13834 - The Proper Motion Field along the Magellanic Bridge: a New Probe of the LMC-SMC interaction

Cycle: 22, 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	(6) MCBRIDGE-BG1	ACS/WFC WFC3/UVIS	2	20-Feb-2015 21:16:38.0	yes
02	(6) MCBRIDGE-BG1	ACS/WFC WFC3/UVIS	2	20-Feb-2015 21:16:42.0	yes
03	(7) MCBRIDGE-BG2	ACS/WFC WFC3/UVIS	2	20-Feb-2015 21:16:46.0	yes
04	(7) MCBRIDGE-BG2	ACS/WFC WFC3/UVIS	2	20-Feb-2015 21:16:50.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
05	(8) MCBRIDGE-BG3	ACS/WFC WFC3/UVIS	2	20-Feb-2015 21:16:53.0	yes
06	(8) MCBRIDGE-BG3	ACS/WFC WFC3/UVIS	2	20-Feb-2015 21:16:56.0	yes
07	(1) MCBRIDGE-QSO1	WFC3/UVIS	1	20-Feb-2015 21:16:59.0	yes
57	(1) MCBRIDGE-QSO1	WFC3/UVIS	1	20-Feb-2015 21:17:01.0	yes
08	(2) MCBRIDGE-QSO2	WFC3/UVIS	1	20-Feb-2015 21:17:02.0	yes
09	(3) MCBRIDGE-QSO3	WFC3/UVIS	1	20-Feb-2015 21:17:03.0	yes
10	(4) MCBRIDGE-QSO4	WFC3/UVIS	1	20-Feb-2015 21:17:05.0	yes
11	(5) MCBRIDGE-QSO5	WFC3/UVIS	1	20-Feb-2015 21:17:06.0	yes

18 Total Orbits Used

ABSTRACT

Our HST proper motion (PM) measurements of the LMC and SMC have revolutionized our understanding of the Magellanic System, and have spurred new research on its use as a cosmological probe of galaxy formation. The PMs imply that the Magellanic Clouds are likely on their first infall towards the Milky Way (MW). The disturbed nature of the Magellanic System is therefore likely due to the LMC-SMC interaction, and not to the MW influence. This has emphasized the importance of dwarf galaxy interactions for galaxy evolution. The Clouds are connected by a complex of gas and stars called the Magellanic Bridge. We propose to map the stellar PM field of the Bridge, similar to our prior HST mapping of the LMC PM rotation field. Our state-of-the-art N-body simulations show that the PM field will tightly constrain the impact parameter of LMC-SMC orbit at its last pericenter 100-300 Myr ago, which is the main uncertainty in our understanding of the LMC/SMC interaction history. This will test whether the tidal debris between the galaxies is due to a recent direct-hit collision. It will also test models in which the tidal debris is responsible for the observed microlensing events. We will observe once 3 fields for which first-epoch archival data already exists, and observe twice 5 other fields over a 2-cycle time baseline. With the established data reduction techniques of our successful HSTPROMO collaboration, this will yield PM accuracies of 10-25 km/s per field, well below the 130 km/s velocity difference between the Clouds. This will yield the best constraints to date on the LMC/SMC interaction, and will further test the importance of dwarf-dwarf interactions for galaxy evolution.

OBSERVING DESCRIPTION

To measure the absolute proper motion of stars in the Magellanic Bridge, we will use two different types of objects as stationary reference sources. For the 3 fields that have first-epoch data in the archive, we will use hundreds of distant background galaxies as stationary reference sources. The Cycle 22 observations will be used as the second-epoch data for these "background galaxy fields". For the other 5 fields, we will use quasars as stationary reference sources. Our Cycle 22 observations for these "quasar fields" will only provide one of the two epochs required for proper motion measurements, and the second-epoch data will be obtained in Cycle 24.

[Background Galaxy Fields] We will observe each background galaxy field for 4 orbits (separated into 2 visits) with ACS/WFC. We will use the F775W filter, the same filter used for the first-epoch data, for the proper motion measurements. Each orbit sill start or end with short F606W exposure for constructing CMDs that will allow identification of Magellanic Bridge stars. Individual exposures will be dithered using customized patterns designed by J. Anderson (STScI) to maximize pixel phase coverage. These are specificied using POS TARGs on the individual exposures; no pre-specified patterns are used. To maximize the overlapping area and to minimize systematics dependent on location on the detector, we request the same orientations and coordinates as used by the first-epoch observations. We also require that each target field be imaged in 30 day windows so that they can be treated as single epoch data for astrometric analyses. During these second epoch observations, the WFC3/UVIS camera will be pointed ~6 arcmin away from our target fields. These parallel fields will be observed with F814W and F606W filters for constructing CMDs to study the stellar population of the Magellanic Bridge.

[Quasar Fields] These will be the first epoch in a two epoch program to measure the proper motion of the 5 background QSOs in the Magellanic Bridge. Epoch field in this epoch will consist of a one orbit observation, obtaining multiple dithered UVIS exposures, in a pattern to optimize PSF sampling. We aim for a S/N >> 200 for the quasars in F606W, and also need the F814W data to make CMDs to separate the Magellanic Bridge stars from field stars as well as to study the stellar populations. To maximize the time baseline with respect to the second epoch, and to achieve random errors that are small enough to do the science, we have put a timing requirement that says "before Feb 1, 2015" for all our targets.

Visit

Proposal 13834, BG1-1 (01), implementation Sat Feb 21 02:17:08 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: ORIENT 237.57D TO 237.57 D; GROUP 01,02 WITHIN 30D

Comments: This is the first visit for imaging MCBRIDGE-BG1. Two orbits are required to complete this visit. Since our goal is to measure proper motions of stars in the target field, our orientation is set to exactly match the previous observations of PID 12286. We adopt a customized dither pattern designed to optimally cover the pixel phase using the POS-TARG special requirements. We required that Visits 01 and 02 be observed within a 30 day window so that they can be treated as single epoch data for astrometric analysis.

Fixed Targets

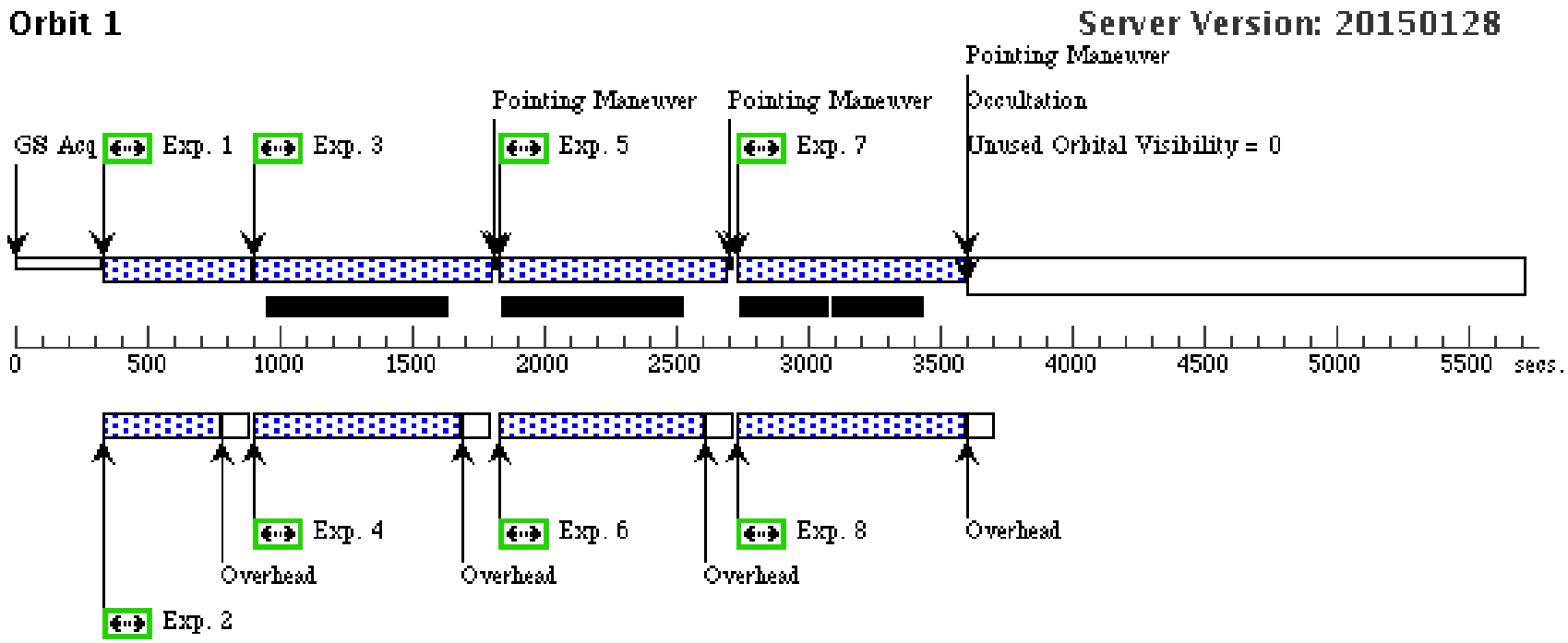
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	MCBRIDGE-BG1	RA: 02 04 11.2000 (31.0466667d) Dec: -76 16 11.50 (-76.26986d) Equinox: J2000		V=21+/-2	Reference Frame: ICRS

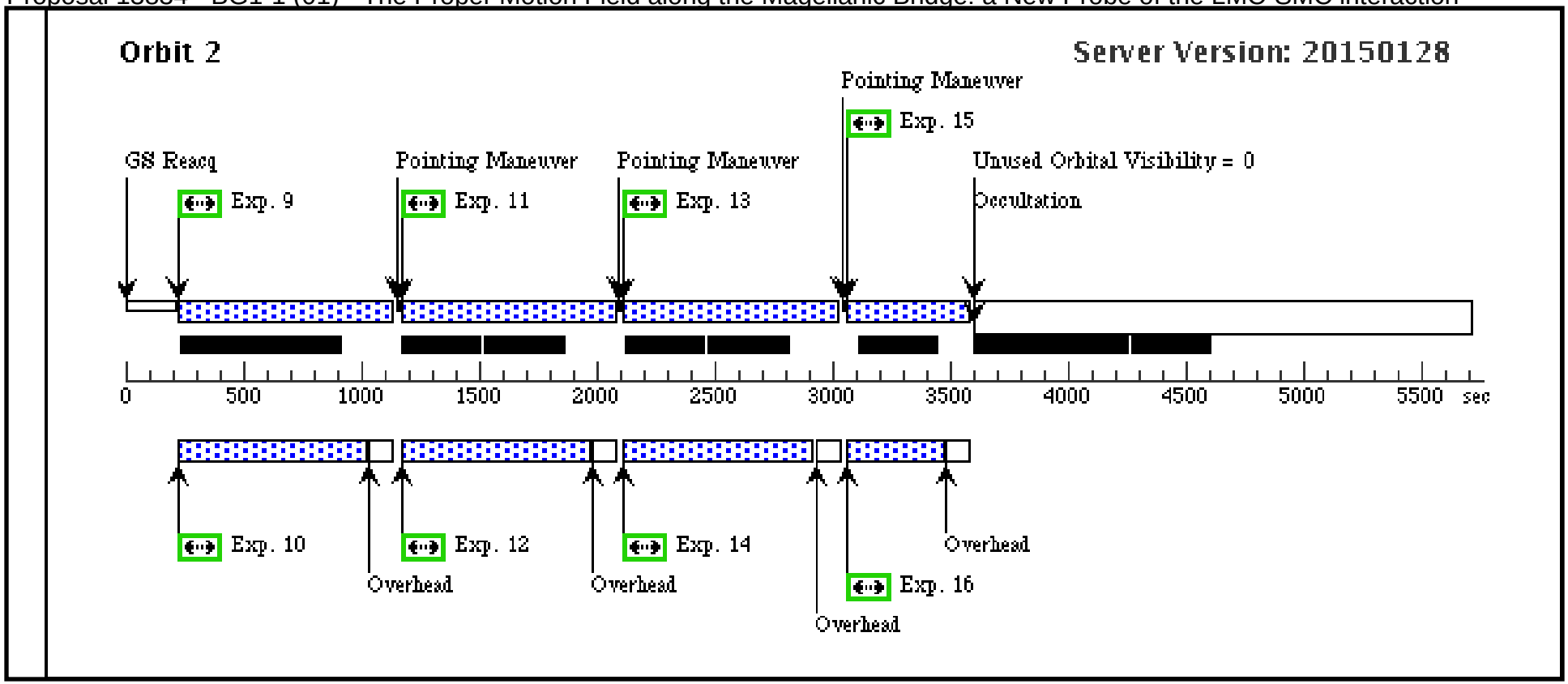
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(6) MCBRIDGE-BG1	ACS/WFC, ACCUM, WFC	F606W		POS TARG 0.0000,0.0000	Sequence 1-8 Non-Int in BG1-1 (01) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in BG1-1 (01)	351 Secs (351 Secs) *[==>]*	***[1]***
2		(6) MCBRIDGE-BG1	WFC3/UVIS, ACCUM, UVIS	F606W			Sequence 1-8 Non-Int in BG1-1 (01) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in BG1-1 (01)	300 Secs (411 Secs) *[==>411.0 Secs]*	***[1]***
3		(6) MCBRIDGE-BG1	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.0000,0.0000	Sequence 1-8 Non-Int in BG1-1 (01) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in BG1-1 (01)	732 Secs (732 Secs) *[==>]*	***[1]***
4		(6) MCBRIDGE-BG1	WFC3/UVIS, ACCUM, UVIS	F606W			Sequence 1-8 Non-Int in BG1-1 (01) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in BG1-1 (01)	750 Secs (782 Secs) *[==>782.0 Secs]*	***[1]***
5		(6) MCBRIDGE-BG1	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.1740,0.1850	Sequence 1-8 Non-Int in BG1-1 (01) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in BG1-1 (01)	732 Secs (732 Secs) *[==>]*	***[1]***
6		(6) MCBRIDGE-BG1	WFC3/UVIS, ACCUM, UVIS	F814W			Sequence 1-8 Non-Int in BG1-1 (01) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in BG1-1 (01)	750 Secs (750 Secs) *[==>750.0 Secs]*	***[1]***
7		(6) MCBRIDGE-BG1	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.3232,0.1235	Sequence 1-8 Non-Int in BG1-1 (01) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in BG1-1 (01)	732 Secs (732 Secs) *[==>]*	***[1]***
8		(6) MCBRIDGE-BG1	WFC3/UVIS, ACCUM, UVIS	F814W			Sequence 1-8 Non-Int in BG1-1 (01) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in BG1-1 (01)	750 Secs (858 Secs) *[==>858.0 Secs]*	***[1]***
9		(6) MCBRIDGE-BG1	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.1005,0.3305	Sequence 9-16 Non-Int in BG1-1 (01) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in BG1-1 (01)	790 Secs (790 Secs) *[==>]*	***[2]***

