13860 - Investigating the low-mass slope and possible turnover in the LMC IMF

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	(1) LMC-FIELD-1	ACS/WFC WFC3/IR	2	03-Sep-2014 21:16:34.0	yes
02	(1) LMC-FIELD-1	ACS/WFC WFC3/IR	2	03-Sep-2014 21:16:36.0	yes
03	(1) LMC-FIELD-1	ACS/WFC WFC3/IR	2	03-Sep-2014 21:16:37.0	yes
04	(1) LMC-FIELD-1	ACS/WFC WFC3/IR	2	03-Sep-2014 21:16:39.0	yes
05	(1) LMC-FIELD-1	ACS/WFC WFC3/IR	2	03-Sep-2014 21:16:40.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
06	(1) LMC-FIELD-1	ACS/WFC WFC3/IR	2	03-Sep-2014 21:16:42.0	yes

12 Total Orbits Used

ABSTRACT

We propose to derive the Initial Mass Function (IMF) of the field population of the Large Magellanic Cloud (LMC) down to 0.2 solar masses, probing the mass regime where the characteristic IMF turnover is observed in our Galaxy. The power of the HST, using the WFC3 IR channel, is necessary to obtain photometric mass estimates for the faint, cool, dwarf stars with masses below the expected IMF turnover point. Only by probing the IMF down to such masses, it will be possible to clearly distinguish between a bottom-heavy or bottom-light IMF in the LMC. Recent studies, using the deepest available observations for the Small Magellanic Cloud, cannot find clear evidence of a turnover in the IMF for this galaxy, suggesting a bottom-heavy IMF in contrast to the Milky Way. A similar study of the LMC is needed to confirm a possible dependence of the low-mass IMF with galactic environment. Studies of giant ellipticals have recently challenged the picture of a universal IMF, and suggest an enviromental dependence of the IMF, with the most massive galaxies having a larger fraction of low mass stars and no IMF turnover. A study of possible IMF variations from resolved stellar populations in nearby galaxies is of great importance in sheding light on this issue. Our simple approach, using direct evidence from basic star counts, is much less prone to systematic errors with respect to studies of more distant objects which have to rely on the observations of integrated properties.

OBSERVING DESCRIPTION

Our observations are designed to reach the low-mass main sequence of the field population in the Large Magaellanic Cloud, using WFC3/IR, down to about 0.25 Msun at SNR=10. The aim is to constrain the slope and possible turnover of the IMF in the LMC. The target magnitudes in F110W and F160W are equivalent to V=30 mag (Vega) for the appropriate stellar spectral type. We have designed parallel ACS observations in F606W and F814W that, while not reaching the same depth, will add constraints to the star formation history of the chosen region.

The 12 allocated orbits are grouped into 6 visits of 2 orbits each.

The primary observations of the first 4 visits (8 orbits) are executed using the F160W filter, while for the other 2 visits (4 orbits) we use F110W. We use the SAMP-SEQ=STEP200 WFC3/IR sampling sequence, which allow us to maximize both the effective observing time, and the number of read samples (14 or 15).

The parallel observations are divided into short, medium and long exposures, to capture the dynamical range of the observed stars with ACS; 5 (2 for short + medium, 3 for long exposures) parallel orbits are dedicated to F814W and 7 (2 for short + medium, 5 for long exposures) to F606W. In the short ACS exposures we use post-flash (FLASH=75) illumination to improve the CTE.

Each visit consists of 4 primary exposures in a box dithering pattern, to better sample the PSF.
The pattern matches the default pattern in the WFC3 Handbook. Between visits we execute additional small offsets (few pixels) to ensure that no star falls repeatedly on the same position, thus minimizing the impact of detector artifacts.

Visit

Proposal 13860, H and V (01), implementation Thu Sep 04 01:16:44 GMT 2014

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: ORIENT 300D TO 180 D

Comments: Two orbits visit.
The primary will be WFC3/IR with the F160W filter and in parallel we will have ACS/F606W
We will execute a 4-point dither pattern to improve PSF sampling.
Between visits we will execute an additional offset. This will ensure that no star is observed at the same chip location twice, thus avoiding bad pixels.
The parallel orbits are dedicated to short and medium ACS exposures

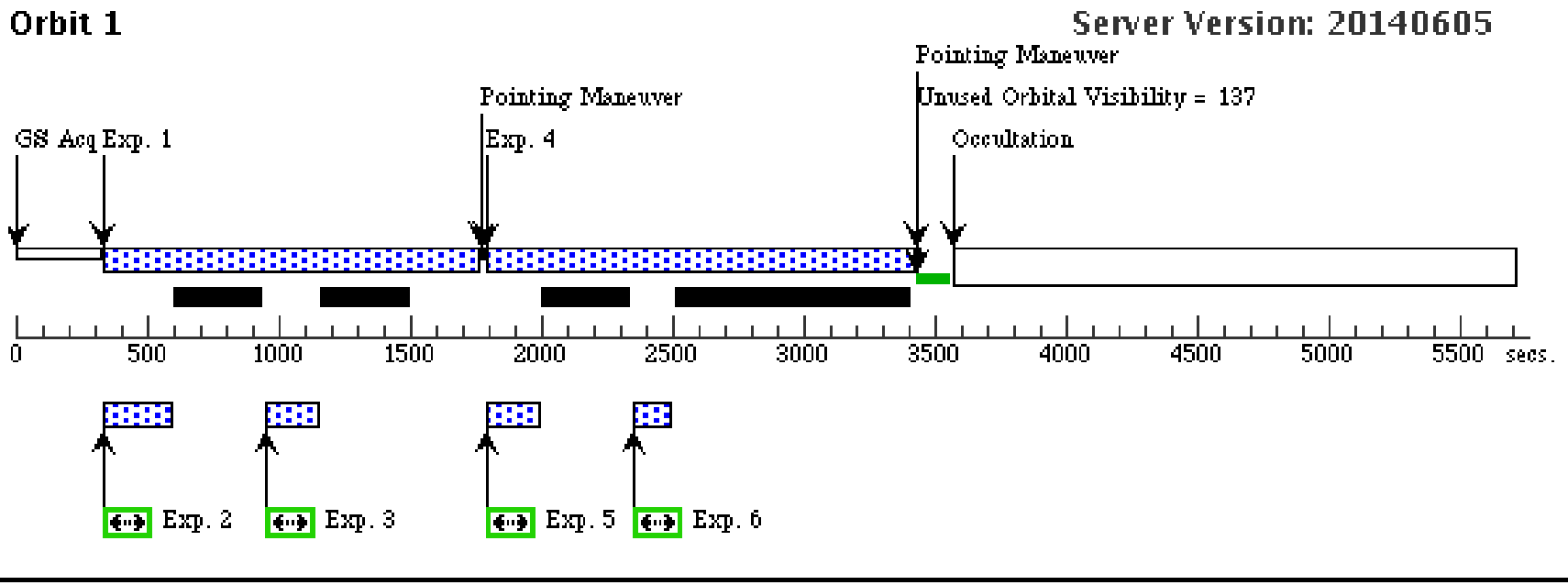
Fixed Targets

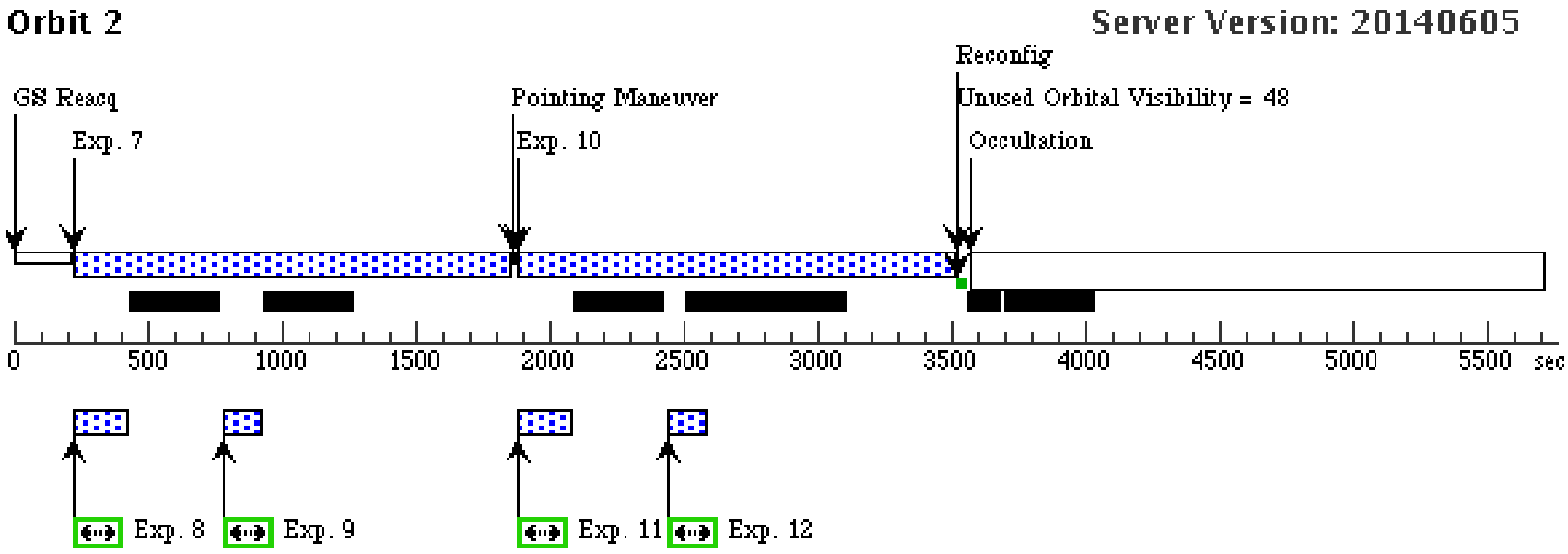
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	LMC-FIELD-1	RA: 05 03 1.5100 (75.7562917d) Dec: -66 24 15.50 (-66.40431d) Equinox: J2000		V=30+/-0.1	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	WFC3/IR F 160W 1399	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=STEP200	POS TARG 0,0	Prime + Parallel Group 1-3 in H and V (01)	1399.231402 Secs (1399.231 Secs) *[==>]*	*[1]*
2	ACS F606W short	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F606W	FLASH=75		Prime + Parallel Group 1-3 in H and V (01)	6 Secs (6 Secs) *[==>]*	*[1]*
3	ACS F606W medium	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F606W	FLASH=75		Prime + Parallel Group 1-3 in H and V (01)	60 Secs (60 Secs) *[==>]*	*[1]*
4	WFC3/IR F 160W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP200	POS TARG 0.542,0.182	Prime + Parallel Group 4-6 in H and V (01)	1599.231469 Secs (1599.231 Secs) *[==>]*	*[1]*
5	ACS F606W medium	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F606W	FLASH=75		Prime + Parallel Group 4-6 in H and V (01)	60 Secs (60 Secs) *[==>]*	*[1]*
6	ACS F606W short	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F606W	FLASH=75		Prime + Parallel Group 4-6 in H and V (01)	6 Secs (6 Secs) *[==>]*	*[1]*
7	WFC3/IR F 160W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP200	POS TARG 0.339,0.485	Prime + Parallel Group 7-9 in H and V (01)	1599.231469 Secs (1599.231 Secs) *[==>]*	*[2]*
8	ACS F606W medium	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F606W	FLASH=75		Prime + Parallel Group 7-9 in H and V (01)	60 Secs (60 Secs) *[==>]*	*[2]*
9	ACS F606W short	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F606W	FLASH=75		Prime + Parallel Group 7-9 in H and V (01)	6 Secs (6 Secs) *[==>]*	*[2]*
10	WFC3/IR F 160W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP200	POS TARG -0.203,0.303	Prime + Parallel Group 10-12 in H and V (01)	1599.231469 Secs (1599.231 Secs) *[==>]*	*[2]*
11	ACS F606W medium	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F606W	FLASH=75		Prime + Parallel Group 10-12 in H and V (01)	60 Secs (60 Secs) *[==>]*	*[2]*
12	ACS F606W short	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F606W	FLASH=75		Prime + Parallel Group 10-12 in H and V (01)	6 Secs (6 Secs) *[==>]*	*[2]*

Orbit Structure





Visit

Proposal 13860, H and V (02), implementation Thu Sep 04 01:16:44 GMT 2014

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SAME ORIENT AS 01

Comments: Two orbits visit.
The primary will be WFC3/IR with the F160W filter and in parallel we will have ACS/F606W
We will execute a 4-point dither pattern to improve PSF sampling.
Between visits we will execute an additional offset. This will ensure that no star is observed at the same chip location twice, thus avoiding bad pixels.

Diagnostics

(H and V (02)) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

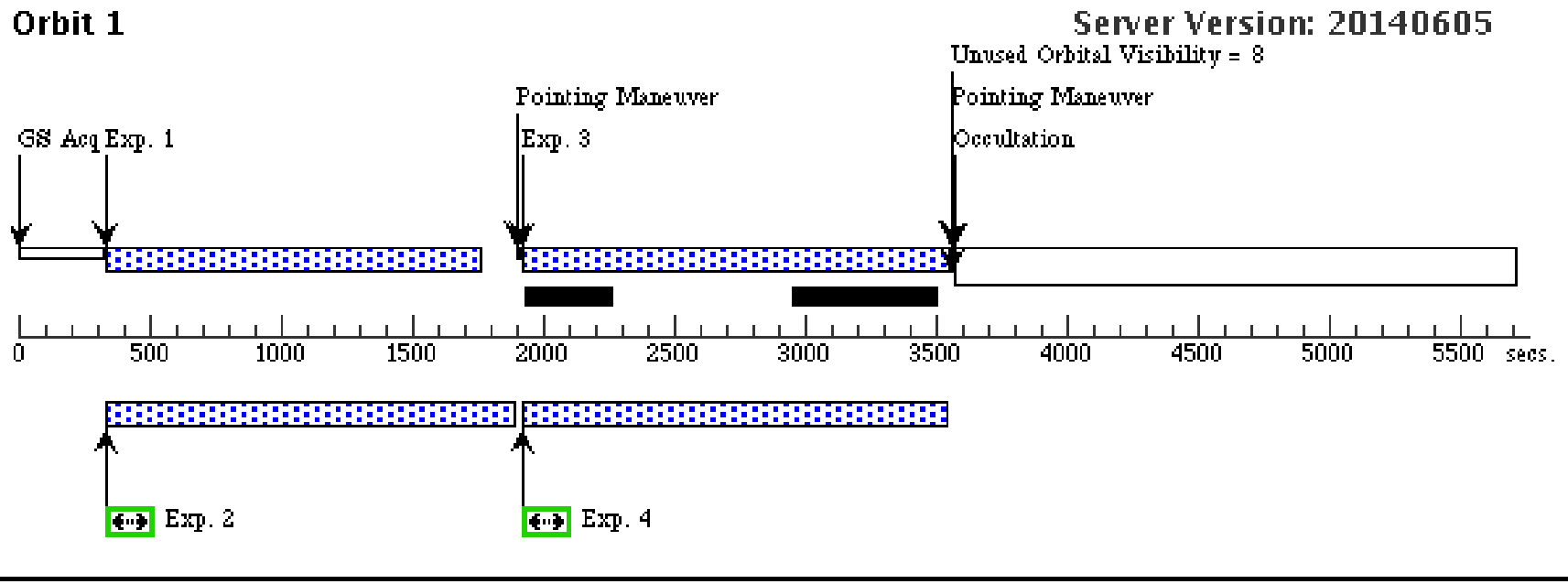
Fixed Targets

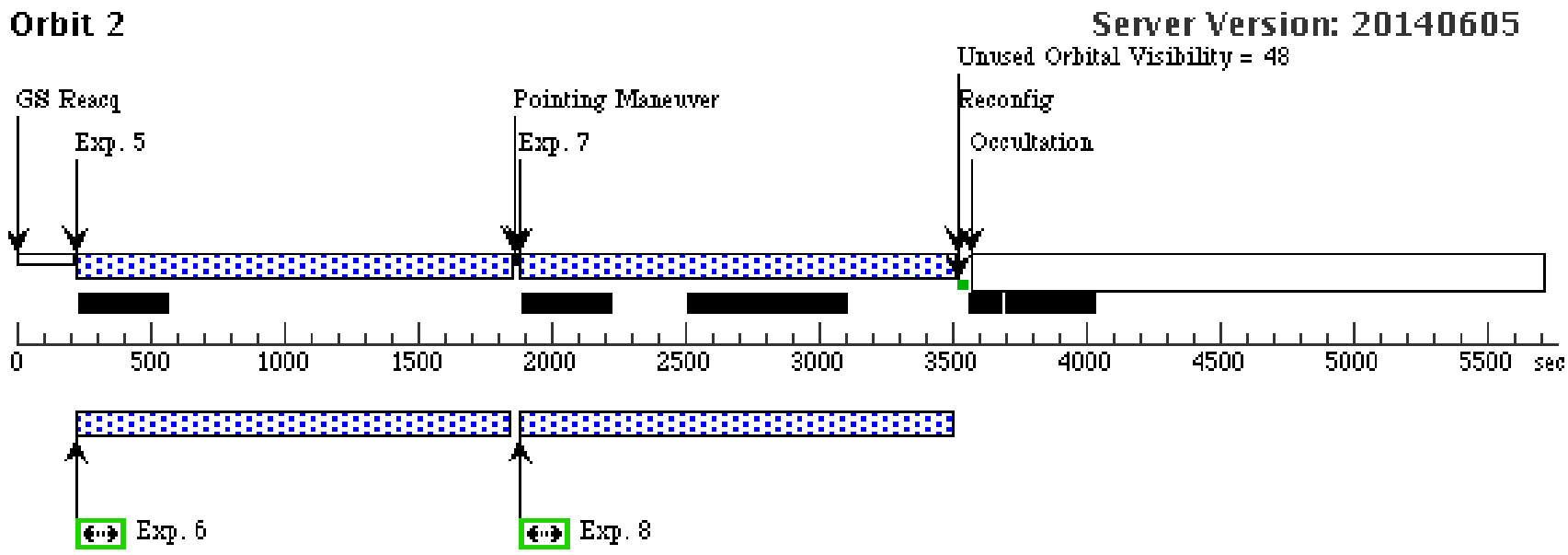
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	LMC-FIELD-1	RA: 05 03 1.5100 (75.7562917d) Dec: -66 24 15.50 (-66.40431d) Equinox: J2000		V=30+/-0.1	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	WFC3/IR F 160W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=STEP200	POS TARG 0.813,0.182	Prime + Parallel Group 1-2 in H and V (02)	1399.231402 Secs (1399.231 Secs) *[==>]*	*[1]*
2	ACS F606W long	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 1-2 in H and V (02)	1350 Secs (1350 Secs) *[==>]*	*[1]*
3	WFC3/IR F 160W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP200	POS TARG 1.355,0.182	Prime + Parallel Group 3-4 in H and V (02)	1599.231469 Secs (1599.231 Secs) *[==>]*	*[1]*
4	ACS F606W long	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 3-4 in H and V (02)	1500 Secs (1500 Secs) *[==>]*	*[1]*
5	WFC3/IR F 160W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP200	POS TARG 1.152,0.484	Prime + Parallel Group 5-6 in H and V (02)	1599.231469 Secs (1599.231 Secs) *[==>]*	*[2]*
6	ACS F606W long	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 5-6 in H and V (02)	1500 Secs (1500 Secs) *[==>]*	*[2]*
7	WFC3/IR F 160W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP200	POS TARG 0.610,0.303	Prime + Parallel Group 7-8 in H and V (02)	1599.231469 Secs (1599.231 Secs) *[==>]*	*[2]*
8	ACS F606W long	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 7-8 in H and V (02)	1500 Secs (1500 Secs) *[==>]*	*[2]*

Orbit Structure





Visit

Proposal 13860, H and V (03), implementation Thu Sep 04 01:16:44 GMT 2014

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SAME ORIENT AS 01

Comments: Two orbits visit.
The primary will be WFC3/IR with the F160W filter and in parallel we will have ACS/F606W
We will execute a 4-point dither pattern to improve PSF sampling.
Between visits we will execute an additional offset. This will ensure that no star is observed at the same chip location twice, thus avoiding bad pixels.

Diagnostics

(H and V (03)) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

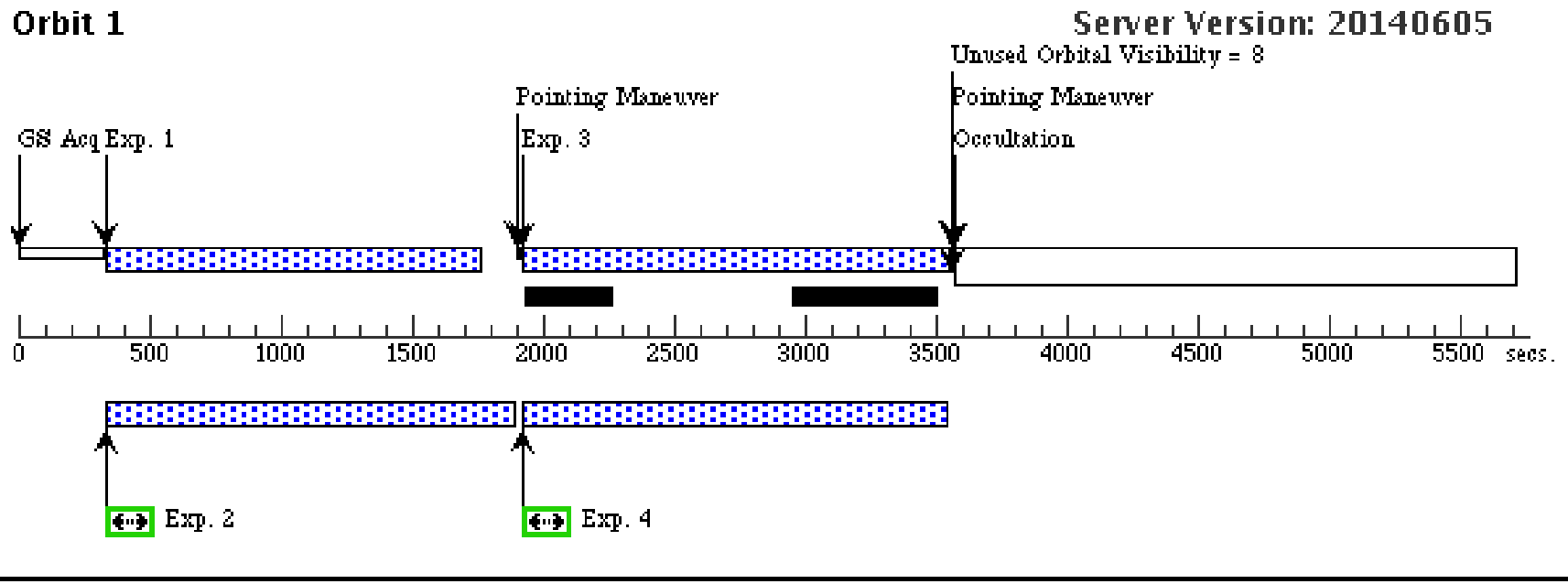
Fixed Targets

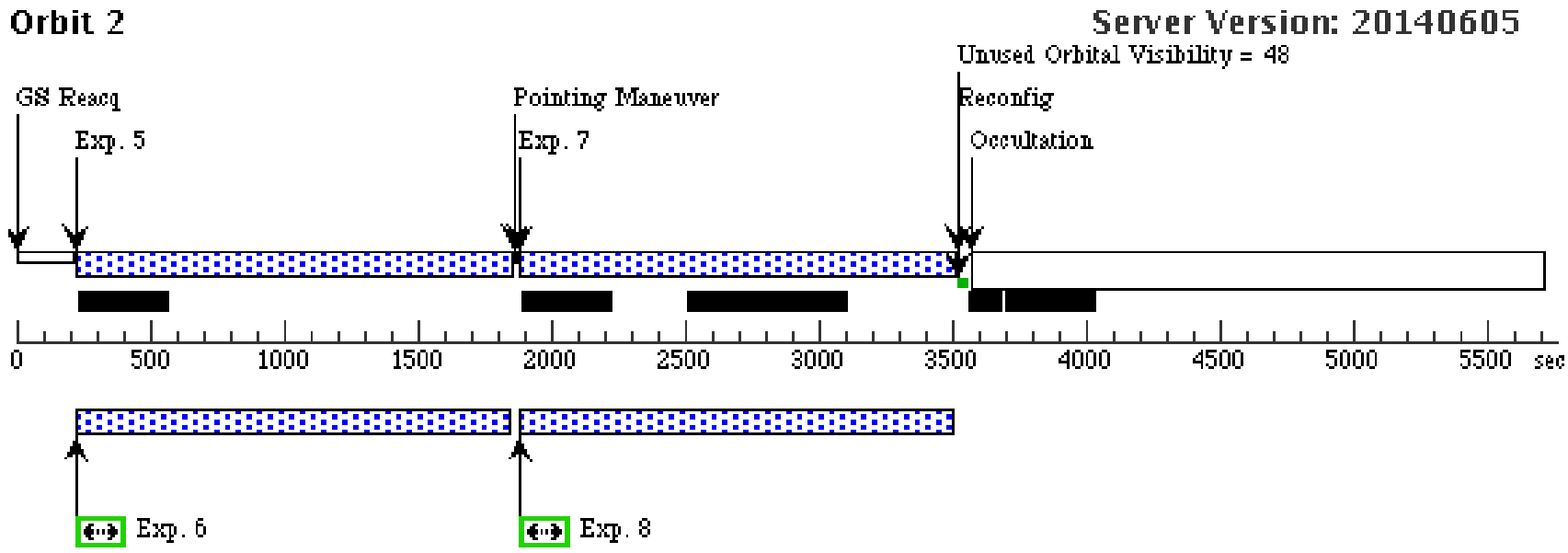
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	LMC-FIELD-1	RA: 05 03 1.5100 (75.7562917d) Dec: -66 24 15.50 (-66.40431d) Equinox: J2000		V=30+/-0.1	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	WFC3/IR F 160W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=STEP200	POS TARG 0.813,0.727	Prime + Parallel Group 1-2 in H and V (03)	1399.231402 Secs (1399.231 Secs) *[==>]*	*[1]*
2	ACS F606W long	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 1-2 in H and V (03)	1350 Secs (1350 Secs) *[==>]*	*[1]*
3	WFC3/IR F 160W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP200	POS TARG 1.355,0.908	Prime + Parallel Group 3-4 in H and V (03)	1599.231469 Secs (1599.231 Secs) *[==>]*	*[1]*
4	ACS F606W long	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 3-4 in H and V (03)	1500 Secs (1500 Secs) *[==>]*	*[1]*
5	WFC3/IR F 160W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP200	POS TARG 1.152,1.211	Prime + Parallel Group 5-6 in H and V (03)	1599.231469 Secs (1599.231 Secs) *[==>]*	*[2]*
6	ACS F606W long	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 5-6 in H and V (03)	1500 Secs (1500 Secs) *[==>]*	*[2]*
7	WFC3/IR F 160W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP200	POS TARG 0.610,1.029	Prime + Parallel Group 7-8 in H and V (03)	1599.231469 Secs (1599.231 Secs) *[==>]*	*[2]*
8	ACS F606W long	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 7-8 in H and V (03)	1500 Secs (1500 Secs) *[==>]*	*[2]*

Orbit Structure





Visit

Proposal 13860, H and V/I (04), implementation Thu Sep 04 01:16:44 GMT 2014

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SAME ORIENT AS 01

Comments: Two orbits visit.
The primary will be WFC3/IR with the F160W filter and in parallel we will have ACS/F606W for 1 orbit and ACS/814W for the other orbit.
We will execute a 4-point dither pattern to improve PSF sampling.
Between visits we will execute an additional offset. This will ensure that no star is observed at the same chip location twice, thus avoiding bad pixels.

Diagnostics

(H and V/I (04)) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

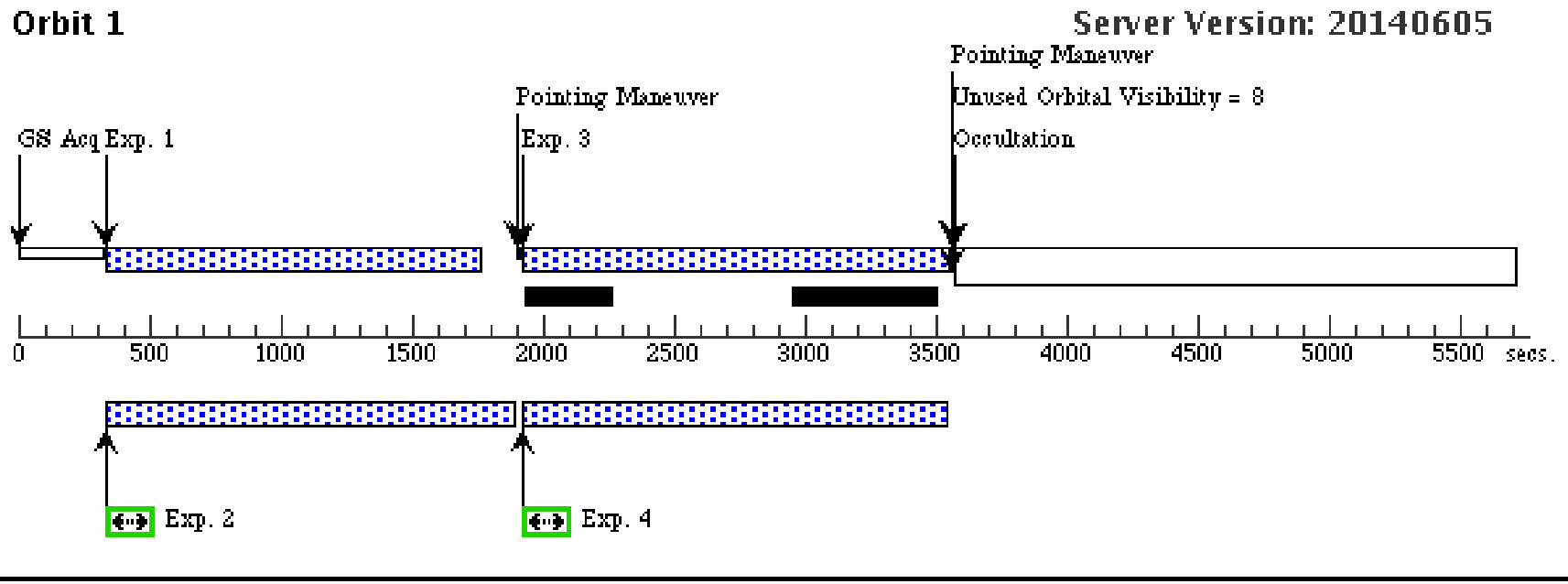
Fixed Targets

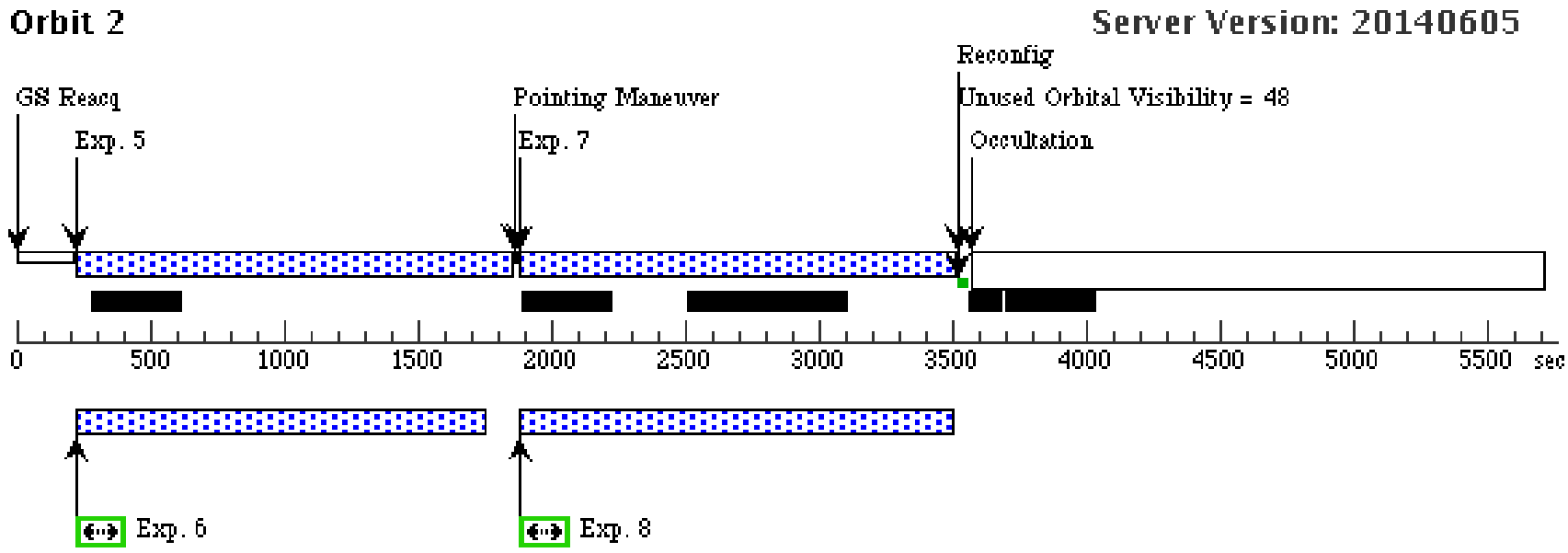
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	LMC-FIELD-1	RA: 05 03 1.5100 (75.7562917d) Dec: -66 24 15.50 (-66.40431d) Equinox: J2000		V=30+/-0.1	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	WFC3/IR F 160W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=STEP200	POS TARG 0.,0.727	Prime + Parallel Group 1-2 in H and V/I (04)	1399.231402 Secs (1399.231 Secs) *[==>]*	*[1]*
2	ACS F606W long	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 1-2 in H and V/I (04)	1350 Secs (1350 Secs) *[==>]*	*[1]*
3	WFC3/IR F 160W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP200	POS TARG 0.542,0.908	Prime + Parallel Group 3-4 in H and V/I (04)	1599.231469 Secs (1599.231 Secs) *[==>]*	*[1]*
4	ACS F606W long	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 3-4 in H and V/I (04)	1500 Secs (1500 Secs) *[==>]*	*[1]*
5	WFC3/IR F 160W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP200	POS TARG 0.339,1.211	Prime + Parallel Group 5-6 in H and V/I (04)	1599.231469 Secs (1599.231 Secs) *[==>]*	*[2]*
6	ACS F814W long	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in H and V/I (04)	1350 Secs (1350 Secs) *[==>]*	*[2]*
7	WFC3/IR F 160W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP200	POS TARG -0.203,1.029	Prime + Parallel Group 7-8 in H and V/I (04)	1599.231469 Secs (1599.231 Secs) *[==>]*	*[2]*
8	ACS F814W long	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 7-8 in H and V/I (04)	1500 Secs (1500 Secs) *[==>]*	*[2]*

Orbit Structure





Visit

Proposal 13860, J and I (05), implementation Thu Sep 04 01:16:44 GMT 2014

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SAME ORIENT AS 01

Comments: Two orbits visit.
The primary will be WFC3/IR with the F110W filter and in parallel we will have ACS/F814W
We will execute a 4-point dither pattern to improve PSF sampling.
Between visits we will execute an additional offset. This will ensure that no star is observed at the same chip location twice, thus avoiding bad pixels.
The parallel orbits are dedicated to short and medium ACS exposures

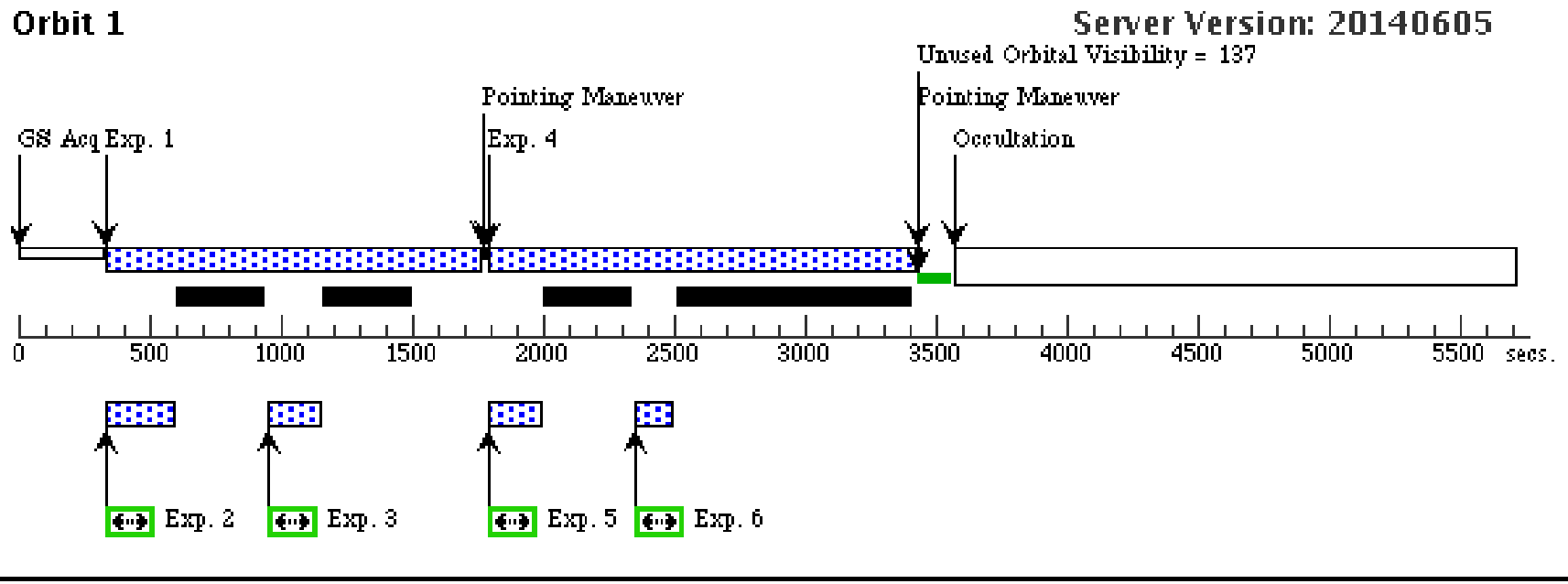
Fixed Targets

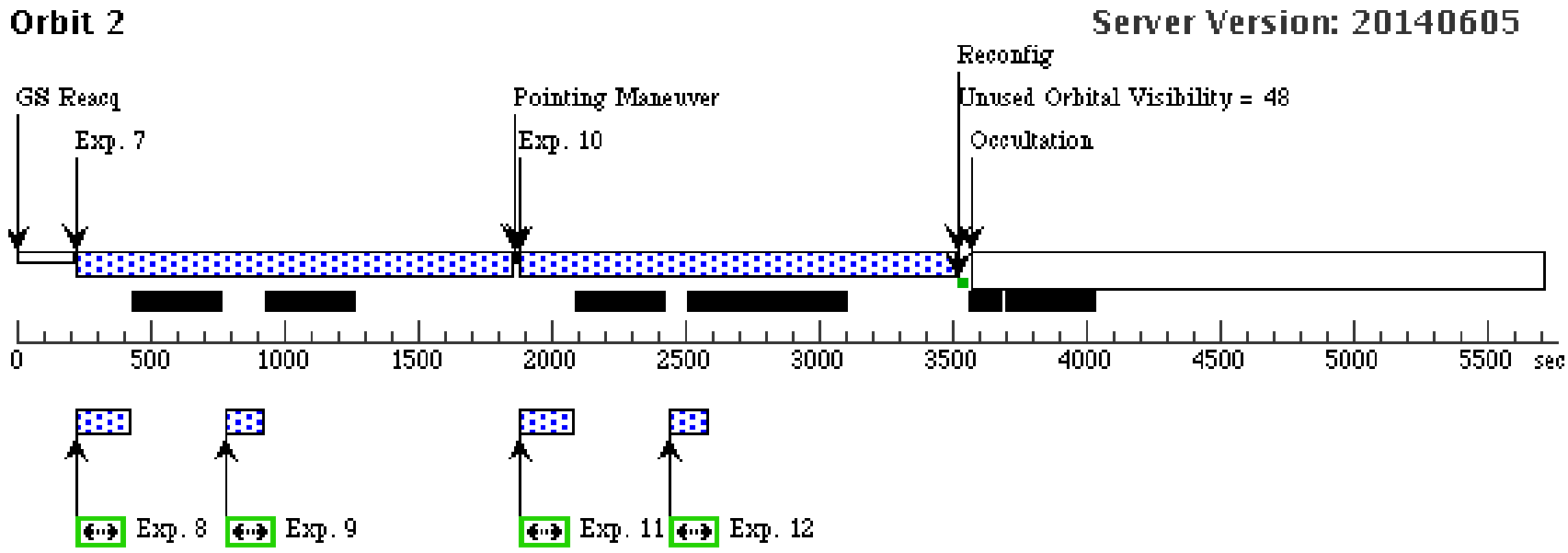
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	LMC-FIELD-1	RA: 05 03 1.5100 (75.7562917d) Dec: -66 24 15.50 (-66.40431d) Equinox: J2000		V=30+/-0.1	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	WFC3/IR F 110W 1399	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=14; SAMP-SEQ=STEP200	POS TARG -0.813,-0.727	Prime + Parallel Group 1-3 in J and I (05)	1399.231402 Secs (1399.231 Secs) *[==>]*	*[1]*
2	ACS F814W short	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F814W	FLASH=75		Prime + Parallel Group 1-3 in J and I (05)	6 Secs (6 Secs) *[==>]*	*[1]*
3	ACS F814W medium	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F814W	FLASH=75		Prime + Parallel Group 1-3 in J and I (05)	60 Secs (60 Secs) *[==>]*	*[1]*
4	WFC3/IR F 110W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=15; SAMP-SEQ=STEP200	POS TARG -0.271,-0.545	Prime + Parallel Group 4-6 in J and I (05)	1599.231469 Secs (1599.231 Secs) *[==>]*	*[1]*
5	ACS F814W medium	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F814W	FLASH=75		Prime + Parallel Group 4-6 in J and I (05)	60 Secs (60 Secs) *[==>]*	*[1]*
6	ACS F814W short	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F814W	FLASH=75		Prime + Parallel Group 4-6 in J and I (05)	6 Secs (6 Secs) *[==>]*	*[1]*
7	WFC3/IR F 110W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=15; SAMP-SEQ=STEP200	POS TARG -0.474,-0.242	Prime + Parallel Group 7-9 in J and I (05)	1599.231469 Secs (1599.231 Secs) *[==>]*	*[2]*
8	ACS F814W medium	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F814W	FLASH=75		Prime + Parallel Group 7-9 in J and I (05)	60 Secs (60 Secs) *[==>]*	*[2]*
9	ACS F606W short	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F814W	FLASH=75		Prime + Parallel Group 7-9 in J and I (05)	6 Secs (6 Secs) *[==>]*	*[2]*
10	WFC3/IR F 110W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=15; SAMP-SEQ=STEP200	POS TARG -1.016,-0.424	Prime + Parallel Group 10-12 in J and I (05)	1599.231469 Secs (1599.231 Secs) *[==>]*	*[2]*
11	ACS F814W medium	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F814W	FLASH=75		Prime + Parallel Group 10-12 in J and I (05)	60 Secs (60 Secs) *[==>]*	*[2]*
12	ACS F814W short	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F814W	FLASH=75		Prime + Parallel Group 10-12 in J and I (05)	6 Secs (6 Secs) *[==>]*	*[2]*

Orbit Structure





Visit

Proposal 13860, J and I (06), implementation Thu Sep 04 01:16:45 GMT 2014

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SAME ORIENT AS 01

Comments: Two orbits visit.
The primary will be WFC3/IR with the F110W filter and in parallel we will have ACS/F814W
We will execute a 4-point dither pattern to improve PSF sampling.
Between visits we will execute an additional offset. This will ensure that no star is observed at the same chip location twice, thus avoiding bad pixels.

Diagnostics

(J and I (06)) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	LMC-FIELD-1	RA: 05 03 1.5100 (75.7562917d) Dec: -66 24 15.50 (-66.40431d) Equinox: J2000		V=30+/-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	WFC3/IR F 110W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=14; SAMP-SEQ=STEP200	POS TARG 0.,-0.727	Prime + Parallel Group 1-2 in J and I (06)	1399.231402 Secs (1399.231 Secs) *[==>]*	*[1]*
2	ACS F814W long	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2 in J and I (06)	1350 Secs (1350 Secs) *[==>]*	*[1]*
3	WFC3/IR F 110W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=15; SAMP-SEQ=STEP200	POS TARG 0.542,-0.545	Prime + Parallel Group 3-4 in J and I (06)	1599.231469 Secs (1599.231 Secs) *[==>]*	*[1]*
4	ACS F814W long	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 3-4 in J and I (06)	1500 Secs (1500 Secs) *[==>]*	*[1]*
5	WFC3/IR F 110W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=15; SAMP-SEQ=STEP200	POS TARG 0.339,-0.242	Prime + Parallel Group 5-6 in J and I (06)	1599.231469 Secs (1599.231 Secs) *[==>]*	*[2]*
6	ACS F814W long	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in J and I (06)	1500 Secs (1500 Secs) *[==>]*	*[2]*
7	WFC3/IR F 110W 1599	(1) LMC-FIELD-1	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=15; SAMP-SEQ=STEP200	POS TARG -0.203,-0.424	Prime + Parallel Group 7-8 in J and I (06)	1599.231469 Secs (1599.231 Secs) *[==>]*	*[2]*
8	ACS F814W long	(1) LMC-FIELD-1	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 7-8 in J and I (06)	1500 Secs (1500 Secs) *[==>]*	*[2]*

Orbit Structure