13028 - Is the First Epoch of Star Formation in Satellite Galaxies Universal?: M31 vs. Milky Way dSphs

Cycle: 20, Proposal Category: GO

(Availability Mode: SUPPORTED)

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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) ANDROMEDA-II ANY	ACS/WFC WFC3/UVIS	2	16-Sep-2013 21:01:48.0	yes
02	(1) ANDROMEDA-II ANY	ACS/WFC WFC3/UVIS	2	16-Sep-2013 21:02:00.0	yes
03	(1) ANDROMEDA-II ANY	ACS/WFC WFC3/UVIS	2	16-Sep-2013 21:02:10.0	yes
04	(1) ANDROMEDA-II ANY	ACS/WFC WFC3/UVIS	2	16-Sep-2013 21:02:19.0	yes
05	(1) ANDROMEDA-II ANY	ACS/WFC WFC3/UVIS	2	16-Sep-2013 21:02:27.0	yes
06	(1) ANDROMEDA-II ANY	ACS/WFC WFC3/UVIS	2	16-Sep-2013 21:02:35.0	yes
07	(1) ANDROMEDA-II ANY	ACS/WFC WFC3/UVIS	2	16-Sep-2013 21:02:44.0	yes
08	(1) ANDROMEDA-II ANY	ACS/WFC WFC3/UVIS	3	16-Sep-2013 21:02:55.0	yes
09	(2) ANDROMEDA-XVI ANY	ACS/WFC WFC3/UVIS	2	16-Sep-2013 21:03:04.0	yes
10	(2) ANDROMEDA-XVI ANY	ACS/WFC WFC3/UVIS	2	16-Sep-2013 21:03:12.0	yes
11	(2) ANDROMEDA-XVI ANY	ACS/WFC WFC3/UVIS	2	16-Sep-2013 21:03:20.0	yes
12	(2) ANDROMEDA-XVI ANY	ACS/WFC WFC3/UVIS	2	16-Sep-2013 21:03:29.0	yes
13	(2) ANDROMEDA-XVI ANY	ACS/WFC WFC3/UVIS	2	16-Sep-2013 21:03:37.0	yes
14	(2) ANDROMEDA-XVI ANY	ACS/WFC WFC3/UVIS	3	16-Sep-2013 21:03:47.0	yes

30 Total Orbits Used

ABSTRACT

We propose to derive detailed star formation and chemical enrichment histories of a representative sample of M31 dwarf spheroidal (dSph) companions in order to compare directly the timing, duration, and strength of their first episodes of star formation to those of the Milky Way satellites. Compared to the MW companion dSphs, the M31 companion dSphs have significantly different horizontal branch morphologies and a different range in structural parameters. We hypothesize that these differences are due to differences in the evolutionary histories of their host galaxies. Only the proposed deep HST imaging will allow us to accurately measure the early star formation histories of the Andromeda companions and thus to test our hypothesis. Fundamentally, we will be testing the assumption that the early evolution of the Milky Way satellites was typical and therefore representative of dSphs in general. The M31 dSphs are the only galaxies for which these observations are possible. Here, in phase I of this project, we propose observations for 2 of the 7 galaxies in our representative sample.

OBSERVING DESCRIPTION

The goal of this proposal is to obtain deep (V~28) color-magnitude diagrams (CMDs) in two dSph galaxies satellites of M31: And II (17 orbits) and And XVI (13 orbits)

Most visits to each object span 2-orbits, and in each orbit, one F475W and one F814W exposure (with no CR-splits) are obtained with the ACS. Small ditherings are performed between exposures in order to remove hot pixels and to smooth the detector response. We don't intend to cover the interchip gap. Ditherings are performed using POS-TARG, and following the basic UDF dither pattern, shifted around by 2-3 pix. The images in the same visit are kept with the same POS TARG in order to have at least two images in the same position, which is supposed to help in the CR removal. Coordinated parallel exposures with WFPC3 are requested in F475W and F814W filters. The purpose of these are to obtain CMDs in a field in the outskirsts of each galaxy.

The first visit to each object is requested within a given range of orientations. This range has been chosen to avoid bright stars in the main and the parallel field, to place the parallel field in an interesting position in the outer part of each galaxy, and to ensure that the observations are performed in low sky periods. Subsequent visits to each object are requested to be obtained with the same ORIENT as the first visit, to maximize the sky area covered at full depth both in the prime and the parallel fields.

Note that we requested low-sky for all targets on Phase I, and we drop this requirement here for these low-declination targets because we estimated

that the increased background caused by BE limb angles between 20 and 40 degrees is negligible. But we do need low-zodiacal background for these targets. We impose that through the ORIENT requirements.

We request the visits to the same object to be executed sequentially with intervals of 2-4 hours between visits, and grouped within a maximum time span of 3 days. This will ensure optimal sampling of the light curves of short period variable stars such as RR Lyrae, which are expected to be numerous in the two galaxies.

Visit

Proposal 13028, AndII-v1 (01), pi Tue Sep 17 01:03:58 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; ORIENT 162D TO 176 D; SEQ 01,02,03,04,05,06,07,08 WITHIN 3 D

Comments: This is the first visit to target And II. We request a range of orientations in this first visit, and same orient as in this visit is requested in the remaining visits to this target, in order to match exactly the same field in WFPC3.

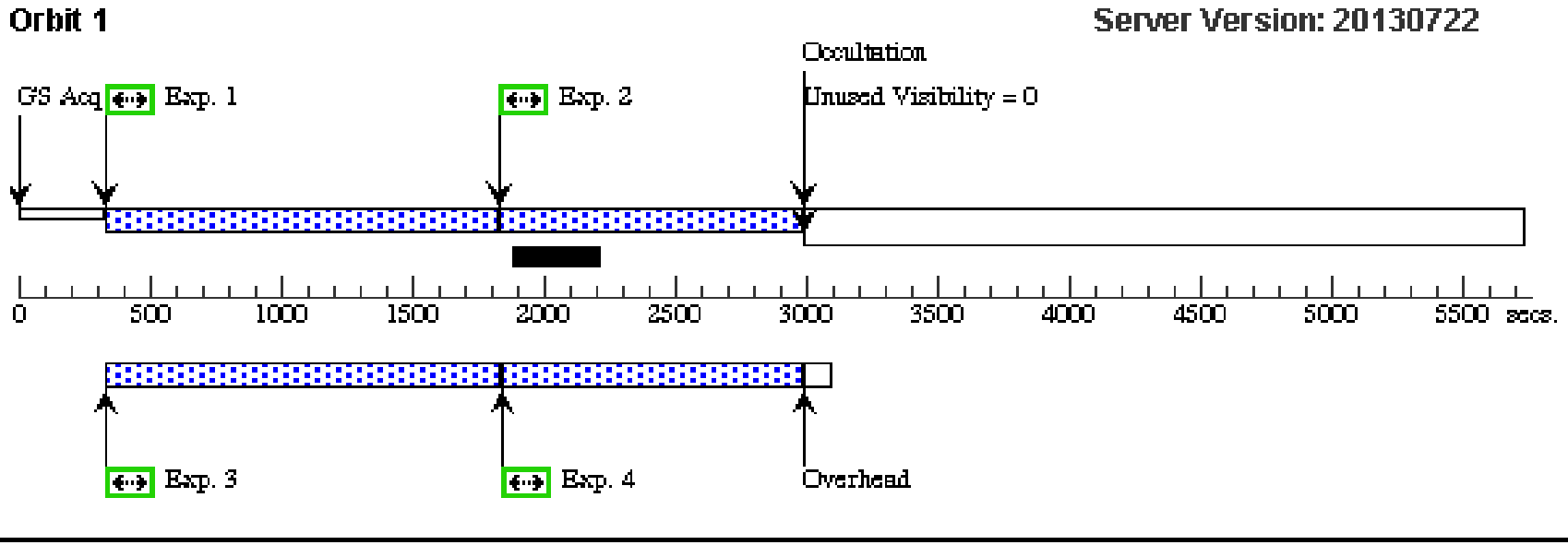
Fixed Targets

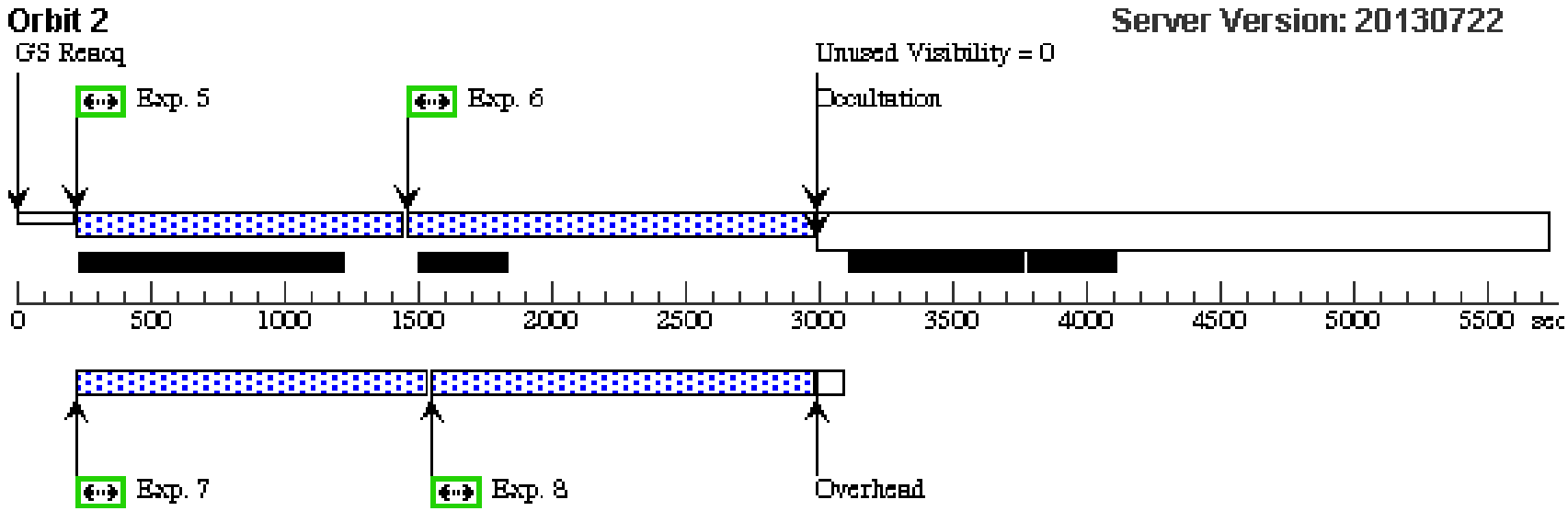
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	ANDROMEDA-II	RA: 01 16 23.8023 (19.0991762d) Dec: +33 26 5.52 (33.43487d) Equinox: J2000		V=28.0+/-0.2	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 1-4 in AndII-v1 (01)	1280 Secs (1280 Secs) *[==>]*	 ***[1]***
2		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-4 in AndII-v1 (01)	987 Secs (987 Secs) *[==>]*	 ***[1]***
3		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in AndII-v1 (01)	1350 Secs (1350 Secs) *[==>]*	 ***[1]***
4		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in AndII-v1 (01)	1122 Secs (1122 Secs) *[==>]*	 ***[1]***
5		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 5-8 in AndII-v1 (01)	1100 Secs (1100 Secs) *[==>]*	 ***[2]***
6		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 5-8 in AndII-v1 (01)	1359 Secs (1359 Secs) *[==>]*	 ***[2]***
7		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in AndII-v1 (01)	1200 Secs (1200 Secs) *[==>]*	 ***[2]***
8		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in AndII-v1 (01)	1409 Secs (1409 Secs) *[==>]*	 ***[2]***

Orbit Structure





Visit

Proposal 13028, AndII-v2 (02), pi Tue Sep 17 01:04:01 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; SAME ORIENT AS 01; AFTER 01 BY 4 H TO 3 D

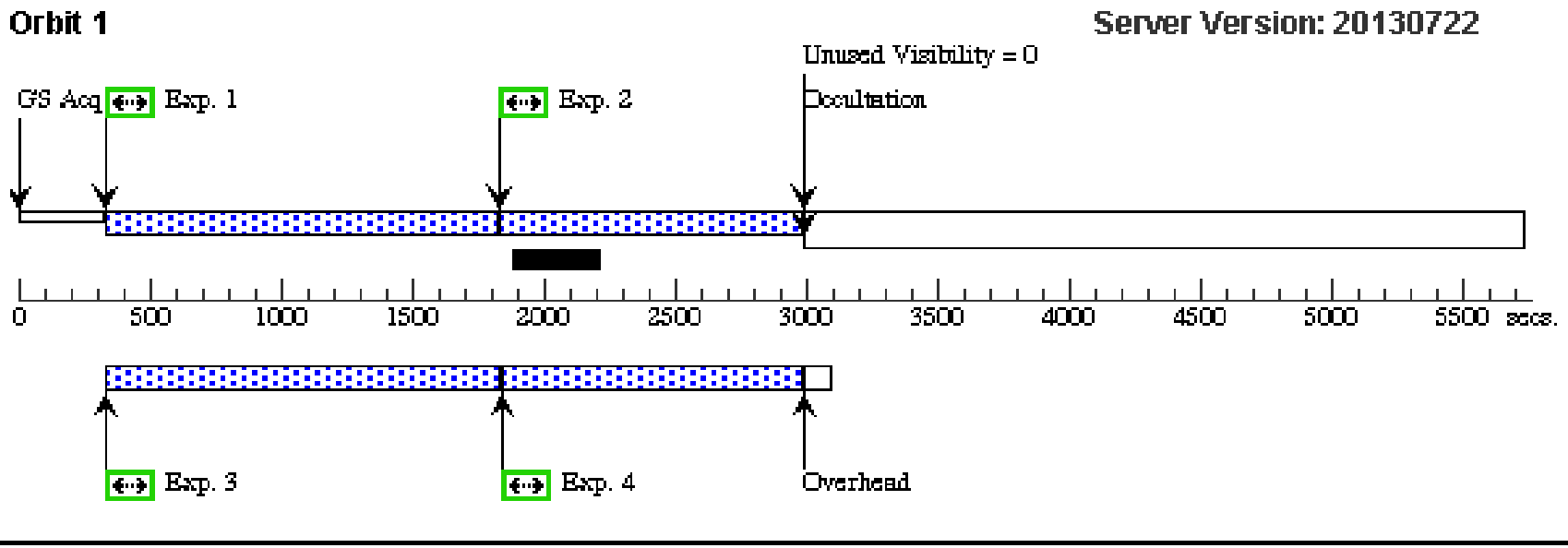
Fixed Targets

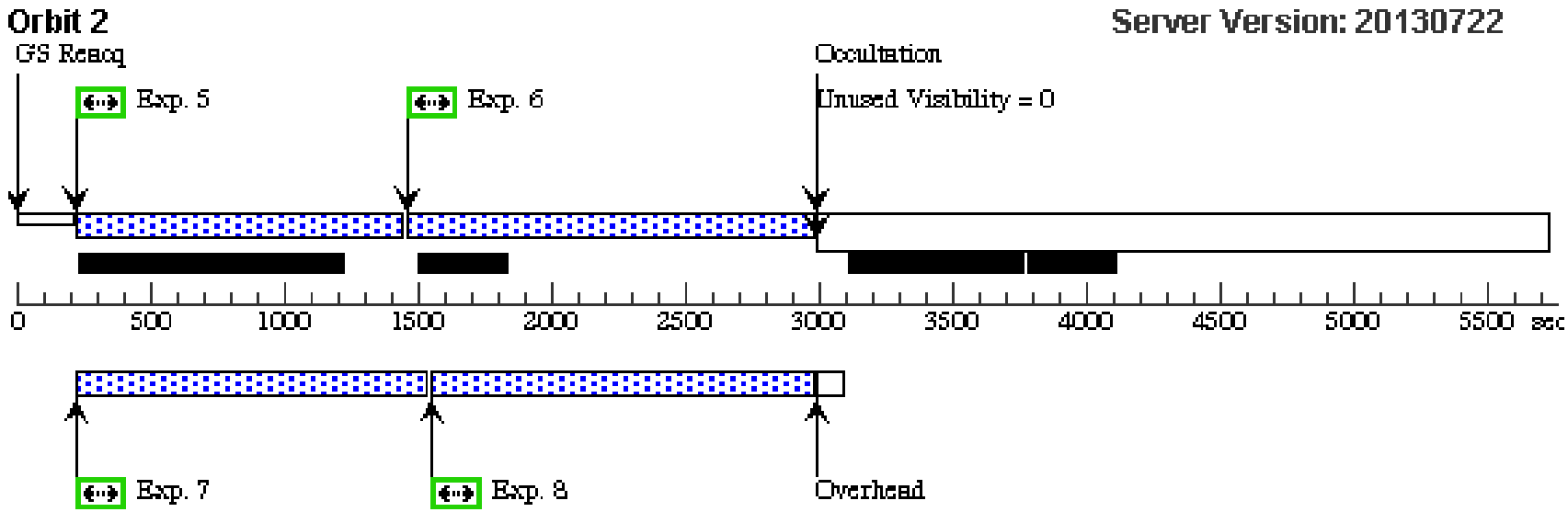
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	ANDROMEDA-II	RA: 01 16 23.8023 (19.0991762d) Dec: +33 26 5.52 (33.43487d) Equinox: J2000		V=28.0+/-0.2	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.148,0.086	Prime + Parallel Group 1-4 in AndII-v2 (02)	1280 Secs (1280 Secs) *[==>]*	***[1]***
2		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.148,0.086	Prime + Parallel Group 1-4 in AndII-v2 (02)	987 Secs (987 Secs) *[==>]*	***[1]***
3		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in AndII-v2 (02)	1350 Secs (1350 Secs) *[==>]*	***[1]***
4		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in AndII-v2 (02)	1122 Secs (1122 Secs) *[==>]*	***[1]***
5		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.148,0.086	Prime + Parallel Group 5-8 in AndII-v2 (02)	1100 Secs (1100 Secs) *[==>]*	***[2]***
6		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.148,0.086	Prime + Parallel Group 5-8 in AndII-v2 (02)	1359 Secs (1359 Secs) *[==>]*	***[2]***
7		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in AndII-v2 (02)	1200 Secs (1200 Secs) *[==>]*	***[2]***
8		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in AndII-v2 (02)	1409 Secs (1409 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 13028, AndII-v3 (03), pi Tue Sep 17 01:04:02 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; SAME ORIENT AS 01; AFTER 02 BY 4 H TO 3 D

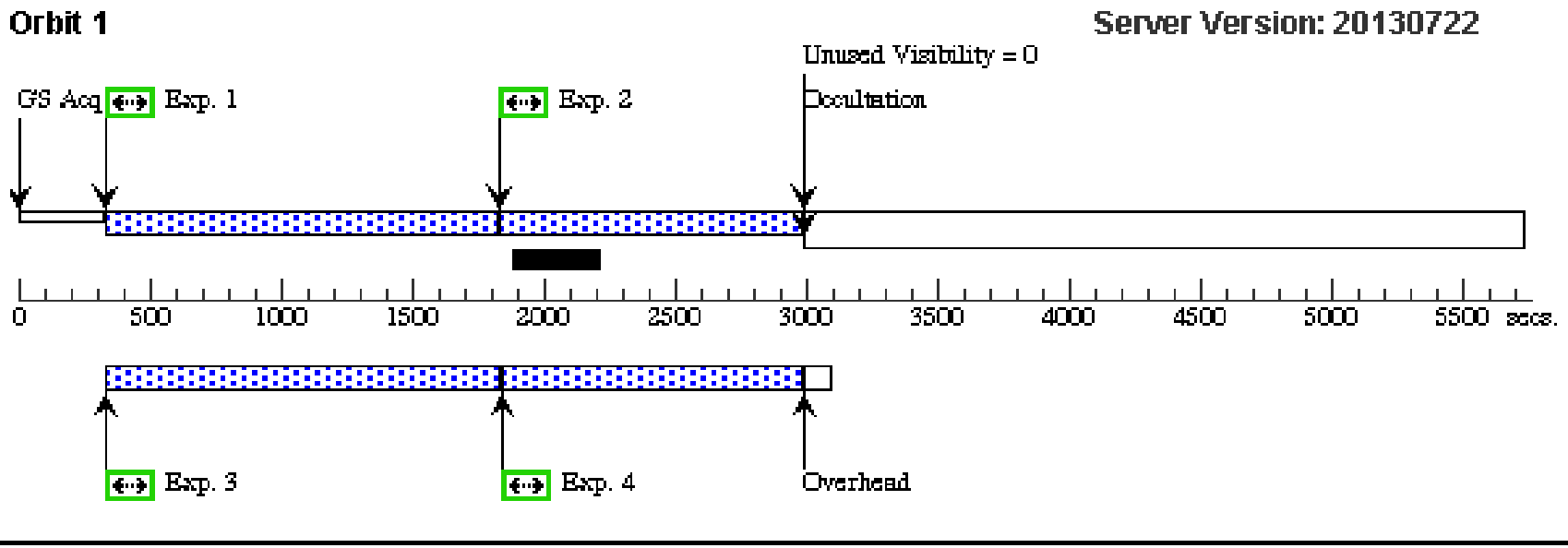
Fixed Targets

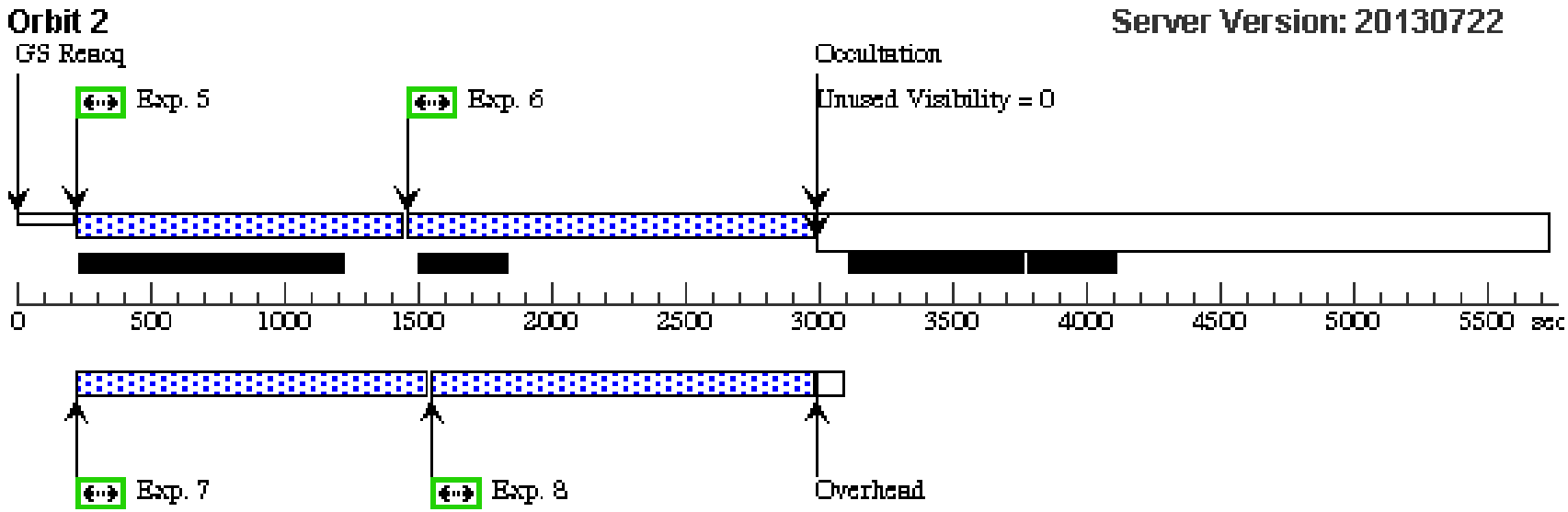
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	ANDROMEDA-II	RA: 01 16 23.8023 (19.0991762d) Dec: +33 26 5.52 (33.43487d) Equinox: J2000		V=28.0+/-0.2	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.222,0.240	Prime + Parallel Group 1-4 in AndII-v3 (03)	1280 Secs (1280 Secs) *[==>]*	*[1]*
2		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.222,0.240	Prime + Parallel Group 1-4 in AndII-v3 (03)	987 Secs (987 Secs) *[==>]*	*[1]*
3		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in AndII-v3 (03)	1350 Secs (1350 Secs) *[==>]*	*[1]*
4		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in AndII-v3 (03)	1122 Secs (1122 Secs) *[==>]*	*[1]*
5		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.222,0.240	Prime + Parallel Group 5-8 in AndII-v3 (03)	1100 Secs (1100 Secs) *[==>]*	*[2]*
6		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.222,0.240	Prime + Parallel Group 5-8 in AndII-v3 (03)	1359 Secs (1359 Secs) *[==>]*	*[2]*
7		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in AndII-v3 (03)	1200 Secs (1200 Secs) *[==>]*	*[2]*
8		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in AndII-v3 (03)	1409 Secs (1409 Secs) *[==>]*	*[2]*

Orbit Structure





Visit

Proposal 13028, AndII-v4 (04), pi Tue Sep 17 01:04:03 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; SAME ORIENT AS 01; AFTER 03 BY 4 H TO 3 D

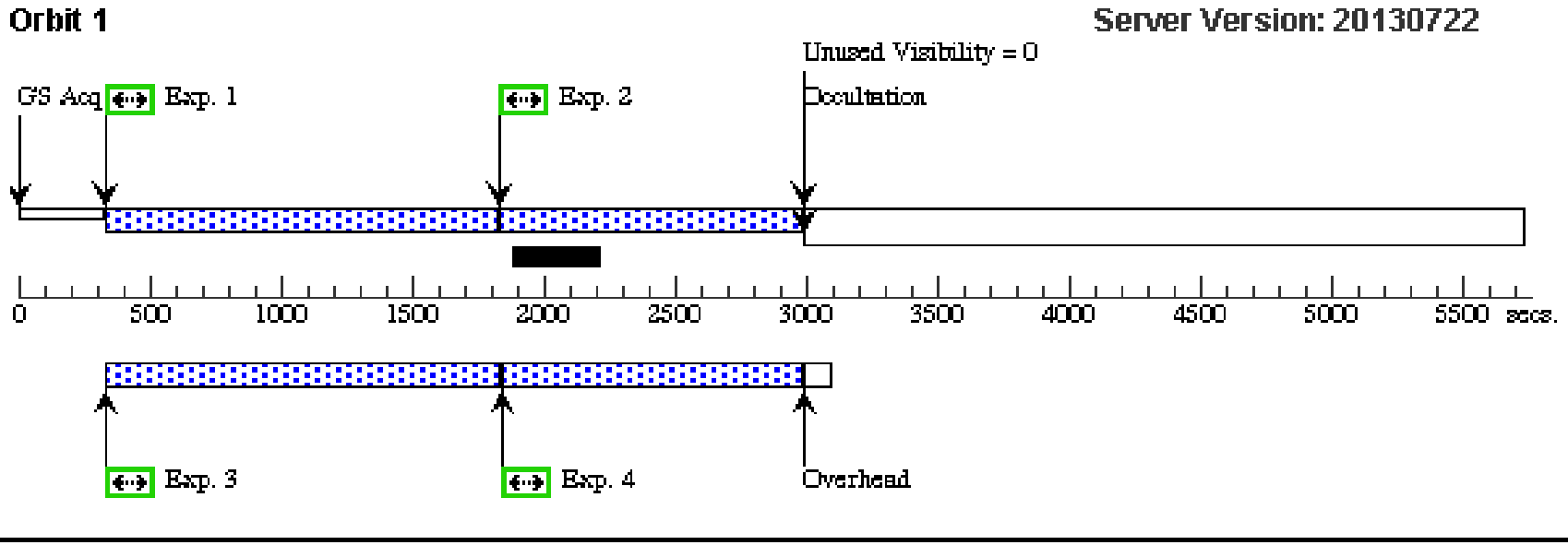
Fixed Targets

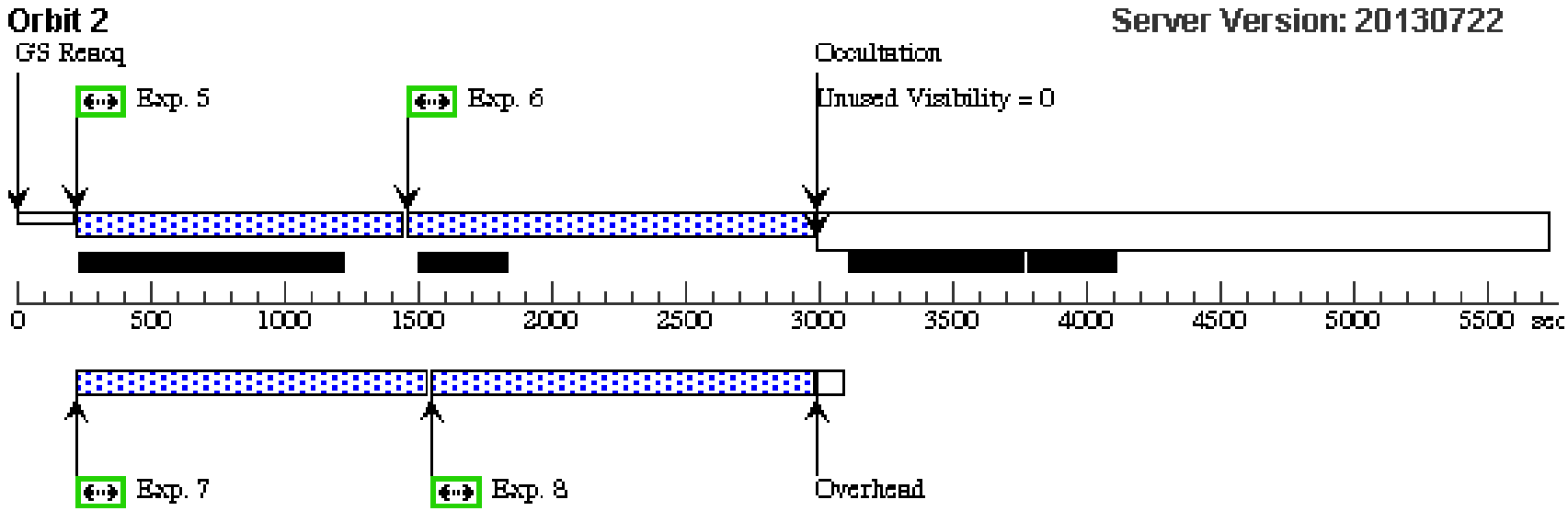
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	ANDROMEDA-II	RA: 01 16 23.8023 (19.0991762d) Dec: +33 26 5.52 (33.43487d) Equinox: J2000		V=28.0+/-0.2	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.074,0.154	Prime + Parallel Group 1-4 in AndII-v4 (04)	1280 Secs (1280 Secs) *[==>]*	*[1]*
2		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.074,0.154	Prime + Parallel Group 1-4 in AndII-v4 (04)	987 Secs (987 Secs) *[==>]*	*[1]*
3		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in AndII-v4 (04)	1350 Secs (1350 Secs) *[==>]*	*[1]*
4		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in AndII-v4 (04)	1122 Secs (1122 Secs) *[==>]*	*[1]*
5		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.074,0.154	Prime + Parallel Group 5-8 in AndII-v4 (04)	1100 Secs (1100 Secs) *[==>]*	*[2]*
6		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.074,0.154	Prime + Parallel Group 5-8 in AndII-v4 (04)	1359 Secs (1359 Secs) *[==>]*	*[2]*
7		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in AndII-v4 (04)	1200 Secs (1200 Secs) *[==>]*	*[2]*
8		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in AndII-v4 (04)	1409 Secs (1409 Secs) *[==>]*	*[2]*

Orbit Structure





Visit

Proposal 13028, AndII-v5 (05), pi Tue Sep 17 01:04:04 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; SAME ORIENT AS 01; AFTER 04 BY 4 H TO 3 D

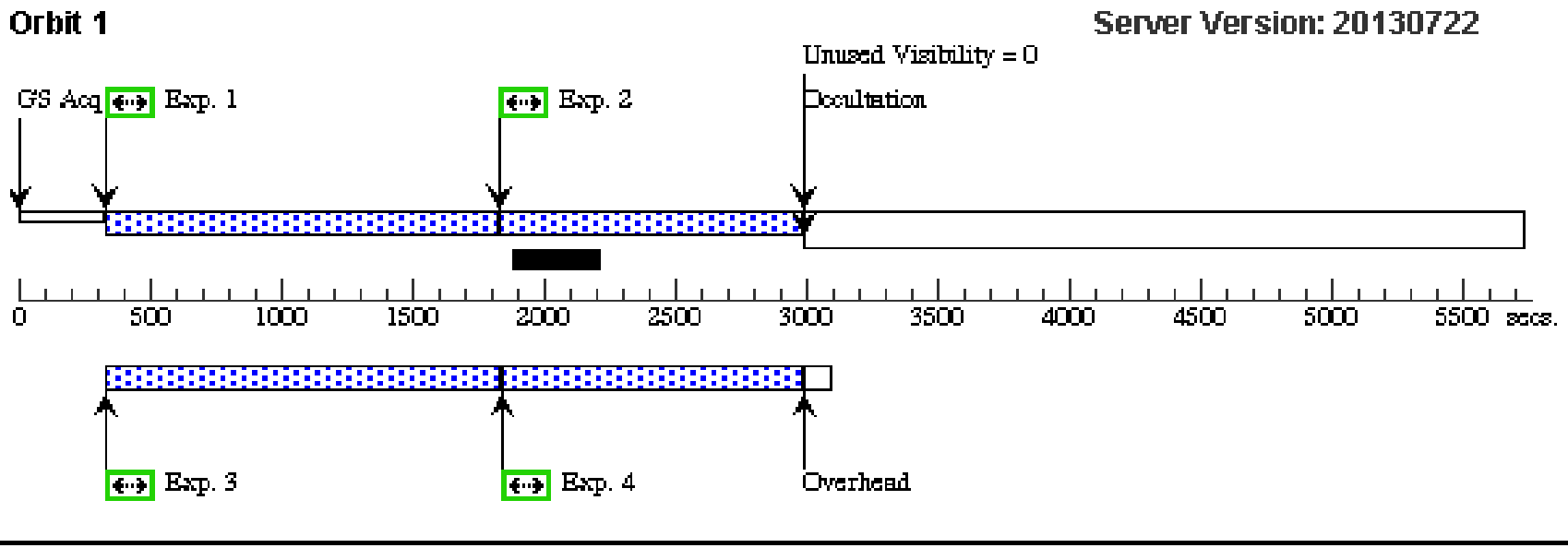
Fixed Targets

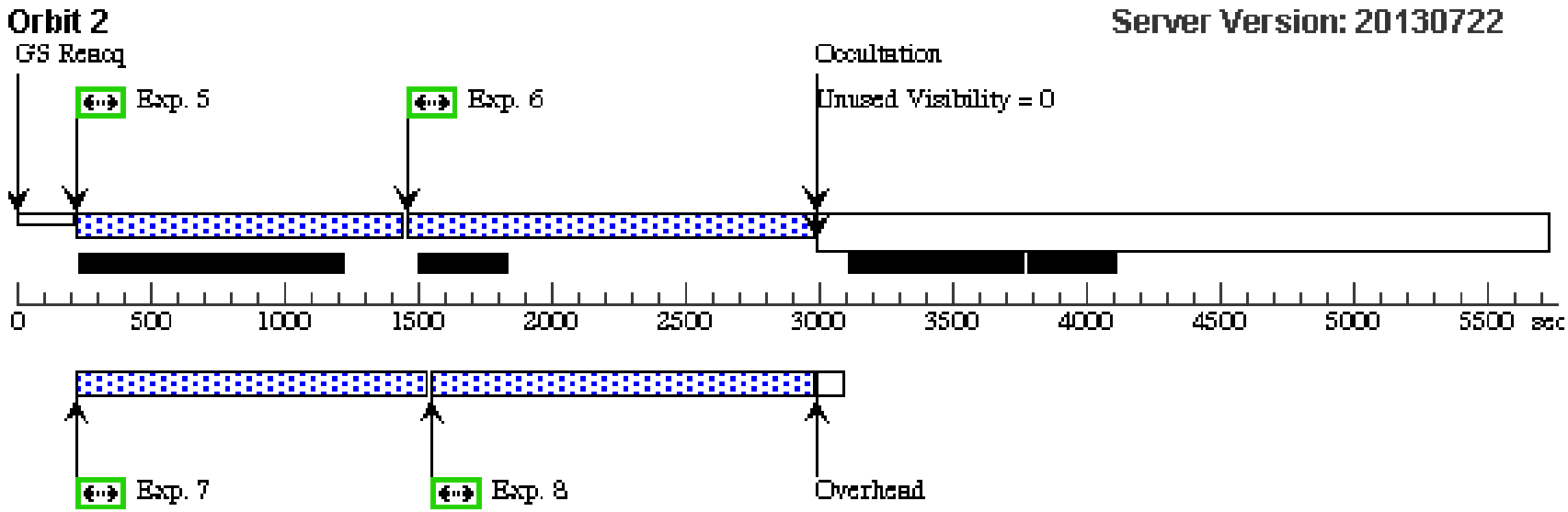
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	ANDROMEDA-II	RA: 01 16 23.8023 (19.0991762d) Dec: +33 26 5.52 (33.43487d) Equinox: J2000		V=28.0+/-0.2	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.085,0.105	Prime + Parallel Group 1-4 in AndII-v5 (05)	1280 Secs (1280 Secs) *[==>]*	 ***[1]***
2		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.085,0.105	Prime + Parallel Group 1-4 in AndII-v5 (05)	987 Secs (987 Secs) *[==>]*	 ***[1]***
3		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in AndII-v5 (05)	1350 Secs (1350 Secs) *[==>]*	 ***[1]***
4		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in AndII-v5 (05)	1122 Secs (1122 Secs) *[==>]*	 ***[1]***
5		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.085,0.105	Prime + Parallel Group 5-8 in AndII-v5 (05)	1100 Secs (1100 Secs) *[==>]*	 ***[2]***
6		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.085,0.105	Prime + Parallel Group 5-8 in AndII-v5 (05)	1359 Secs (1359 Secs) *[==>]*	 ***[2]***
7		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in AndII-v5 (05)	1200 Secs (1200 Secs) *[==>]*	 ***[2]***
8		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in AndII-v5 (05)	1409 Secs (1409 Secs) *[==>]*	 ***[2]***

Orbit Structure





Visit

Proposal 13028, AndII-v6 (06), pi Tue Sep 17 01:04:06 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; SAME ORIENT AS 01; AFTER 05 BY 4 H TO 3 D

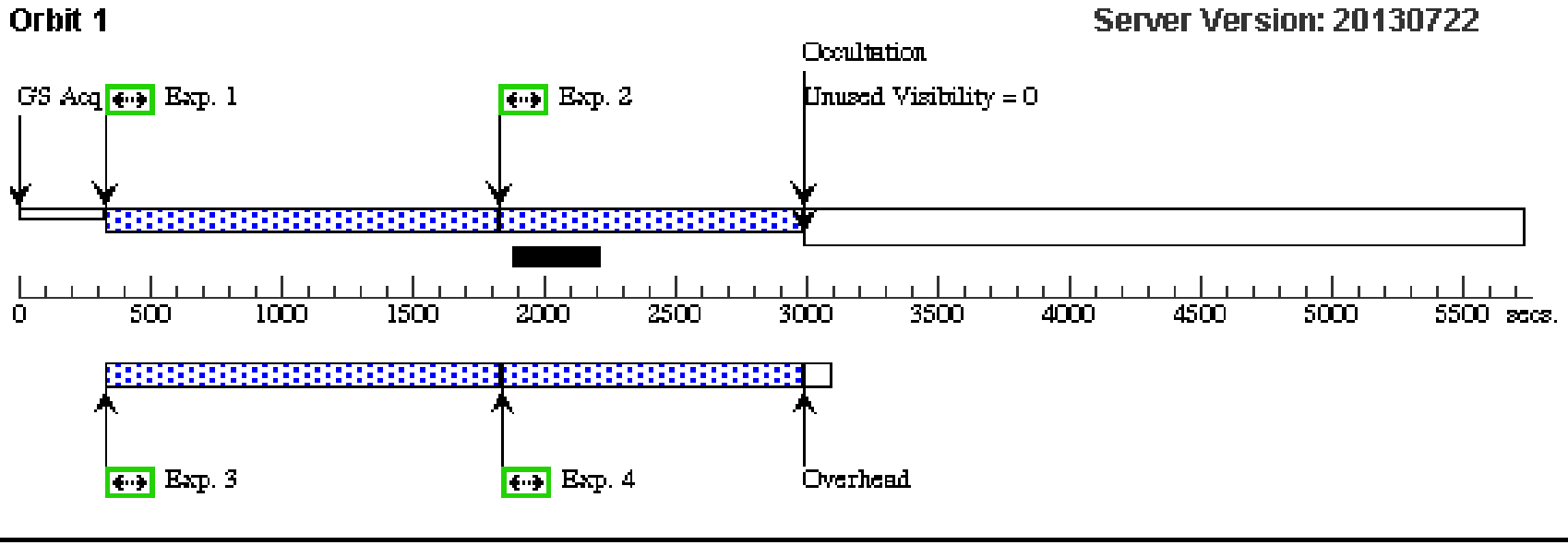
Fixed Targets

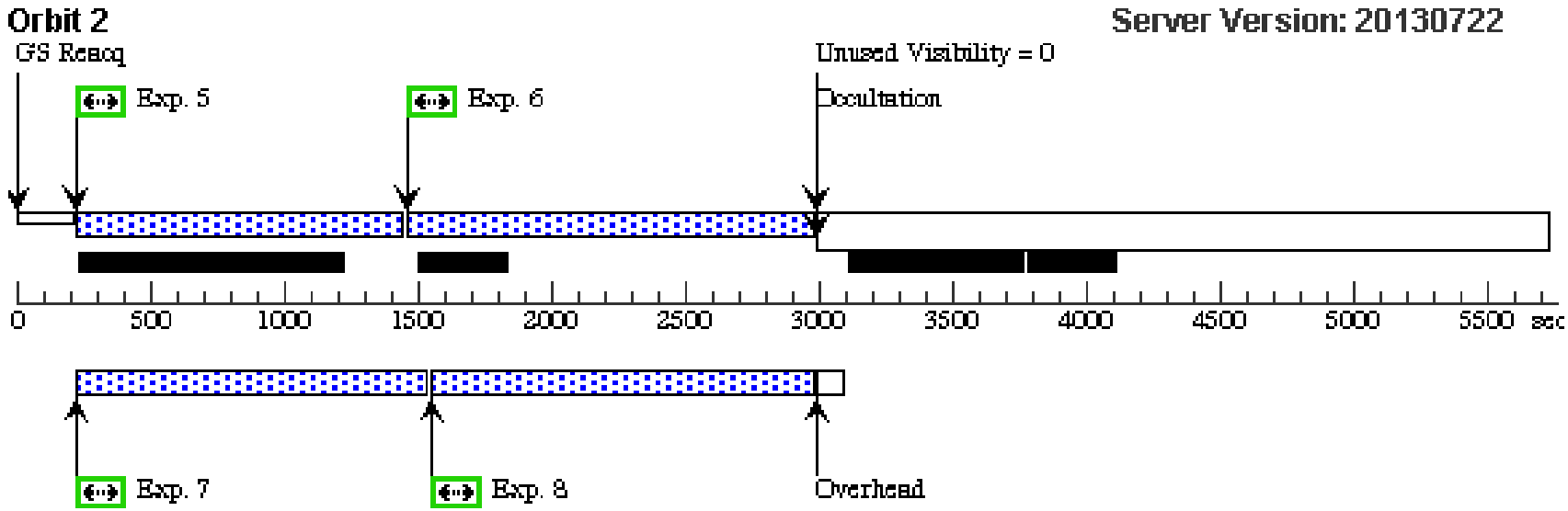
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	ANDROMEDA-II	RA: 01 16 23.8023 (19.0991762d) Dec: +33 26 5.52 (33.43487d) Equinox: J2000		V=28.0+/-0.2	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.233,0.191	Prime + Parallel Group 1-4 in AndII-v6 (06)	1280 Secs (1280 Secs) *[==>]*	*[1]*
2		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.233,0.191	Prime + Parallel Group 1-4 in AndII-v6 (06)	987 Secs (987 Secs) *[==>]*	*[1]*
3		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in AndII-v6 (06)	1350 Secs (1350 Secs) *[==>]*	*[1]*
4		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in AndII-v6 (06)	1122 Secs (1122 Secs) *[==>]*	*[1]*
5		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.233,0.191	Prime + Parallel Group 5-8 in AndII-v6 (06)	1100 Secs (1100 Secs) *[==>]*	*[2]*
6		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.233,0.191	Prime + Parallel Group 5-8 in AndII-v6 (06)	1359 Secs (1359 Secs) *[==>]*	*[2]*
7		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in AndII-v6 (06)	1200 Secs (1200 Secs) *[==>]*	*[2]*
8		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in AndII-v6 (06)	1409 Secs (1409 Secs) *[==>]*	*[2]*

Orbit Structure





Visit

Proposal 13028, AndII-v7 (07), pi Tue Sep 17 01:04:07 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; SAME ORIENT AS 01; AFTER 06 BY 4 H TO 3 D

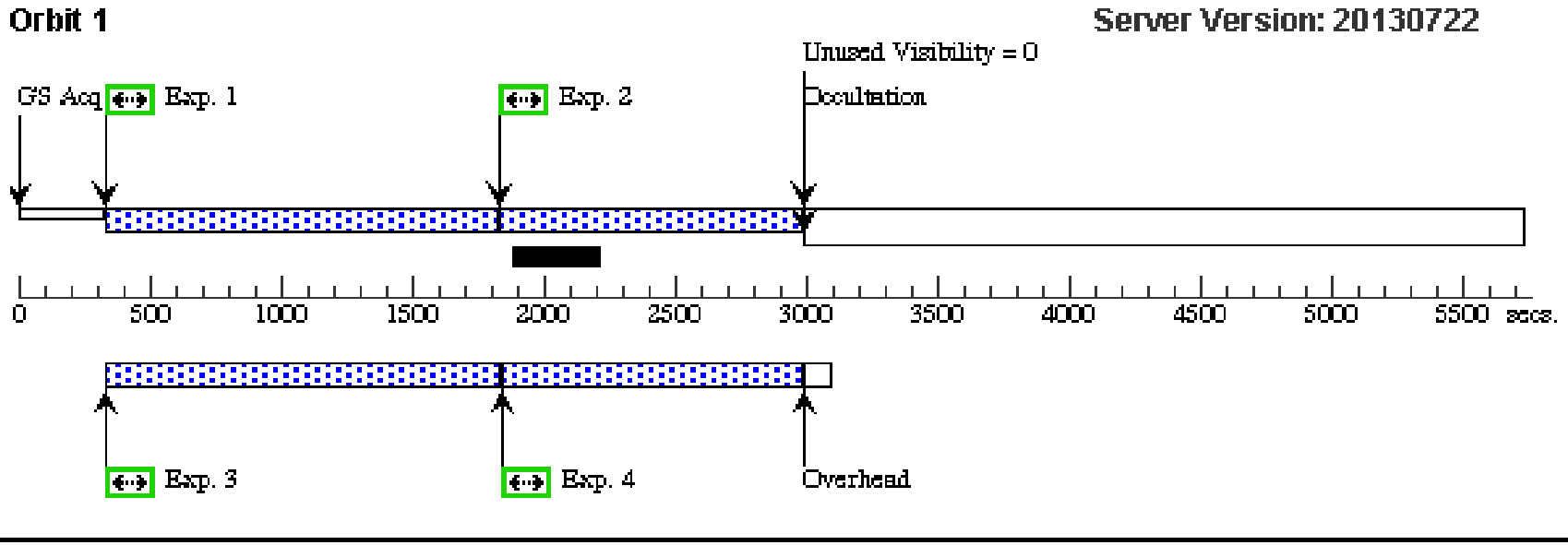
Fixed Targets

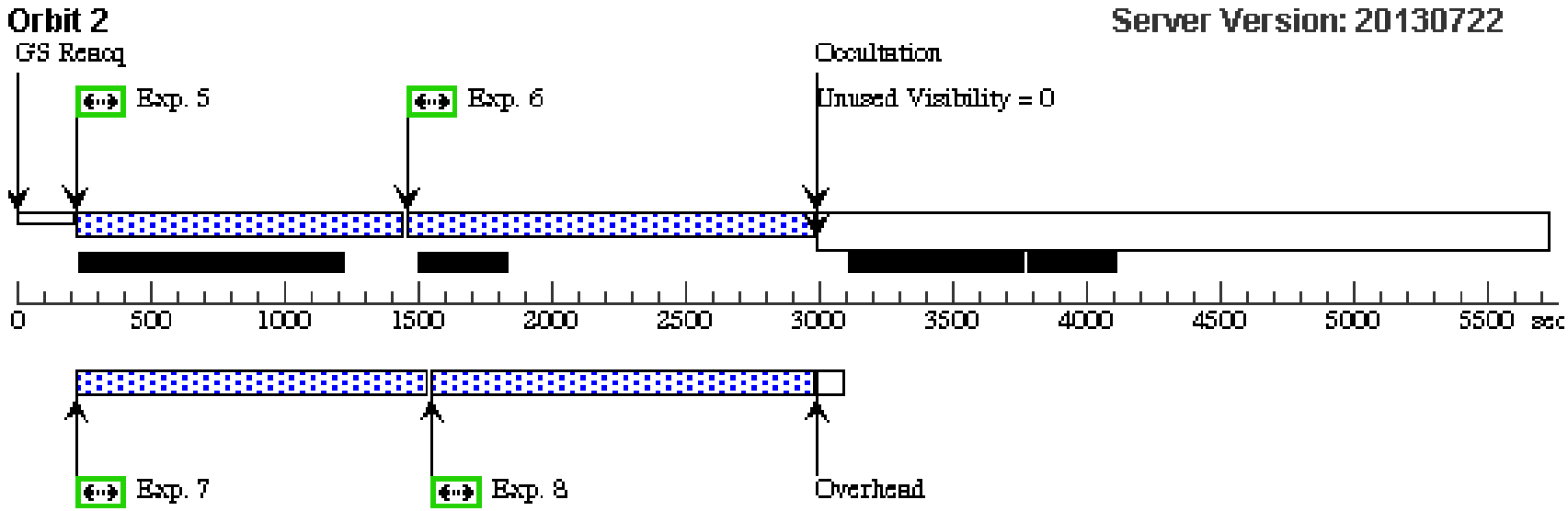
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	ANDROMEDA-II	RA: 01 16 23.8023 (19.0991762d) Dec: +33 26 5.52 (33.43487d) Equinox: J2000		V=28.0+/-0.2	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.307,0.345	Prime + Parallel Group 1-4 in AndII-v7 (07)	1280 Secs (1280 Secs) *[==>]*	***[1]***
2		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.307,0.345	Prime + Parallel Group 1-4 in AndII-v7 (07)	987 Secs (987 Secs) *[==>]*	***[1]***
3		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in AndII-v7 (07)	1350 Secs (1350 Secs) *[==>]*	***[1]***
4		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in AndII-v7 (07)	1122 Secs (1122 Secs) *[==>]*	***[1]***
5		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.307,0.345	Prime + Parallel Group 5-8 in AndII-v7 (07)	1100 Secs (1100 Secs) *[==>]*	***[2]***
6		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.307,0.345	Prime + Parallel Group 5-8 in AndII-v7 (07)	1359 Secs (1359 Secs) *[==>]*	***[2]***
7		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in AndII-v7 (07)	1200 Secs (1200 Secs) *[==>]*	***[2]***
8		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in AndII-v7 (07)	1409 Secs (1409 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 13028, AndII-v8 (08), pi Tue Sep 17 01:04:07 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; SAME ORIENT AS 01; AFTER 07 BY 4 H TO 3 D

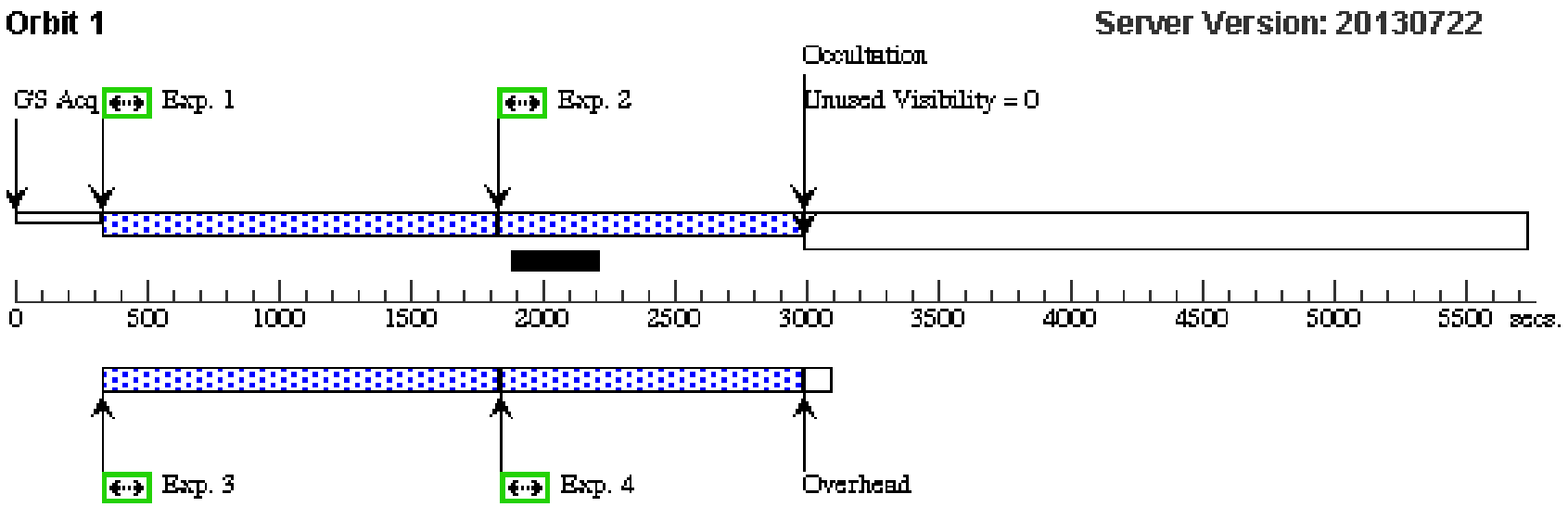
Fixed Targets

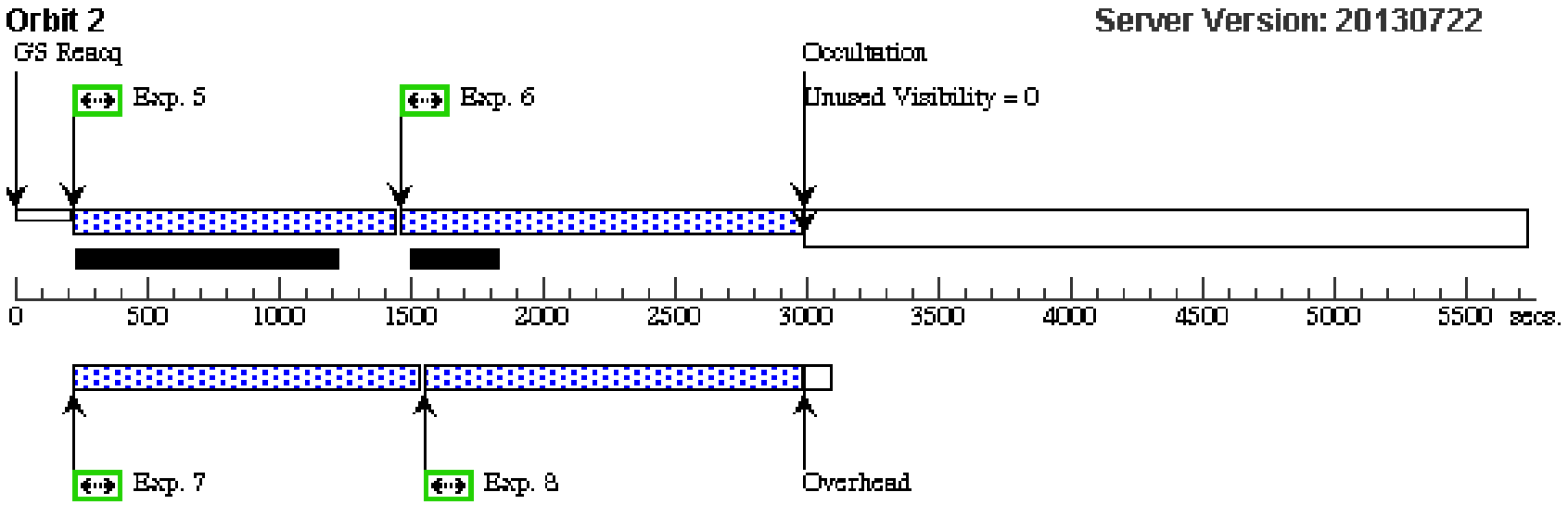
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	ANDROMEDA-II	RA: 01 16 23.8023 (19.0991762d) Dec: +33 26 5.52 (33.43487d) Equinox: J2000		V=28.0+/-0.2	Reference Frame: ICRS

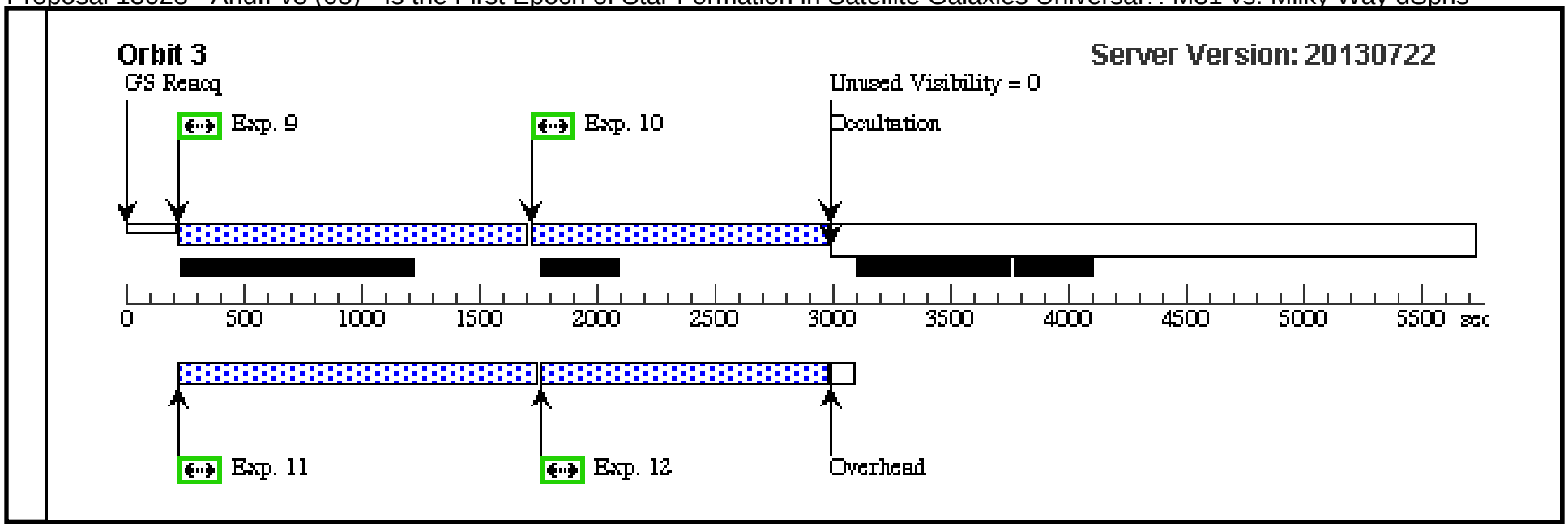
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.159,0.259	Prime + Parallel Group 1-4 in AndII-v8 (08)	1280 Secs (1280 Secs) *[==>]*	***[1]***
2		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.159,0.259	Prime + Parallel Group 1-4 in AndII-v8 (08)	987 Secs (987 Secs) *[==>]*	***[1]***
3		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in AndII-v8 (08)	1350 Secs (1350 Secs) *[==>]*	***[1]***
4		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in AndII-v8 (08)	1122 Secs (1122 Secs) *[==>]*	***[1]***
5		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.159,0.259	Prime + Parallel Group 5-8 in AndII-v8 (08)	1100 Secs (1100 Secs) *[==>]*	***[2]***
6		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.159,0.259	Prime + Parallel Group 5-8 in AndII-v8 (08)	1359 Secs (1359 Secs) *[==>]*	***[2]***
7		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in AndII-v8 (08)	1200 Secs (1200 Secs) *[==>]*	***[2]***
8		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in AndII-v8 (08)	1409 Secs (1409 Secs) *[==>]*	***[2]***
9		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.159,0.259	Prime + Parallel Group 9-12 in AndII-v8 (08)	1360 Secs (1360 Secs) *[==>]*	***[3]***
10		(1) ANDROMEDA-II	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.159,0.259	Prime + Parallel Group 9-12 in AndII-v8 (08)	1100 Secs (1100 Secs) *[==>]*	***[3]***
11		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 9-12 in AndII-v8 (08)	1410 Secs (1410 Secs) *[==>]*	***[3]***
12		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 9-12 in AndII-v8 (08)	1200 Secs (1200 Secs) *[==>]*	***[3]***

Orbit Structure



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4000
4500
5000
5500
sec
Exp. 11
Exp. 12
Overhead

Visit

Proposal 13028, AndXVI-v1 (09), pi Tue Sep 17 01:04:09 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; ORIENT 100D TO 110 D; SEQ 09,10,11,12,13,14 WITHIN 3 D

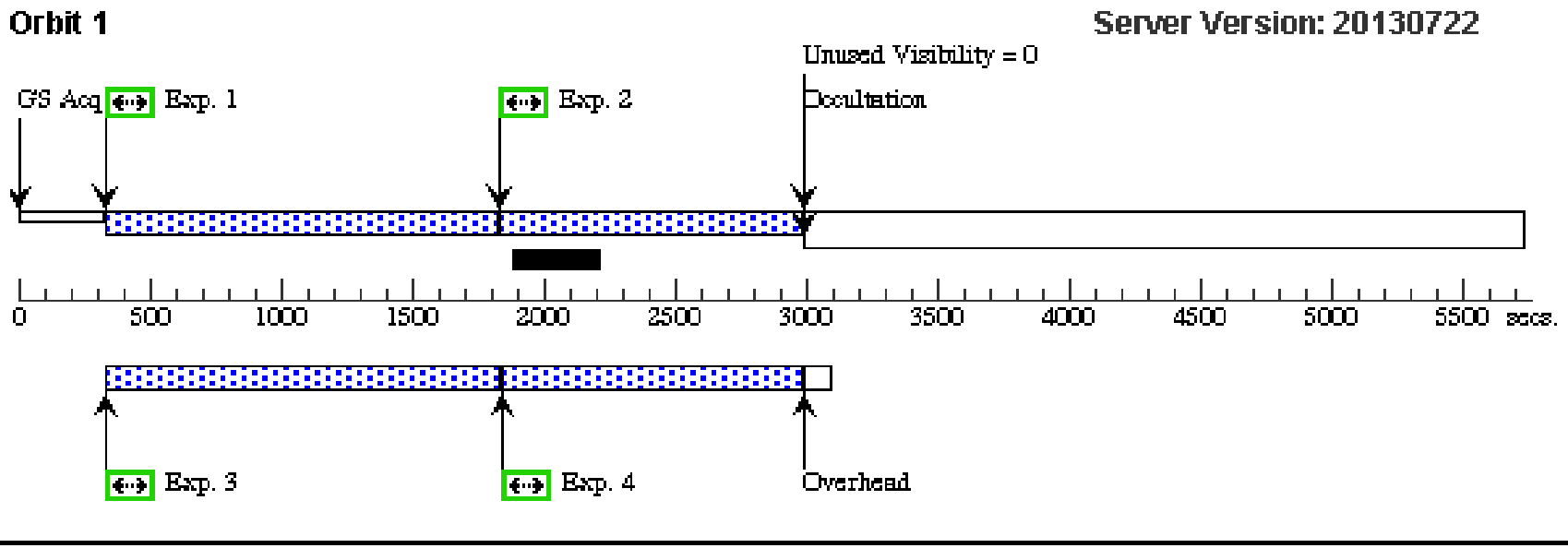
Fixed Targets

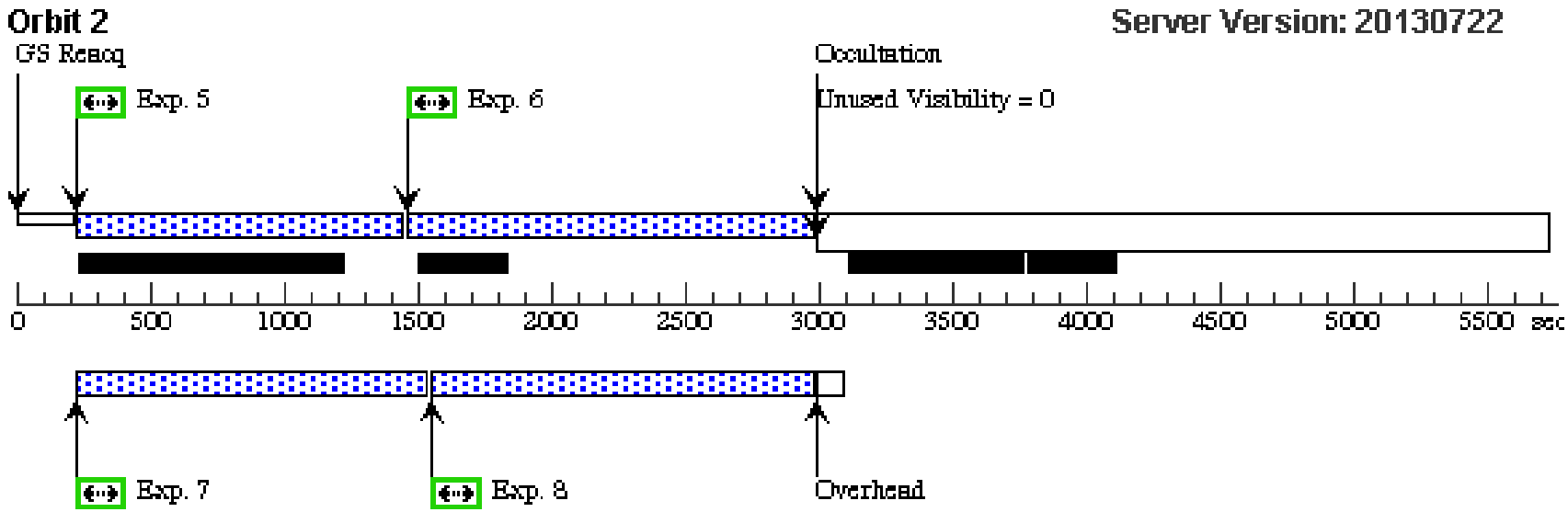
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	ANDROMEDA-XVI	RA: 00 59 32.3379 (14.8847412d) Dec: +32 23 38.91 (32.39414d) Equinox: J2000		V=28.0+/-0.1	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 1-4 in AndXVI-v1 (09)	1280 Secs (1280 Secs) *[==>]*	***[1]***
2		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-4 in AndXVI-v1 (09)	987 Secs (987 Secs) *[==>]*	***[1]***
3		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in AndXVI-v1 (09)	1350 Secs (1350 Secs) *[==>]*	***[1]***
4		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in AndXVI-v1 (09)	1122 Secs (1122 Secs) *[==>]*	***[1]***
5		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 5-8 in AndXVI-v1 (09)	1100 Secs (1100 Secs) *[==>]*	***[2]***
6		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F475W			Prime + Parallel Group 5-8 in AndXVI-v1 (09)	1359 Secs (1359 Secs) *[==>]*	***[2]***
7		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in AndXVI-v1 (09)	1200 Secs (1200 Secs) *[==>]*	***[2]***
8		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in AndXVI-v1 (09)	1409 Secs (1409 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 13028, AndXVI-v2 (10), pi Tue Sep 17 01:04:10 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; SAME ORIENT AS 09; AFTER 09 BY 4 H TO 3 D

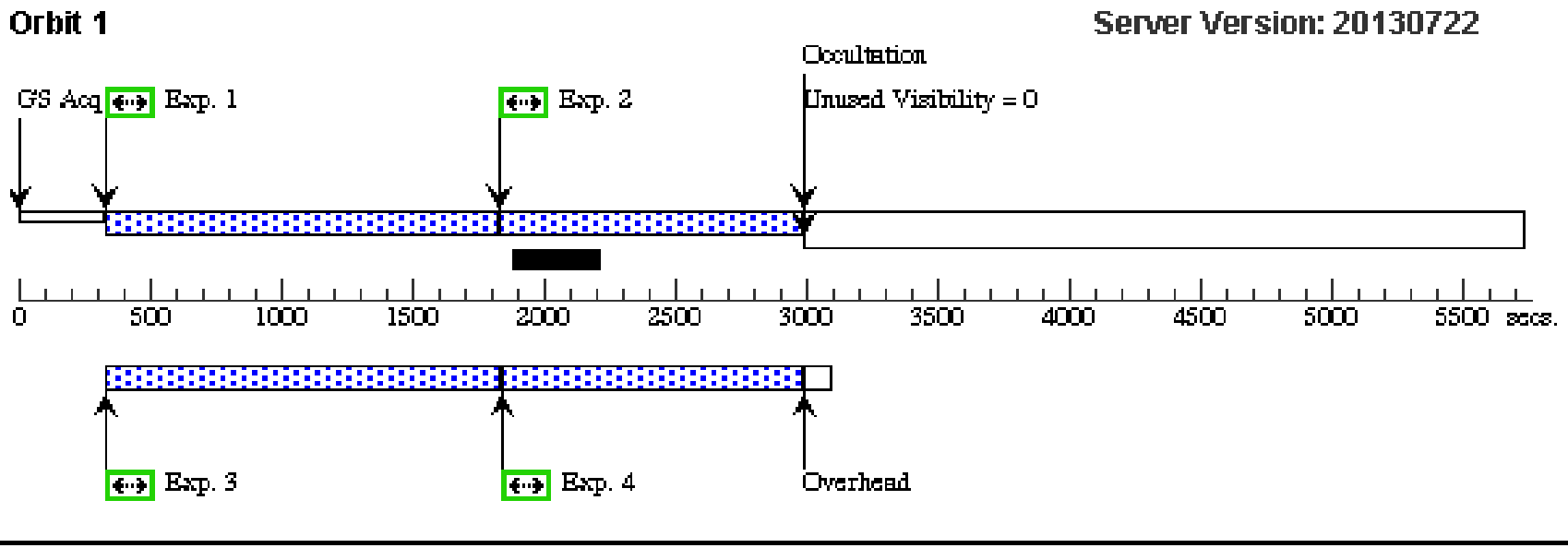
Fixed Targets

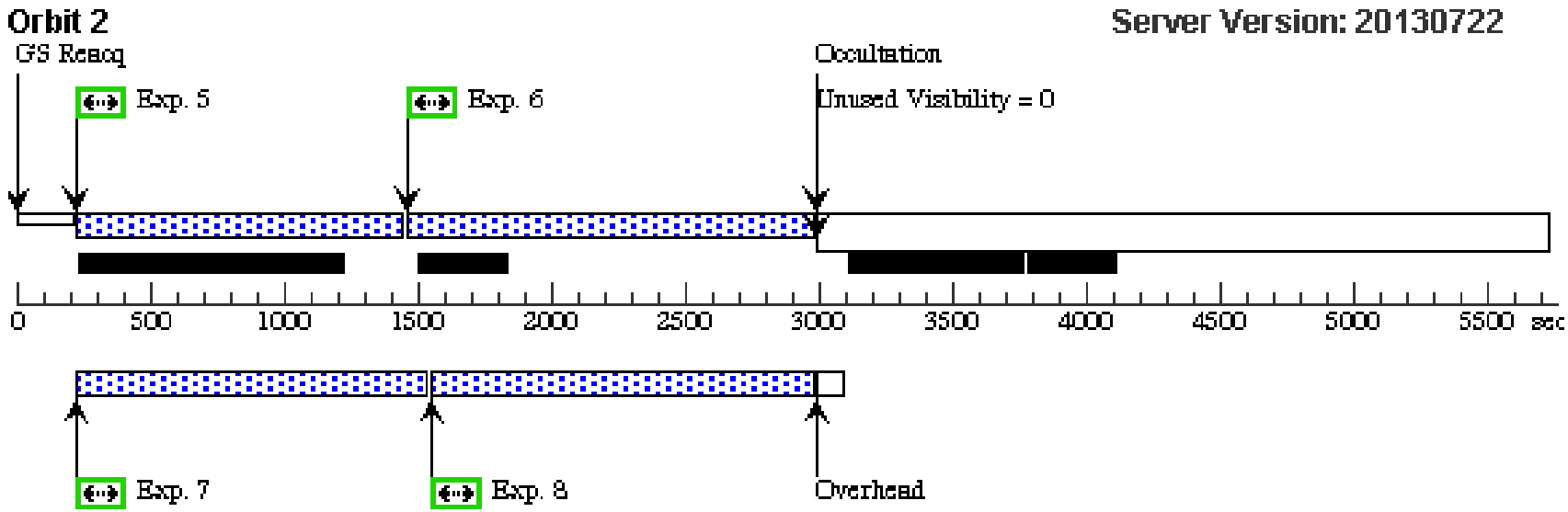
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	ANDROMEDA-XVI	RA: 00 59 32.3379 (14.8847412d) Dec: +32 23 38.91 (32.39414d) Equinox: J2000		V=28.0+/-0.1	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.148,0.086	Prime + Parallel Group 1-4 in AndXVI-v2 (10)	1280 Secs (1280 Secs) *[==>]*	***[1]***
2		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.148,0.086	Prime + Parallel Group 1-4 in AndXVI-v2 (10)	987 Secs (987 Secs) *[==>]*	***[1]***
3		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in AndXVI-v2 (10)	1350 Secs (1350 Secs) *[==>]*	***[1]***
4		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in AndXVI-v2 (10)	1122 Secs (1122 Secs) *[==>]*	***[1]***
5		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.148,0.086	Prime + Parallel Group 5-8 in AndXVI-v2 (10)	1100 Secs (1100 Secs) *[==>]*	***[2]***
6		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.148,0.086	Prime + Parallel Group 5-8 in AndXVI-v2 (10)	1359 Secs (1359 Secs) *[==>]*	***[2]***
7		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in AndXVI-v2 (10)	1200 Secs (1200 Secs) *[==>]*	***[2]***
8		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in AndXVI-v2 (10)	1409 Secs (1409 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 13028, AndXVI-v3 (11), pi Tue Sep 17 01:04:11 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; SAME ORIENT AS 09; AFTER 10 BY 4 H TO 3 D

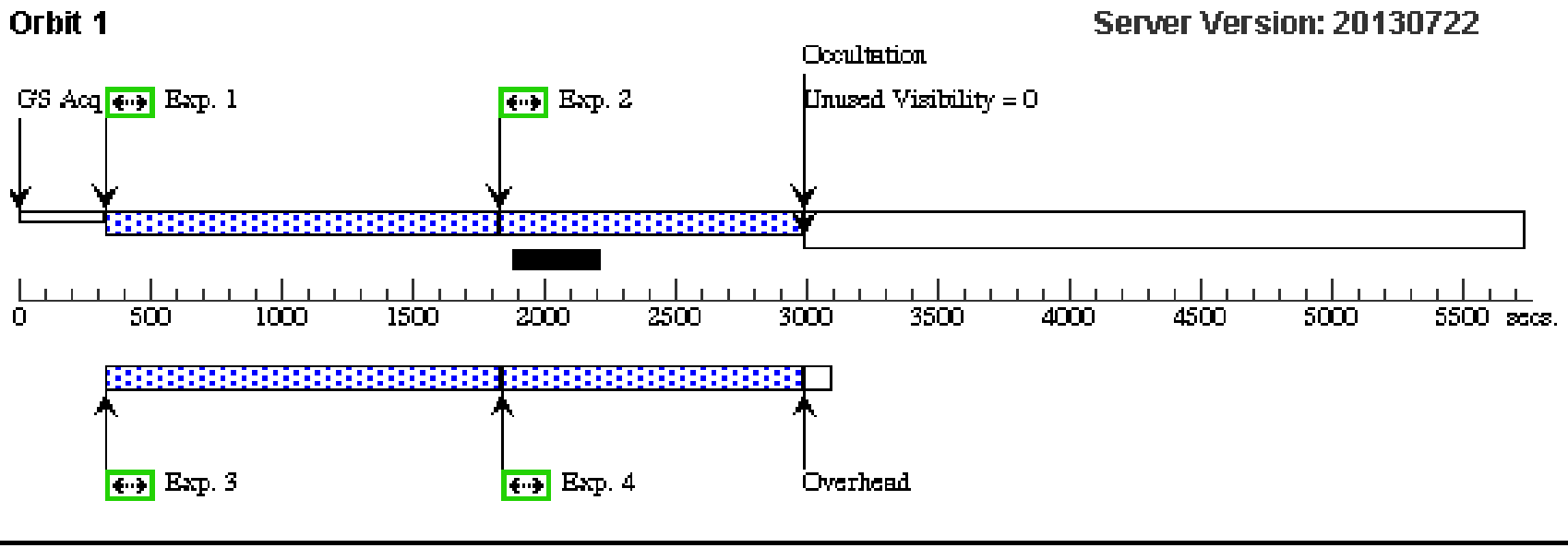
Fixed Targets

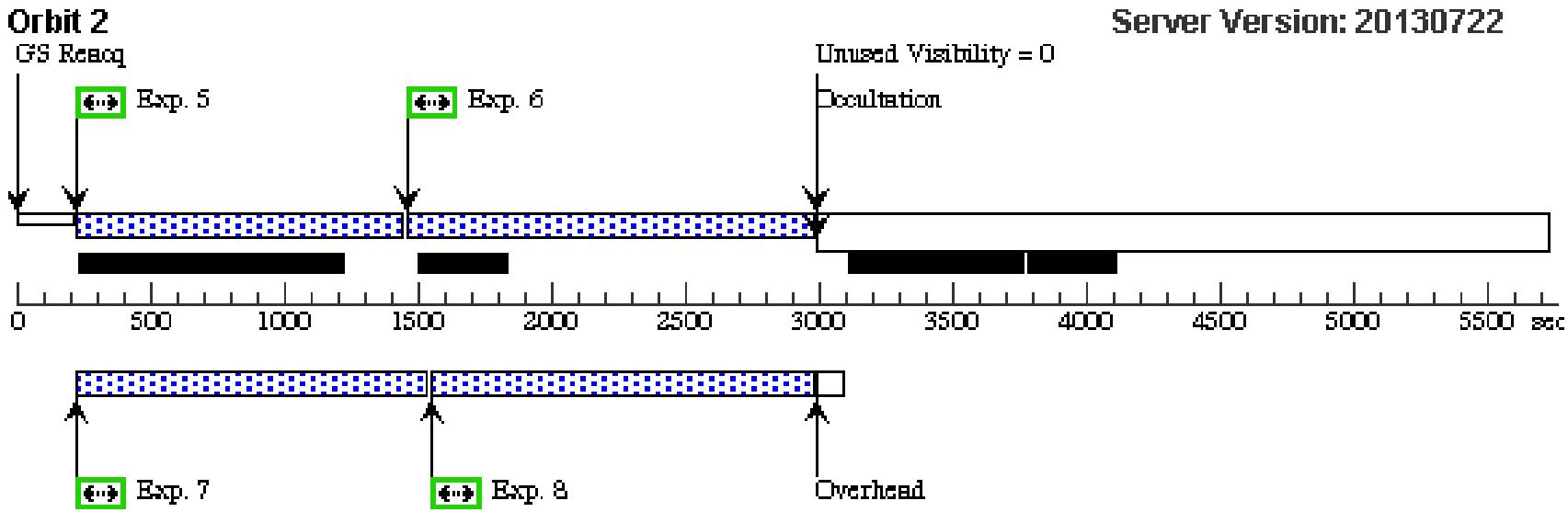
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	ANDROMEDA-XVI	RA: 00 59 32.3379 (14.8847412d) Dec: +32 23 38.91 (32.39414d) Equinox: J2000		V=28.0+/-0.1	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.222,0.240	Prime + Parallel Group 1-4 in AndXVI-v3 (11)	1280 Secs (1280 Secs) *[==>]*	*[1]*
2		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.222,0.240	Prime + Parallel Group 1-4 in AndXVI-v3 (11)	987 Secs (987 Secs) *[==>]*	*[1]*
3		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in AndXVI-v3 (11)	1350 Secs (1350 Secs) *[==>]*	*[1]*
4		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in AndXVI-v3 (11)	1122 Secs (1122 Secs) *[==>]*	*[1]*
5		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.222,0.240	Prime + Parallel Group 5-8 in AndXVI-v3 (11)	1100 Secs (1100 Secs) *[==>]*	*[2]*
6		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.222,0.240	Prime + Parallel Group 5-8 in AndXVI-v3 (11)	1359 Secs (1359 Secs) *[==>]*	*[2]*
7		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in AndXVI-v3 (11)	1200 Secs (1200 Secs) *[==>]*	*[2]*
8		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in AndXVI-v3 (11)	1409 Secs (1409 Secs) *[==>]*	*[2]*

Orbit Structure





Visit

Proposal 13028, AndXVI-v4 (12), pi Tue Sep 17 01:04:11 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; SAME ORIENT AS 09; AFTER 11 BY 4 H TO 3 D

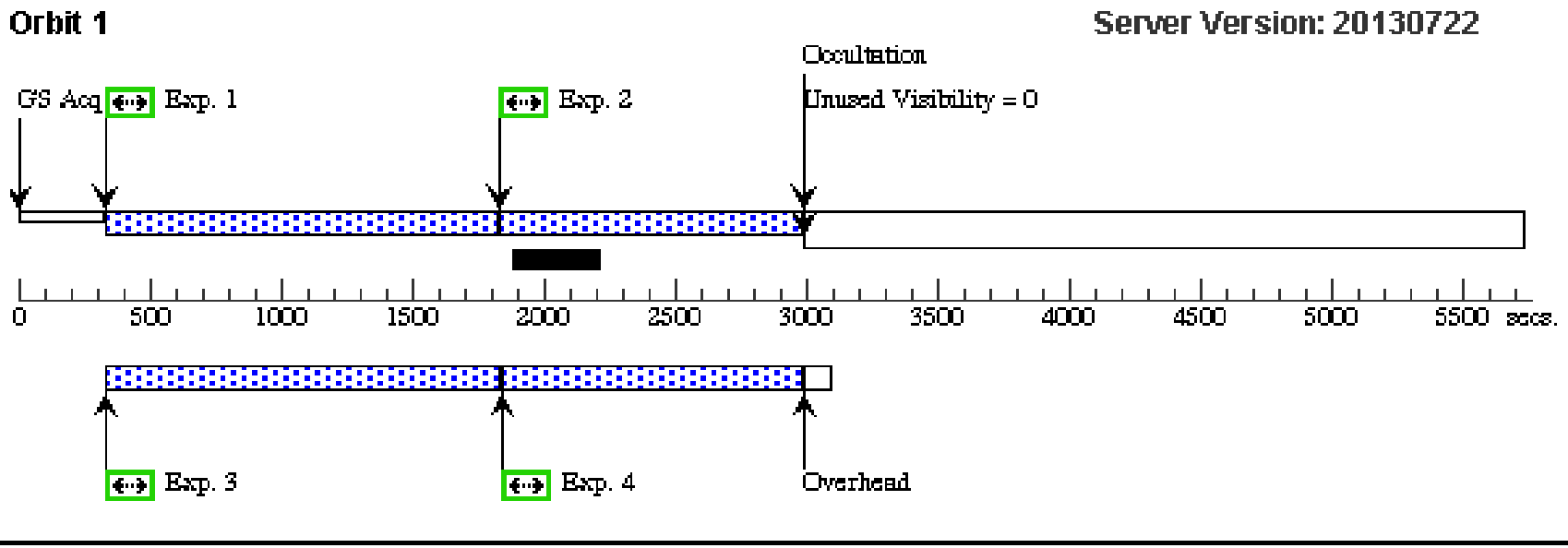
Fixed Targets

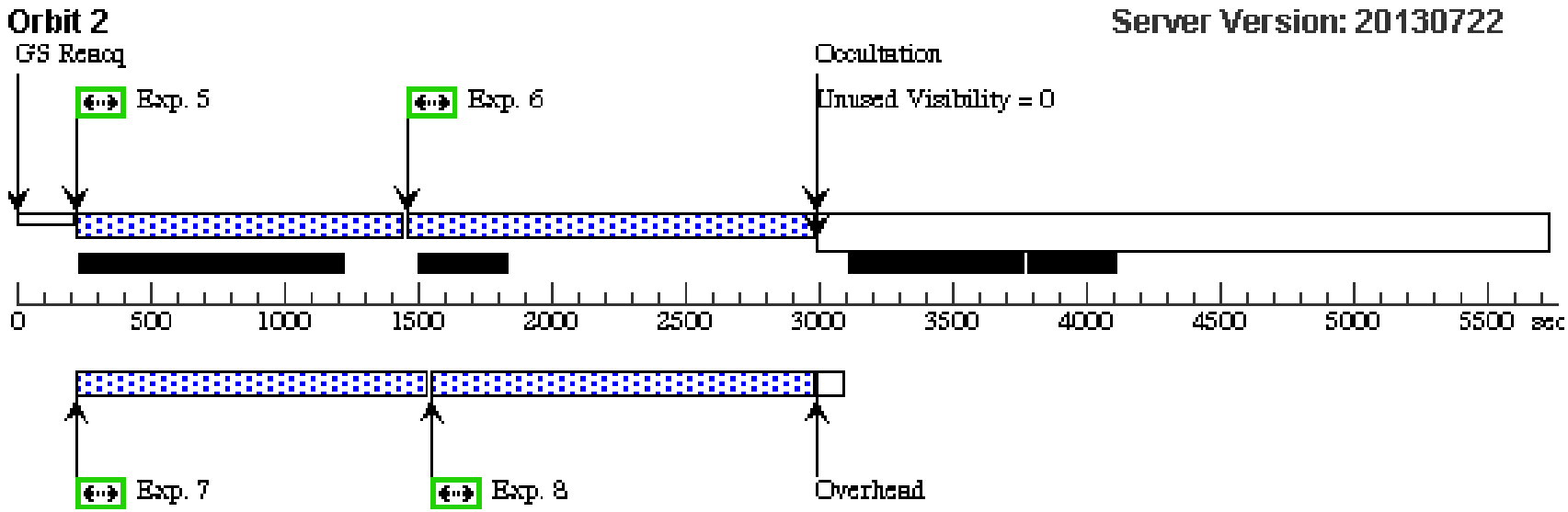
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	ANDROMEDA-XVI	RA: 00 59 32.3379 (14.8847412d) Dec: +32 23 38.91 (32.39414d) Equinox: J2000		V=28.0+/-0.1	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.074,0.154	Prime + Parallel Group 1-4 in AndXVI-v4 (12)	1280 Secs (1280 Secs) *[==>]*	 ***[1]***
2		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.074,0.154	Prime + Parallel Group 1-4 in AndXVI-v4 (12)	987 Secs (987 Secs) *[==>]*	 ***[1]***
3		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in AndXVI-v4 (12)	1350 Secs (1350 Secs) *[==>]*	 ***[1]***
4		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in AndXVI-v4 (12)	1122 Secs (1122 Secs) *[==>]*	 ***[1]***
5		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.074,0.154	Prime + Parallel Group 5-8 in AndXVI-v4 (12)	1100 Secs (1100 Secs) *[==>]*	 ***[2]***
6		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.074,0.154	Prime + Parallel Group 5-8 in AndXVI-v4 (12)	1359 Secs (1359 Secs) *[==>]*	 ***[2]***
7		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in AndXVI-v4 (12)	1200 Secs (1200 Secs) *[==>]*	 ***[2]***
8		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in AndXVI-v4 (12)	1409 Secs (1409 Secs) *[==>]*	 ***[2]***

Orbit Structure





Visit

Proposal 13028, AndXVI-v5 (13), pi Tue Sep 17 01:04:12 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; SAME ORIENT AS 09; AFTER 12 BY 4 H TO 3 D

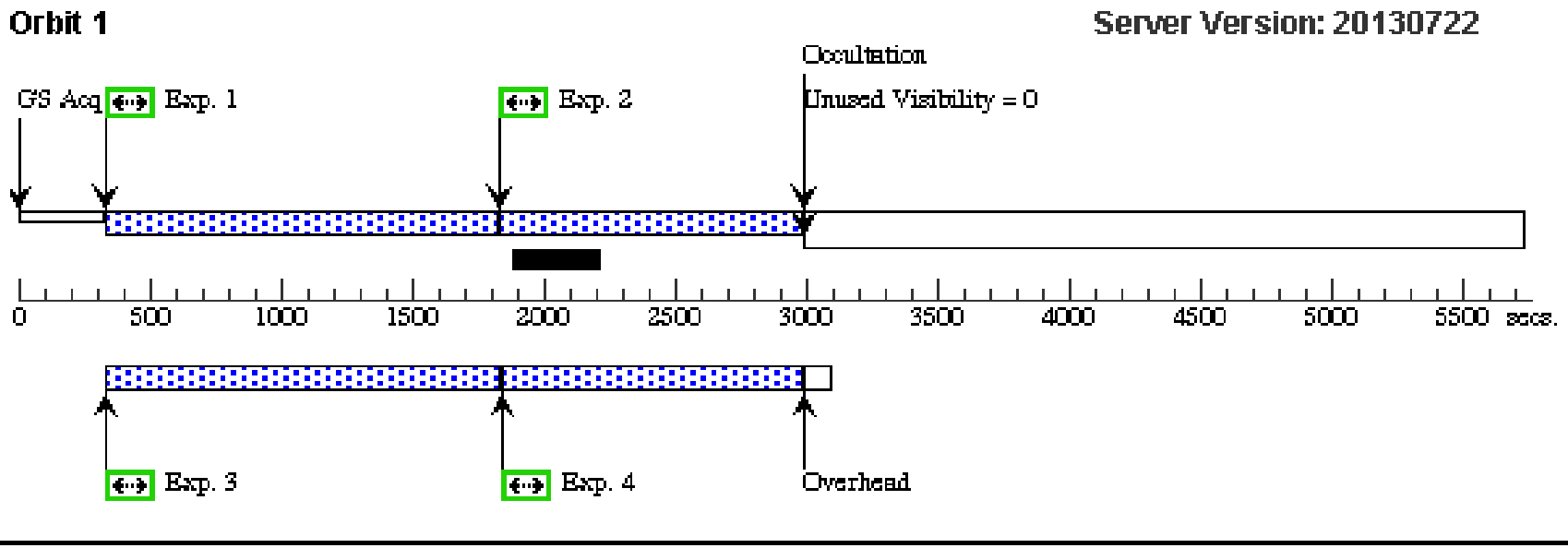
Fixed Targets

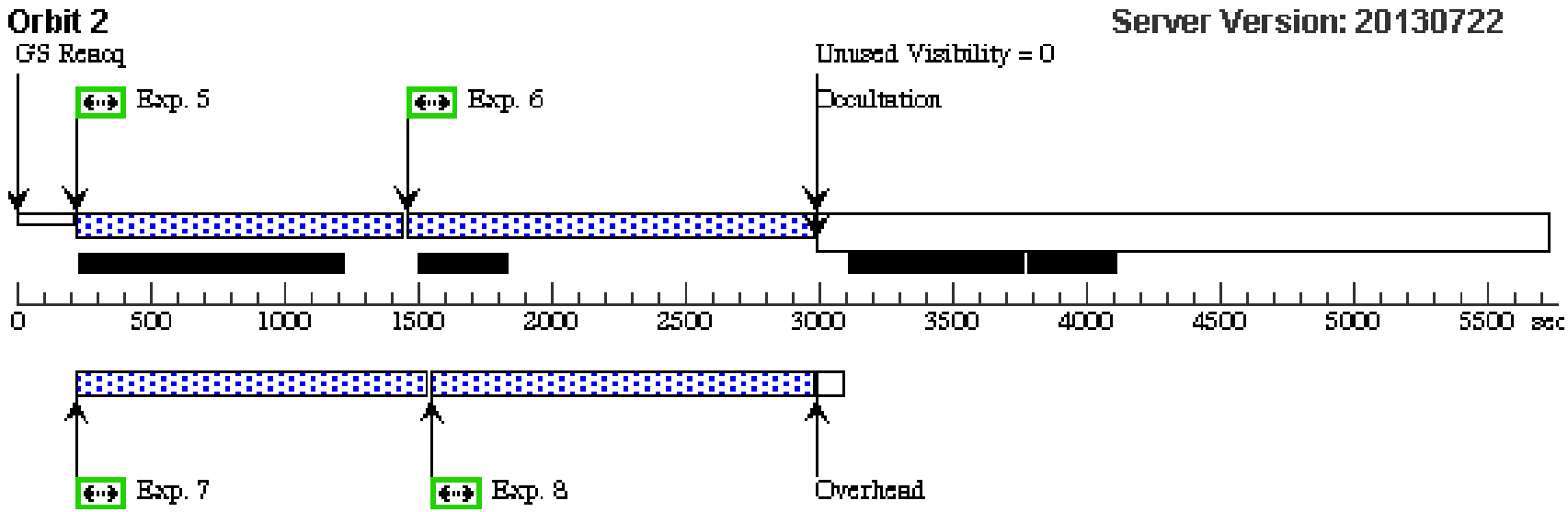
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	ANDROMEDA-XVI	RA: 00 59 32.3379 (14.8847412d) Dec: +32 23 38.91 (32.39414d) Equinox: J2000		V=28.0+/-0.1	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.085,0.105	Prime + Parallel Group 1-4 in AndXVI-v5 (13)	1280 Secs (1280 Secs) *[==>]*	*[1]*
2		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.085,0.105	Prime + Parallel Group 1-4 in AndXVI-v5 (13)	987 Secs (987 Secs) *[==>]*	*[1]*
3		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in AndXVI-v5 (13)	1350 Secs (1350 Secs) *[==>]*	*[1]*
4		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in AndXVI-v5 (13)	1122 Secs (1122 Secs) *[==>]*	*[1]*
5		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.085,0.105	Prime + Parallel Group 5-8 in AndXVI-v5 (13)	1100 Secs (1100 Secs) *[==>]*	*[2]*
6		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.085,0.105	Prime + Parallel Group 5-8 in AndXVI-v5 (13)	1359 Secs (1359 Secs) *[==>]*	*[2]*
7		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in AndXVI-v5 (13)	1200 Secs (1200 Secs) *[==>]*	*[2]*
8		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in AndXVI-v5 (13)	1409 Secs (1409 Secs) *[==>]*	*[2]*

Orbit Structure





Visit

Proposal 13028, AndXVI-v6 (14), pi Tue Sep 17 01:04:13 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; SAME ORIENT AS 09; AFTER 13 BY 4 H TO 3 D

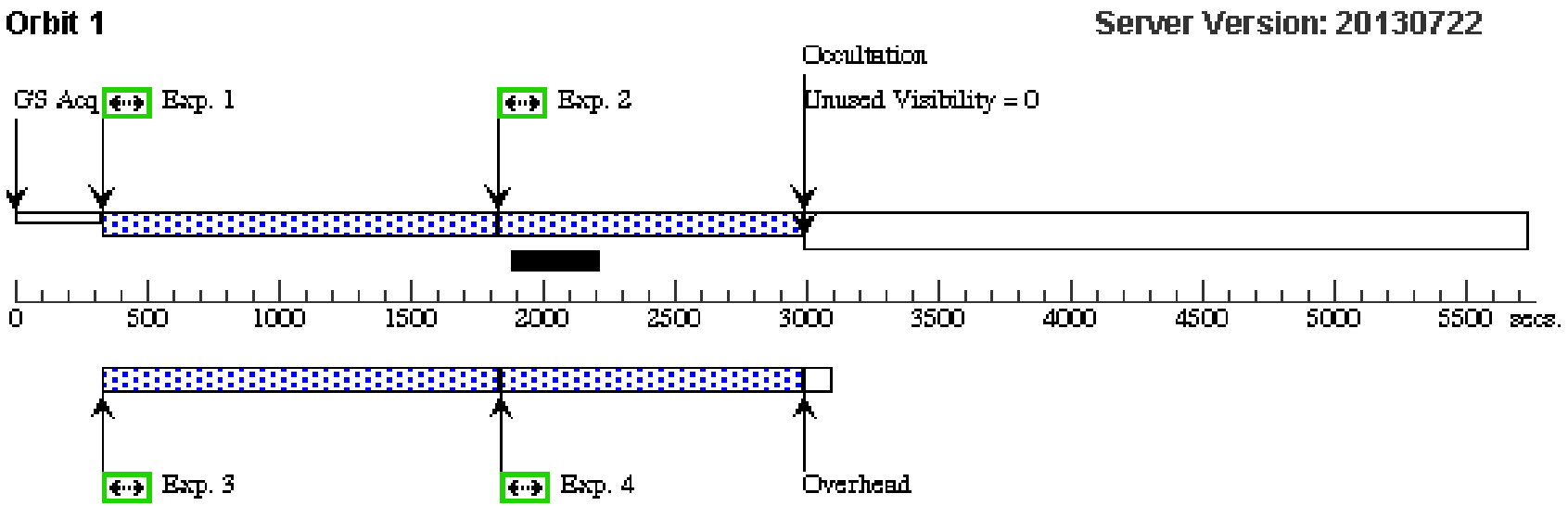
Fixed Targets

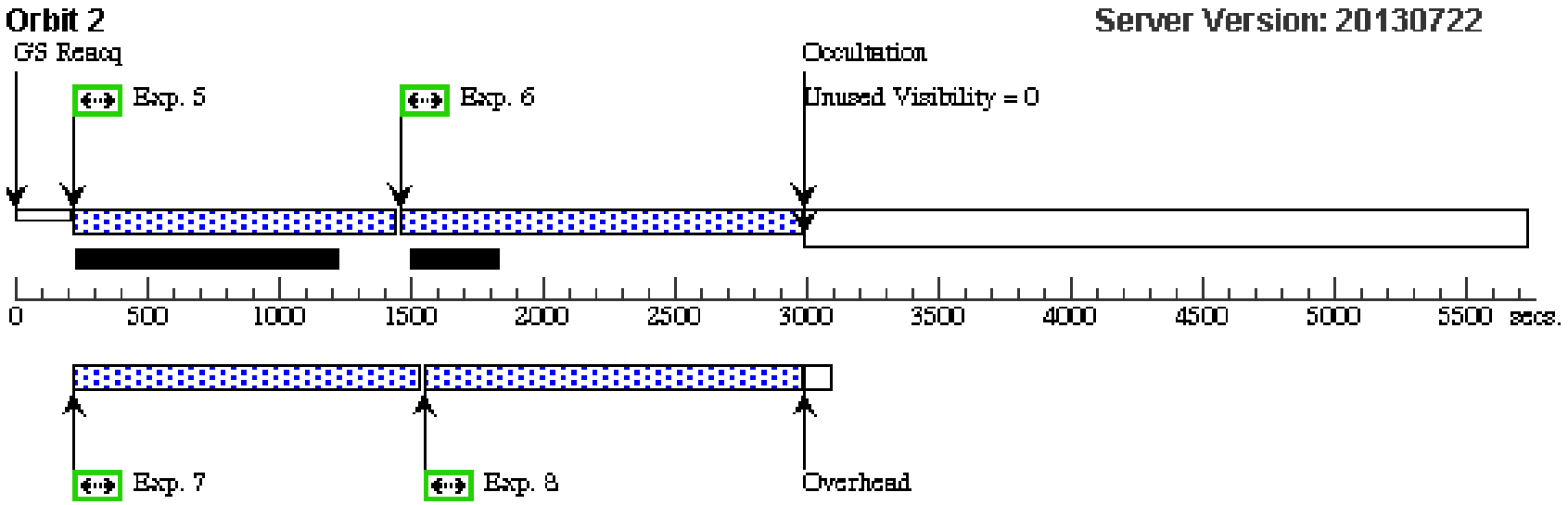
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	ANDROMEDA-XVI	RA: 00 59 32.3379 (14.8847412d) Dec: +32 23 38.91 (32.39414d) Equinox: J2000		V=28.0+/-0.1	Reference Frame: ICRS

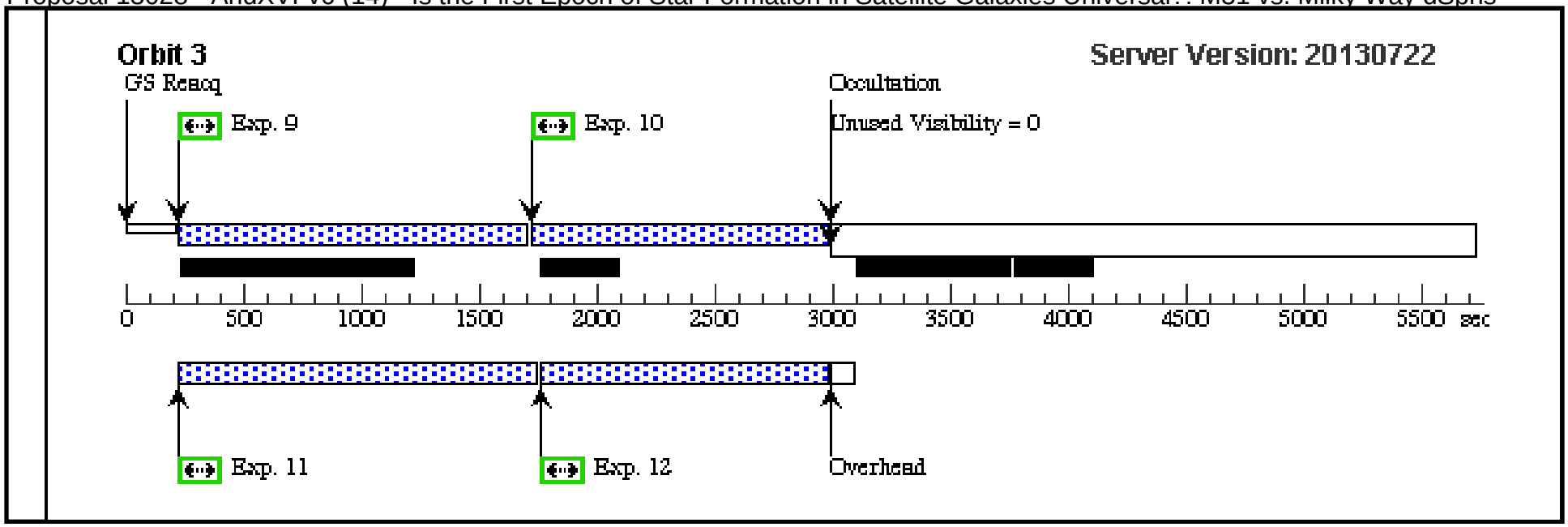
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.159,0.259	Prime + Parallel Group 1-4 in AndXVI-v6 (14)	1280 Secs (1280 Secs) *[==>]*	*[1]*
2		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.159,0.259	Prime + Parallel Group 1-4 in AndXVI-v6 (14)	987 Secs (987 Secs) *[==>]*	*[1]*
3		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in AndXVI-v6 (14)	1350 Secs (1350 Secs) *[==>]*	*[1]*
4		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in AndXVI-v6 (14)	1122 Secs (1122 Secs) *[==>]*	*[1]*
5		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.159,0.259	Prime + Parallel Group 5-8 in AndXVI-v6 (14)	1100 Secs (1100 Secs) *[==>]*	*[2]*
6		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.159,0.259	Prime + Parallel Group 5-8 in AndXVI-v6 (14)	1359 Secs (1359 Secs) *[==>]*	*[2]*
7		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in AndXVI-v6 (14)	1200 Secs (1200 Secs) *[==>]*	*[2]*
8		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in AndXVI-v6 (14)	1409 Secs (1409 Secs) *[==>]*	*[2]*
9		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.159,0.259	Prime + Parallel Group 9-12 in AndXVI-v6 (14)	1360 Secs (1360 Secs) *[==>]*	*[3]*
10		(2) ANDROMEDA-XVI	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.159,0.259	Prime + Parallel Group 9-12 in AndXVI-v6 (14)	1100 Secs (1100 Secs) *[==>]*	*[3]*
11		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 9-12 in AndXVI-v6 (14)	1410 Secs (1410 Secs) *[==>]*	*[3]*
12		ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 9-12 in AndXVI-v6 (14)	1200 Secs (1200 Secs) *[==>]*	*[3]*

Orbit Structure



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Exp. 11
Exp. 12
Overhead