	10	(6) MCBRIDGE-BG 1	WFC3/UVIS, ACCUM, UVIS	F606W		Sequence 9-16 Non-Int in BG1-1 (01) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in BG1-1 (01)	750 Secs (777 Secs) *[==>777.0 Secs]*	***[2]***
	11	(6) MCBRIDGE-BG 1	ACS/WFC, ACCUM, WFC	F775W	POS TARG 0.5030,0.0460	Sequence 9-16 Non-Int in BG1-1 (01) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in BG1-1 (01)	790 Secs (790 Secs) *[==>]*	***[2]***
	12	(6) MCBRIDGE-BG 1	WFC3/UVIS, ACCUM, UVIS	F814W		Sequence 9-16 Non-Int in BG1-1 (01) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in BG1-1 (01)	750 Secs (777 Secs) *[==>777.0 Secs]*	***[2]***
	13	(6) MCBRIDGE-BG 1	ACS/WFC, ACCUM, WFC	F775W	POS TARG 0.6770,0.2310	Sequence 9-16 Non-Int in BG1-1 (01) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in BG1-1 (01)	790 Secs (790 Secs) *[==>]*	***[2]***
	14	(6) MCBRIDGE-BG 1	WFC3/UVIS, ACCUM, UVIS	F814W		Sequence 9-16 Non-Int in BG1-1 (01) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in BG1-1 (01)	750 Secs (800 Secs) *[==>800.0 Secs]*	***[2]***
	15	(6) MCBRIDGE-BG 1	ACS/WFC, ACCUM, WFC	F606W	POS TARG 0.148,0.086	Sequence 9-16 Non-Int in BG1-1 (01) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in BG1-1 (01)	360 Secs (360 Secs) *[==>]*	***[2]***
	16	(6) MCBRIDGE-BG 1	WFC3/UVIS, ACCUM, UVIS	F606W		Sequence 9-16 Non-Int in BG1-1 (01) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in BG1-1 (01)	200 Secs (388 Secs) *[==>388.0 Secs]*	***[2]***

Orbit Structure

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Exp. 15
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Occultation
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1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 10
Overhead
Exp. 12
Overhead
Exp. 14
Overhead
Exp. 16
Overhead

Visit

Proposal 13834, BG1-2 (02), implementation Sat Feb 21 02:17:09 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 01; GROUP 02,01 WITHIN 30D

Comments: This is the second visit for imaging MCBRIDGE-BG1. Two orbits are required to complete this visit. Since our goal is to measure proper motions of stars in the target field, our orientation is set to exactly match the previous observations of PID 12286. We adopt a customized dither pattern designed to optimally cover the pixel phase using the POS-TARG special requirements. We required that Visits 01 and 02 be observed within a 30 day window so that they can be treated as single epoch data for astrometric analysis.

Fixed Targets

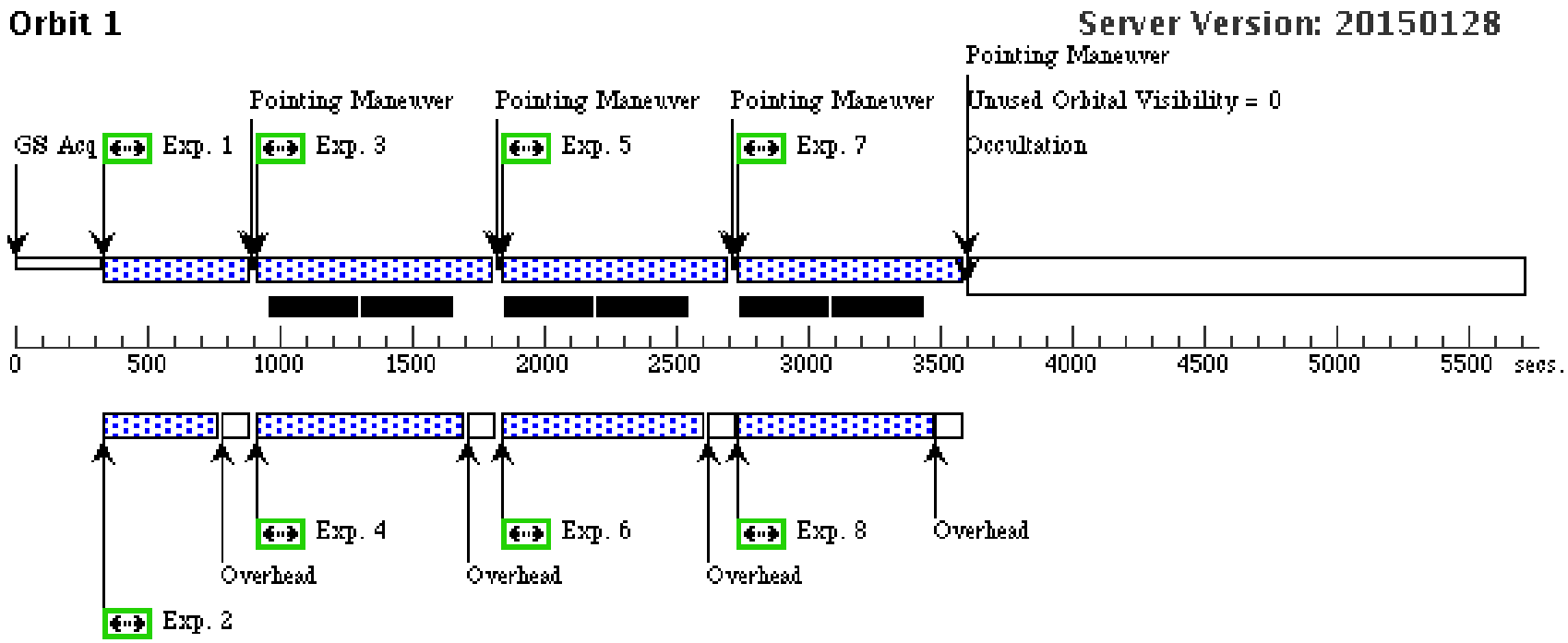
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	MCBRIDGE-BG1	RA: 02 04 11.2000 (31.0466667d) Dec: -76 16 11.50 (-76.26986d) Equinox: J2000		V=21+/-2	Reference Frame: ICRS

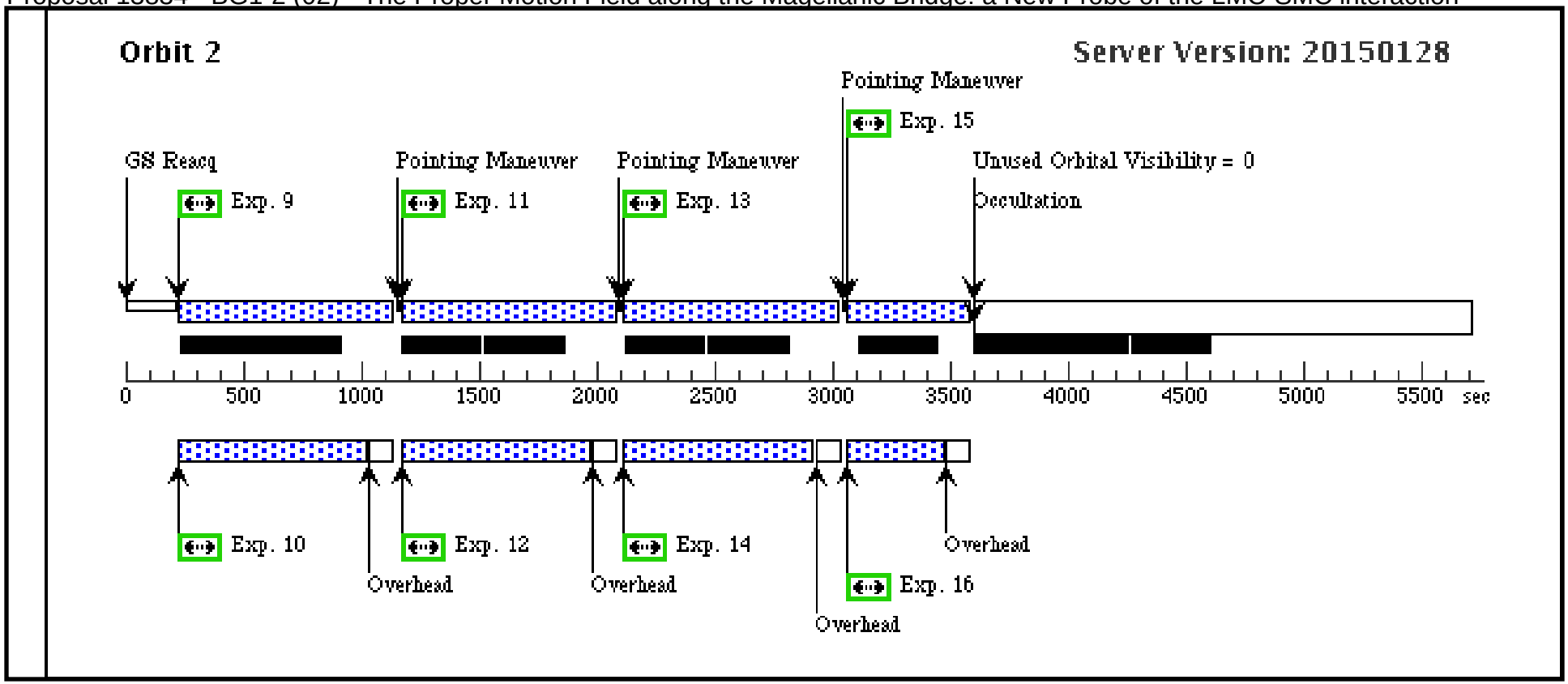
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(6) MCBRIDGE-BG1	ACS/WFC, ACCUM, WFC	F606W		POS TARG 0.222,0.240	Sequence 1-8 Non-Int in BG1-2 (02) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in BG1-2 (02)	345 Secs (345 Secs) *[==>]*	***[1]***
2		(6) MCBRIDGE-BG1	WFC3/UVIS, ACCUM, UVIS	F606W			Sequence 1-8 Non-Int in BG1-2 (02) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in BG1-2 (02)	300 Secs (405 Secs) *[==>405.0 Secs]*	***[1]***
3		(6) MCBRIDGE-BG1	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.8262,0.1695	Sequence 1-8 Non-Int in BG1-2 (02) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in BG1-2 (02)	730 Secs (730 Secs) *[==>]*	***[1]***
4		(6) MCBRIDGE-BG1	WFC3/UVIS, ACCUM, UVIS	F606W			Sequence 1-8 Non-Int in BG1-2 (02) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in BG1-2 (02)	740 Secs (780 Secs) *[==>780.0 Secs]*	***[1]***
5		(6) MCBRIDGE-BG1	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.6035,0.3765	Sequence 1-8 Non-Int in BG1-2 (02) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in BG1-2 (02)	730 Secs (730 Secs) *[==>]*	***[1]***
6		(6) MCBRIDGE-BG1	WFC3/UVIS, ACCUM, UVIS	F814W			Sequence 1-8 Non-Int in BG1-2 (02) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in BG1-2 (02)	740 Secs (740 Secs) *[==>740.0 Secs]*	***[1]***
7		(6) MCBRIDGE-BG1	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.1180,0.5180	Sequence 1-8 Non-Int in BG1-2 (02) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in BG1-2 (02)	730 Secs (730 Secs) *[==>]*	***[1]***
8		(6) MCBRIDGE-BG1	WFC3/UVIS, ACCUM, UVIS	F814W			Sequence 1-8 Non-Int in BG1-2 (02) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in BG1-2 (02)	740 Secs (740 Secs) *[==>]*	***[1]***
9		(6) MCBRIDGE-BG1	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.2920,0.7030	Sequence 9-16 Non-Int in BG1-2 (02) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in BG1-2 (02)	790 Secs (790 Secs) *[==>]*	***[2]***

	10	(6) MCBRIDGE-BG 1	WFC3/UVIS, ACCUM, UVIS	F606W		Sequence 9-16 Non-Int in BG1-2 (02) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in BG1-2 (02)	750 Secs (777 Secs) *[==>777.0 Secs]*	***[2]***
	11	(6) MCBRIDGE-BG 1	ACS/WFC, ACCUM, WFC	F775W	POS TARG 0.4412,0.6415	Sequence 9-16 Non-Int in BG1-2 (02) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in BG1-2 (02)	790 Secs (790 Secs) *[==>]*	***[2]***
	12	(6) MCBRIDGE-BG 1	WFC3/UVIS, ACCUM, UVIS	F814W		Sequence 9-16 Non-Int in BG1-2 (02) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in BG1-2 (02)	750 Secs (777 Secs) *[==>777.0 Secs]*	***[2]***
	13	(6) MCBRIDGE-BG 1	ACS/WFC, ACCUM, WFC	F775W	POS TARG 0.2185,0.8485	Sequence 9-16 Non-Int in BG1-2 (02) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in BG1-2 (02)	790 Secs (790 Secs) *[==>]*	***[2]***
	14	(6) MCBRIDGE-BG 1	WFC3/UVIS, ACCUM, UVIS	F814W		Sequence 9-16 Non-Int in BG1-2 (02) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in BG1-2 (02)	750 Secs (800 Secs) *[==>800.0 Secs]*	***[2]***
	15	(6) MCBRIDGE-BG 1	ACS/WFC, ACCUM, WFC	F606W	POS TARG 0.074,0.154	Sequence 9-16 Non-Int in BG1-2 (02) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in BG1-2 (02)	360 Secs (360 Secs) *[==>]*	***[2]***
	16	(6) MCBRIDGE-BG 1	WFC3/UVIS, ACCUM, UVIS	F606W		Sequence 9-16 Non-Int in BG1-2 (02) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in BG1-2 (02)	200 Secs (388 Secs) *[==>388.0 Secs]*	***[2]***

Orbit Structure

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Occultation
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500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 10
Overhead
Exp. 12
Overhead
Exp. 14
Overhead
Exp. 16
Overhead

Visit

Proposal 13834, BG2-1 (03), implementation Sat Feb 21 02:17:09 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 40%; ORIENT 134.73D TO 134.73 D; GROUP 03,04 WITHIN 30D

Comments: This is the first visit for imaging MCBRIDGE-BG2. Two orbits are required to complete this visit. Since our goal is to measure proper motions of stars in the target field, our orientation is set to exactly match the previous observations of PID 9488. We adopt a customized dither pattern designed to optimally cover the pixel phase using the POS-TARG special requirements. We required that Visits 03 and 04 be observed within a 30 day window so that they can be treated as single epoch data for astrometric analysis.

Fixed Targets

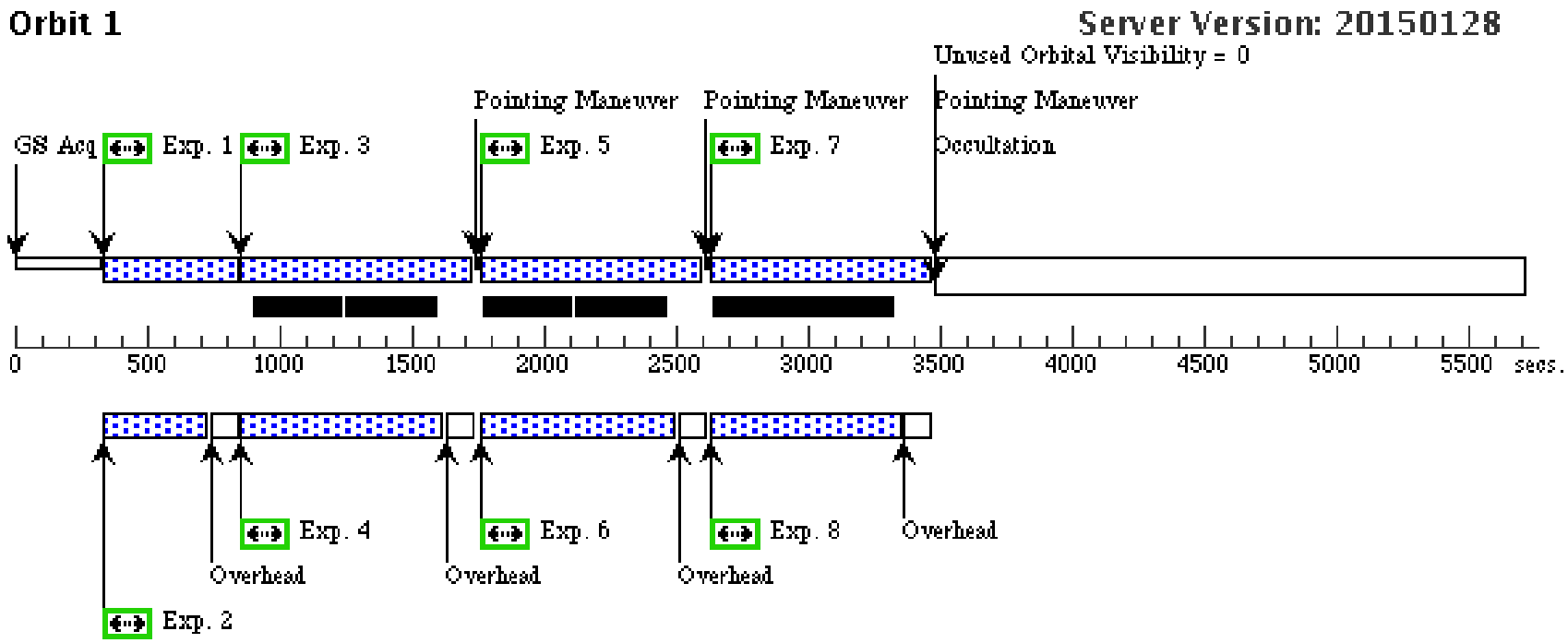
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	MCBRIDGE-BG2	RA: 02 30 41.6000 (37.6733333d) Dec: -73 53 43.30 (-73.89536d) Equinox: J2000		V=21+/-2	Reference Frame: ICRS

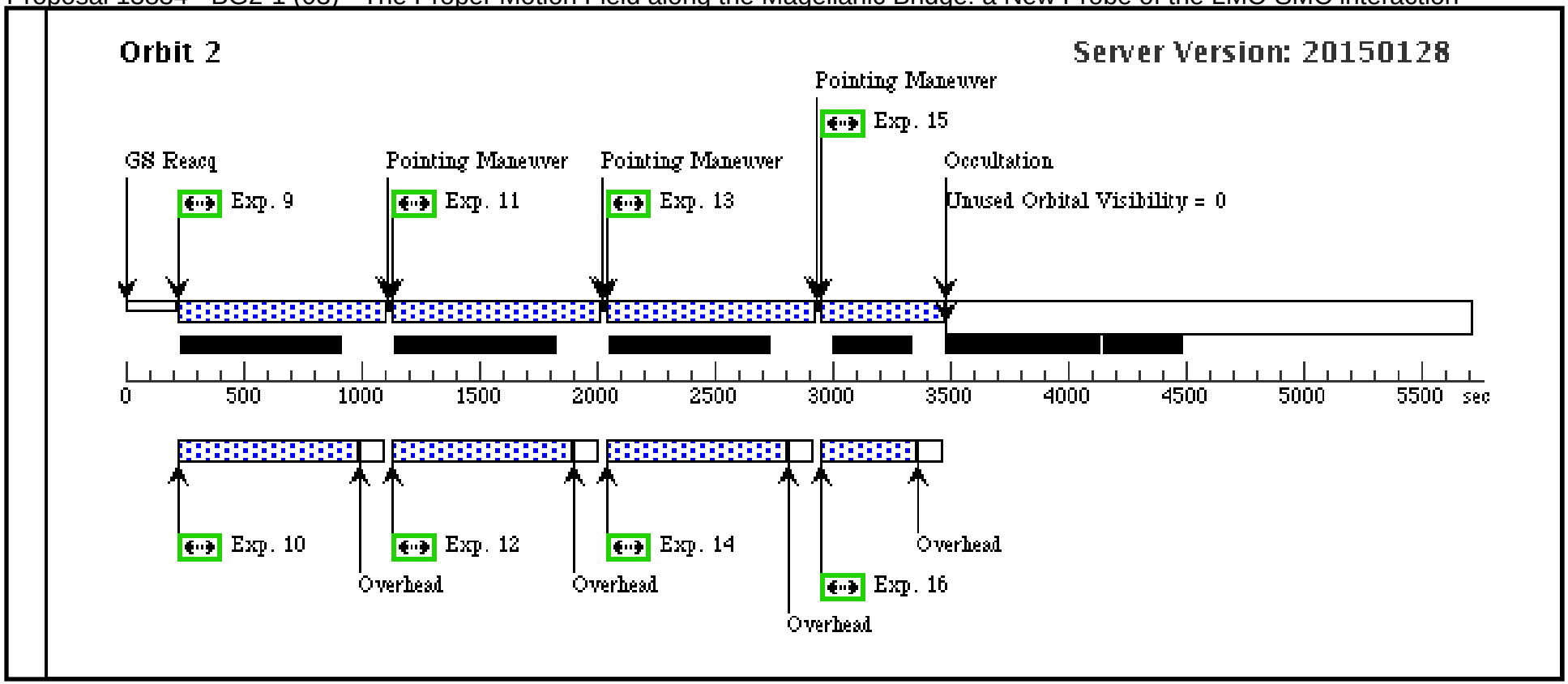
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(7) MCBRIDGE-BG2	ACS/WFC, ACCUM, WFC	F606W		POS TARG 0.000,0.000	Sequence 1-8 Non-Int in BG2-1 (03) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in BG2-1 (03)	305 Secs (305 Secs) *[==>]*	***[1]***
2		(7) MCBRIDGE-BG2	WFC3/UVIS, ACCUM, UVIS	F606W			Sequence 1-8 Non-Int in BG2-1 (03) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in BG2-1 (03)	300 Secs (365 Secs) *[==>365.0 Secs]*	***[1]***
3		(7) MCBRIDGE-BG2	ACS/WFC, ACCUM, WFC	F775W			Sequence 1-8 Non-Int in BG2-1 (03) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in BG2-1 (03)	710 Secs (710 Secs) *[==>]*	***[1]***
4		(7) MCBRIDGE-BG2	WFC3/UVIS, ACCUM, UVIS	F606W			Sequence 1-8 Non-Int in BG2-1 (03) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in BG2-1 (03)	738 Secs (760 Secs) *[==>760.0 Secs]*	***[1]***
5		(7) MCBRIDGE-BG2	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.1740,0.1850	Sequence 1-8 Non-Int in BG2-1 (03) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in BG2-1 (03)	710 Secs (710 Secs) *[==>]*	***[1]***
6		(7) MCBRIDGE-BG2	WFC3/UVIS, ACCUM, UVIS	F814W			Sequence 1-8 Non-Int in BG2-1 (03) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in BG2-1 (03)	700 Secs (710 Secs) *[==>710.0 Secs]*	***[1]***
7		(7) MCBRIDGE-BG2	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.3232,0.1235	Sequence 1-8 Non-Int in BG2-1 (03) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in BG2-1 (03)	710 Secs (710 Secs) *[==>]*	***[1]***
8		(7) MCBRIDGE-BG2	WFC3/UVIS, ACCUM, UVIS	F814W			Sequence 1-8 Non-Int in BG2-1 (03) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in BG2-1 (03)	700 Secs (720 Secs) *[==>720.0 Secs]*	***[1]***
9		(7) MCBRIDGE-BG2	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.1005,0.3305	Sequence 9-16 Non-Int in BG2-1 (03) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in BG2-1 (03)	752 Secs (752 Secs) *[==>]*	***[2]***

	10	(7) MCBRIDGE-BG 2	WFC3/UVIS, ACCUM, UVIS	F606W		Sequence 9-16 Non-Int in BG2-1 (03) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in BG2-1 (03)	700 Secs (739 Secs) *[==>739.0 Secs]*	***[2]***
	11	(7) MCBRIDGE-BG 2	ACS/WFC, ACCUM, WFC	F775W	POS TARG 0.5030,0.0460	Sequence 9-16 Non-Int in BG2-1 (03) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in BG2-1 (03)	752 Secs (752 Secs) *[==>]*	***[2]***
	12	(7) MCBRIDGE-BG 2	WFC3/UVIS, ACCUM, UVIS	F814W		Sequence 9-16 Non-Int in BG2-1 (03) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in BG2-1 (03)	700 Secs (739 Secs) *[==>739.0 Secs]*	***[2]***
	13	(7) MCBRIDGE-BG 2	ACS/WFC, ACCUM, WFC	F775W	POS TARG 0.6770,0.2310	Sequence 9-16 Non-Int in BG2-1 (03) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in BG2-1 (03)	752 Secs (752 Secs) *[==>]*	***[2]***
	14	(7) MCBRIDGE-BG 2	WFC3/UVIS, ACCUM, UVIS	F814W		Sequence 9-16 Non-Int in BG2-1 (03) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in BG2-1 (03)	700 Secs (762 Secs) *[==>762.0 Secs]*	***[2]***
	15	(7) MCBRIDGE-BG 2	ACS/WFC, ACCUM, WFC	F606W	POS TARG 0.148,0.086	Sequence 9-16 Non-Int in BG2-1 (03) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in BG2-1 (03)	351 Secs (351 Secs) *[==>]*	***[2]***
	16	(7) MCBRIDGE-BG 2	WFC3/UVIS, ACCUM, UVIS	F606W		Sequence 9-16 Non-Int in BG2-1 (03) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in BG2-1 (03)	300 Secs (379 Secs) *[==>379.0 Secs]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20150128
Pointing Maneuver
Exp. 15
GS Reacq
Exp. 9
Pointing Maneuver
Exp. 11
Pointing Maneuver
Exp. 13
Occultation
Unused Orbital Visibility = 0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 10
Overhead
Exp. 12
Overhead
Exp. 14
Overhead
Exp. 16
Overhead

Visit

Proposal 13834, BG2-2 (04), implementation Sat Feb 21 02:17:09 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 40%; SAME ORIENT AS 03; GROUP 04,03 WITHIN 30D

Comments: This is the second visit for imaging MCBRIDGE-BG2. Two orbits are required to complete this visit. Since our goal is to measure proper motions of stars in the target field, our orientation is set to exactly match the previous observations of PID 9488. We adopt a customized dither pattern designed to optimally cover the pixel phase using the POS-TARG special requirements. We required that Visits 03 and 04 be observed within a 30 day window so that they can be treated as single epoch data for astrometric analysis.

Fixed Targets

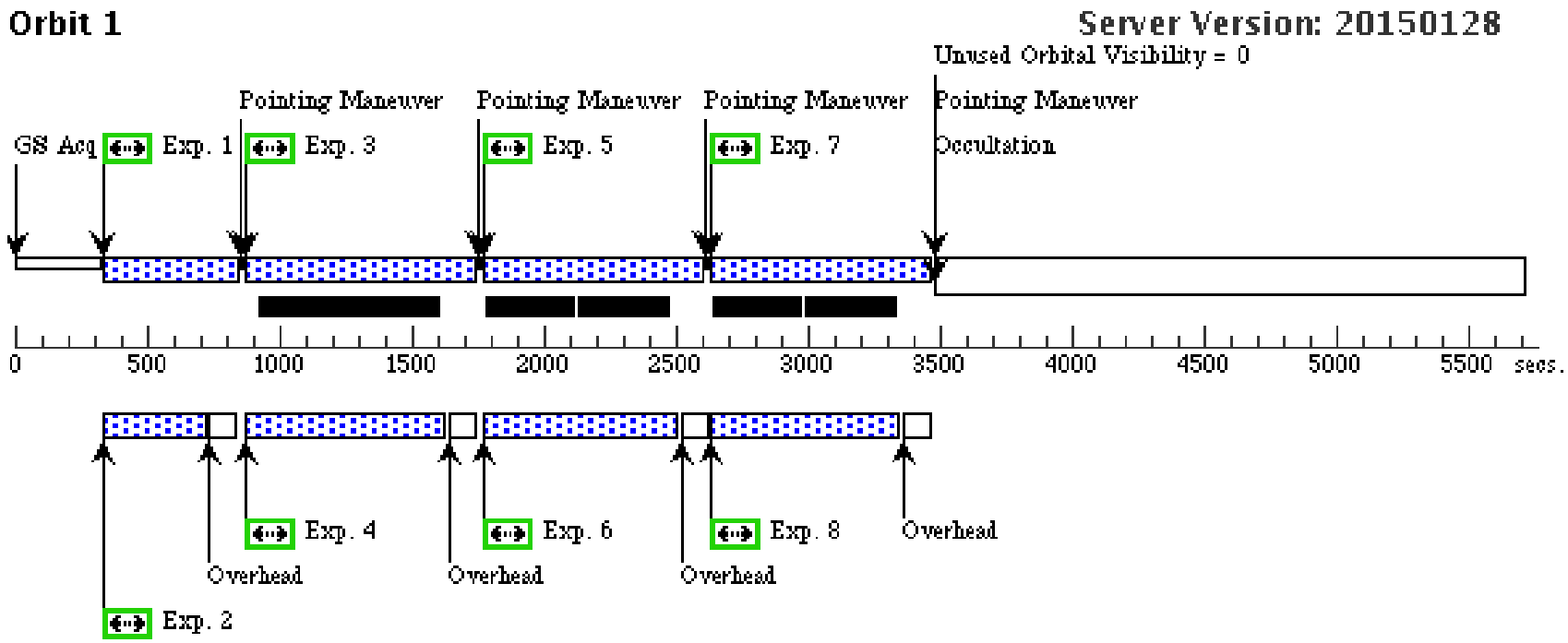
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	MCBRIDGE-BG2	RA: 02 30 41.6000 (37.6733333d) Dec: -73 53 43.30 (-73.89536d) Equinox: J2000		V=21+/-2	Reference Frame: ICRS

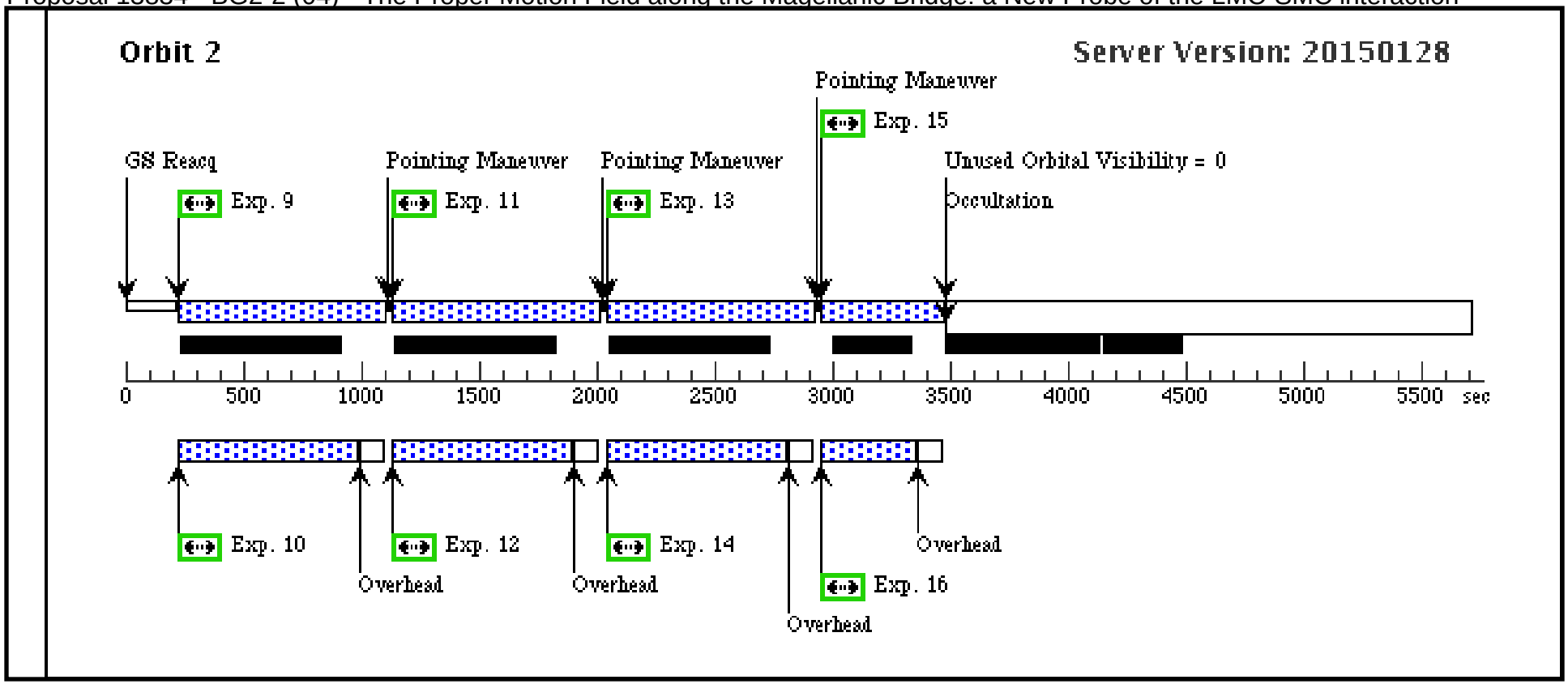
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(7) MCBRIDGE-BG2	ACS/WFC, ACCUM, WFC	F606W		POS TARG 0.222,0.240	Sequence 1-8 Non-Int in BG2-2 (04) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in BG2-2 (04)	300 Secs (300 Secs) *[==>]*	***[1]***
2		(7) MCBRIDGE-BG2	WFC3/UVIS, ACCUM, UVIS	F606W			Sequence 1-8 Non-Int in BG2-2 (04) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in BG2-2 (04)	300 Secs (360 Secs) *[==>360.0 Secs]*	***[1]***
3		(7) MCBRIDGE-BG2	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.8262,0.1695	Sequence 1-8 Non-Int in BG2-2 (04) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in BG2-2 (04)	705 Secs (705 Secs) *[==>]*	***[1]***
4		(7) MCBRIDGE-BG2	WFC3/UVIS, ACCUM, UVIS	F606W			Sequence 1-8 Non-Int in BG2-2 (04) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in BG2-2 (04)	738 Secs (755 Secs) *[==>755.0 Secs]*	***[1]***
5		(7) MCBRIDGE-BG2	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.6035,0.3765	Sequence 1-8 Non-Int in BG2-2 (04) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in BG2-2 (04)	705 Secs (705 Secs) *[==>]*	***[1]***
6		(7) MCBRIDGE-BG2	WFC3/UVIS, ACCUM, UVIS	F814W			Sequence 1-8 Non-Int in BG2-2 (04) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in BG2-2 (04)	700 Secs (710 Secs) *[==>710.0 Secs]*	***[1]***
7		(7) MCBRIDGE-BG2	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.1180,0.5180	Sequence 1-8 Non-Int in BG2-2 (04) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in BG2-2 (04)	705 Secs (705 Secs) *[==>]*	***[1]***
8		(7) MCBRIDGE-BG2	WFC3/UVIS, ACCUM, UVIS	F814W			Sequence 1-8 Non-Int in BG2-2 (04) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in BG2-2 (04)	700 Secs (715 Secs) *[==>715.0 Secs]*	***[1]***
9		(7) MCBRIDGE-BG2	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.2920,0.7030	Sequence 9-16 Non-Int in BG2-2 (04) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in BG2-2 (04)	752 Secs (752 Secs) *[==>]*	***[2]***

	10	(7) MCBRIDGE-BG 2	WFC3/UVIS, ACCUM, UVIS	F606W		Sequence 9-16 Non-Int in BG2-2 (04) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in BG2-2 (04)	700 Secs (739 Secs) *[==>739.0 Secs]*	***[2]***
	11	(7) MCBRIDGE-BG 2	ACS/WFC, ACCUM, WFC	F775W	POS TARG 0.4412,0.6415	Sequence 9-16 Non-Int in BG2-2 (04) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in BG2-2 (04)	752 Secs (752 Secs) *[==>]*	***[2]***
	12	(7) MCBRIDGE-BG 2	WFC3/UVIS, ACCUM, UVIS	F814W		Sequence 9-16 Non-Int in BG2-2 (04) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in BG2-2 (04)	700 Secs (739 Secs) *[==>739.0 Secs]*	***[2]***
	13	(7) MCBRIDGE-BG 2	ACS/WFC, ACCUM, WFC	F775W	POS TARG 0.2185,0.8485	Sequence 9-16 Non-Int in BG2-2 (04) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in BG2-2 (04)	752 Secs (752 Secs) *[==>]*	***[2]***
	14	(7) MCBRIDGE-BG 2	WFC3/UVIS, ACCUM, UVIS	F814W		Sequence 9-16 Non-Int in BG2-2 (04) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in BG2-2 (04)	700 Secs (762 Secs) *[==>762.0 Secs]*	***[2]***
	15	(7) MCBRIDGE-BG 2	ACS/WFC, ACCUM, WFC	F606W	POS TARG 0.074,0.154	Sequence 9-16 Non-Int in BG2-2 (04) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in BG2-2 (04)	351 Secs (351 Secs) *[==>]*	***[2]***
	16	(7) MCBRIDGE-BG 2	WFC3/UVIS, ACCUM, UVIS	F606W		Sequence 9-16 Non-Int in BG2-2 (04) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in BG2-2 (04)	300 Secs (379 Secs) *[==>379.0 Secs]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20150128
Pointing Maneuver
Exp. 15
GS Reacq
Exp. 9
Pointing Maneuver
Exp. 11
Pointing Maneuver
Exp. 13
Unused Orbital Visibility = 0
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 10
Overhead
Exp. 12
Overhead
Exp. 14
Overhead
Exp. 16
Overhead

Visit

Proposal 13834, BG3-1 (05), implementation Sat Feb 21 02:17:09 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: ORIENT 289.70D TO 289.70 D; GROUP 05,06 WITHIN 30D

Comments: This is the first visit for imaging MCBRIDGE-BG3. Two orbits are required to complete this visit. Since our goal is to measure proper motions of stars in the target field, our orientation is set to exactly match the previous observations of PID 9488. We adopt a customized dither pattern designed to optimally cover the pixel phase using the POS-TARG special requirements. We required that Visits 05 and 06 be observed within a 30 day window so that they can be treated as single epoch data for astrometric analysis.

Fixed Targets

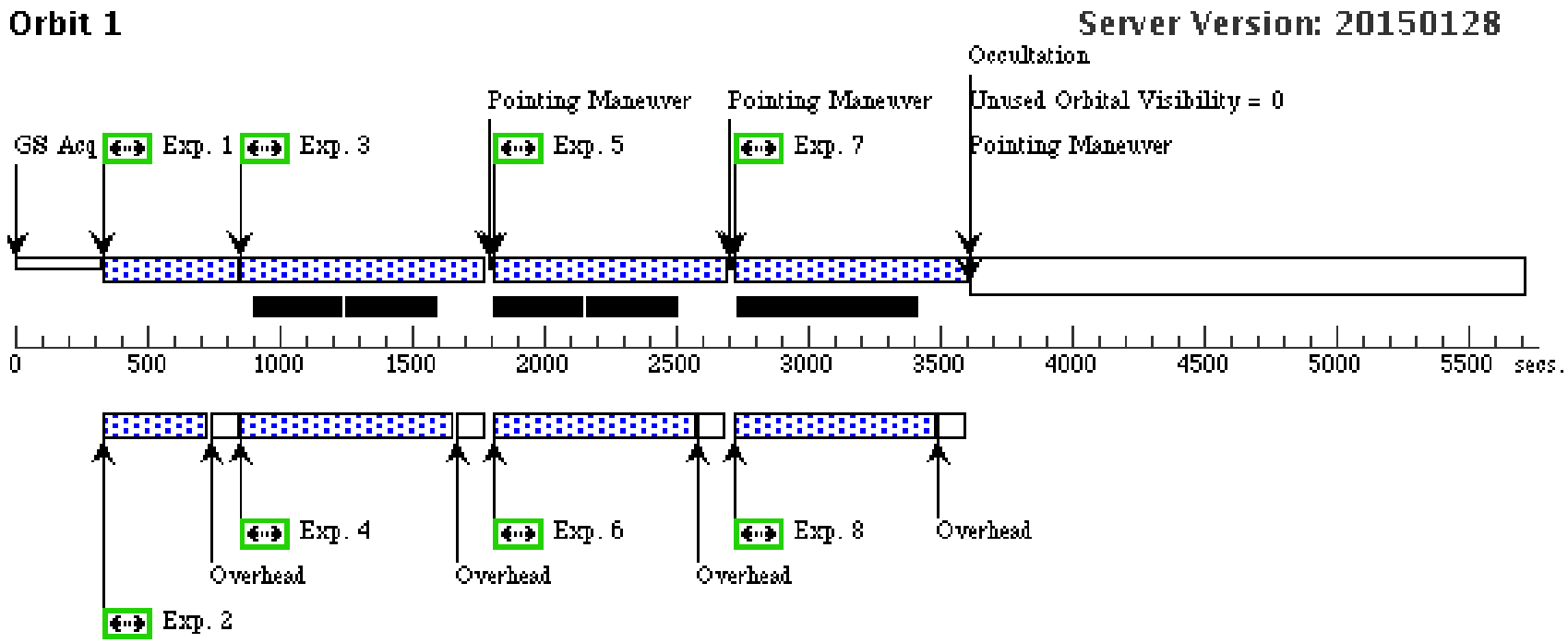
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	MCBRIDGE-BG3	RA: 04 21 5.0000 (65.2708333d) Dec: -74 02 26.90 (-74.04081d) Equinox: J2000		V=21+/-2	Reference Frame: ICRS

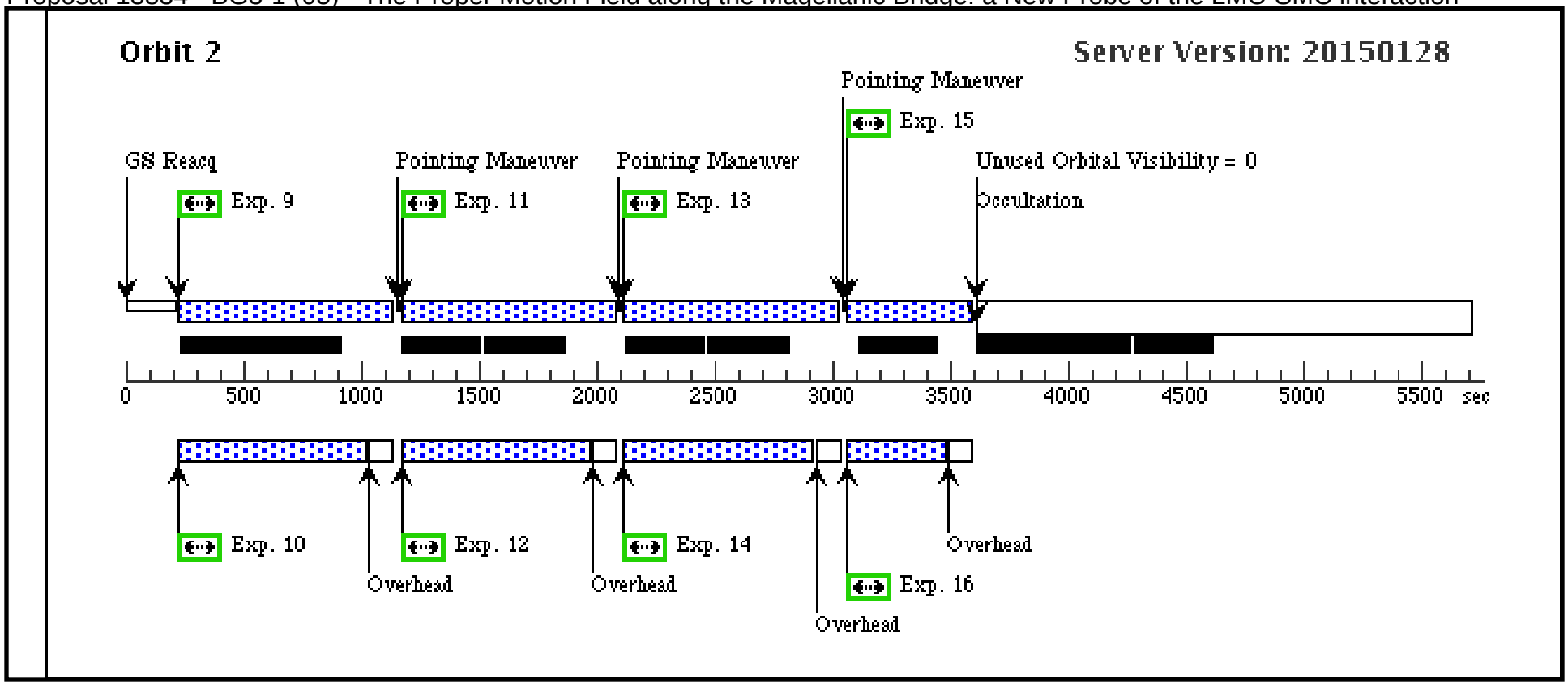
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(8) MCBRIDGE-BG3	ACS/WFC, ACCUM, WFC	F606W		POS TARG 0.000,0.000	Sequence 1-8 Non-Int in BG3-1 (05) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in BG3-1 (05)	305 Secs (305 Secs) *[==>]*	***[1]***
2		(8) MCBRIDGE-BG3	WFC3/UVIS, ACCUM, UVIS	F606W			Sequence 1-8 Non-Int in BG3-1 (05) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in BG3-1 (05)	200 Secs (365 Secs) *[==>365.0 Secs]*	***[1]***
3		(8) MCBRIDGE-BG3	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.0000,0.0000	Sequence 1-8 Non-Int in BG3-1 (05) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in BG3-1 (05)	754 Secs (754 Secs) *[==>]*	***[1]***
4		(8) MCBRIDGE-BG3	WFC3/UVIS, ACCUM, UVIS	F606W			Sequence 1-8 Non-Int in BG3-1 (05) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in BG3-1 (05)	738 Secs (804 Secs) *[==>804.0 Secs]*	***[1]***
5		(8) MCBRIDGE-BG3	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.1740,0.1850	Sequence 1-8 Non-Int in BG3-1 (05) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in BG3-1 (05)	754 Secs (754 Secs) *[==>]*	***[1]***
6		(8) MCBRIDGE-BG3	WFC3/UVIS, ACCUM, UVIS	F814W			Sequence 1-8 Non-Int in BG3-1 (05) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in BG3-1 (05)	700 Secs (741 Secs) *[==>741.0 Secs]*	***[1]***
7		(8) MCBRIDGE-BG3	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.3232,0.1235	Sequence 1-8 Non-Int in BG3-1 (05) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in BG3-1 (05)	754 Secs (754 Secs) *[==>]*	***[1]***
8		(8) MCBRIDGE-BG3	WFC3/UVIS, ACCUM, UVIS	F814W			Sequence 1-8 Non-Int in BG3-1 (05) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in BG3-1 (05)	700 Secs (764 Secs) *[==>764.0 Secs]*	***[1]***
9		(8) MCBRIDGE-BG3	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.1005,0.3305	Sequence 9-16 Non-Int in BG3-1 (05) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in BG3-1 (05)	790 Secs (790 Secs) *[==>]*	***[2]***

	10	(8) MCBRIDGE-BG 3	WFC3/UVIS, ACCUM, UVIS	F606W		Sequence 9-16 Non-Int in BG3-1 (05) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in BG3-1 (05)	700 Secs (777 Secs) *[==>777.0 Secs]*	***[2]***
	11	(8) MCBRIDGE-BG 3	ACS/WFC, ACCUM, WFC	F775W	POS TARG 0.5030,0.0460	Sequence 9-16 Non-Int in BG3-1 (05) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in BG3-1 (05)	790 Secs (790 Secs) *[==>]*	***[2]***
	12	(8) MCBRIDGE-BG 3	WFC3/UVIS, ACCUM, UVIS	F814W		Sequence 9-16 Non-Int in BG3-1 (05) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in BG3-1 (05)	700 Secs (777 Secs) *[==>777.0 Secs]*	***[2]***
	13	(8) MCBRIDGE-BG 3	ACS/WFC, ACCUM, WFC	F775W	POS TARG 0.6770,0.2310	Sequence 9-16 Non-Int in BG3-1 (05) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in BG3-1 (05)	790 Secs (790 Secs) *[==>]*	***[2]***
	14	(8) MCBRIDGE-BG 3	WFC3/UVIS, ACCUM, UVIS	F814W		Sequence 9-16 Non-Int in BG3-1 (05) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in BG3-1 (05)	700 Secs (800 Secs) *[==>800.0 Secs]*	***[2]***
	15	(8) MCBRIDGE-BG 3	ACS/WFC, ACCUM, WFC	F606W	POS TARG 0.148,0.086	Sequence 9-16 Non-Int in BG3-1 (05) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in BG3-1 (05)	369 Secs (369 Secs) *[==>]*	***[2]***
	16	(8) MCBRIDGE-BG 3	WFC3/UVIS, ACCUM, UVIS	F606W		Sequence 9-16 Non-Int in BG3-1 (05) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in BG3-1 (05)	300 Secs (397 Secs) *[==>397.0 Secs]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20150128
GS Reacq
Exp. 9
Pointing Maneuver
Exp. 11
Pointing Maneuver
Exp. 13
Pointing Maneuver
Exp. 15
Unused Orbital Visibility = 0
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 10
Overhead
Exp. 12
Overhead
Exp. 14
Overhead
Exp. 16
Overhead

Visit

Proposal 13834, BG3-2 (06), implementation Sat Feb 21 02:17:10 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 05; GROUP 06,05 WITHIN 30D

Comments: This is the second visit for imaging MCBRIDGE-BG3. Two orbits are required to complete this visit. Since our goal is to measure proper motions of stars in the target field, our orientation is set to exactly match the previous observations of PID 9488. We adopt a customized dither pattern designed to optimally cover the pixel phase using the POS-TARG special requirements. We required that Visits 05 and 06 be observed within a 30 day window so that they can be treated as single epoch data for astrometric analysis.

Fixed Targets

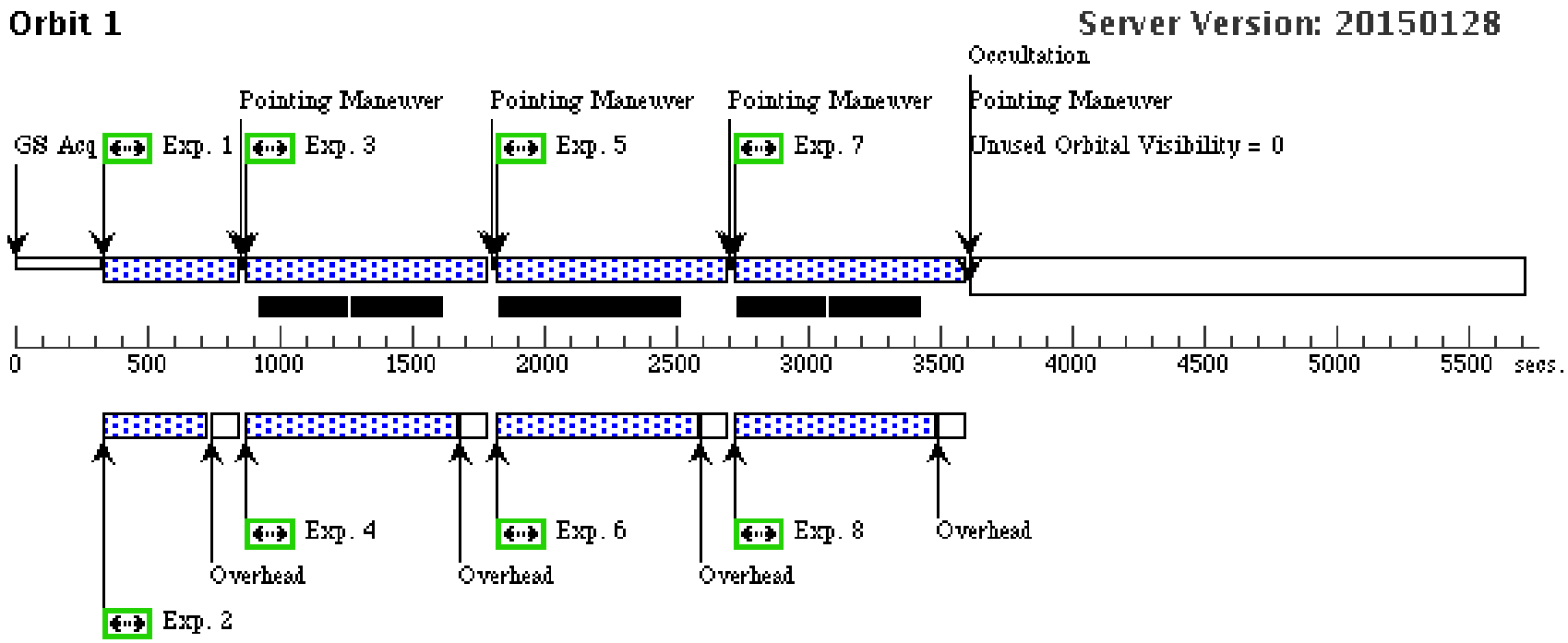
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	MCBRIDGE-BG3	RA: 04 21 5.0000 (65.2708333d) Dec: -74 02 26.90 (-74.04081d) Equinox: J2000		V=21+/-2	Reference Frame: ICRS

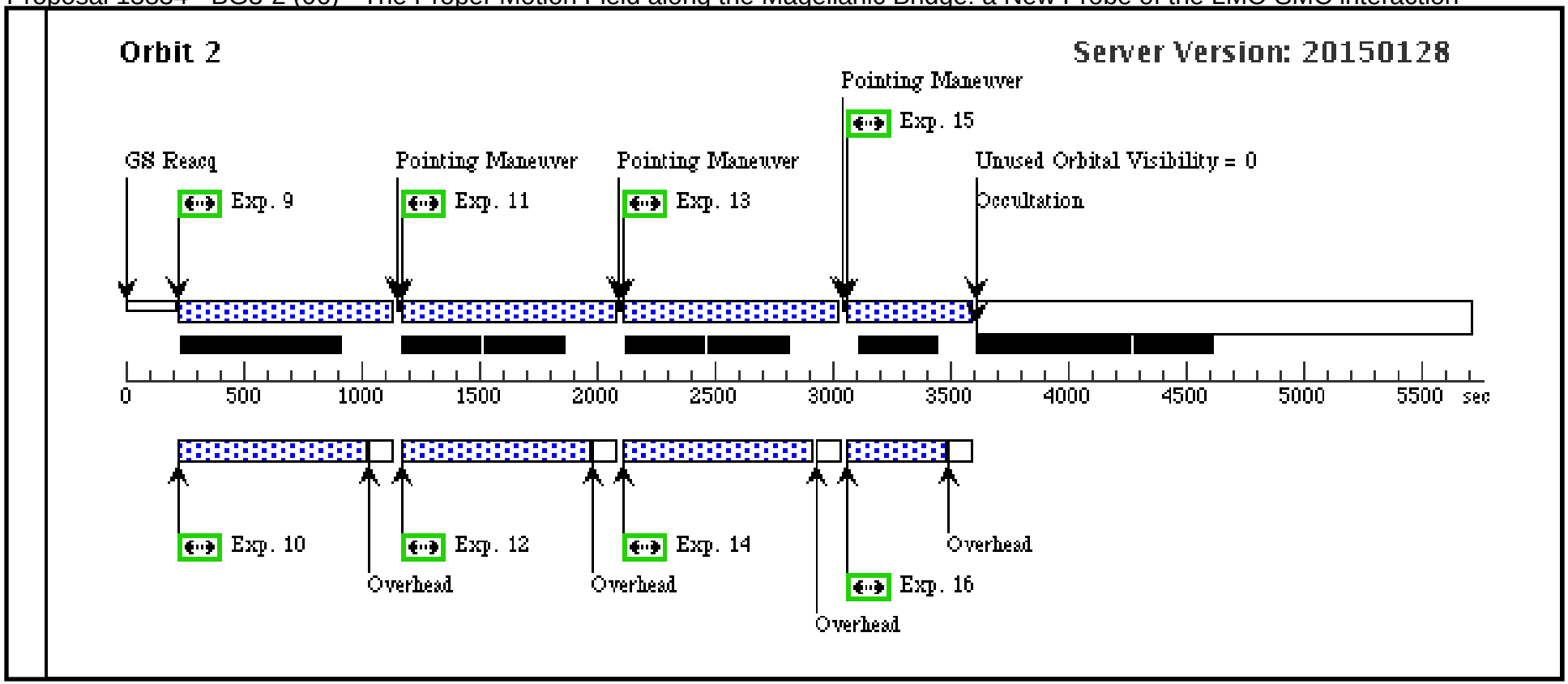
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(8) MCBRIDGE-BG3	ACS/WFC, ACCUM, WFC	F606W		POS TARG 0.222,0.240	Sequence 1-8 Non-Int in BG3-2 (06) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in BG3-2 (06)	303 Secs (303 Secs) *[==>]*	***[1]***
2		(8) MCBRIDGE-BG3	WFC3/UVIS, ACCUM, UVIS	F606W			Sequence 1-8 Non-Int in BG3-2 (06) Prime + Parallel Group 1-2 in Sequence 1-8 Non-Int in BG3-2 (06)	200 Secs (363 Secs) *[==>363.0 Secs]*	***[1]***
3		(8) MCBRIDGE-BG3	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.8262,0.1695	Sequence 1-8 Non-Int in BG3-2 (06) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in BG3-2 (06)	748 Secs (748 Secs) *[==>]*	***[1]***
4		(8) MCBRIDGE-BG3	WFC3/UVIS, ACCUM, UVIS	F606W			Sequence 1-8 Non-Int in BG3-2 (06) Prime + Parallel Group 3-4 in Sequence 1-8 Non-Int in BG3-2 (06)	738 Secs (798 Secs) *[==>798.0 Secs]*	***[1]***
5		(8) MCBRIDGE-BG3	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.6035,0.3765	Sequence 1-8 Non-Int in BG3-2 (06) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in BG3-2 (06)	748 Secs (748 Secs) *[==>]*	***[1]***
6		(8) MCBRIDGE-BG3	WFC3/UVIS, ACCUM, UVIS	F814W			Sequence 1-8 Non-Int in BG3-2 (06) Prime + Parallel Group 5-6 in Sequence 1-8 Non-Int in BG3-2 (06)	700 Secs (735 Secs) *[==>735.0 Secs]*	***[1]***
7		(8) MCBRIDGE-BG3	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.1180,0.5180	Sequence 1-8 Non-Int in BG3-2 (06) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in BG3-2 (06)	748 Secs (748 Secs) *[==>]*	***[1]***
8		(8) MCBRIDGE-BG3	WFC3/UVIS, ACCUM, UVIS	F814W			Sequence 1-8 Non-Int in BG3-2 (06) Prime + Parallel Group 7-8 in Sequence 1-8 Non-Int in BG3-2 (06)	700 Secs (758 Secs) *[==>758.0 Secs]*	***[1]***
9		(8) MCBRIDGE-BG3	ACS/WFC, ACCUM, WFC	F775W		POS TARG 0.2920,0.7030	Sequence 9-16 Non-Int in BG3-2 (06) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in BG3-2 (06)	790 Secs (790 Secs) *[==>]*	***[2]***

	10	(8) MCBRIDGE-BG 3	WFC3/UVIS, ACCUM, UVIS	F606W		Sequence 9-16 Non-Int in BG3-2 (06) Prime + Parallel Group 9-10 in Sequence 9-16 Non-Int in BG3-2 (06)	700 Secs (777 Secs) *[==>777.0 Secs]*	***[2]***
	11	(8) MCBRIDGE-BG 3	ACS/WFC, ACCUM, WFC	F775W	POS TARG 0.4412,0.6415	Sequence 9-16 Non-Int in BG3-2 (06) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in BG3-2 (06)	790 Secs (790 Secs) *[==>]*	***[2]***
	12	(8) MCBRIDGE-BG 3	WFC3/UVIS, ACCUM, UVIS	F814W		Sequence 9-16 Non-Int in BG3-2 (06) Prime + Parallel Group 11-12 in Sequence 9-16 Non-Int in BG3-2 (06)	700 Secs (777 Secs) *[==>777.0 Secs]*	***[2]***
	13	(8) MCBRIDGE-BG 3	ACS/WFC, ACCUM, WFC	F775W	POS TARG 0.2185,0.8485	Sequence 9-16 Non-Int in BG3-2 (06) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in BG3-2 (06)	790 Secs (790 Secs) *[==>]*	***[2]***
	14	(8) MCBRIDGE-BG 3	WFC3/UVIS, ACCUM, UVIS	F814W		Sequence 9-16 Non-Int in BG3-2 (06) Prime + Parallel Group 13-14 in Sequence 9-16 Non-Int in BG3-2 (06)	700 Secs (800 Secs) *[==>800.0 Secs]*	***[2]***
	15	(8) MCBRIDGE-BG 3	ACS/WFC, ACCUM, WFC	F606W	POS TARG 0.074,0.154	Sequence 9-16 Non-Int in BG3-2 (06) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in BG3-2 (06)	369 Secs (369 Secs) *[==>]*	***[2]***
	16	(8) MCBRIDGE-BG 3	WFC3/UVIS, ACCUM, UVIS	F606W		Sequence 9-16 Non-Int in BG3-2 (06) Prime + Parallel Group 15-16 in Sequence 9-16 Non-Int in BG3-2 (06)	300 Secs (397 Secs) *[==>397.0 Secs]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20150128
Pointing Maneuver
Exp. 15
GS Reacq
Exp. 9
Pointing Maneuver
Exp. 11
Pointing Maneuver
Exp. 13
Unused Orbital Visibility = 0
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 10
Overhead
Exp. 12
Overhead
Exp. 14
Overhead
Exp. 16
Overhead

Visit

Proposal 13834, QSO1 (07), failed Sat Feb 21 02:17:10 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: BEFORE 01-JAN-2015:00:00:00

Comments: This is the visit for first-epoch observation of MCBRIDGE-QSO1.

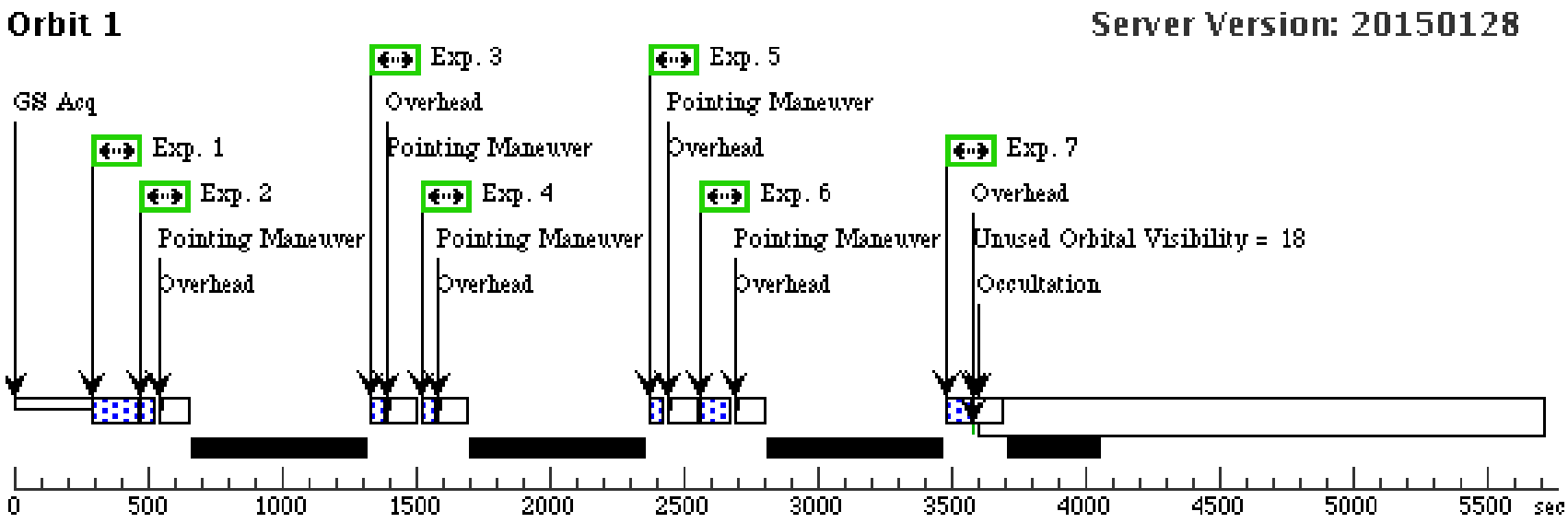
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	MCBRIDGE-QSO1 Alt Name1: B0202-765	RA: 02 02 13.6945 (30.5570604d) Dec: -76 20 3.06 (-76.33418d) Equinox: J2000	Redshift: 0.389	V=16.77+/-0.1	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) MCBRIDGE-QSO1	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=12	POS TARG 0.000,0.000	Sequence 1-7 Non-Int in QSO1 (07)	10 Secs (10 Secs) *[==>]*	 ***[1]***
2		(1) MCBRIDGE-QSO1	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=10.0	POS TARG 0.000,0.000	Sequence 1-7 Non-Int in QSO1 (07)	50 Secs (50 Secs) *[==>]*	 ***[1]***
3		(1) MCBRIDGE-QSO1	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=10.0	POS TARG 0.158,0.070	Sequence 1-7 Non-Int in QSO1 (07)	50 Secs (50 Secs) *[==>]*	 ***[1]***
4		(1) MCBRIDGE-QSO1	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=10.0	POS TARG 0.099,0.165	Sequence 1-7 Non-Int in QSO1 (07)	50 Secs (50 Secs) *[==>]*	 ***[1]***
5		(1) MCBRIDGE-QSO1	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=10.0	POS TARG -0.060,0.095	Sequence 1-7 Non-Int in QSO1 (07)	50 Secs (50 Secs) *[==>]*	 ***[1]***
6		(1) MCBRIDGE-QSO1	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=10.0	POS TARG 0.000,0.000	Sequence 1-7 Non-Int in QSO1 (07)	90 Secs (90 Secs) *[==>]*	 ***[1]***
7		(1) MCBRIDGE-QSO1	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=10	POS TARG 0.099,0.106	Sequence 1-7 Non-Int in QSO1 (07)	90 Secs (90 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 13834, QSO1 (57), completed Sat Feb 21 02:17:10 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: BEFORE 01-JAN-2015:00:00:00

Comments: This is the visit for first-epoch observation of MCBRIDGE-QSO1.

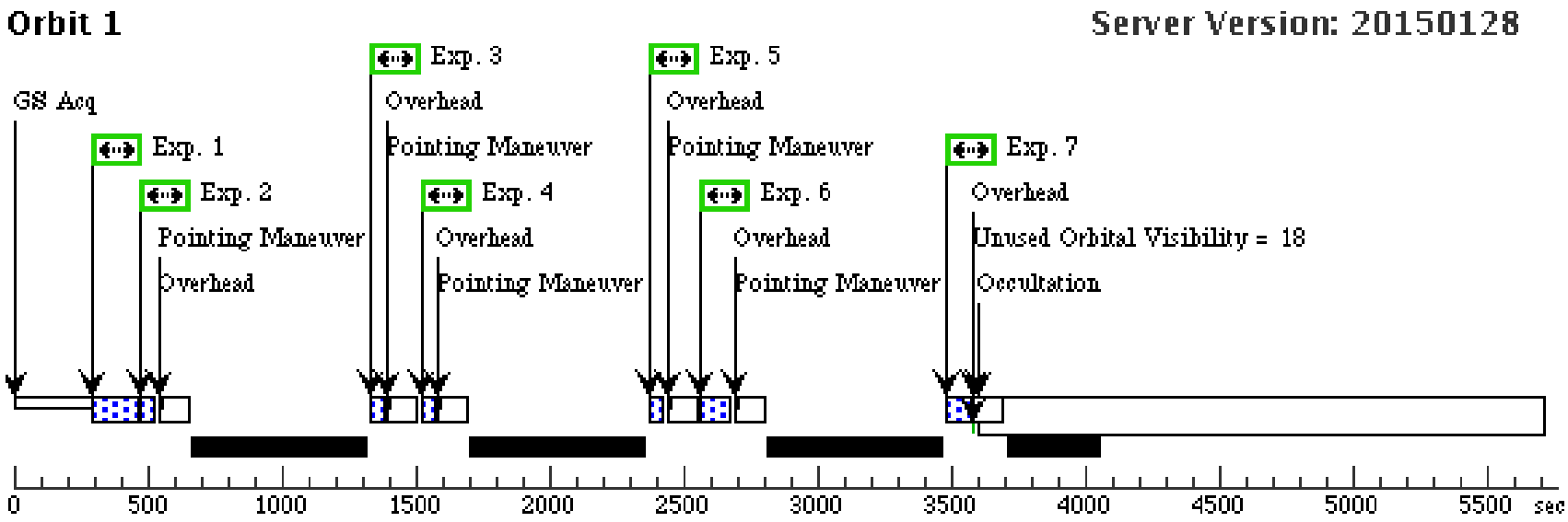
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	MCBRIDGE-QSO1 Alt Name1: B0202-765	RA: 02 02 13.6945 (30.5570604d) Dec: -76 20 3.06 (-76.33418d) Equinox: J2000	Redshift: 0.389	V=16.77+/-0.1	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) MCBRIDGE-QSO1	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=12	POS TARG 0.000,0.000	Sequence 1-7 Non-Int in QSO1 (57)	10 Secs (10 Secs) *[==>]*	 ***[1]***
2		(1) MCBRIDGE-QSO1	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=10.0	POS TARG 0.000,0.000	Sequence 1-7 Non-Int in QSO1 (57)	50 Secs (50 Secs) *[==>]*	 ***[1]***
3		(1) MCBRIDGE-QSO1	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=10.0	POS TARG 0.158,0.070	Sequence 1-7 Non-Int in QSO1 (57)	50 Secs (50 Secs) *[==>]*	 ***[1]***
4		(1) MCBRIDGE-QSO1	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=10.0	POS TARG 0.099,0.165	Sequence 1-7 Non-Int in QSO1 (57)	50 Secs (50 Secs) *[==>]*	 ***[1]***
5		(1) MCBRIDGE-QSO1	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=10.0	POS TARG -0.060,0.095	Sequence 1-7 Non-Int in QSO1 (57)	50 Secs (50 Secs) *[==>]*	 ***[1]***
6		(1) MCBRIDGE-QSO1	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=10.0	POS TARG 0.000,0.000	Sequence 1-7 Non-Int in QSO1 (57)	90 Secs (90 Secs) *[==>]*	 ***[1]***
7		(1) MCBRIDGE-QSO1	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=10	POS TARG 0.099,0.106	Sequence 1-7 Non-Int in QSO1 (57)	90 Secs (90 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 13834, QSO2 (08), completed Sat Feb 21 02:17:10 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: BEFORE 01-JAN-2015:00:00:00

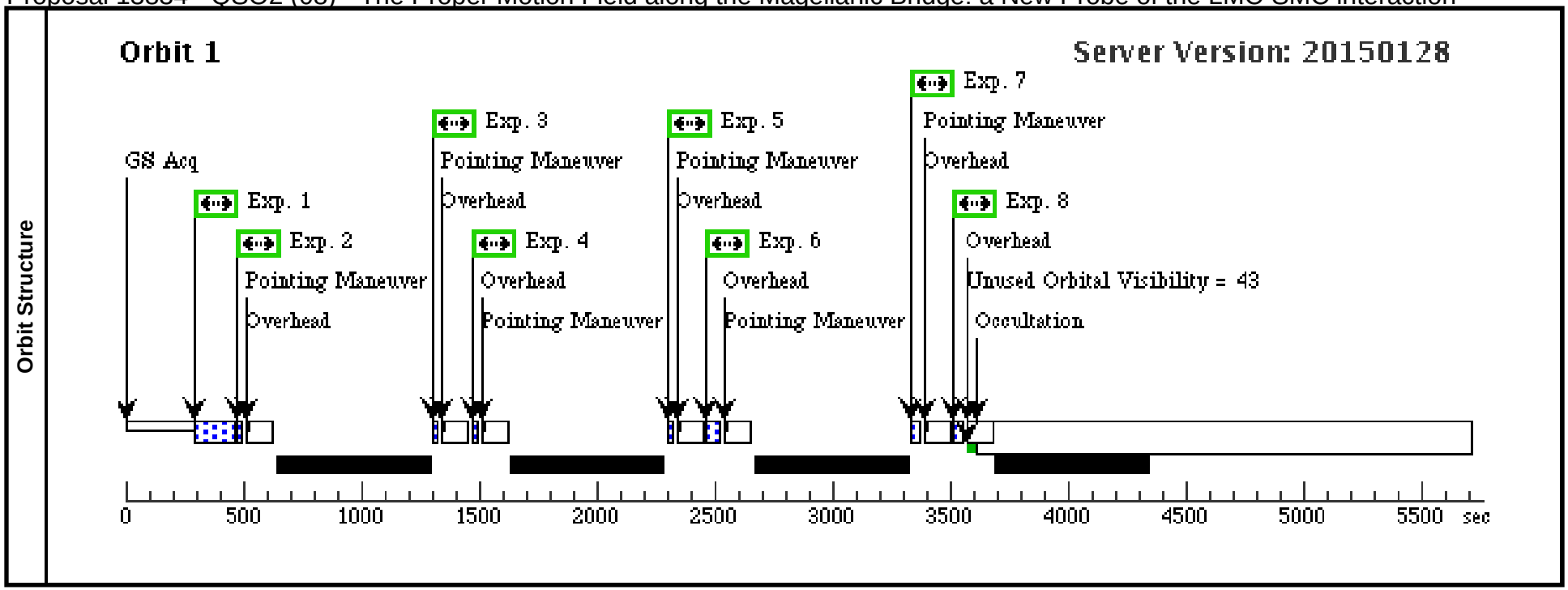
Comments: This is the visit for first-epoch observation of MCBRIDGE-QSO2.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	MCBRIDGE-QSO2 Alt Name1: B0242-7229	RA: 02 43 9.6100 (40.7900417d) Dec: -72 16 48.20 (-72.28006d) Equinox: J2000	Redshift: 0.102	V=15.9+/-0.1	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) MCBRIDGE-QSO2	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=11	POS TARG 0.000,0.000	Sequence 1-8 Non-Int in QSO2 (08)	10 Secs (10 Secs) *[==>]*	 ***[1]***
2		(2) MCBRIDGE-QSO2	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=11	POS TARG 0.000,0.000	Sequence 1-8 Non-Int in QSO2 (08)	25 Secs (25 Secs) *[==>]*	 ***[1]***
3		(2) MCBRIDGE-QSO2	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=11	POS TARG 0.158,0.070	Sequence 1-8 Non-Int in QSO2 (08)	25 Secs (25 Secs) *[==>]*	 ***[1]***
4		(2) MCBRIDGE-QSO2	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=11	POS TARG 0.099,0.165	Sequence 1-8 Non-Int in QSO2 (08)	25 Secs (25 Secs) *[==>]*	 ***[1]***
5		(2) MCBRIDGE-QSO2	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=11	POS TARG -0.060,0.095	Sequence 1-8 Non-Int in QSO2 (08)	25 Secs (25 Secs) *[==>]*	 ***[1]***
6		(2) MCBRIDGE-QSO2	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=12	POS TARG 0.000,0.000	Sequence 1-8 Non-Int in QSO2 (08)	40 Secs (40 Secs) *[==>]*	 ***[1]***
7		(2) MCBRIDGE-QSO2	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=12	POS TARG 0.092,0.098	Sequence 1-8 Non-Int in QSO2 (08)	40 Secs (40 Secs) *[==>]*	 ***[1]***
8		(2) MCBRIDGE-QSO2	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=12	POS TARG 0.185,0.197	Sequence 1-8 Non-Int in QSO2 (08)	40 Secs (40 Secs) *[==>]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20150128
GS Acq
Exp. 1
Exp. 2
Pointing Maneuver
Overhead
Exp. 3
Pointing Maneuver
Overhead
Exp. 4
Overhead
Pointing Maneuver
Exp. 5
Pointing Maneuver
Overhead
Exp. 6
Overhead
Pointing Maneuver
Exp. 7
Pointing Maneuver
Overhead
Exp. 8
Overhead
Unused Orbital Visibility = 43
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 13834, QSO3 (09), completed Sat Feb 21 02:17:10 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: BEFORE 01-JAN-2015:00:00:00

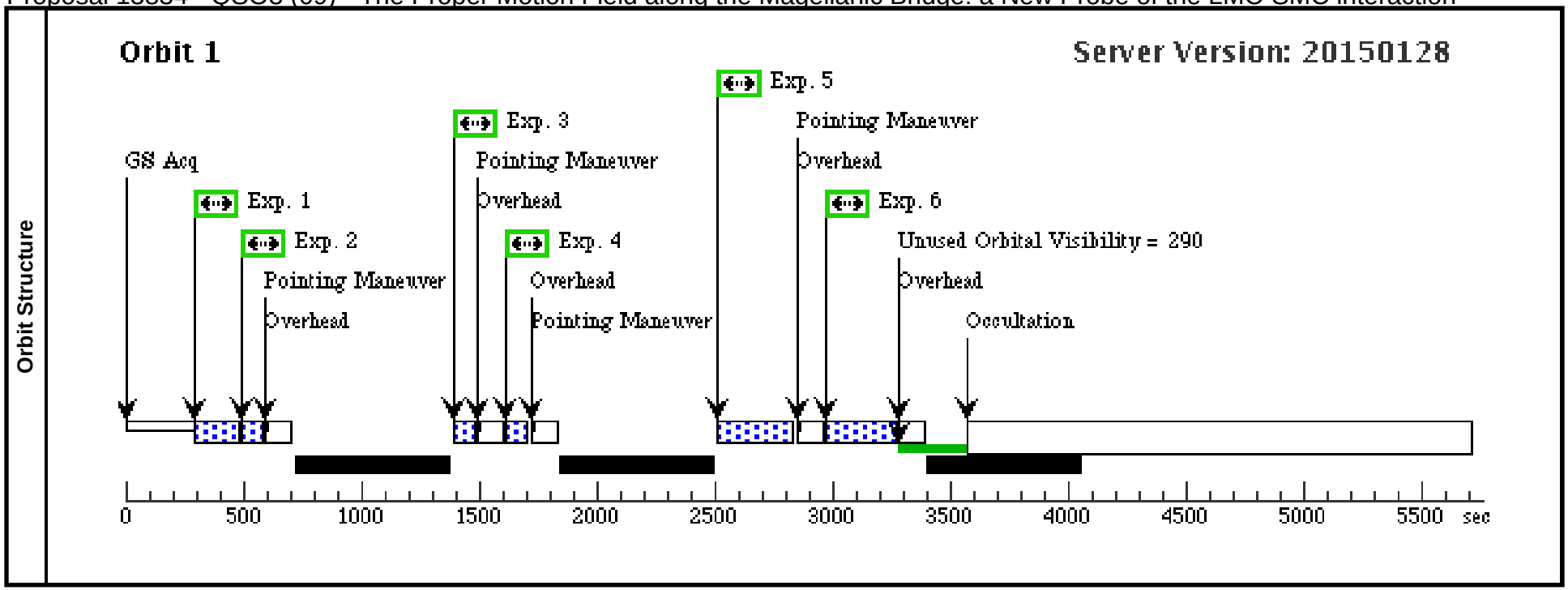
Comments: This is the visit for first-epoch observation of MCBRIDGE-QSO3.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	MCBRIDGE-QSO3 Alt Name1: B0251-675	RA: 02 51 55.7840 (42.9824333d) Dec: -67 18 0.14 (-67.30004d) Equinox: J2000	Redshift: 1.002	V=17.5+/-0.1	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(3) MCBRIDGE-QSO3	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=8	POS TARG 0.000,0.000	Sequence 1-6 Non-Int in QSO3 (09)	30 Secs (30 Secs) *[==>]*	 ***[1]***
2		(3) MCBRIDGE-QSO3	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=8	POS TARG 0.000,0.000	Sequence 1-6 Non-Int in QSO3 (09)	90 Secs (90 Secs) *[==>]*	 ***[1]***
3		(3) MCBRIDGE-QSO3	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=8	POS TARG 0.092,0.098	Sequence 1-6 Non-Int in QSO3 (09)	90 Secs (90 Secs) *[==>]*	 ***[1]***
4		(3) MCBRIDGE-QSO3	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=8	POS TARG 0.185,0.197	Sequence 1-6 Non-Int in QSO3 (09)	90 Secs (90 Secs) *[==>]*	 ***[1]***
5		(3) MCBRIDGE-QSO3	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=3	POS TARG 0.000,0.000	Sequence 1-6 Non-Int in QSO3 (09)	300 Secs (300 Secs) *[==>]*	 ***[1]***
6		(3) MCBRIDGE-QSO3	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=3	POS TARG 0.099,0.106	Sequence 1-6 Non-Int in QSO3 (09)	300 Secs (300 Secs) *[==>]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20150128
GS Acq
Exp. 1
Exp. 2
Pointing Maneuver
Overhead
Exp. 3
Pointing Maneuver
Overhead
Exp. 4
Overhead
Pointing Maneuver
Exp. 5
Pointing Maneuver
Overhead
Exp. 6
Unused Orbital Visibility = 290
Overhead
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 13834, QSO4 (10), completed Sat Feb 21 02:17:10 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: BEFORE 01-JAN-2015:00:00:00

Comments: This is the visit for first-epoch observation of MCBRIDGE-QSO4

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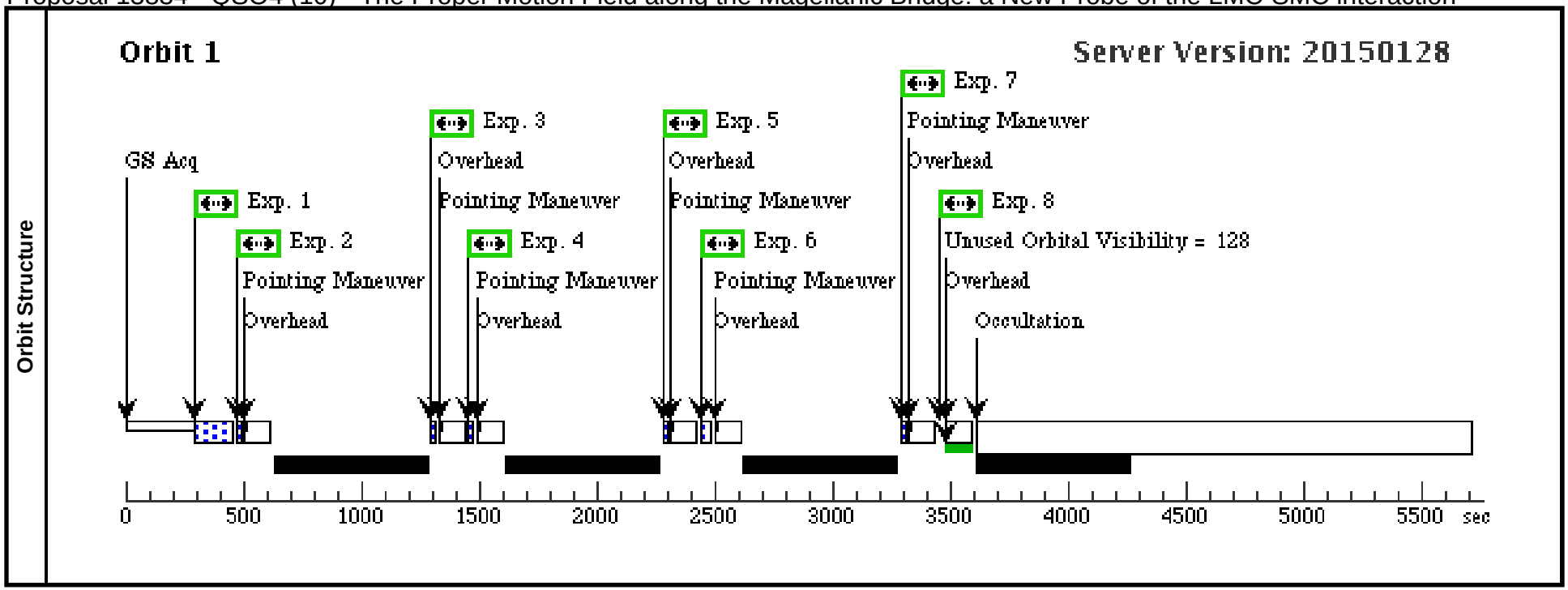
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	MCBRIDGE-QSO4	RA: 03 07 35.3200 (46.8971667d)	Redshift: 0.028	V=(?)	Reference Frame: ICRS
	Alt Name1: ESO31-8	Dec: -72 50 2.50 (-72.83403d)		B = 15.5	
		Equinox: J2000			

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(4) MCBRIDGE-QSO4	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=12	POS TARG 0.000,0.000	Sequence 1-8 Non-Int in QSO4 (10)	5 Secs (5 Secs)	
								[==>]	***[1]***
2		(4) MCBRIDGE-QSO4	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=12	POS TARG 0.000,0.000	Sequence 1-8 Non-Int in QSO4 (10)	20 Secs (20 Secs)	
								[==>]	***[1]***
3		(4) MCBRIDGE-QSO4	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=12	POS TARG 0.158,0.070	Sequence 1-8 Non-Int in QSO4 (10)	20 Secs (20 Secs)	
								[==>]	***[1]***
4		(4) MCBRIDGE-QSO4	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=12	POS TARG 0.099,0.165	Sequence 1-8 Non-Int in QSO4 (10)	20 Secs (20 Secs)	
								[==>]	***[1]***
5		(4) MCBRIDGE-QSO4	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=12	POS TARG -0.060,0.095	Sequence 1-8 Non-Int in QSO4 (10)	20 Secs (20 Secs)	
								[==>]	***[1]***
6		(4) MCBRIDGE-QSO4	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=12	POS TARG 0.000,0.000	Sequence 1-8 Non-Int in QSO4 (10)	20 Secs (20 Secs)	
								[==>]	***[1]***
7		(4) MCBRIDGE-QSO4	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=12	POS TARG 0.092,0.098	Sequence 1-8 Non-Int in QSO4 (10)	20 Secs (20 Secs)	
								[==>]	***[1]***
8		(4) MCBRIDGE-QSO4	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=12	POS TARG 0.185,0.197	Sequence 1-8 Non-Int in QSO4 (10)	20 Secs (20 Secs)	
								[==>]	***[1]***


Orbit Structure
Orbit 1
Server Version: 20150128
GS Acq
Exp. 1
Exp. 2
Pointing Maneuver
Overhead
Exp. 3
Overhead
Pointing Maneuver
Exp. 4
Pointing Maneuver
Overhead
Exp. 5
Overhead
Pointing Maneuver
Exp. 6
Pointing Maneuver
Overhead
Exp. 7
Pointing Maneuver
Overhead
Exp. 8
Unused Orbital Visibility = 128
Overhead
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 13834, QSO5 (11), completed Sat Feb 21 02:17:10 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: BEFORE 01-JAN-2015:00:00:00

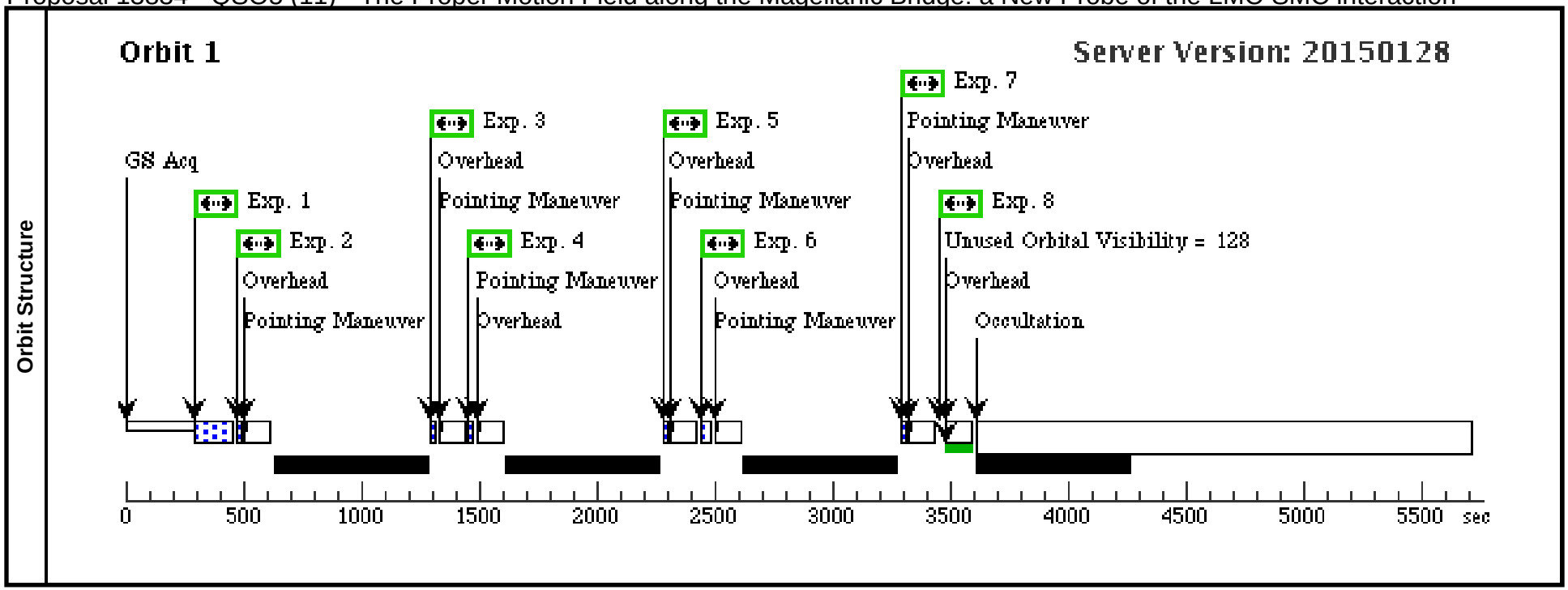
Comments: This is the visit for first-epoch observation of MCBRIDGE-QSO5.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	MCBRIDGE-QSO5	RA: 03 54 2.0300 (58.5084583d)	Redshift: 0.049	V=(?)	Reference Frame: ICRS
	Alt Name1: ESO55-2	Dec: -72 08 4.90 (-72.13469d)		B = 15.7	
		Equinox: J2000			

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(5) MCBRIDGE-QSO5	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=12	POS TARG 0.000,0.000	Sequence 1-8 Non-Int in QSO5 (11)	5 Secs (5 Secs)	
								[==>]	***[1]***
2		(5) MCBRIDGE-QSO5	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=12	POS TARG 0.000,0.000	Sequence 1-8 Non-Int in QSO5 (11)	20 Secs (20 Secs)	
								[==>]	***[1]***
3		(5) MCBRIDGE-QSO5	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=12	POS TARG 0.158,0.070	Sequence 1-8 Non-Int in QSO5 (11)	20 Secs (20 Secs)	
								[==>]	***[1]***
4		(5) MCBRIDGE-QSO5	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=12	POS TARG 0.099,0.165	Sequence 1-8 Non-Int in QSO5 (11)	20 Secs (20 Secs)	
								[==>]	***[1]***
5		(5) MCBRIDGE-QSO5	WFC3/UVIS, ACCUM, UVIS2	F606W	FLASH=12	POS TARG -0.060,0.095	Sequence 1-8 Non-Int in QSO5 (11)	20 Secs (20 Secs)	
								[==>]	***[1]***
6		(5) MCBRIDGE-QSO5	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=12	POS TARG 0.000,0.000	Sequence 1-8 Non-Int in QSO5 (11)	20 Secs (20 Secs)	
								[==>]	***[1]***
7		(5) MCBRIDGE-QSO5	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=12	POS TARG 0.092,0.098	Sequence 1-8 Non-Int in QSO5 (11)	20 Secs (20 Secs)	
								[==>]	***[1]***
8		(5) MCBRIDGE-QSO5	WFC3/UVIS, ACCUM, UVIS2	F814W	FLASH=12	POS TARG 0.185,0.197	Sequence 1-8 Non-Int in QSO5 (11)	20 Secs (20 Secs)	
								[==>]	***[1]***


Orbit Structure
Orbit 1
Server Version: 20150128
GS Acq
Exp. 1
Exp. 2
Overhead
Pointing Maneuver
Exp. 3
Overhead
Pointing Maneuver
Exp. 4
Pointing Maneuver
Overhead
Exp. 5
Overhead
Pointing Maneuver
Exp. 6
Overhead
Pointing Maneuver
Exp. 7
Pointing Maneuver
Overhead
Exp. 8
Unused Orbital Visibility = 128
Overhead
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec