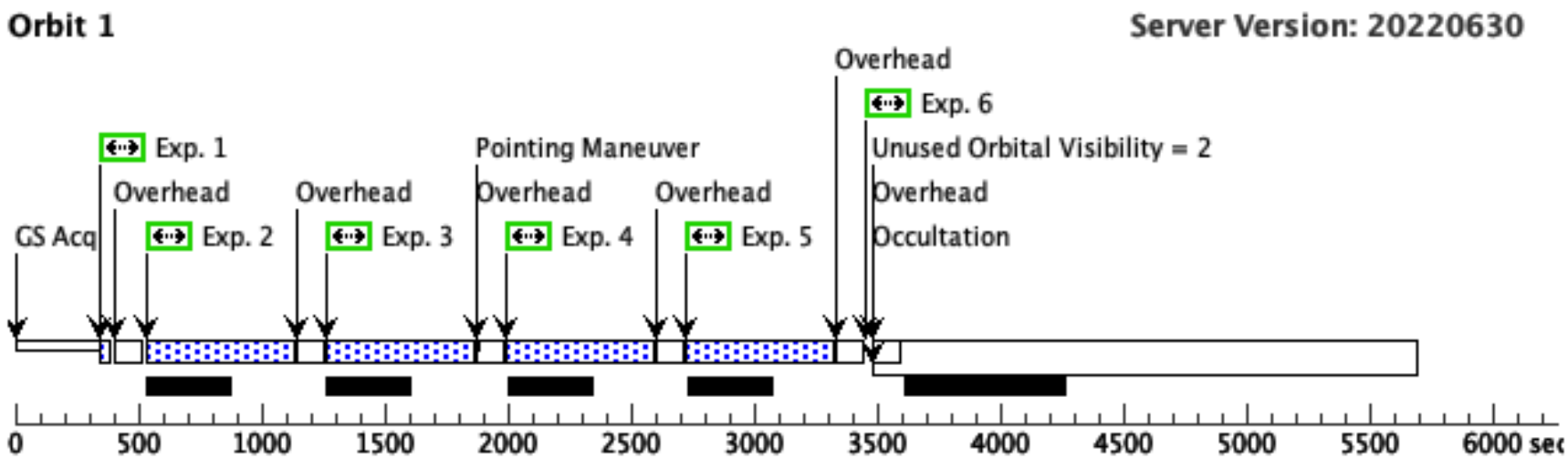
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	MRK279	RA: 13 53 3.4349 (208.2643121d) Dec: +69 18 29.41 (69.30817d) Equinox: J2000		V=14.46 z=0.0305, log MBH/Msun = 7.58	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[SEYFERT]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(6) MRK279	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	POS TARG -0.089,-1.203		10 Secs (10 Secs) *[==>]*	*[1]*
2		(6) MRK279	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	SAME POS AS 1		600 Secs (600 Secs) *[==>]*	*[1]*
3		(6) MRK279	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	SAME POS AS 1		600 Secs (600 Secs) *[==>]*	*[1]*
4		(6) MRK279	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	POS TARG 0.089,1.203		600 Secs (600 Secs) *[==>]*	*[1]*
5		(6) MRK279	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	SAME POS AS 4		600 Secs (600 Secs) *[==>]*	*[1]*
6		(6) MRK279	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	SAME POS AS 4		10 Secs (10 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17103, Mrk279 (56), failed Mon Apr 24 13:00:29 GMT 2023

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: ORIENT 50D TO 350 D

Comments: HOPR repeat of visit 6.

Fixed Targets

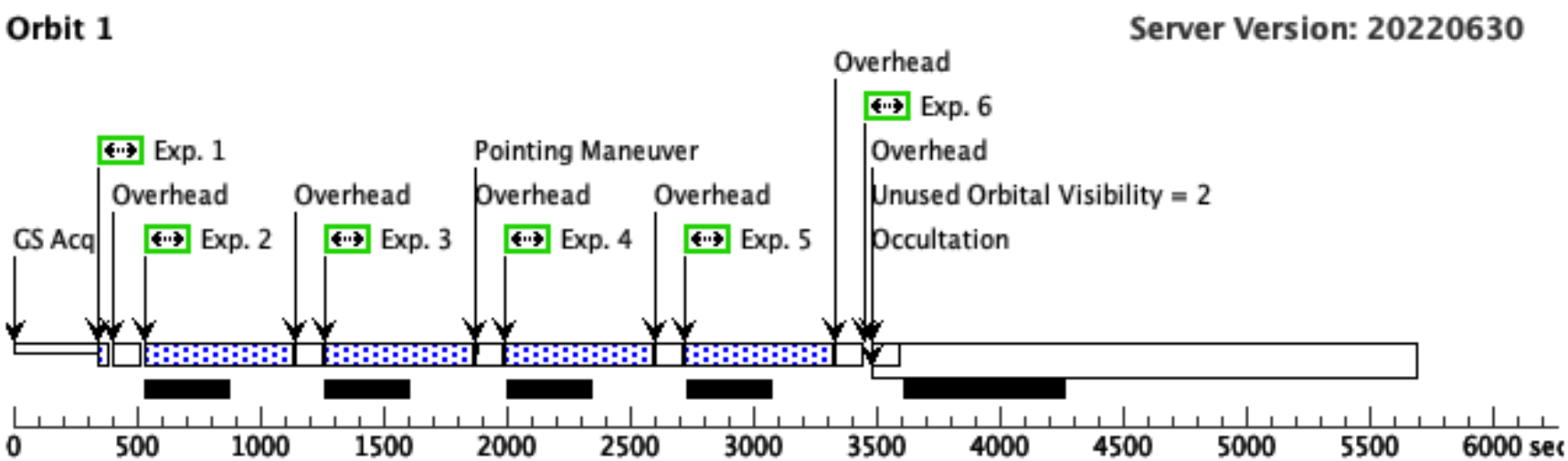
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	MRK279	RA: 13 53 3.4349 (208.2643121d) Dec: +69 18 29.41 (69.30817d) Equinox: J2000		V=14.46 z=0.0305, log MBH/Msun = 7.58	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[SEYFERT]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(6) MRK279	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	POS TARG -0.089,-1.203		10 Secs (10 Secs) *[==>]*	*[1]*
2		(6) MRK279	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	SAME POS AS 1		600 Secs (600 Secs) *[==>]*	*[1]*
3		(6) MRK279	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	SAME POS AS 1		600 Secs (600 Secs) *[==>]*	*[1]*
4		(6) MRK279	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	POS TARG 0.089,1.203		600 Secs (600 Secs) *[==>]*	*[1]*
5		(6) MRK279	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	SAME POS AS 4		600 Secs (600 Secs) *[==>]*	*[1]*
6		(6) MRK279	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	SAME POS AS 4		10 Secs (10 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17103, Mrk279 (57) Mon Apr 24 13:00:29 GMT 2023

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: ORIENT 50D TO 350 D

Comments: HOPR repeat of visit 56.

Fixed Targets

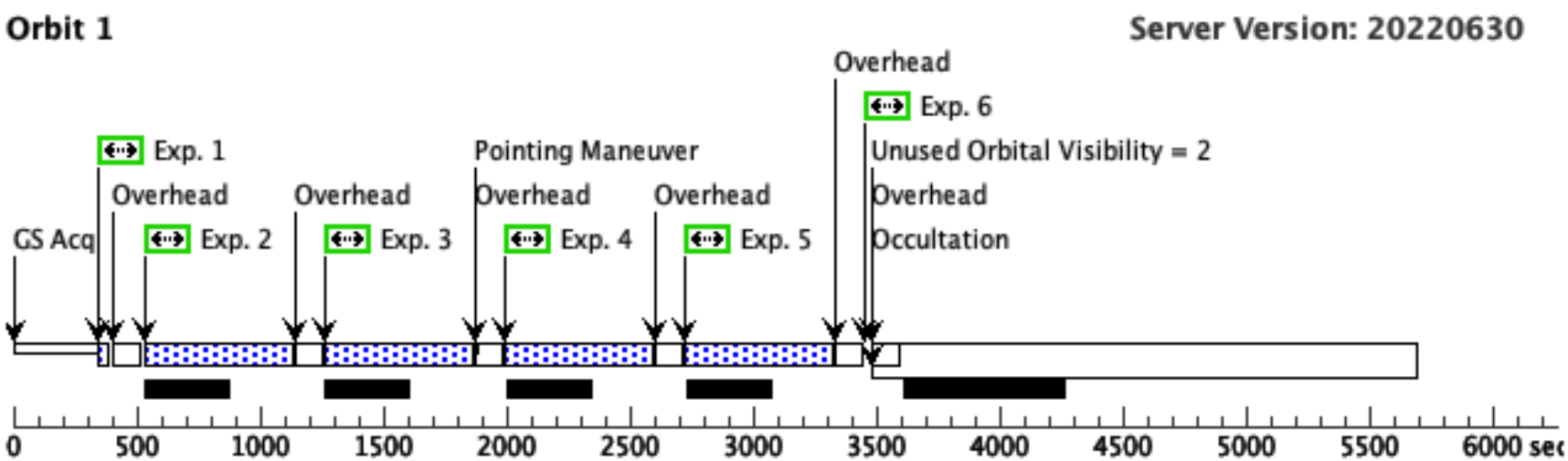
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	MRK279	RA: 13 53 3.4349 (208.2643121d) Dec: +69 18 29.41 (69.30817d) Equinox: J2000		V=14.46 z=0.0305, log MBH/Msun = 7.58	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[SEYFERT]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(6) MRK279	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	POS TARG -0.089,-1.203		10 Secs (10 Secs) *[==>]*	*[1]*
2		(6) MRK279	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	SAME POS AS 1		600 Secs (600 Secs) *[==>]*	*[1]*
3		(6) MRK279	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	SAME POS AS 1		600 Secs (600 Secs) *[==>]*	*[1]*
4		(6) MRK279	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	POS TARG 0.089,1.203		600 Secs (600 Secs) *[==>]*	*[1]*
5		(6) MRK279	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=3	SAME POS AS 4		600 Secs (600 Secs) *[==>]*	*[1]*
6		(6) MRK279	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	SAME POS AS 4		10 Secs (10 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17103, Mrk841 (07), scheduling Mon Apr 24 13:00:29 GMT 2023

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Fixed Targets

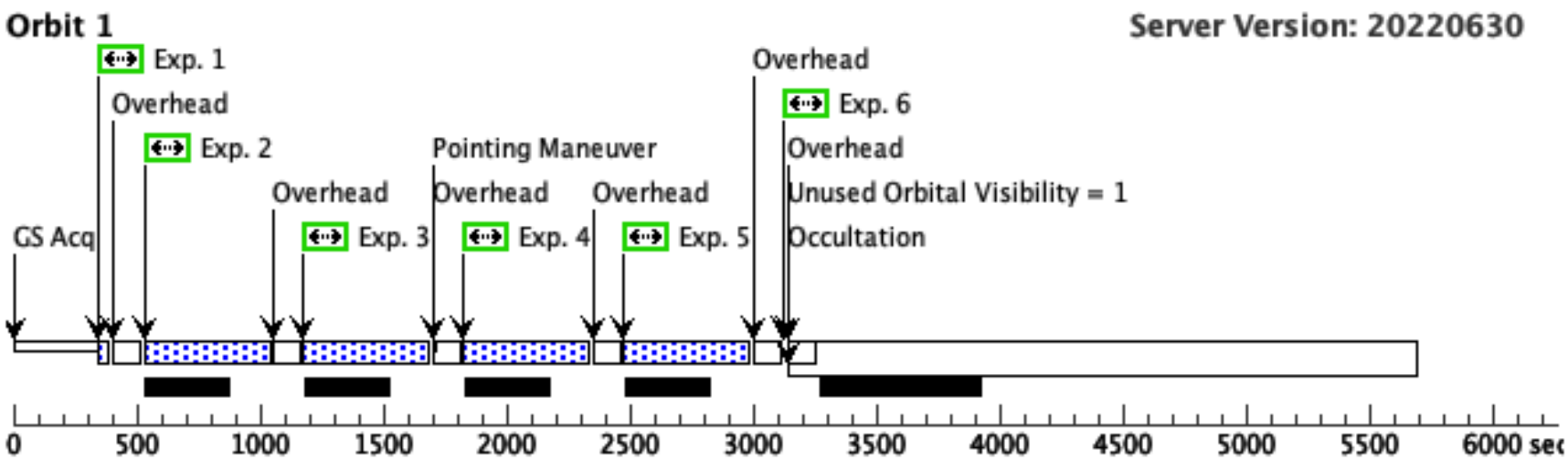
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	MRK841	RA: 15 04 1.1935 (226.0049729d) Dec: +10 26 15.78 (10.43772d) Equinox: J2000		V=16.0 z=0.0364; log MBH/Msun=7.67	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[SEYFERT]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(7) MRK841	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	POS TARG -0.089,-1.203		10 Secs (10 Secs) *[==>]*	*[1]*
2		(7) MRK841	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 1		515 Secs (515 Secs) *[==>]*	*[1]*
3		(7) MRK841	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 1		515 Secs (515 Secs) *[==>]*	*[1]*
4		(7) MRK841	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	POS TARG 0.089,1.203		515 Secs (515 Secs) *[==>]*	*[1]*
5		(7) MRK841	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 4		515 Secs (515 Secs) *[==>]*	*[1]*
6		(7) MRK841	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	SAME POS AS 4		10 Secs (10 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17103, Mrk1392 (08), completed Mon Apr 24 13:00:29 GMT 2023

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Fixed Targets

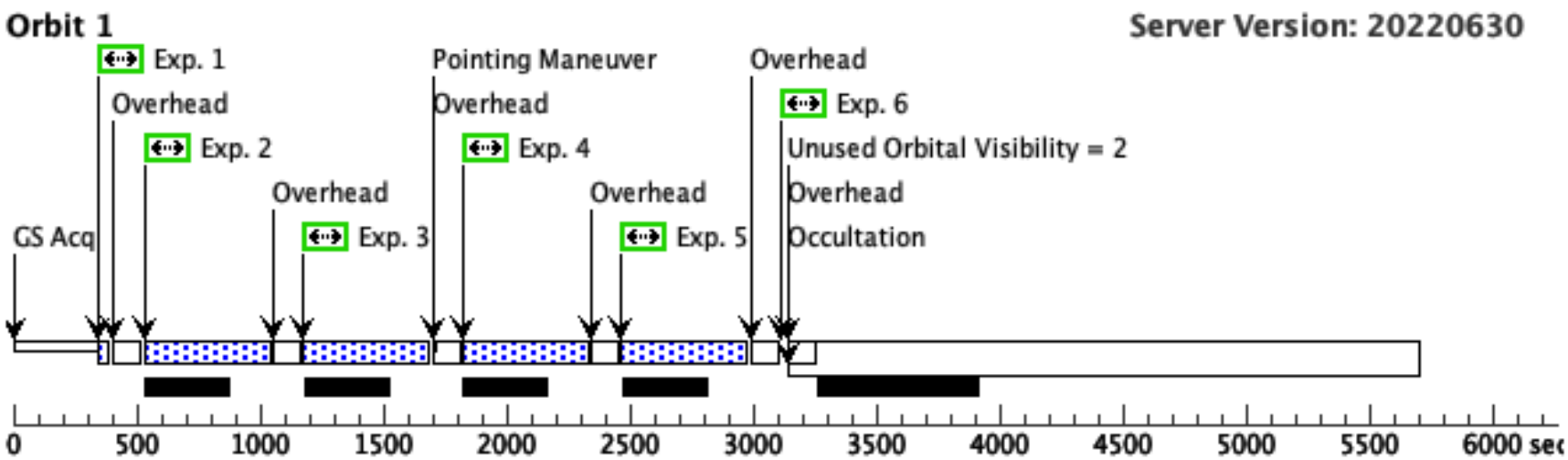
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	MRK1392	RA: 15 05 56.5521 (226.4856338d) Dec: +03 42 26.34 (3.70732d) Equinox: J2000		V=14.3 z=0.0361; log MBH/Msun=7.80	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[SEYFERT]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(8) MRK1392	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	POS TARG -0.089,-1.203		10 Secs (10 Secs) *[==>]*	*[1]*
2		(8) MRK1392	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 1		513 Secs (513 Secs) *[==>]*	*[1]*
3		(8) MRK1392	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 1		513 Secs (513 Secs) *[==>]*	*[1]*
4		(8) MRK1392	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	POS TARG 0.089,1.203		513 Secs (513 Secs) *[==>]*	*[1]*
5		(8) MRK1392	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 4		513 Secs (513 Secs) *[==>]*	*[1]*
6		(8) MRK1392	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	SAME POS AS 4		10 Secs (10 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17103, NPM1G+27.0587 (09), completed Mon Apr 24 13:00:29 GMT 2023

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Fixed Targets

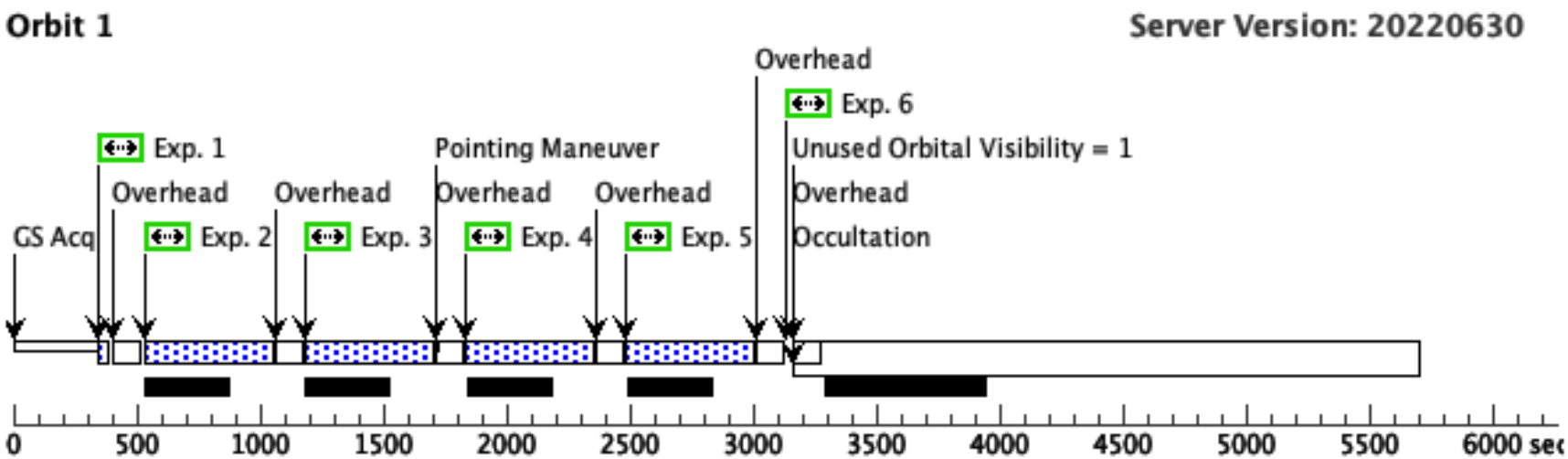
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(9)	NPM1G+27.0587	RA: 18 53 3.8648 (283.2661033d) Dec: +27 50 27.84 (27.84107d) Equinox: J2000		V=(?) z=0.062, log MBH/Msun =7.36	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[SEYFERT]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(9) NPM1G+27.0587	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	POS TARG -0.089,-1.203		10 Secs (10 Secs) *[==>]*	*[1]*
2		(9) NPM1G+27.0587	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 1		519 Secs (519 Secs) *[==>]*	*[1]*
3		(9) NPM1G+27.0587	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 1		519 Secs (519 Secs) *[==>]*	*[1]*
4		(9) NPM1G+27.0587	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	POS TARG 0.089,1.203		519 Secs (519 Secs) *[==>]*	*[1]*
5		(9) NPM1G+27.0587	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 4		519 Secs (519 Secs) *[==>]*	*[1]*
6		(9) NPM1G+27.0587	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	SAME POS AS 4		10 Secs (10 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17103, PG2209+184 (10), scheduling Mon Apr 24 13:00:29 GMT 2023

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

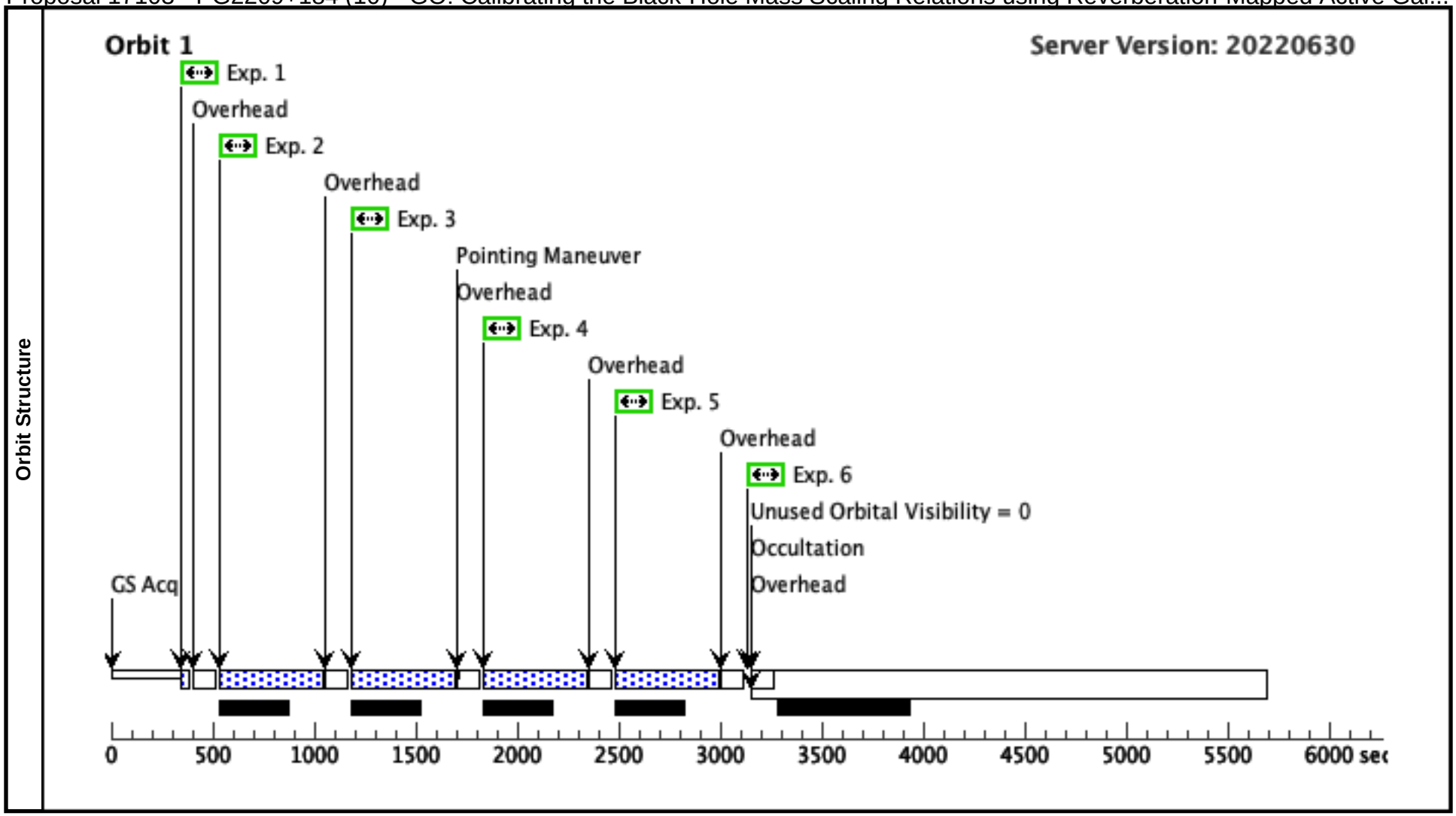
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(10)	PG2209+184	RA: 22 11 53.8889 (332.9745371d) Dec: +18 41 49.86 (18.69718d) Equinox: J2000		V=15.4 z=0.070; log MBH/Msun=7.46	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[SEYFERT]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(10) PG2209+184	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	POS TARG -0.089,-1.203		10 Secs (10 Secs) *[==>]*	*[1]*
2		(10) PG2209+184	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 1		517 Secs (517 Secs) *[==>]*	*[1]*
3		(10) PG2209+184	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 1		517 Secs (517 Secs) *[==>]*	*[1]*
4		(10) PG2209+184	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	POS TARG 0.089,1.203		517 Secs (517 Secs) *[==>]*	*[1]*
5		(10) PG2209+184	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 4		517 Secs (517 Secs) *[==>]*	*[1]*
6		(10) PG2209+184	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	SAME POS AS 4		10 Secs (10 Secs) *[==>]*	*[1]*


Orbit Structure
Orbit 1
Server Version: 20220630
Exp. 1
Overhead
Exp. 2
Overhead
Exp. 3
Pointing Maneuver
Overhead
Exp. 4
Overhead
Exp. 5
Overhead
Exp. 6
Unused Orbital Visibility = 0
Occultation
Overhead
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17103, RBS1917 (11), scheduling Mon Apr 24 13:00:29 GMT 2023

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

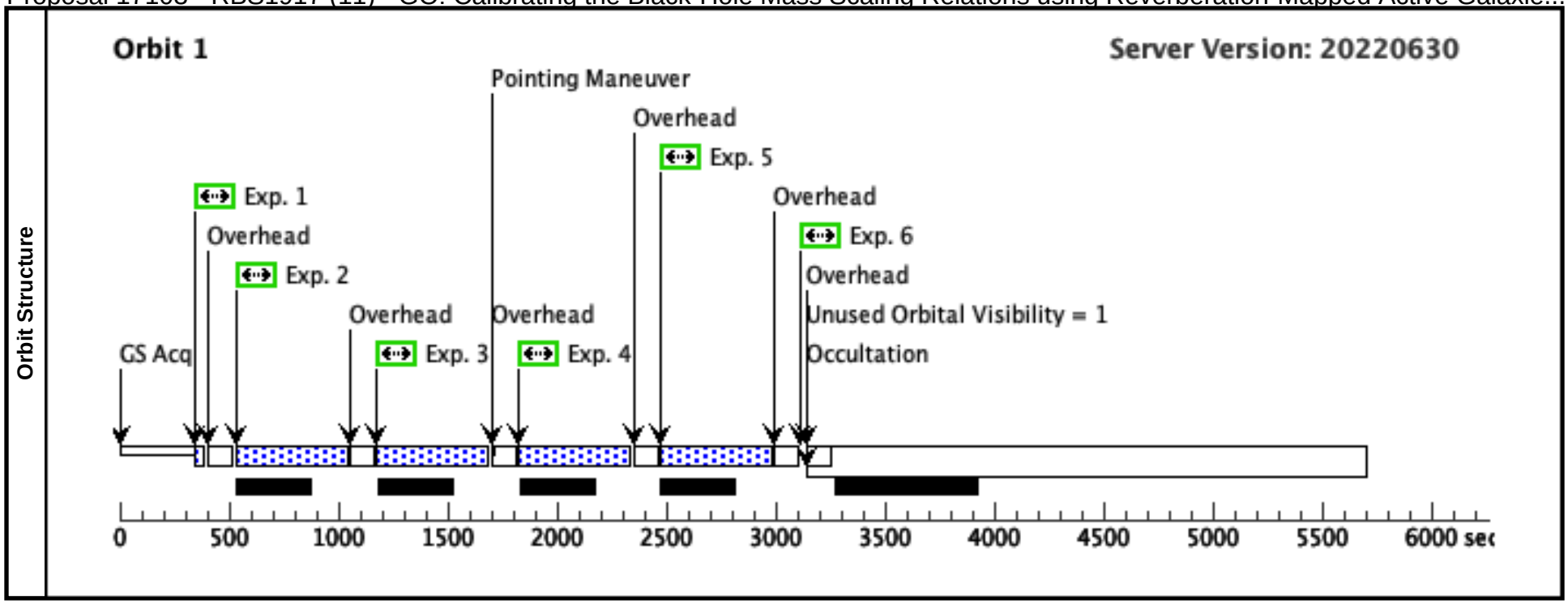
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(11)	RBS1917	RA: 22 56 36.4607 (344.1519196d) Dec: +05 25 17.10 (5.42142d) Equinox: J2000		V=16.2 z=0.066; log MBH/Msun =7.15	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[SEYFERT]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(11) RBS1917	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	POS TARG -0.089,-1.203		10 Secs (10 Secs) *[==>]*	*[1]*
2		(11) RBS1917	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 1		514 Secs (514 Secs) *[==>]*	*[1]*
3		(11) RBS1917	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 1		514 Secs (514 Secs) *[==>]*	*[1]*
4		(11) RBS1917	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	POS TARG 0.089,1.203		514 Secs (514 Secs) *[==>]*	*[1]*
5		(11) RBS1917	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=5	SAME POS AS 4		514 Secs (514 Secs) *[==>]*	*[1]*
6		(11) RBS1917	WFC3/UVIS, ACCUM, UVIS	F814W	FLASH=20; BLADE=A	SAME POS AS 4		10 Secs (10 Secs) *[==>]*	*[1]*


Orbit Structure
Orbit 1
Server Version: 20220630
Pointing Maneuver
Overhead
Exp. 5
Exp. 1
Overhead
Exp. 6
Overhead
Exp. 2
Overhead
Unused Orbital Visibility = 1
Overhead
Exp. 3
Exp. 4
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec