15281 - Characterizing Mass Outflows in Palomar Green Quasars: evidence for AGN feedback?

Cycle: 25, Proposal Category: GO

(Availability Mode: SUPPORTED)

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) 2E-93	ACS/WFC	1	11-Dec-2019 14:00:21.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
51	(1) 2E-93	ACS/WFC	1	11-Dec-2019 14:00:22.0	yes
02	(2) 2E-217	ACS/WFC	1	11-Dec-2019 14:00:23.0	yes
03	(3) MRK-1014	ACS/WFC	1	11-Dec-2019 14:00:24.0	yes
04	(4) 2XMM-J095652.4+411522	ACS/WFC	1	11-Dec-2019 14:00:24.0	yes
05	(5) 2DFGRS-TGN357Z241	ACS/WFC	1	11-Dec-2019 14:00:25.0	yes
55	(5) 2DFGRS-TGN357Z241	ACS/WFC	1	11-Dec-2019 14:00:26.0	yes
06	(6) 2MASSI-J1051514-005117	ACS/WFC	1	11-Dec-2019 14:00:26.0	yes
07	(7) 2XMM-J130946.9+081948	ACS/WFC	1	11-Dec-2019 14:00:27.0	yes
57	(7) 2XMM-J130946.9+081948	ACS/WFC	1	11-Dec-2019 14:00:28.0	yes
08	(1) 2E-93	STIS/CCD	2	11-Dec-2019 14:00:29.0	yes
09	(2) 2E-217	STIS/CCD	2	11-Dec-2019 14:00:30.0	yes
10	(3) MRK-1014	STIS/CCD	2	11-Dec-2019 14:00:31.0	yes
58	(3) MRK-1014	STIS/CCD	2	11-Dec-2019 14:00:32.0	yes
11	(4) 2XMM-J095652.4+411522	STIS/CCD	2	11-Dec-2019 14:00:34.0	yes
12	(5) 2DFGRS-TGN357Z241	STIS/CCD	2	11-Dec-2019 14:00:35.0	yes
13	(6) 2MASSI-J1051514-005117	STIS/CCD	2	11-Dec-2019 14:00:36.0	yes
14	(7) 2XMM-J130946.9+081948	STIS/CCD	2	11-Dec-2019 14:00:38.0	yes
59	(7) 2XMM-J130946.9+081948	STIS/CCD	2	11-Dec-2019 14:00:39.0	yes

28 Total Orbits Used

ABSTRACT

The correlation between the masses of galaxy bulges and the super-massive black holes (BH) at their gravitational centers suggests that they co-evolve. The process thought to regulate bulge/BH growth is ``AGN feedback", either in the form of radiation-driven (``quasar mode") or mechanically driven (e.g., ``radio mode") outflows. Our recent HST/ACS/STIS study of QSO2s has, indeed, revealed outflows, but they do not extend beyond ~ 1.5 kpc, which calls into question their relevance to feedback processes. However, the morphologies of these objects suggest that they may be in an early state of activity, before the outflows can clear the bulges. To explore whether large-scale outflows are present, we propose to

extend our study to the 7 [O III] brightest, radio quiet, PG QSO1s. Previous HST/WFPC2 images reveal that these targets possess extended emission-line regions. Therefore, we propose to obtain HST/ACS images and STIS long-slit spectra of these targets with which we will measure and model the extended emisision-line gas kinematics, probe the dynamics of the gas, and, ultimately, determine whether AGN-driven outflows exist in these QSOs. Ground-based observations lack the sensitivity to probe the extended emission-line gas, hence this study can only be accomplished with HST. These results will have profound implications towards our understanding of AGN feedback.

OBSERVING DESCRIPTION

Given the redshifts of our targets 0.142 < z < 0.360, the [O~III] observations have to be done with the ACS/WFC ramp filters (FR551N, FR601N and FR656N), since WFC3 does not have the appropriate filters. We conservatively assume that the [O~III] surface brightness of these targets is 10^-14 erg cm^-2 s^-1 arcsec^-2, which corresponds to NLR's with a diameter of 3.5" for the
fainter targets. We calculate that we will be able to reach S/N ~ 22 per resolution element for a 30 minutes exposure with any of the ramp filters. We can also estimate that we will reach S/N = 3 per resolution element for a surface brightness
of 8 x 10^-16 erg cm-2 s-1 arcsec^-2, which is sufficient to detect the faint extended emission in these targets.
For the continuum observations we will use the medium bandwidth ramp filter FR647M. This will allow us to select a relatively broad continuum region, free of strong emission lines, redward of the [O~III] emission line. We calculate that a 5 minutes exposure will reach a 3-sigma surface brightness level of V=22 mag arcsec^-2, sufficient for the continuum subtraction. The continuum to line exposure times are similar to the ones used for Sy galaxies (Schmitt et al. 2003). Since these targets have strong nuclear emission, with typical number magnitudes V ~15.5 mag, we will also obtain a short ~10 seconds exposure with each one of the filters, to be able to correct for saturated pixels in the longer exposures. We will also use subarrays, to reduce the read-out times and data volumes, thus avoiding any potential time loss to buffer dumps. All the long observations will be split into 2 exposures, dithered, to be able to better eliminate cosmic rays and cosmetic defects. Considering guide star acquisition (6 minutes), telescope moves and readouts, we will require 1 orbit per Quasar.

We will obtain STIS long-slit spectra of our targets with the G750M grating to determine their kinematics (due to the redshifts of our targets, [O~III] 5007A is shifted to wavelenghts > 5700A, hence out of the bandpass of G430M). We will use the 52" x 0.2" slit as the best compromise between spatial resolution and S/N, based on our previous QSO2 observations. We will use a single slit position along the major axis of the [O~III] emission, which is sufficient to detect the outflow signature and constrain the
model parameters (Fischer et al. 2010). Our models can tolerate a large variance in position angle (+/- 20deg), which results in a wide range in possible orientation angles. We will obtain three subexposures at slightly different positions along the slit to facilitate the removal of cosmic rays and

hot pixels on the CCD images. We will obtain these exposures near the top of the chip (the E1 position) to minimize CTE loss. Our exposure-time estimates are all based on the latest version of the STIS Exposure Time Calculator (ETC).

The G750M spectra of the bright [O~III] 5007 line will achieve a velocity resolution of ~ 60 km s^-1, which is ideal for separating distinct kinematic components and measuring accurate velocity dispersions for each component (Das et al. 2005). Based on the integrated [O~III] fluxes of our targets, we expect a typical [O~III] surface brightness of at least 1 x 10^-15 ergs s^-1 cm^-2 arcsec^-2 at positions ~1.0 from their nuclei. For this flux, using the ETC, we obtain an exposure time of 60 min for a signal-to-noise ratio of SNR ~ 5 (with no binning in the spatial direction), which is sufficient to measure an accurate radial velocity centroid. Thus, each target in our sample requires a two-orbit G750M observation.

Visit

Proposal 15281, Visit 01, failed Wed Dec 11 19:00:39 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Diagnostics

(Exposure 2 (Pattern 1, Exps 2-2 in Visit 01)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Exposure 3 (Pattern 1, Exps 3-3 in Visit 01)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false		(2), (3)

Fixed Targets

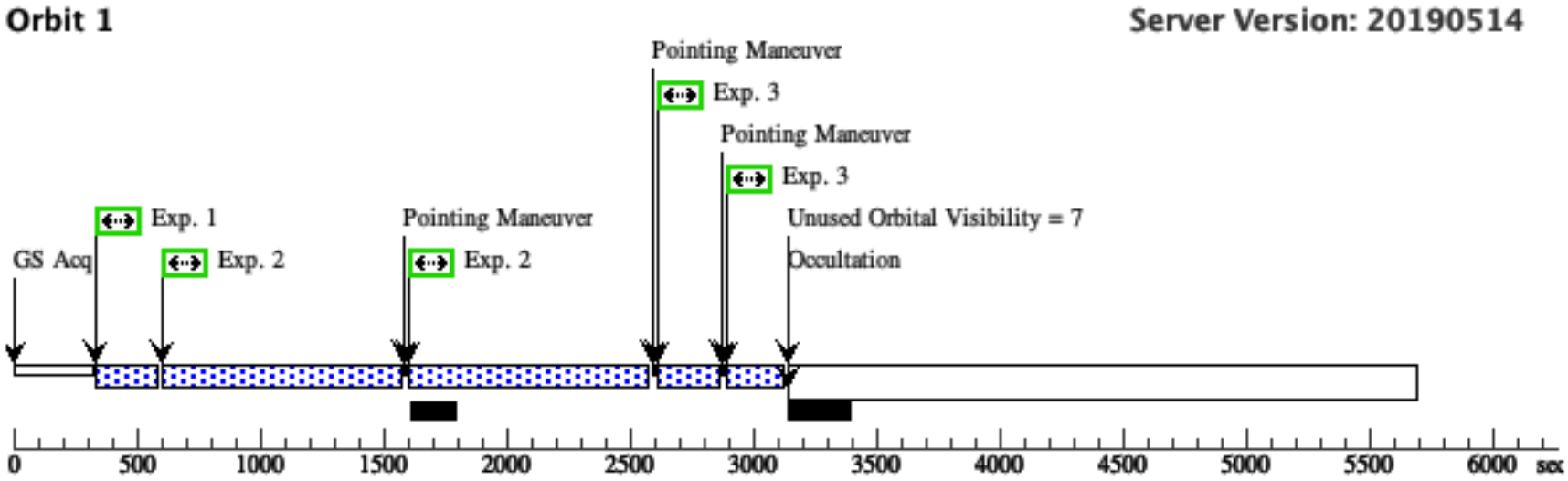
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	2E-93	RA: 00 29 13.7020 (7.3070917d) Dec: +13 16 3.89 (13.26775d) Equinox: J2000		V=15.41	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) 2E-93	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR551N 5718 A				10 Secs (10 Secs) *[==>]*	***[1]***
2		(1) 2E-93	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR551N 5718 A			Pattern 1, Exps 2-2 in Visit 01 (1)	850 Secs (1700 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(1) 2E-93	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 6281 A			Pattern 1, Exps 3-3 in Visit 01 (1)	100 Secs (200 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***

Orbit Structure



Visit

Proposal 15281, Repeat of visit 01 (51), completed Wed Dec 11 19:00:40 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Comments: Exact duplicate of failed visit 01 as approved by HOPR filed 8/24/18

Diagnostics

(Exposure 2 (Pattern 1, Exps 2-2 in Repeat of visit 01 (51))) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Exposure 3 (Pattern 1, Exps 3-3 in Repeat of visit 01 (51))) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false		(2), (3)

Fixed Targets

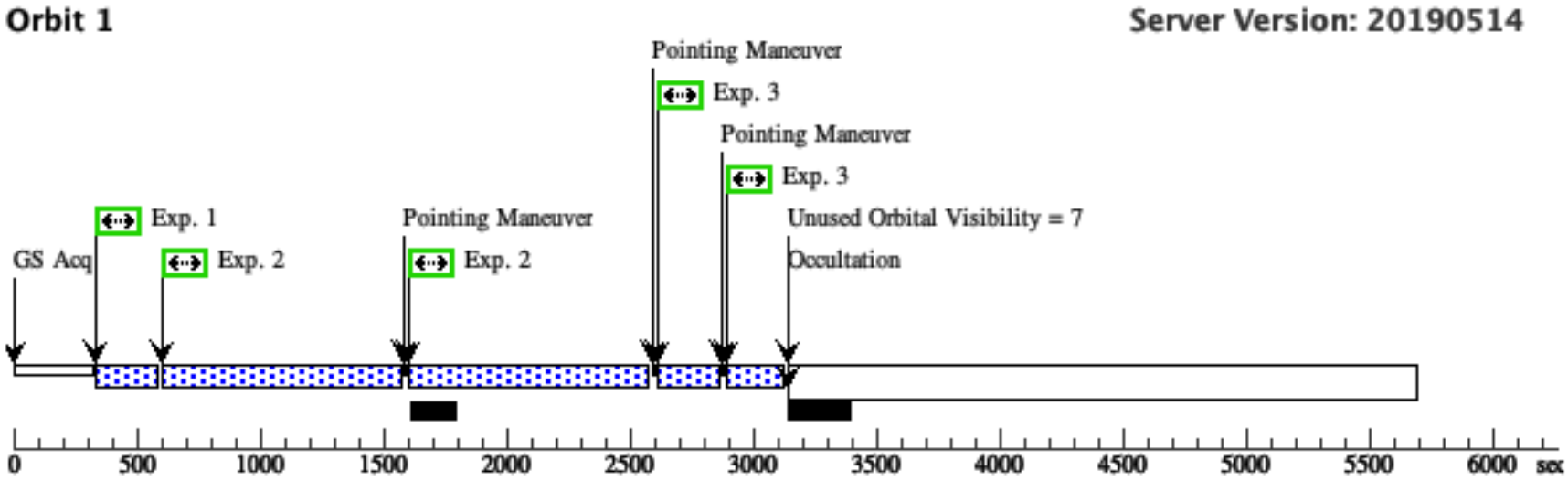
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	2E-93	RA: 00 29 13.7020 (7.3070917d) Dec: +13 16 3.89 (13.26775d) Equinox: J2000		V=15.41	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) 2E-93	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR551N 5718 A				10 Secs (10 Secs) *[==>]*	***[1]***
2		(1) 2E-93	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR551N 5718 A			Pattern 1, Exps 2-2 in Repeat of visit 01 (51) (1)	850 Secs (1700 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(1) 2E-93	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 6281 A			Pattern 1, Exps 3-3 in Repeat of visit 01 (51) (1)	100 Secs (200 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***

Orbit Structure



Visit

Proposal 15281, Visit 02, completed Wed Dec 11 19:00:40 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Diagnostics

(Visit 02) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Exposure 2 (Pattern 1, Exps 2-2 in Visit 02)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Exposure 3 (Pattern 1, Exps 3-3 in Visit 02)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false		(2), (3)

Fixed Targets

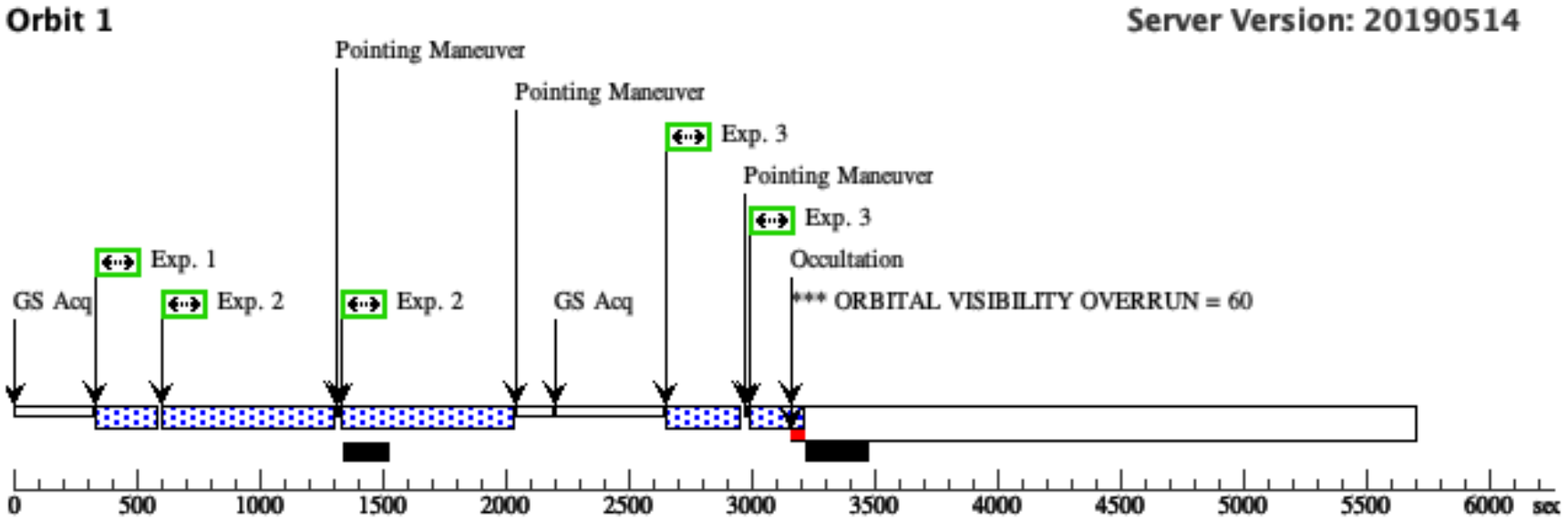
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	2E-217	RA: 00 54 52.1309 (13.7172121d) Dec: +25 25 38.94 (25.42748d) Equinox: J2000		V=15.42	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) 2E-217	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR601N 5783 A				10 Secs (10 Secs) *[==>]*	***[1]***
2		(2) 2E-217	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR601N 5783 A			Pattern 1, Exps 2-2 in Visit 02 (1)	573 Secs (1146 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(2) 2E-217	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 6353 A			Pattern 1, Exps 3-3 in Visit 02 (1)	90 Secs (180 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***

Orbit Structure



Visit

Proposal 15281, Visit 03, completed Wed Dec 11 19:00:40 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Diagnostics

(Visit 03) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Exposure 2 (Pattern 1, Exps 2-2 in Visit 03)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Exposure 3 (Pattern 1, Exps 3-3 in Visit 03)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false		(2), (3)

Fixed Targets

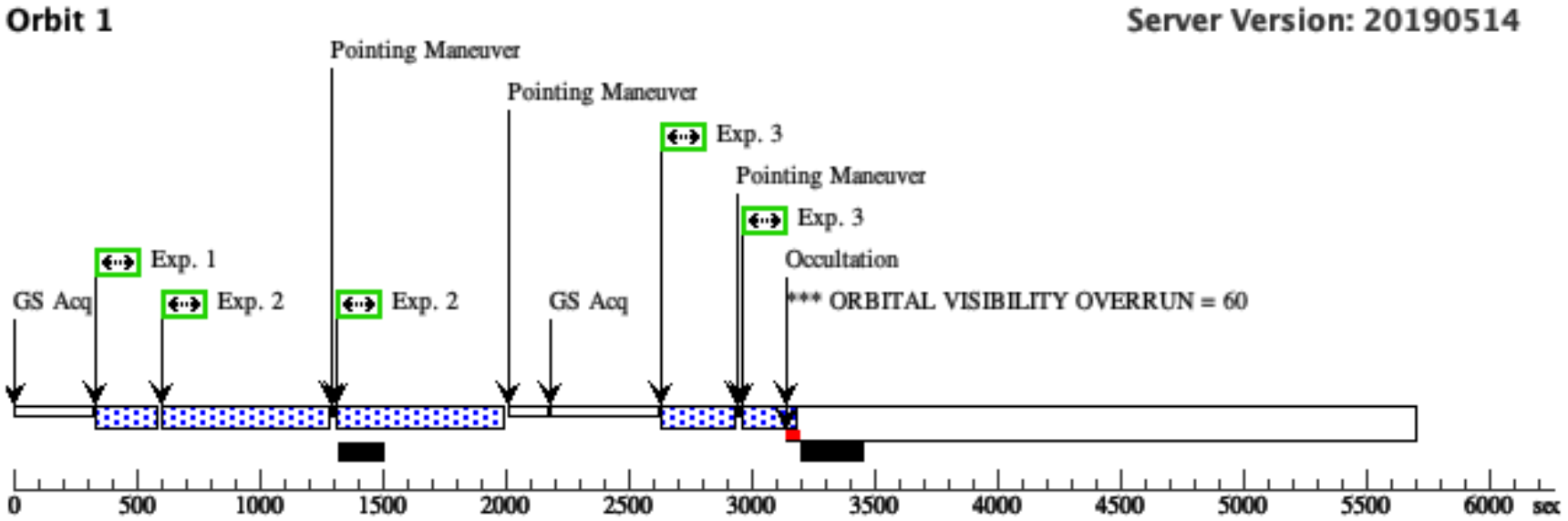
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	MRK-1014	RA: 01 59 50.2540 (29.9593917d) Dec: +00 23 41.00 (.39472d) Equinox: J2000		V=15.87	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(3) MRK-1014	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR601N 5823 A				10 Secs (10 Secs) *[==>]*	*[1]*
2		(3) MRK-1014	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR601N 5823 A			Pattern 1, Exps 2-2 in Visit 03 (1)	557 Secs (1114 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	*[1]*
3		(3) MRK-1014	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 6397 A			Pattern 1, Exps 3-3 in Visit 03 (1)	90 Secs (180 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	*[1]*

Orbit Structure



Visit

Proposal 15281, Visit 04, completed Wed Dec 11 19:00:40 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Diagnostics

(Visit 04) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Exposure 2 (Pattern 1, Exps 2-2 in Visit 04)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Exposure 3 (Pattern 1, Exps 3-3 in Visit 04)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false		(2), (3)

Fixed Targets

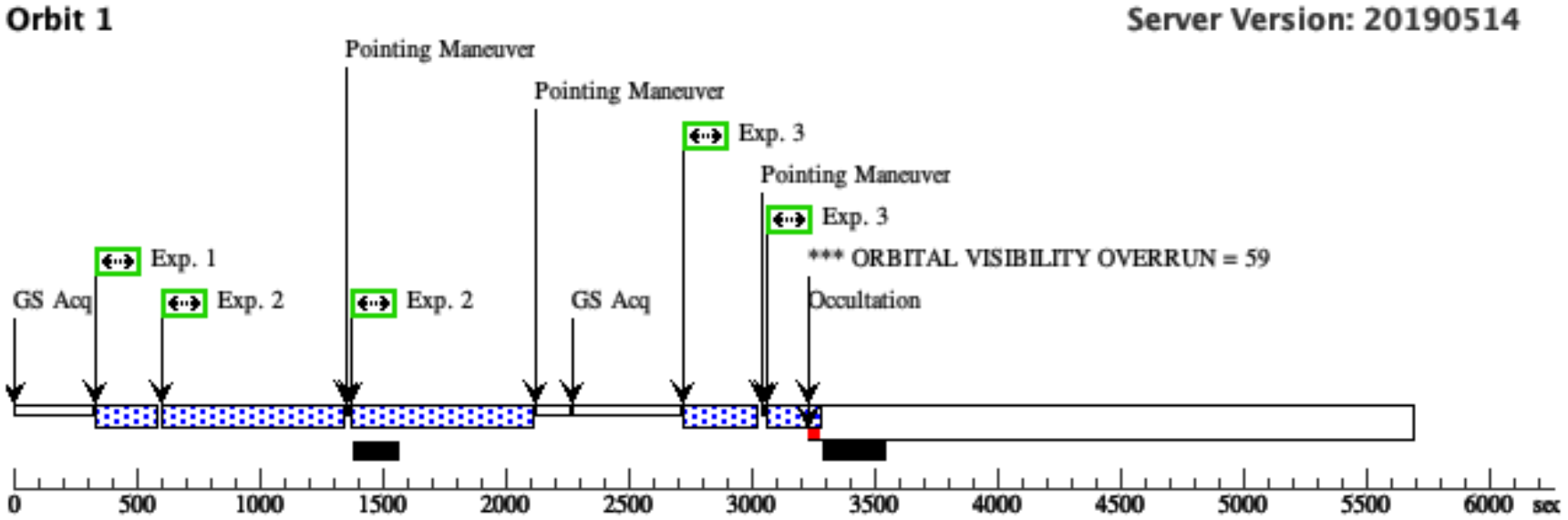
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	2XMM-J095652.4+411522	RA: 09 56 52.3916 (149.2182983d) Dec: +41 15 22.17 (41.25616d) Equinox: J2000		V=14.9	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(4) 2XMM-J095652.4+411522	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR601N 6179 A				10 Secs (10 Secs) *[==>]*	***[1]***
2		(4) 2XMM-J095652.4+411522	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR601N 6179 A			Pattern 1, Exps 2-2 in Visit 04 (1)	612 Secs (1224 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(4) 2XMM-J095652.4+411522	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 6727 A			Pattern 1, Exps 3-3 in Visit 04 (1)	90 Secs (180 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***

Orbit Structure



Visit

Proposal 15281, Visit 05, failed Wed Dec 11 19:00:40 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Diagnostics

(Visit 05) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Exposure 2 (Pattern 1, Exps 2-2 in Visit 05)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Exposure 3 (Pattern 1, Exps 3-3 in Visit 05)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false		(2), (3)

Fixed Targets

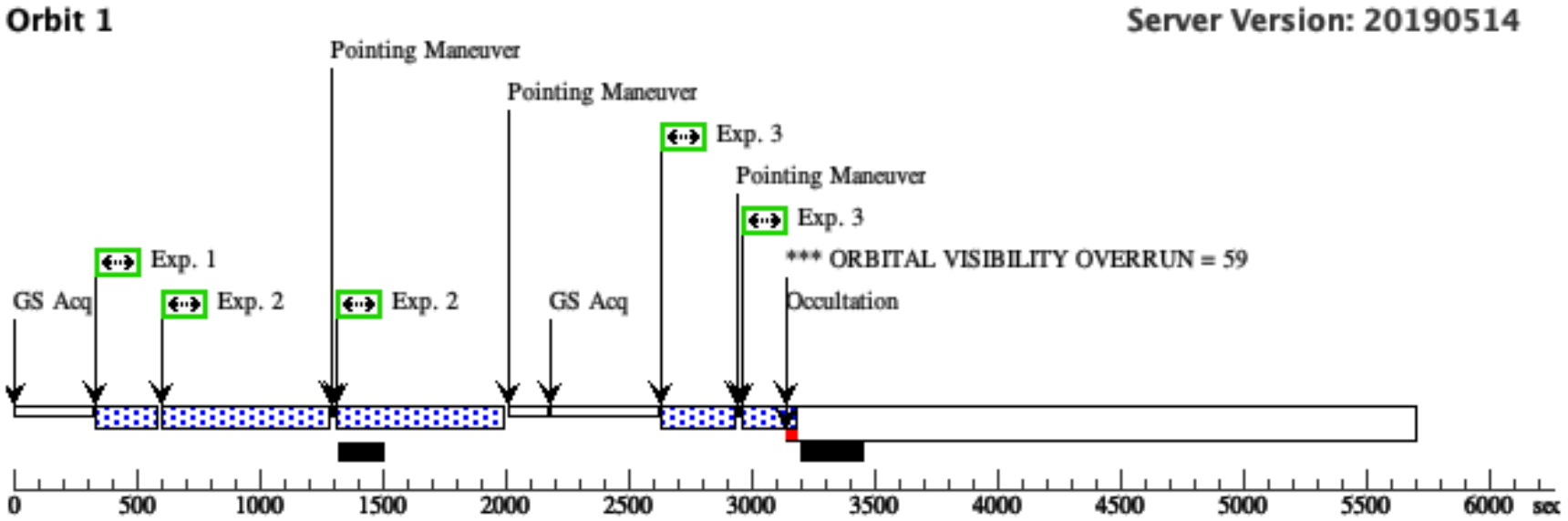
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	2DFGRS-TGN357Z241	RA: 10 14 54.9020 (153.7287583d) Dec: +00 33 37.55 (.56043d) Equinox: J2000		V=18.94	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(5) 2DFGRS-TGN357Z241	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR601N 5943 A				10 Secs (10 Secs) *[==>]*	***[1]***
2		(5) 2DFGRS-TGN357Z241	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR601N 5943 A			Pattern 1, Exps 2-2 in Visit 05 (1)	556 Secs (1112 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(5) 2DFGRS-TGN357Z241	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 6529 A			Pattern 1, Exps 3-3 in Visit 05 (1)	90 Secs (180 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***

Orbit Structure



Visit

Proposal 15281, Repeat of Visit 05 (55), completed Wed Dec 11 19:00:40 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Comments: Repeat of failed visit 05

Diagnostics

(Repeat of Visit 05 (55)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Exposure 2 (Pattern 1, Exps 2-2 in Repeat of Visit 05 (55))) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Exposure 3 (Pattern 1, Exps 3-3 in Repeat of Visit 05 (55))) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false		(2), (3)

Fixed Targets

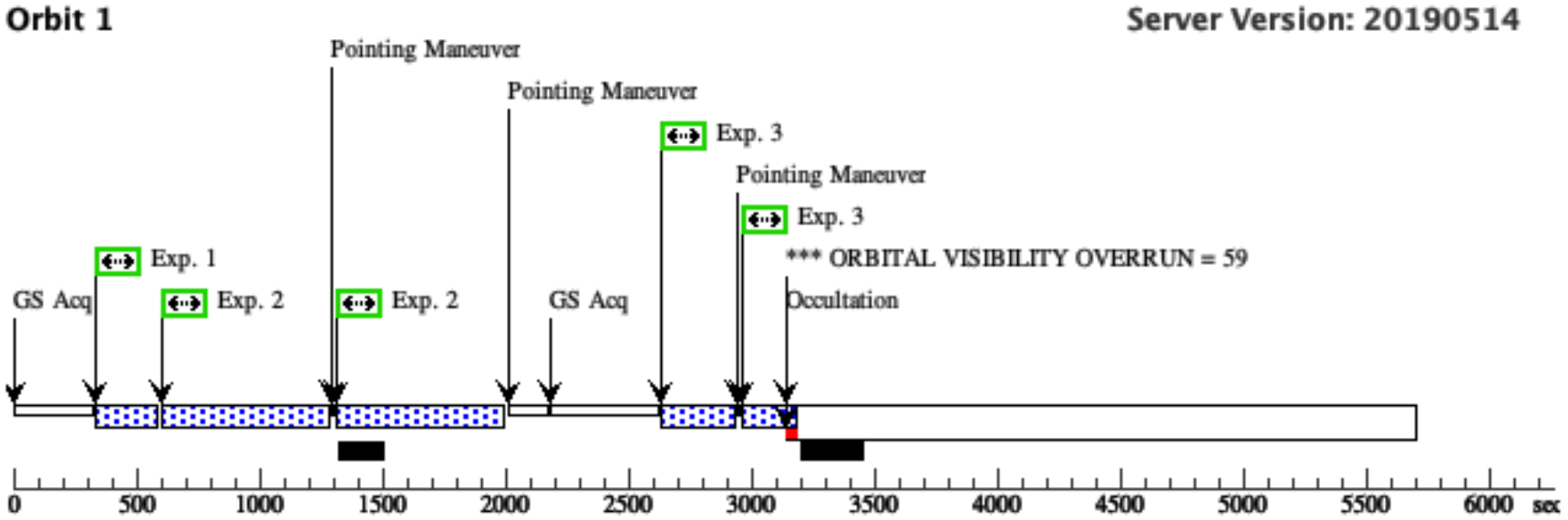
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	2DFGRS-TGN357Z241	RA: 10 14 54.9020 (153.7287583d) Dec: +00 33 37.55 (.56043d) Equinox: J2000		V=18.94	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(5) 2DFGRS-TGN357Z241	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR601N 5943 A				10 Secs (10 Secs) *[==>]*	 ***[1]***
2		(5) 2DFGRS-TGN357Z241	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR601N 5943 A			Pattern 1, Exps 2-2 in Repeat of Visit 05 (55) (1)	556 Secs (1112 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
3		(5) 2DFGRS-TGN357Z241	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 6529 A			Pattern 1, Exps 3-3 in Repeat of Visit 05 (55) (1)	90 Secs (180 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***

Orbit Structure



Visit

Proposal 15281, Visit 06, completed Wed Dec 11 19:00:40 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Diagnostics

(Visit 06) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Exposure 2 (Pattern 1, Exps 2-2 in Visit 06)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Exposure 3 (Pattern 1, Exps 3-3 in Visit 06)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false		(2), (3)

Fixed Targets

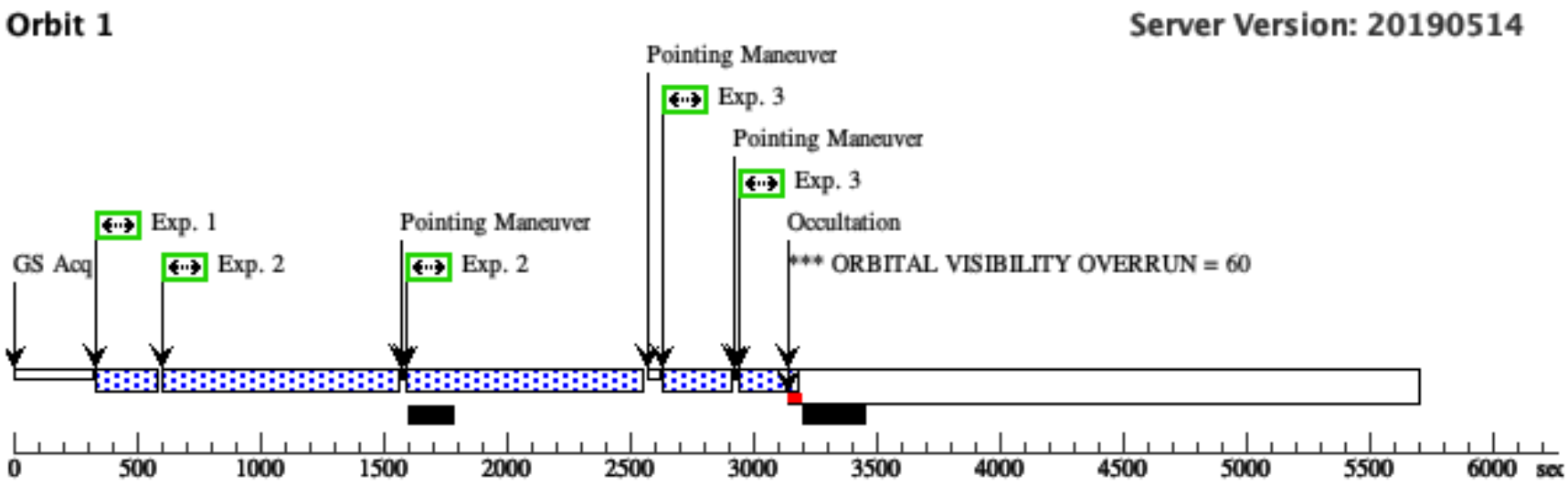
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	2MASSI-J1051514-005117	RA: 10 51 51.4404 (162.9643350d) Dec: -00 51 17.73 (-.85492d) Equinox: J2000		V=15.78	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(6) 2MASSI-J10515 14-005117	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR656N 6810 A				10 Secs (10 Secs) *[==>]*	***[1]***
2		(6) 2MASSI-J10515 14-005117	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR656N 6810 A			Pattern 1, Exps 2-2 in Visit 06 (1)	837 Secs (1674 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(6) 2MASSI-J10515 14-005117	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 7480 A			Pattern 1, Exps 3-3 in Visit 06 (1)	110 Secs (220 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***

Orbit Structure



Visit

Proposal 15281, Visit 07, failed Wed Dec 11 19:00:40 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Diagnostics

(Visit 07) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Exposure 2 (Pattern 1, Exps 2-2 in Visit 07)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Exposure 3 (Pattern 1, Exps 3-3 in Visit 07)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false		(2), (3)

Fixed Targets

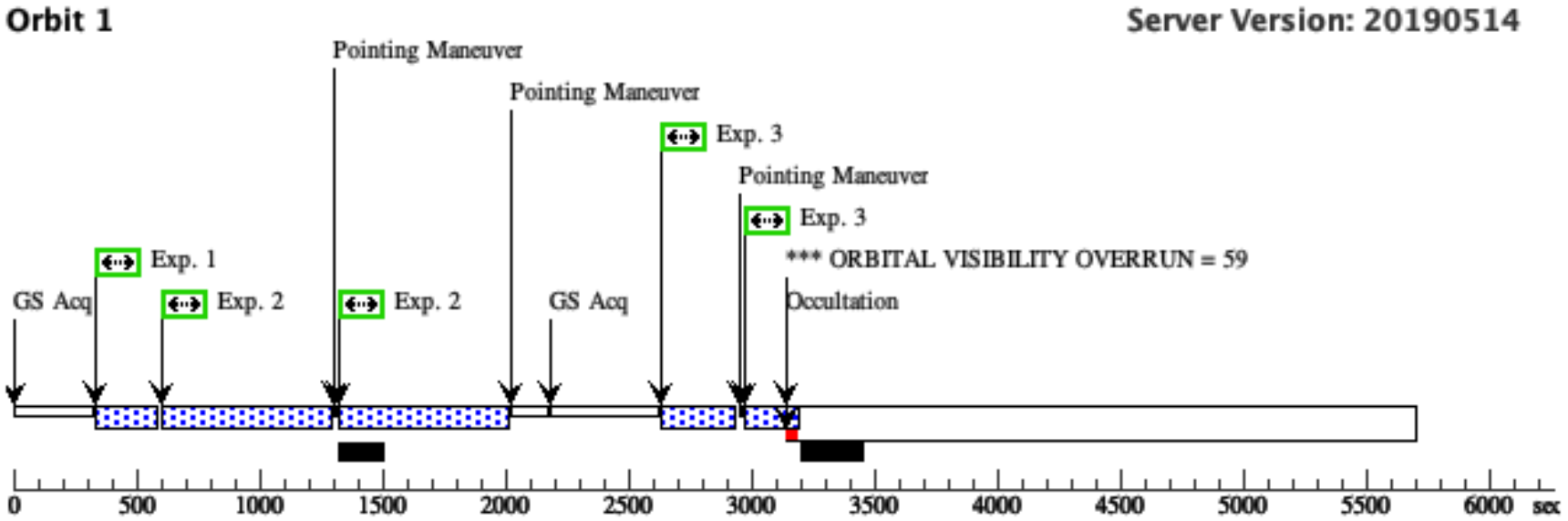
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	2XMM-J130946.9+081948	RA: 13 09 46.9980 (197.4458250d) Dec: +08 19 48.24 (8.33007d) Equinox: J2000		V=15.89	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(7) 2XMM-J130946.9+081948	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR601N 5783 A				10 Secs (10 Secs) *[==>]*	*[1]*
2		(7) 2XMM-J130946.9+081948	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR601N 5783 A			Pattern 1, Exps 2-2 in Visit 07 (1)	561 Secs (1122 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	*[1]*
3		(7) 2XMM-J130946.9+081948	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 6353 A			Pattern 1, Exps 3-3 in Visit 07 (1)	90 Secs (180 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	*[1]*

Orbit Structure



Visit

Proposal 15281, Repeat of Visit 07 (57), completed Wed Dec 11 19:00:40 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Comments: Repeat of failed visit 07

Diagnostics

(Repeat of Visit 07 (57)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Exposure 2 (Pattern 1, Exps 2-2 in Repeat of Visit 07 (57))) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Exposure 3 (Pattern 1, Exps 3-3 in Repeat of Visit 07 (57))) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false		(2), (3)

Fixed Targets

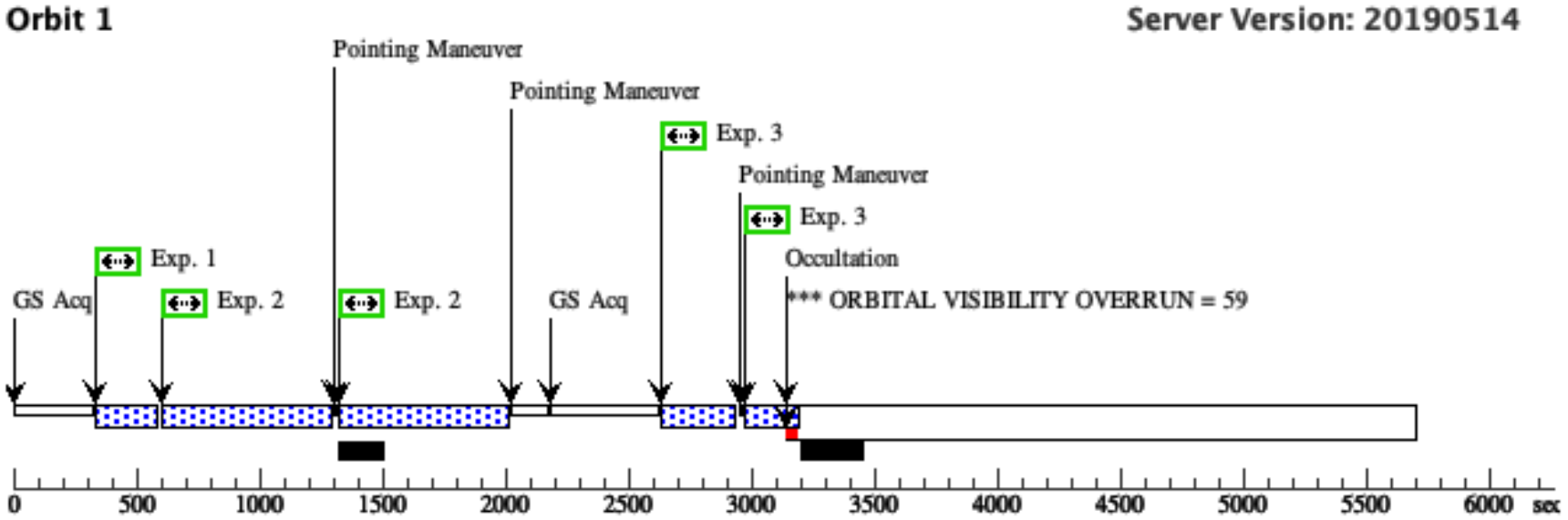
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	2XMM-J130946.9+081948	RA: 13 09 46.9980 (197.4458250d) Dec: +08 19 48.24 (8.33007d) Equinox: J2000		V=15.89	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(7) 2XMM-J130946.9+081948	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR601N 5783 A				10 Secs (10 Secs) *[==>]*	 ***[1]***
2		(7) 2XMM-J130946.9+081948	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR601N 5783 A			Pattern 1, Exps 2-2 in Repeat of Visit 07 (57) (1)	561 Secs (1122 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
3		(7) 2XMM-J130946.9+081948	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 6353 A			Pattern 1, Exps 3-3 in Repeat of Visit 07 (57) (1)	90 Secs (180 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***

Orbit Structure



Visit

Proposal 15281, Visit 08, completed Wed Dec 11 19:00:40 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: ORIENT 35D TO 55 D; ORIENT 215D TO 235 D; ON HOLD

On Hold Comments: Need to analyze the images from visit 1 to determine the optimal roll angle for the STIS observations.

Diagnostics

(Visit 08) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(Visit 08) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 08) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 08) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 08) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 08) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 08) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 08) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 08) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 08) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=STIS-ALONG-SLIT Purpose=DITHER Number Of Points=3 Point Spacing=0.25 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=90.0 Angle Between Sides= Center Pattern=false		(2)

Fixed Targets

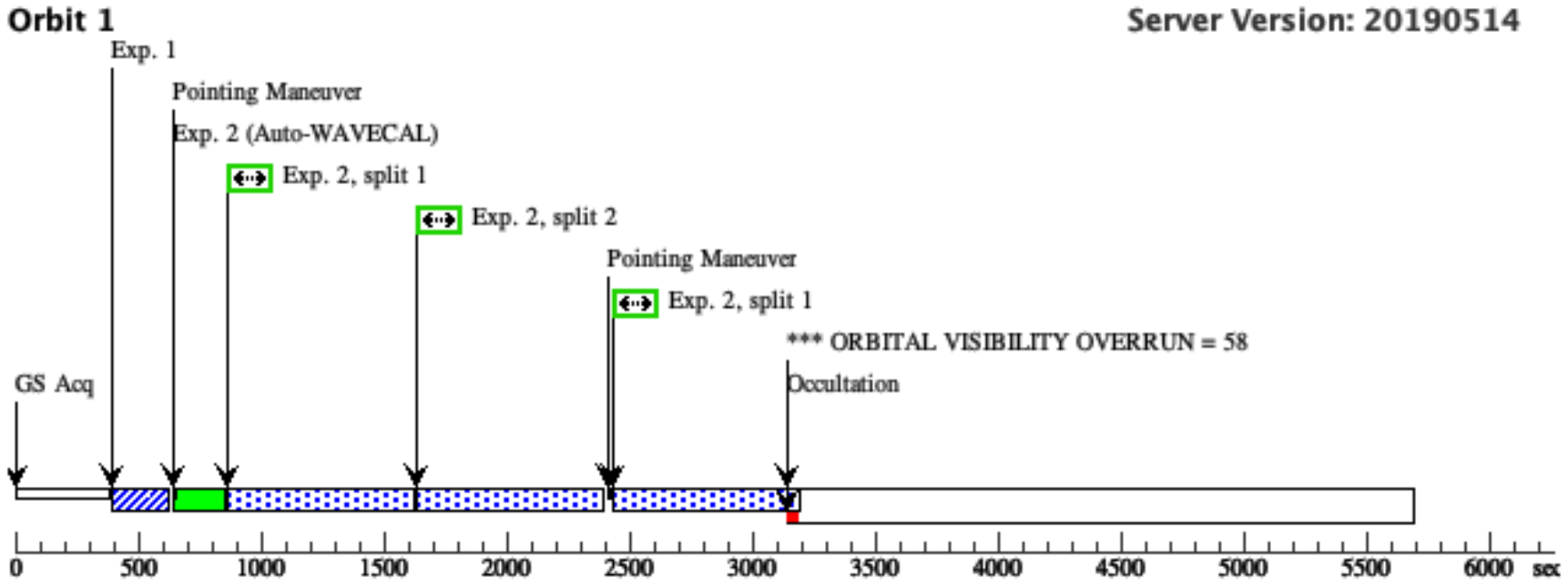
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	2E-93	RA: 00 29 13.7020 (7.3070917d) Dec: +13 16 3.89 (13.26775d) Equinox: J2000		V=15.41	Reference Frame: SIMBAD

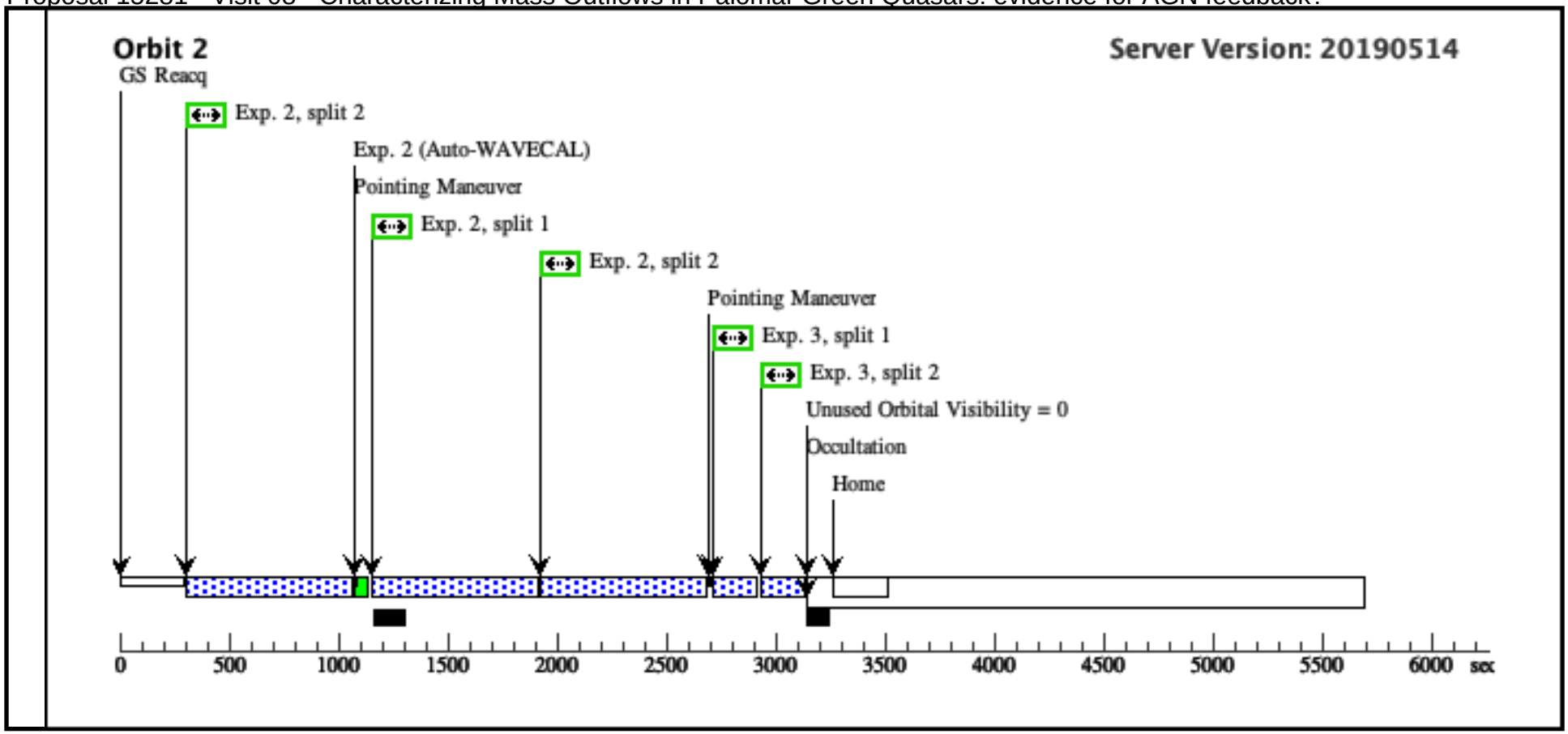
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) 2E-93	STIS/CCD, ACQ, F28X50LP	MIRROR				2 Secs (2 Secs)	
								[==>]	***[1]***
2		(1) 2E-93	STIS/CCD, ACCUM, 52X0.2	G750M 5734 A			Pattern 2, Exps 2-2 in Visit 08 (2)	1452 Secs (4356 Secs)	
								[==>(Pattern 1, Split 1)] *[==>(Pattern 1, Split 2)]* *[==>(Pattern 2, Split 1)]*	***[1]***
								[==>(Pattern 2, Split 2)] *[==>(Pattern 3, Split 1)]* *[==>(Pattern 3, Split 2)]*	***[2]***
3		(1) 2E-93	STIS/CCD, ACCUM, 52X0.2	G750M 5734 A				336 Secs (336 Secs)	
								[==>(Split 1)] *[==>(Split 2)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20190514
GS Reacq
Exp. 2, split 2
Exp. 2 (Auto-WAVECAL)
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Pointing Maneuver
Exp. 3, split 1
Exp. 3, split 2
Unused Orbital Visibility = 0
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15281, Visit 09, completed Wed Dec 11 19:00:40 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: ORIENT 70D TO 90 D; ORIENT 250D TO 270 D; ON HOLD

On Hold Comments: Need to analyze the images from visit 2 to determine the optimal roll angle for the STIS observations.

Diagnostics

(Visit 09) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(Visit 09) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 09) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 09) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 09) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 09) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 09) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 09) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 09) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 09) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=STIS-ALONG-SLIT Purpose=DITHER Number Of Points=3 Point Spacing=0.25 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=90.0 Angle Between Sides= Center Pattern=false		(2)

Fixed Targets

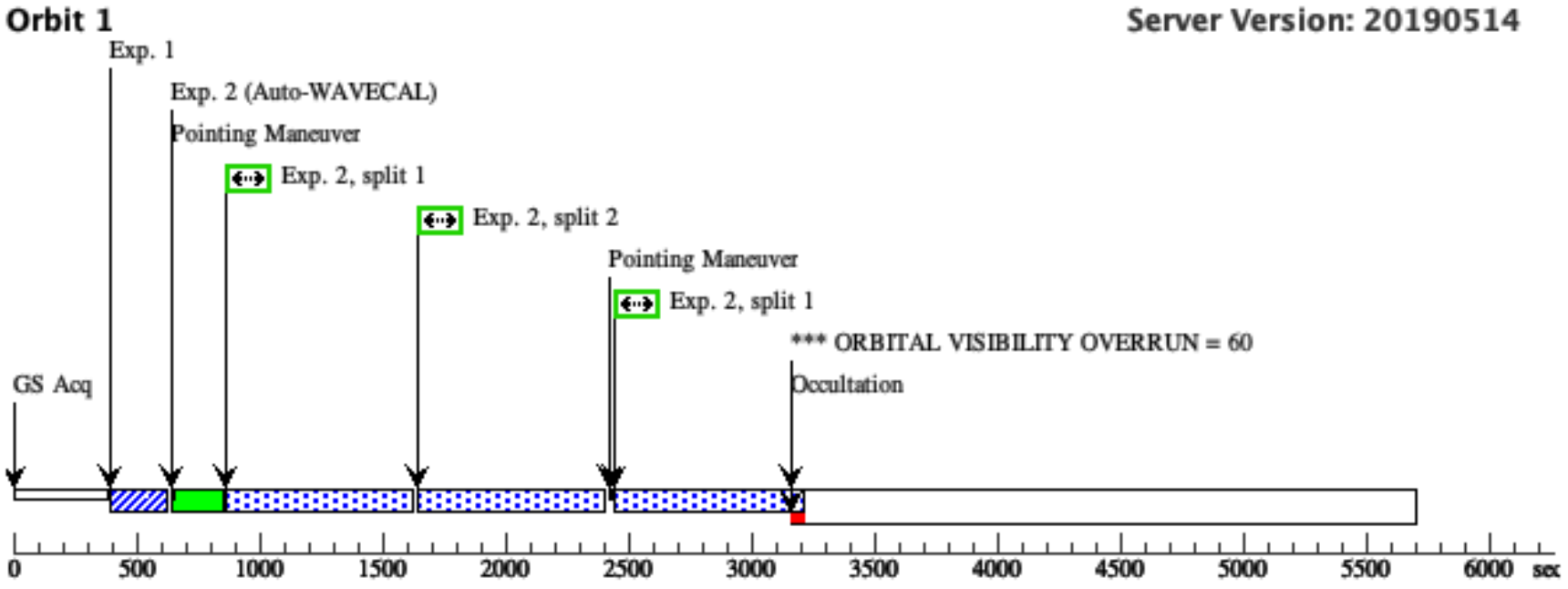
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	2E-217	RA: 00 54 52.1309 (13.7172121d) Dec: +25 25 38.94 (25.42748d) Equinox: J2000		V=15.42	Reference Frame: SIMBAD

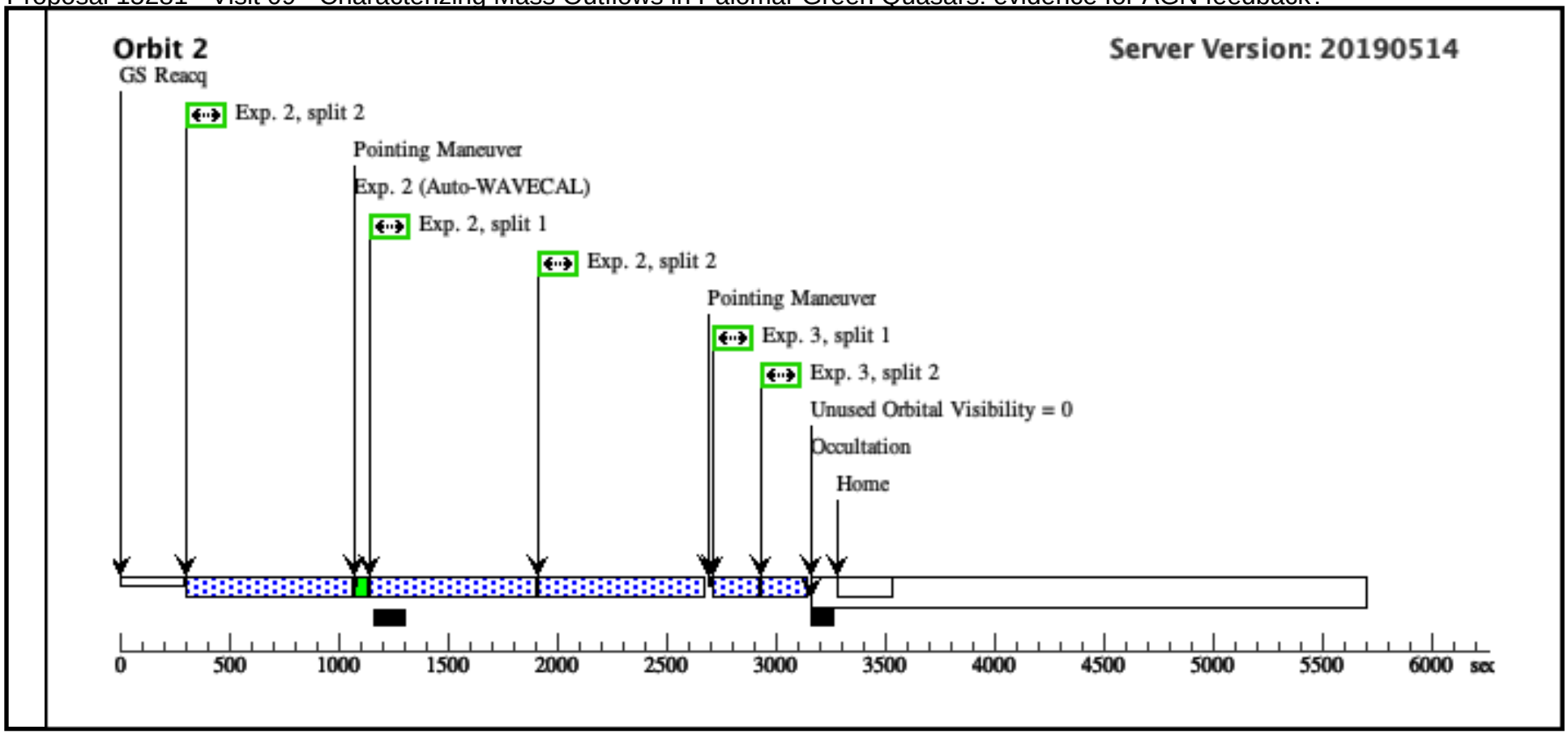
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) 2E-217	STIS/CCD, ACQ, F28X50LP	MIRROR				2 Secs (2 Secs)	
								[==>]	***[1]***
2		(2) 2E-217	STIS/CCD, ACCUM, 52X0.2	G750M 5734 A			Pattern 2, Exps 2-2 in Visit 09 (2)	1503 Secs (4365 Secs)	
								[==>731.5 Secs (Pattern 1, Split 1)] *[==>731.5 Secs (Pattern 1, Split 2)]* *[==>731.5 Secs (Pattern 2, Split 1)]*	***[1]***
								[==>723.5 Secs (Pattern 2, Split 2)] *[==>723.5 Secs (Pattern 3, Split 1)]* *[==>723.5 Secs (Pattern 3, Split 2)]*	***[2]***
3		(2) 2E-217	STIS/CCD, ACCUM, 52X0.2	G750M 5734 A				413 Secs (357 Secs)	
								[==>178.5 Secs (Split 1)] *[==>178.5 Secs (Split 2)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20190514
GS Reacq
Exp. 2, split 2
Pointing Maneuver
Exp. 2 (Auto-WAVECAL)
Exp. 2, split 1
Exp. 2, split 2
Pointing Maneuver
Exp. 3, split 1
Exp. 3, split 2
Unused Orbital Visibility = 0
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15281, Visit 10, failed Wed Dec 11 19:00:40 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: ORIENT 98D TO 118 D; ORIENT 278D TO 298 D; AFTER 03 BY 30 D TO 365 D

Diagnostics

(Visit 10) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(Visit 10) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(Visit 10) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 10) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 10) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 10) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 10) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 10) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 10) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 10) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 10) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=STIS-ALONG-SLIT Purpose=DITHER Number Of Points=3 Point Spacing=0.25 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=90.0 Angle Between Sides= Center Pattern=false		(2)

Fixed Targets

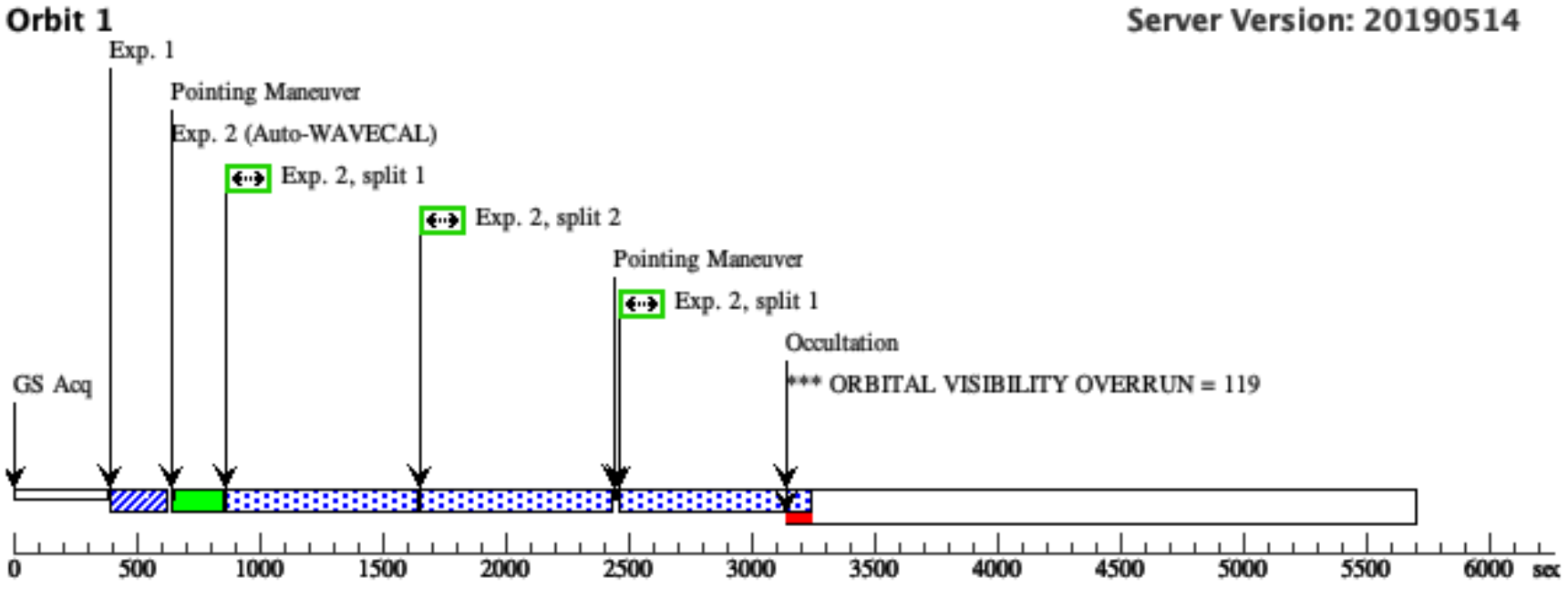
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	MRK-1014	RA: 01 59 50.2540 (29.9593917d) Dec: +00 23 41.00 (.39472d) Equinox: J2000		V=15.87	Reference Frame: SIMBAD

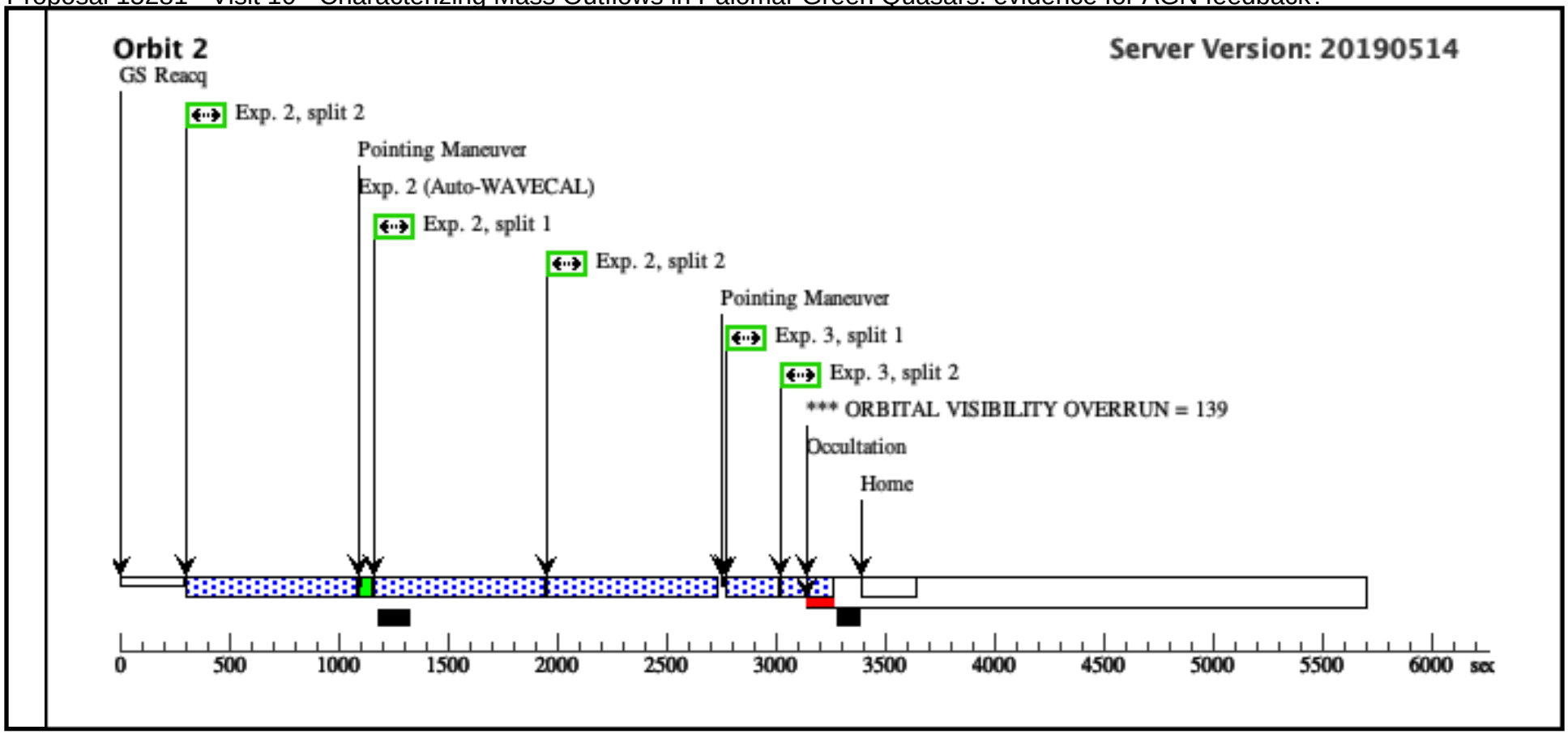
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(3) MRK-1014	STIS/CCD, ACQ, F28X50LP	MIRROR				2 Secs (2 Secs) *[==>]*	***[1]***
2		(3) MRK-1014	STIS/CCD, ACCUM, 52X0.2	G750M 5734 A			Pattern 2, Exps 2-2 in Visit 10 (2)	1487 Secs (4461 Secs) *[==>(Pattern 1, Split 1)]* *[==>(Pattern 1, Split 2)]* *[==>(Pattern 2, Split 1)]*	***[1]***
								[==>(Pattern 2, Split 2)] *[==>(Pattern 3, Split 1)]* *[==>(Pattern 3, Split 2)]*	***[2]***
3		(3) MRK-1014	STIS/CCD, ACCUM, 52X0.2	G750M 5734 A				414 Secs (414 Secs) *[==>(Split 1)]* *[==>(Split 2)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20190514
GS Reacq
Exp. 2, split 2
Pointing Maneuver
Exp. 2 (Auto-WAVECAL)
Exp. 2, split 1
Exp. 2, split 2
Pointing Maneuver
Exp. 3, split 1
Exp. 3, split 2
*** ORBITAL VISIBILITY OVERRUN = 139
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15281, Visit 58, completed Wed Dec 11 19:00:40 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: ORIENT 154D TO 224 D; ORIENT 334D TO 44 D

Diagnostics

(Visit 58) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(Visit 58) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(Visit 58) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 58) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 58) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 58) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
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(Visit 58) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 58) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 58) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=STIS-ALONG-SLIT Purpose=DITHER Number Of Points=3 Point Spacing=0.25 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=90.0 Angle Between Sides= Center Pattern=false		(2)

Fixed Targets

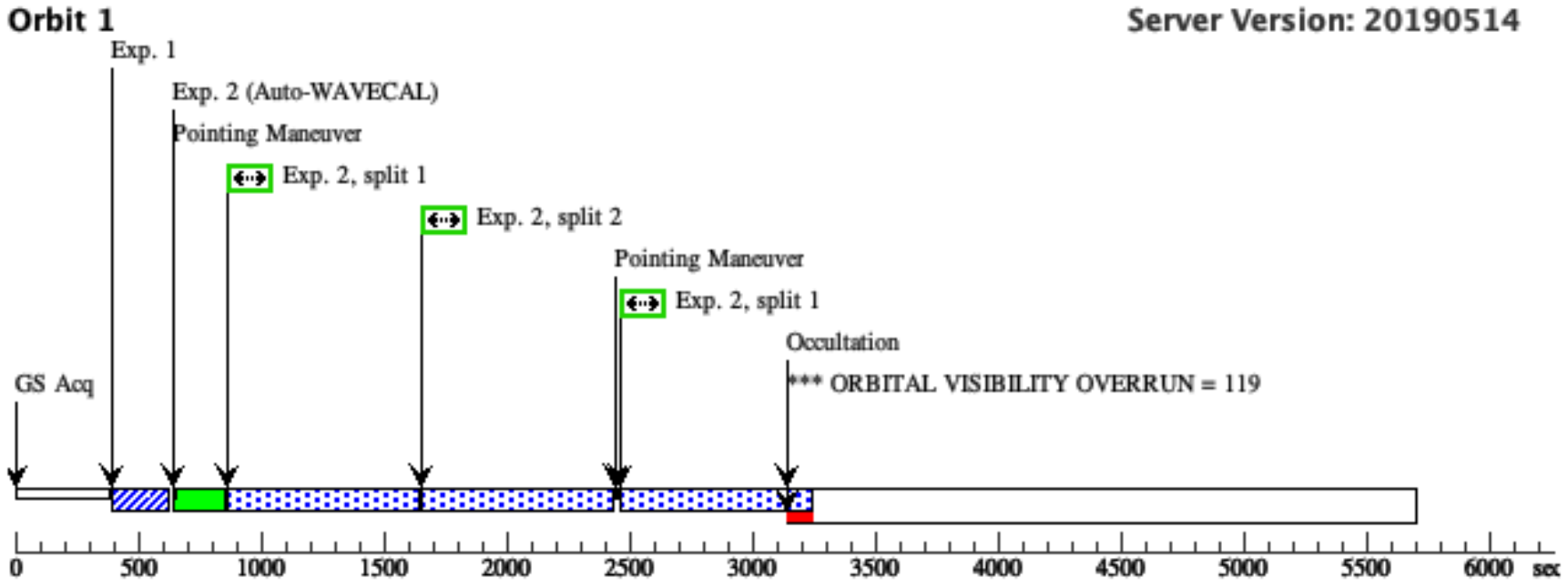
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	MRK-1014	RA: 01 59 50.2540 (29.9593917d) Dec: +00 23 41.00 (.39472d) Equinox: J2000		V=15.87	Reference Frame: SIMBAD

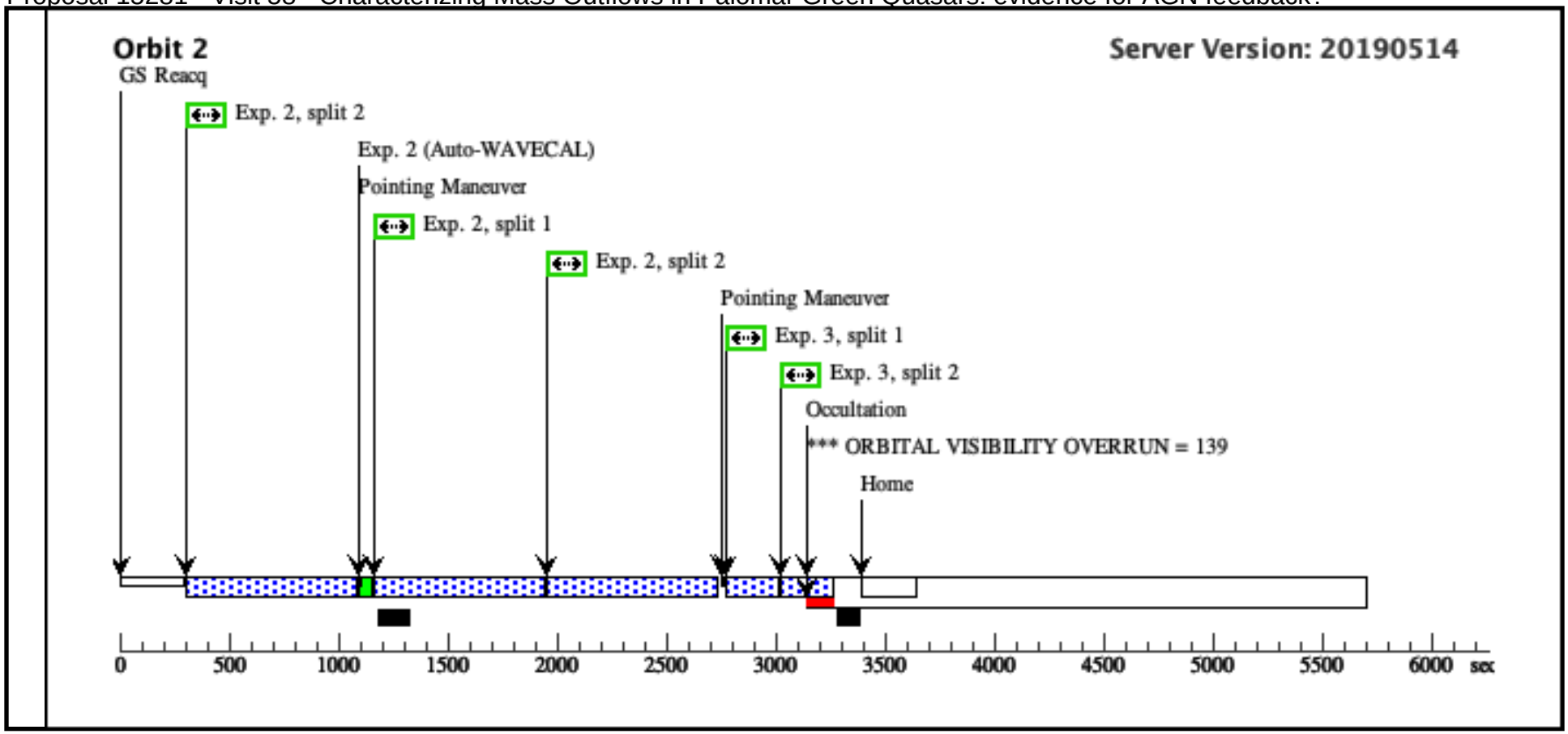
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(3) MRK-1014	STIS/CCD, ACQ, F28X50LP	MIRROR				2 Secs (2 Secs)	
								[==>]	***[1]***
2		(3) MRK-1014	STIS/CCD, ACCUM, 52X0.2	G750M 5734 A			Pattern 2, Exps 2-2 in Visit 58 (2)	1487 Secs (4461 Secs)	
								[==>(Pattern 1, Split 1)] *[==>(Pattern 1, Split 2)]* *[==>(Pattern 2, Split 1)]*	***[1]***
								[==>(Pattern 2, Split 2)] *[==>(Pattern 3, Split 1)]* *[==>(Pattern 3, Split 2)]*	***[2]***
3		(3) MRK-1014	STIS/CCD, ACCUM, 52X0.2	G750M 5734 A				414 Secs (414 Secs)	
								[==>(Split 1)] *[==>(Split 2)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20190514
GS Reacq
Exp. 2, split 2
Exp. 2 (Auto-WAVECAL)
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Pointing Maneuver
Exp. 3, split 1
Exp. 3, split 2
Occultation
*** ORBITAL VISIBILITY OVERRUN = 139
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15281, Visit 11, completed Wed Dec 11 19:00:40 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: ORIENT 120D TO 160 D; ORIENT 300D TO 340 D; ON HOLD

On Hold Comments: Need to analyze the images from visit 4 to determine the optimal roll angle for the STIS observations.

Diagnostics

(Visit 11) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(Visit 11) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 11) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 11) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 11) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 11) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 11) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 11) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 11) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 11) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=STIS-ALONG-SLIT Purpose=DITHER Number Of Points=3 Point Spacing=0.25 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=90.0 Angle Between Sides= Center Pattern=false		(2)

Fixed Targets

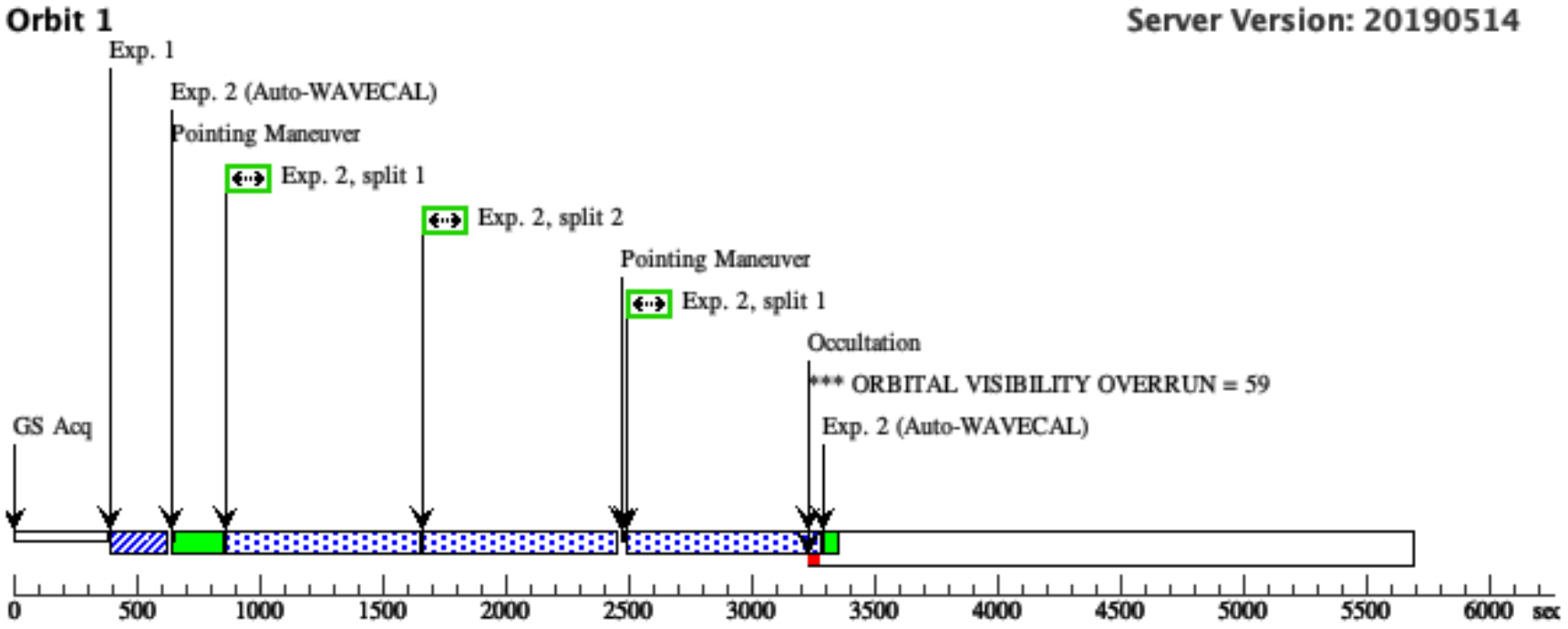
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	2XMM-J095652.4+411522	RA: 09 56 52.3916 (149.2182983d) Dec: +41 15 22.17 (41.25616d) Equinox: J2000		V=14.9	Reference Frame: SIMBAD

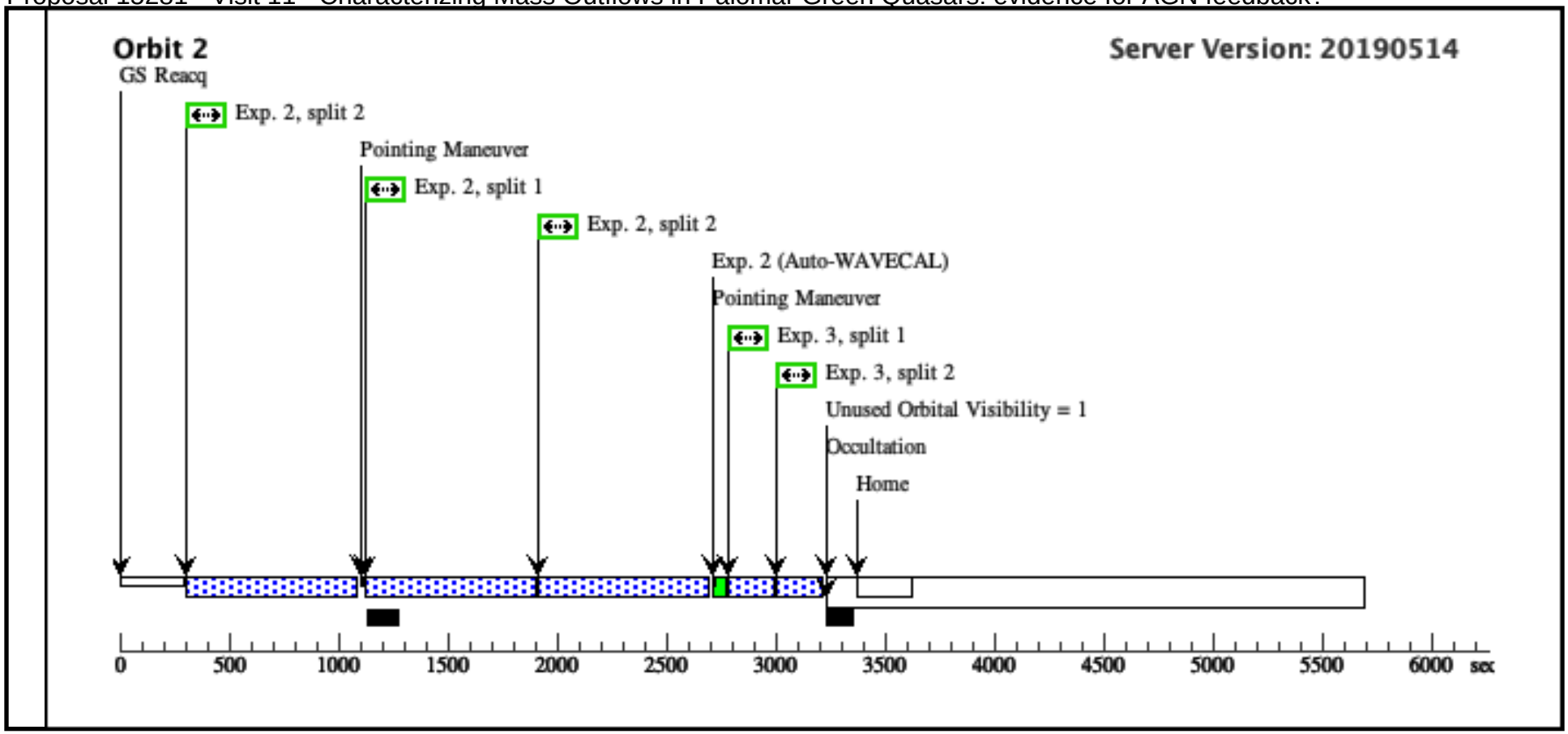
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(4) 2XMM-J095652.4+411522	STIS/CCD, ACQ, F28X50LP	MIRROR				2 Secs (2 Secs)	
								[==>]	***[1]***
2		(4) 2XMM-J095652.4+411522	STIS/CCD, ACCUM, 52X0.2	G750M 6094 A			Pattern 2, Exps 2-2 in Visit 11 (2)	1552 Secs (4512 Secs)	
								[==>756.0 Secs (Pattern 1, Split 1)] *[==>756.0 Secs (Pattern 1, Split 2)]* *[==>756.0 Secs (Pattern 2, Split 1)]*	***[1]***
								[==>748.0 Secs (Pattern 2, Split 2)] *[==>748.0 Secs (Pattern 3, Split 1)]* *[==>748.0 Secs (Pattern 3, Split 2)]*	***[2]***
3		(4) 2XMM-J095652.4+411522	STIS/CCD, ACCUM, 52X0.2	G750M 6094 A				414 Secs (358 Secs)	
								[==>179.0 Secs (Split 1)] *[==>179.0 Secs (Split 2)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20190514
GS Reacq
Exp. 2, split 2
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2 (Auto-WAVECAL)
Pointing Maneuver
Exp. 3, split 1
Exp. 3, split 2
Unused Orbital Visibility = 1
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15281, Visit 12, completed Wed Dec 11 19:00:40 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: ORIENT 200D TO 230 D; ORIENT 20D TO 50 D; ON HOLD

On Hold Comments: Need to analyze the images from visit 5 to determine the optimal roll angle for the STIS observations.

Diagnostics

(Visit 12) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(Visit 12) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 12) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 12) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 12) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 12) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 12) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 12) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 12) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 12) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=STIS-ALONG-SLIT Purpose=DITHER Number Of Points=3 Point Spacing=0.25 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=90.0 Angle Between Sides= Center Pattern=false		(2)

Fixed Targets

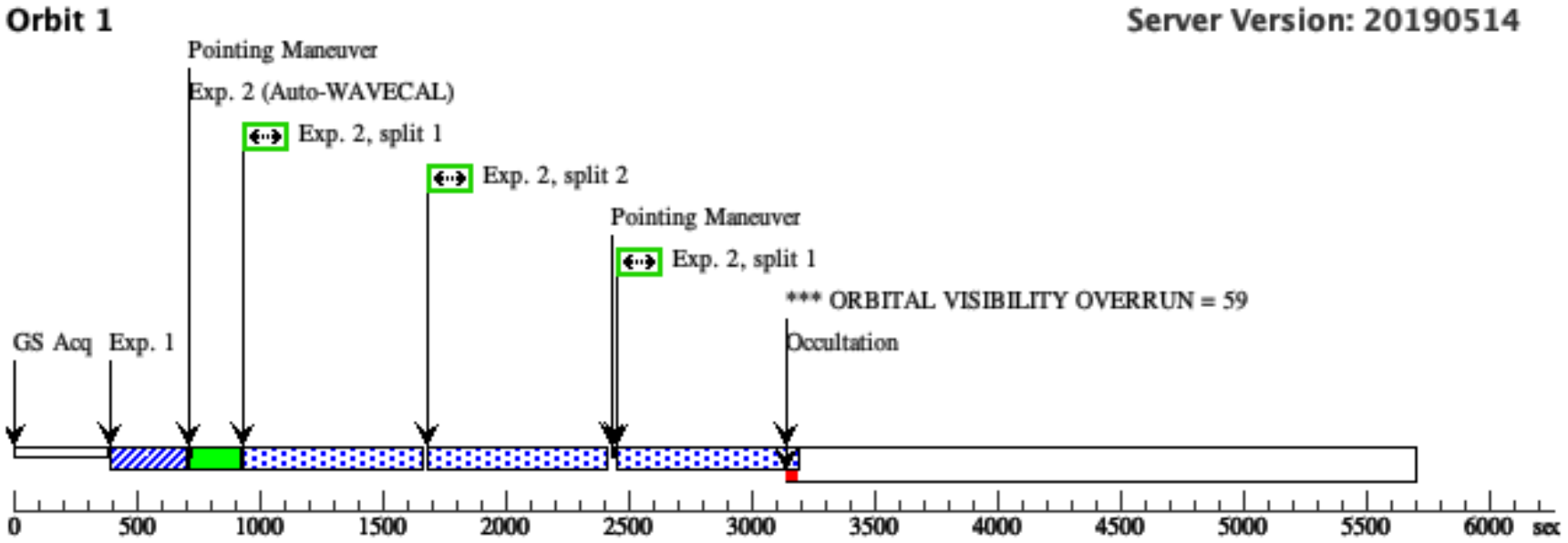
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	2DFGRS-TGN357Z241	RA: 10 14 54.9020 (153.7287583d) Dec: +00 33 37.55 (.56043d) Equinox: J2000		V=18.94	Reference Frame: SIMBAD

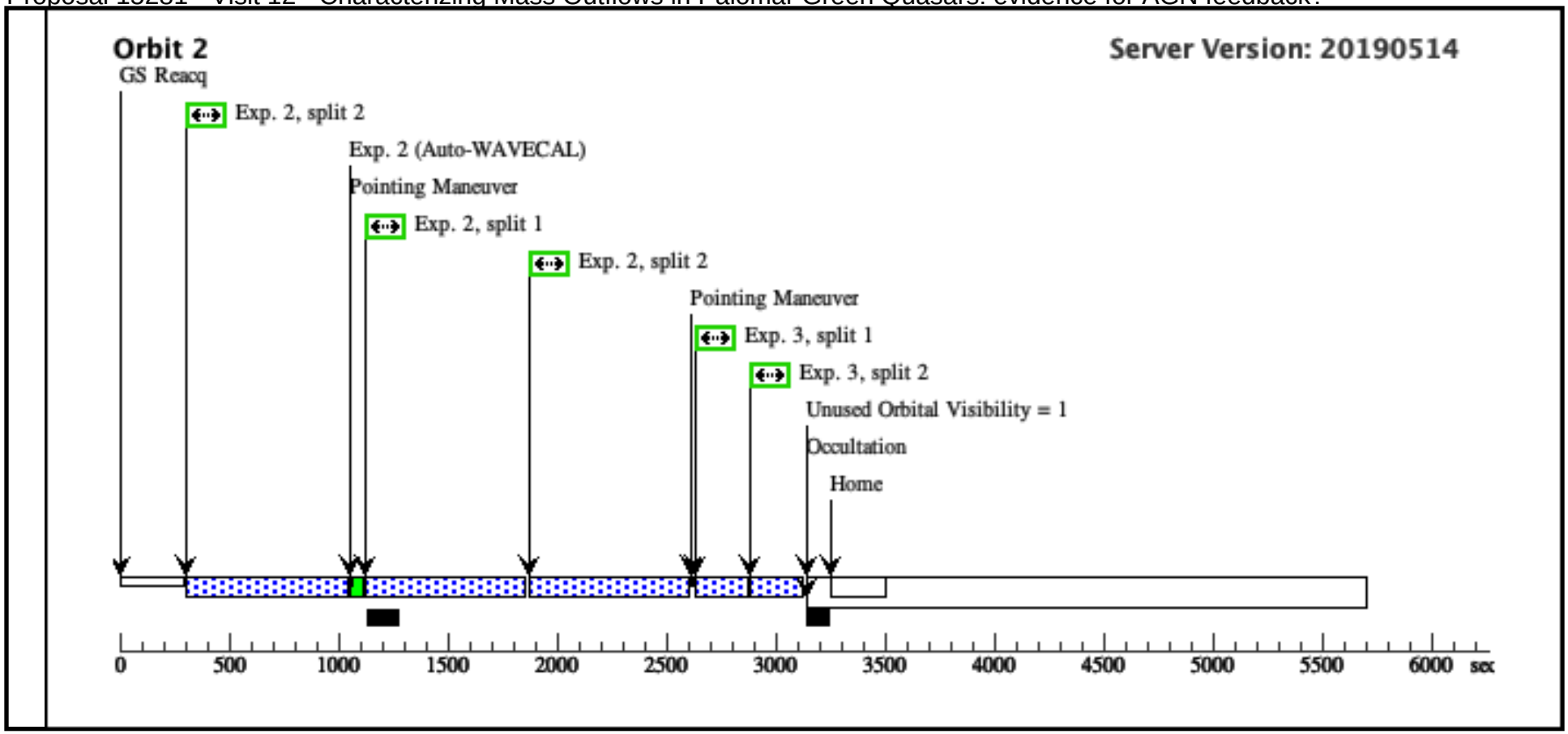
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(5) 2DFGRS-TGN357Z241	STIS/CCD, ACQ, F28X50LP	MIRROR				20 Secs (20 Secs)	
								[==>]	***[1]***
2		(5) 2DFGRS-TGN357Z241	STIS/CCD, ACCUM, 52X0.2	G750M 6094 A			Pattern 2, Exps 2-2 in Visit 12 (2)	1400 Secs (4200 Secs)	
								[==>(Pattern 1, Split 1)] *[==>(Pattern 1, Split 2)]* *[==>(Pattern 2, Split 1)]*	***[1]***
								[==>(Pattern 2, Split 2)] *[==>(Pattern 3, Split 1)]* *[==>(Pattern 3, Split 2)]*	***[2]***
3		(5) 2DFGRS-TGN357Z241	STIS/CCD, ACCUM, 52X0.2	G750M 6094 A				406 Secs (406 Secs)	
								[==>(Split 1)] *[==>(Split 2)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20190514
GS Reacq
Exp. 2, split 2
Exp. 2 (Auto-WAVECAL)
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Pointing Maneuver
Exp. 3, split 1
Exp. 3, split 2
Unused Orbital Visibility = 1
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Proposal 15281 - Visit 13 - Characterizing Mass Outflows in Palomar Green Quasars: evidence for AGN feedback?

Visit

Proposal 15281, Visit 13, implementation Wed Dec 11 19:00:41 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: ORIENT 135D TO 175 D; ORIENT 315D TO 355 D; AFTER 06 BY 60 D TO 425 D

Diagnostics

(Visit 13) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 13) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 13) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 13) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 13) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 13) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 13) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 13) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 13) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=STIS-ALONG-SLIT Purpose=DITHER Number Of Points=3 Point Spacing=0.25 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=90.0 Angle Between Sides= Center Pattern=false		(2)

Fixed Targets

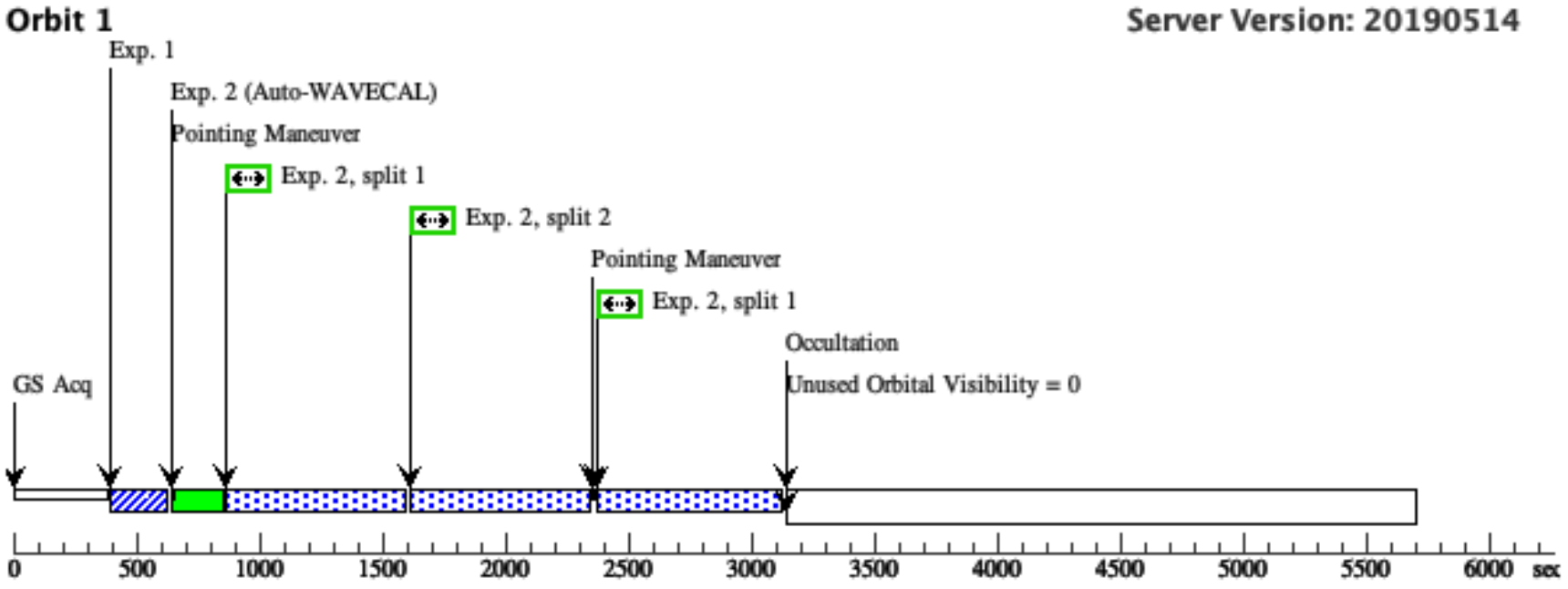
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	2MASSI-J1051514-005117	RA: 10 51 51.4404 (162.9643350d) Dec: -00 51 17.73 (-.85492d) Equinox: J2000		V=15.78	Reference Frame: SIMBAD

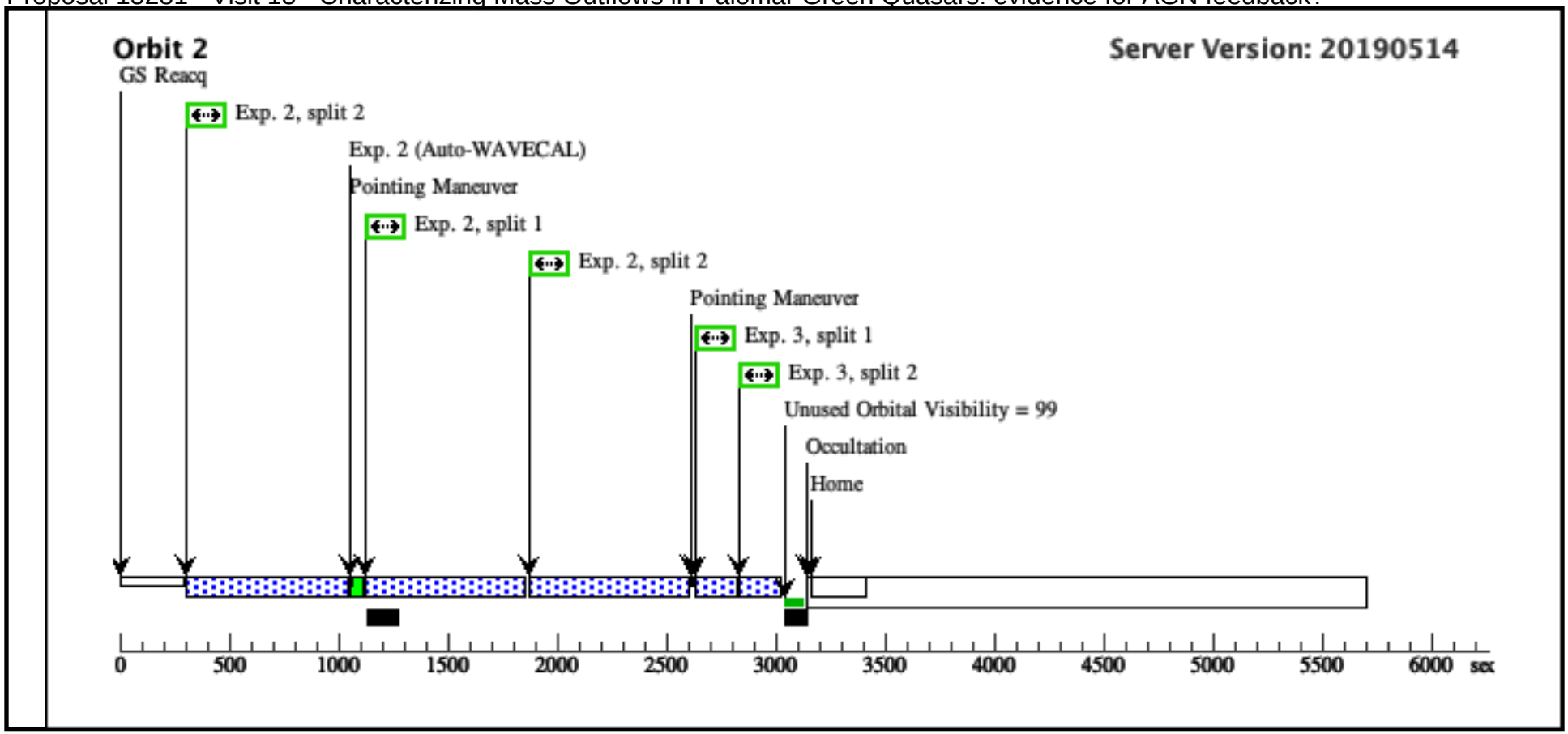
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(6) 2MASSI-J1051514-005117	STIS/CCD, ACQ, F28X50LP	MIRROR				2 Secs (2 Secs)	
								[==>]	***[1]***
2		(6) 2MASSI-J1051514-005117	STIS/CCD, ACCUM, 52X0.2	G750M 6768 A			Pattern 2, Exps 2-2 in Visit 13 (2)	1487 Secs (4213 Secs)	
								[==>700.0 Secs (Pattern 1, Split 1)] *[==>700.0 Secs (Pattern 1, Split 2)]* *[==>713.0 Secs (Pattern 2, Split 1)]*	***[1]***
								[==>700.0 Secs (Pattern 2, Split 2)] *[==>700.0 Secs (Pattern 3, Split 1)]* *[==>700.0 Secs (Pattern 3, Split 2)]*	***[2]***
3		(6) 2MASSI-J1051514-005117	STIS/CCD, ACCUM, 52X0.2	G750M 6768 A				414 Secs (308 Secs)	
								[==>154.0 Secs (Split 1)] *[==>154.0 Secs (Split 2)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20190514
GS Reacq
Exp. 2, split 2
Exp. 2 (Auto-WAVECAL)
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Pointing Maneuver
Exp. 3, split 1
Exp. 3, split 2
Unused Orbital Visibility = 99
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15281, Visit 14, failed Wed Dec 11 19:00:41 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: ORIENT 75D TO 95 D; ORIENT 255D TO 275 D; AFTER 57 BY 60 D TO 365 D

Diagnostics

(Visit 14) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(Visit 14) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 14) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 14) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 14) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 14) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 14) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 14) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 14) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 14) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=STIS-ALONG-SLIT Purpose=DITHER Number Of Points=3 Point Spacing=0.25 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=90.0 Angle Between Sides= Center Pattern=false		(2)

Fixed Targets

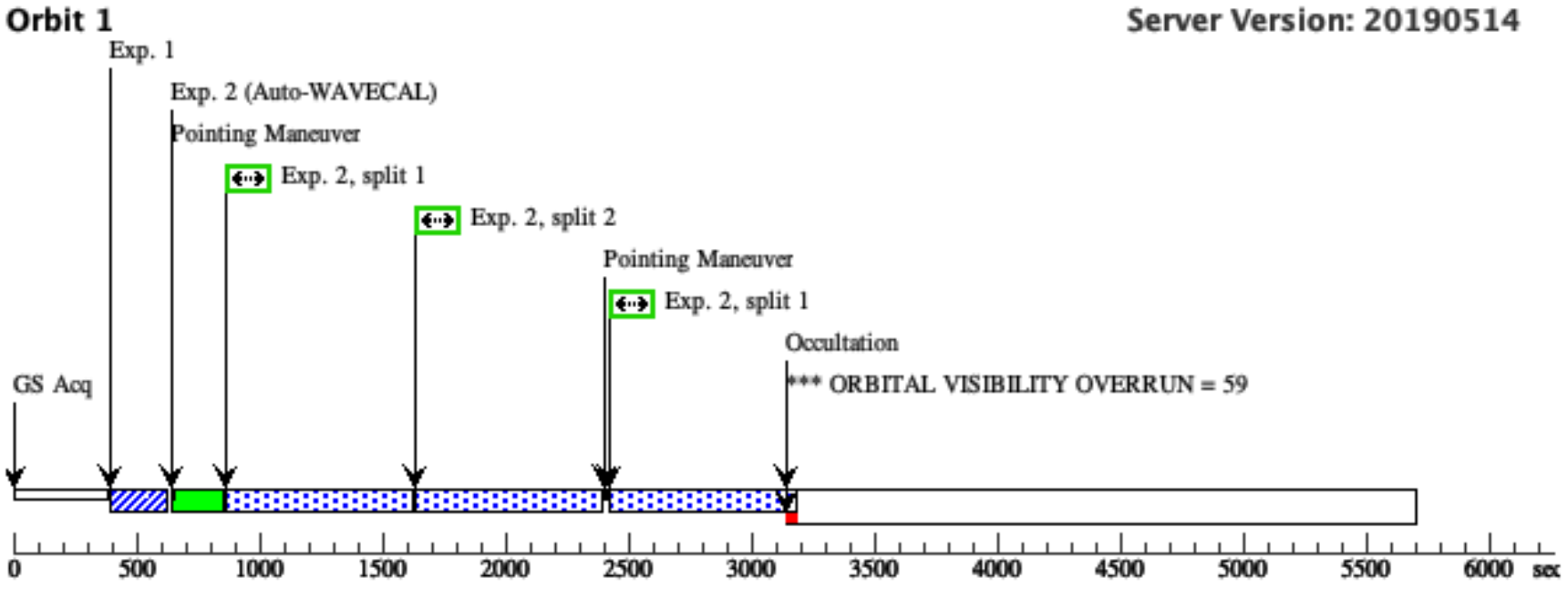
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	2XMM-J130946.9+081948	RA: 13 09 46.9980 (197.4458250d) Dec: +08 19 48.24 (8.33007d) Equinox: J2000		V=15.89	Reference Frame: SIMBAD

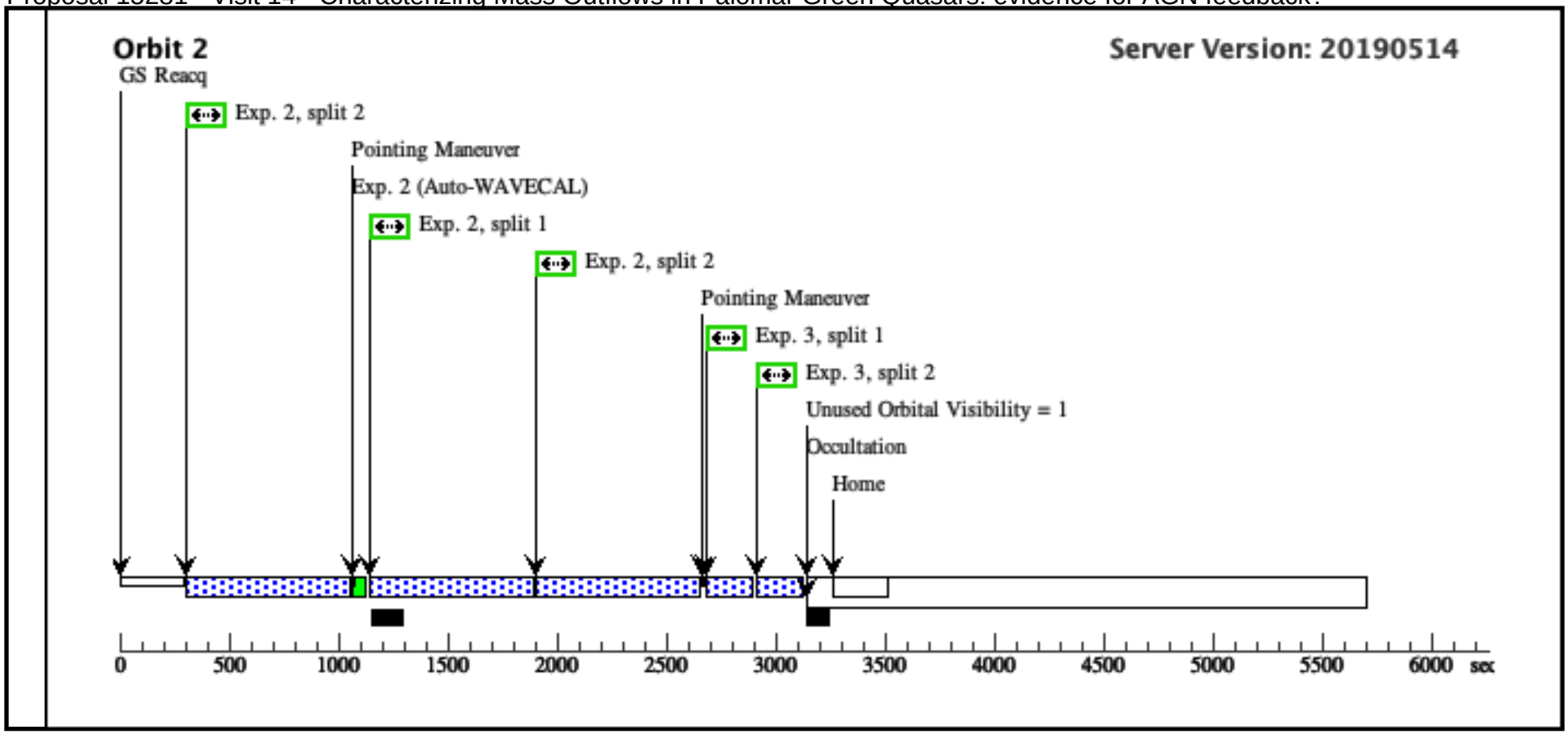
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(7) 2XMM-J130946.9+081948	STIS/CCD, ACQ, F28X50LP	MIRROR				2 Secs (2 Secs)	
								[==>]	***[1]***
2		(7) 2XMM-J130946.9+081948	STIS/CCD, ACCUM, 52X0.2	G750M 5734 A			Pattern 2, Exps 2-2 in Visit 14 (2)	1490 Secs (4326 Secs)	
								[==>725.0 Secs (Pattern 1, Split 1)] *[==>725.0 Secs (Pattern 1, Split 2)]* *[==>725.0 Secs (Pattern 2, Split 1)]*	***[1]***
								[==>717.0 Secs (Pattern 2, Split 2)] *[==>717.0 Secs (Pattern 3, Split 1)]* *[==>717.0 Secs (Pattern 3, Split 2)]*	***[2]***
3		(7) 2XMM-J130946.9+081948	STIS/CCD, ACCUM, 52X0.2	G750M 5734 A				414 Secs (358 Secs)	
								[==>179.0 Secs (Split 1)] *[==>179.0 Secs (Split 2)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20190514
GS Reacq
Exp. 2, split 2
Pointing Maneuver
Exp. 2 (Auto-WAVECAL)
Exp. 2, split 1
Exp. 2, split 2
Pointing Maneuver
Exp. 3, split 1
Exp. 3, split 2
Unused Orbital Visibility = 1
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15281, Visit 59, implementation Wed Dec 11 19:00:41 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: ORIENT 65D TO 105 D; ORIENT 245D TO 285 D

Diagnostics

(Visit 59) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 59) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 59) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 59) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 59) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 59) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 59) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 59) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE
(Visit 59) Warning (Orbit Planner): REFERENCE-FRAME MUST BE ICRS OR GSC1 FOR SMALL APERTURE

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=STIS-ALONG-SLIT Purpose=DITHER Number Of Points=3 Point Spacing=0.25 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=90.0 Angle Between Sides= Center Pattern=false		(2)

Fixed Targets

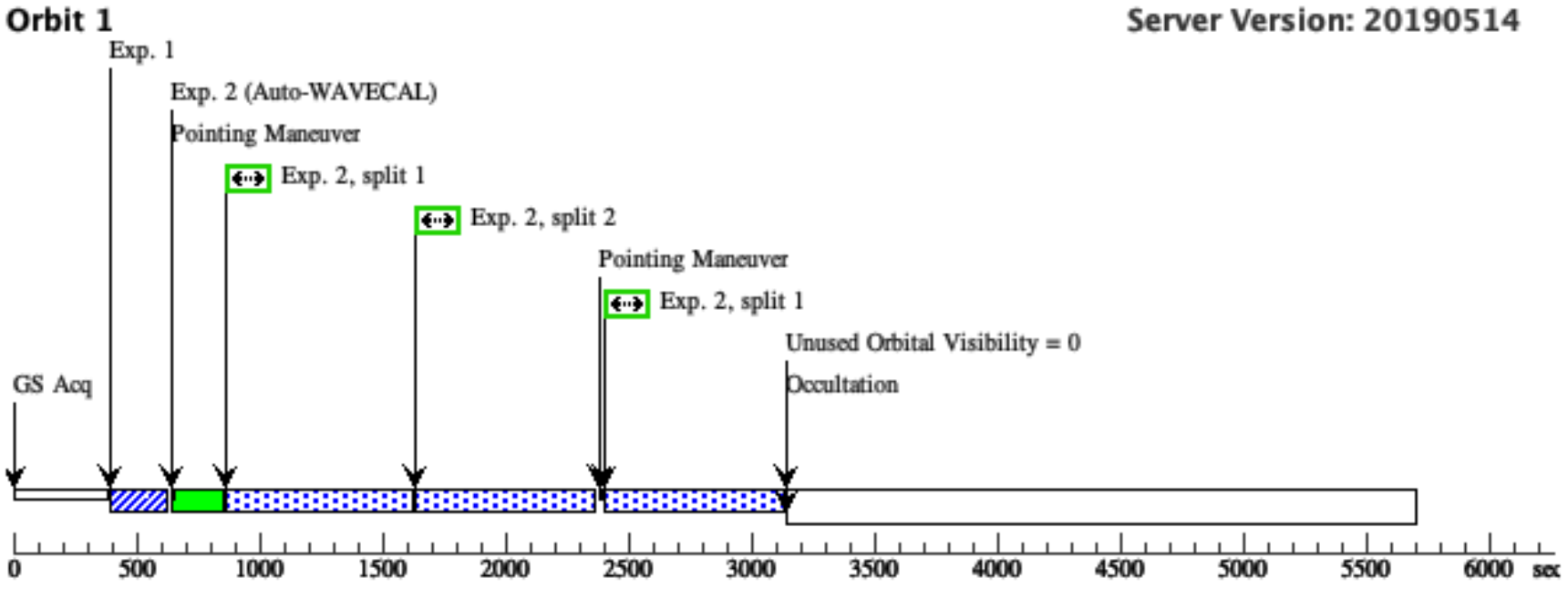
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	2XMM-J130946.9+081948	RA: 13 09 46.9980 (197.4458250d) Dec: +08 19 48.24 (8.33007d) Equinox: J2000		V=15.89	Reference Frame: SIMBAD

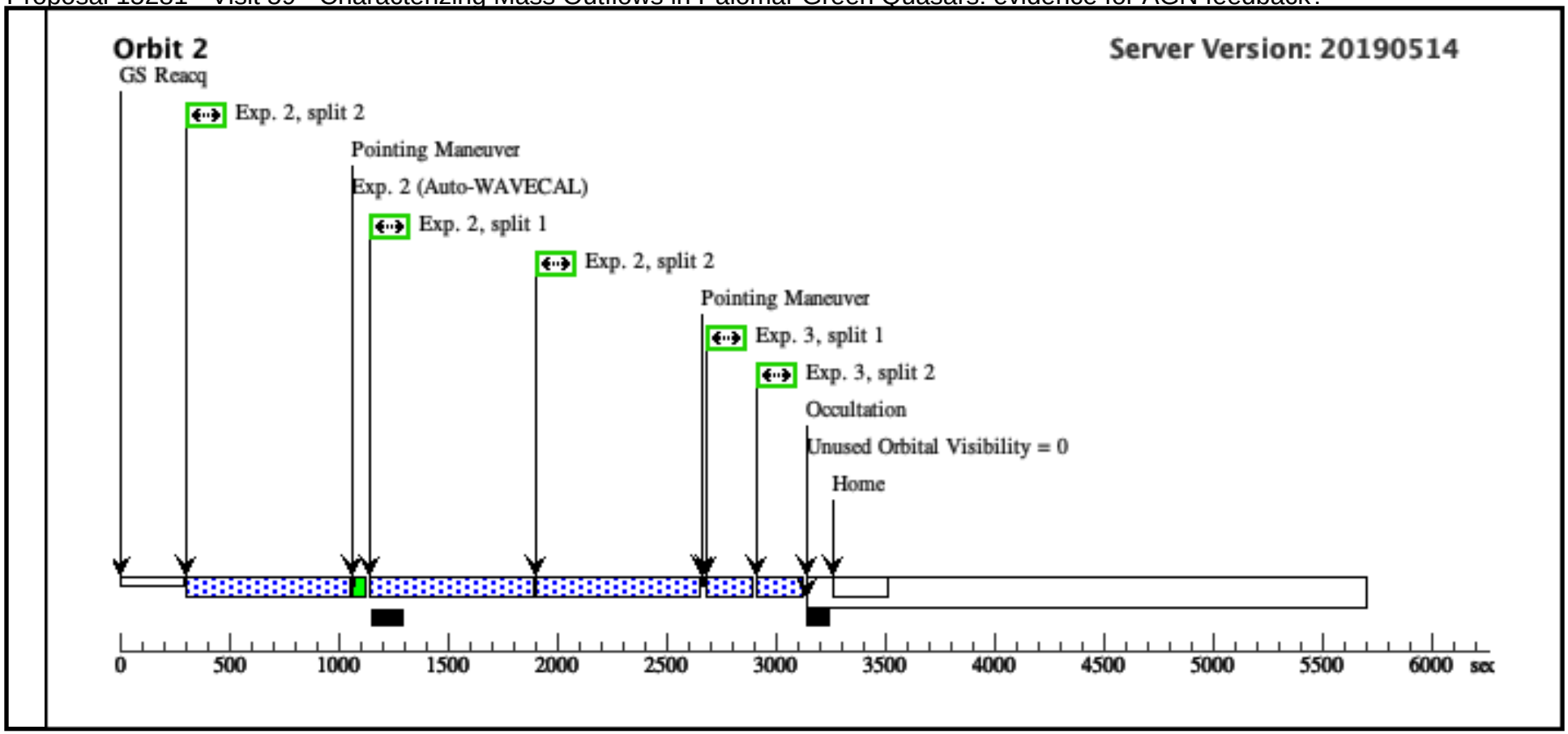
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[NLR, QSO, QUASAR]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(7) 2XMM-J130946.9+081948	STIS/CCD, ACQ, F28X50LP	MIRROR				2 Secs (2 Secs)	
								[==>]	***[1]***
2		(7) 2XMM-J130946.9+081948	STIS/CCD, ACCUM, 52X0.2	G750M 5734 A			Pattern 2, Exps 2-2 in Visit 59 (2)	1490 Secs (4267 Secs)	
								[==>725.0 Secs (Pattern 1, Split 1)] *[==>696.0 Secs (Pattern 1, Split 2)]* *[==>695.0 Secs (Pattern 2, Split 1)]*	***[1]***
								[==>717.0 Secs (Pattern 2, Split 2)] *[==>717.0 Secs (Pattern 3, Split 1)]* *[==>717.0 Secs (Pattern 3, Split 2)]*	***[2]***
3		(7) 2XMM-J130946.9+081948	STIS/CCD, ACCUM, 52X0.2	G750M 5734 A				414 Secs (359 Secs)	
								[==>180.0 Secs (Split 1)] *[==>179.0 Secs (Split 2)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20190514
GS Reacq
Exp. 2, split 2
Pointing Maneuver
Exp. 2 (Auto-WAVECAL)
Exp. 2, split 1
Exp. 2, split 2
Pointing Maneuver
Exp. 3, split 1
Exp. 3, split 2
Occultation
Unused Orbital Visibility = 0
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec