10526 - Dynamics of the Polarization Structure of the Crab Nebula

Cycle: 14, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

Name	*Institution*	*E-Mail*
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Dr. Jon A. Morse (CoI)	Arizona State University	jon.morse@asu.edu

VISITS

Visit	*Targets*	*Configurations*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) CRAB	ACS/WFC	4	28-Oct-2005 21:00:59.0	yes
02	(1) CRAB	ACS/WFC	4	28-Oct-2005 21:01:06.0	yes
03	(1) CRAB	ACS/WFC	4	28-Oct-2005 21:01:11.0	yes
04	(1) CRAB	ACS/WFC	4	28-Oct-2005 21:01:16.0	yes
05	(1) CRAB	ACS/WFC	4	28-Oct-2005 21:01:20.0	yes
06	(1) CRAB	ACS/WFC	4	28-Oct-2005 21:01:24.0	yes
07	(1) CRAB	ACS/WFC	4	28-Oct-2005 21:01:29.0	yes
08	(1) CRAB	ACS/WFC	4	28-Oct-2005 21:01:33.0	yes
09	(1) CRAB	ACS/WFC	4	28-Oct-2005 21:01:40.0	yes
10	(1) CRAB	ACS/WFC	4	28-Oct-2005 21:01:44.0	yes

Visit	*Targets*	*Configurations*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
11	(1) CRAB	ACS/WFC	4	28-Oct-2005 21:01:48.0	yes
12	(1) CRAB	ACS/WFC	4	28-Oct-2005 21:01:53.0	yes

48 Total Orbits Used

ABSTRACT

The Crab Nebula is not a free expansion SNR. Rather, it is a pulsar wind nebula expanding from the inside out into a larger remnant of freely expanding ejecta. At the heart of this object is the Crab Pulsar and the region where the pulsar's highly nonisotropic wind interacts with the larger synchtron nebula. HST and Chandra monitoring has shown this to be one of the most intricately structured and highly dynamical objects ever observed. In Cycle 12 we demonstrated our ability to use the polarization capabilities of the ACS to isolate physically discrete features within the Crab Synchrotron Nebula and accurately measure their polarization characteristics. These data provide a unique look at the physical structure in the heart of the Crab, adding a new dimension to past observations. Polarization provides extensive information about field geometries, the degree of disorder in the field, and particle pitch angle distributions. But one image of the Crab is like a single image of waves at the beach. It necessarily misses the point. In the Crab, the name of the game is "dynamics". In this proposal we request time to monitor changes in the polarization structure of the Crab. This program will allow us to follow the changing polarization of features including relativistically moving wisps in the Crab Nebula. This is the only place in the sky where a dynamic relativistic plasma can be observed in sufficient detail to make such measurements possible, and the HST/ACS is the only instrument that we are likely to see in our careers capable of making the measurement. These observations will be an important addition to the already rich observational legacy of HST for what is arguably the most important single object in astrophysics.

OBSERVING DESCRIPTION

The purpose of this proposal is to obtain polarization observations of the Crab synchrotron nebula on each of 12 visits spread as uniformly as possible through the Cycle 14 visibility window for the Crab. Each visit consists of 4 orbits. During the first orbit a CR-SPLIT observation is obtained with F550M, a relatively line-free continuum filter. This image gives us an image of the total intensity from the synchrotron nebula, with very little contamination from emission-line filaments. The next three orbits obtain CR-SPLIT F606W images crossed with POL0V, POL60V, and POL120V,

respectively. The observations use the ACS/WFC. "WFC1-2K" is used with F550M, while "WFC" is used with F606W+POLXXV. It is our understanding that this should put the object at the same place on the detectors for all four exposures. The only special requirement is that the position and orientation be the same for each of the three polarizer images taken during each visit, since this greatly simplifies reconstruction of polarization information. The proposal specifies a visit every 9*N +/- 1 days from the date of the first visit. Exposure times were backed off to 2000 seconds per orbit to facilitate schedulability, but if possible better packing of orbits would be preferable.

Visit

Proposal 10526, Visit 01 Sat Oct 29 01:01:55 GMT 2005

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Comments: The intention of the pointing and aperture specification is to place the specified coordinates as close as possible to the geometrical center of the field of view of the ACS polarizers when used with the WFC.

Diagnostics

(Visit 01) Warning: SAME POS MAY NOT BE APPROPRIATE
(Visit 01) Warning: SAME POS MAY NOT BE APPROPRIATE
(Visit 01) Warning: SAME POS MAY NOT BE APPROPRIATE
(Visit 01) Warning: SAME POS MAY NOT BE APPROPRIATE

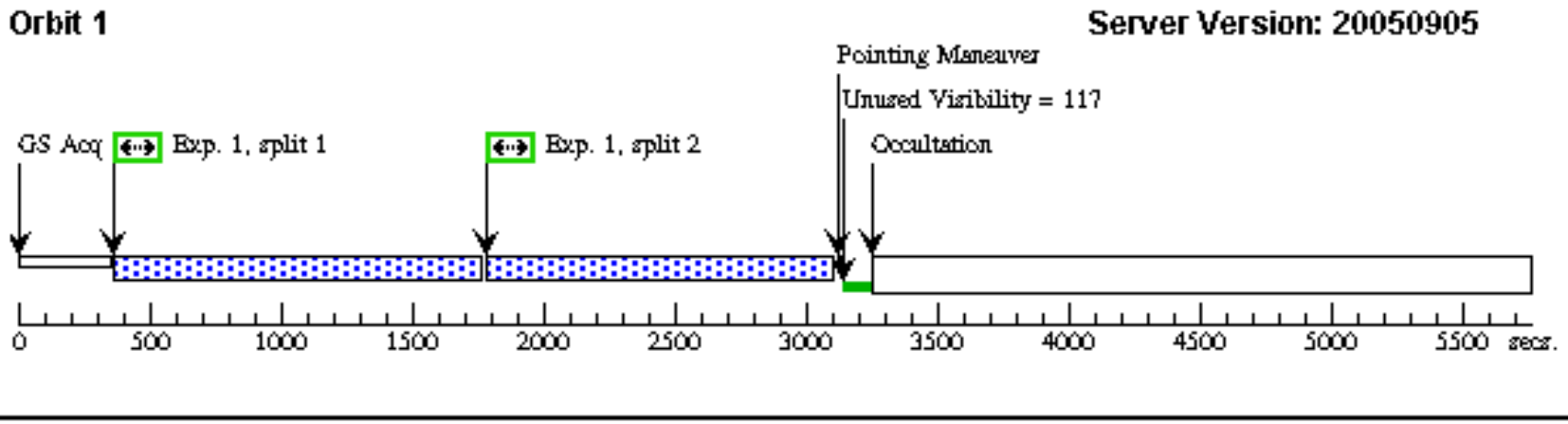
Fixed Targets

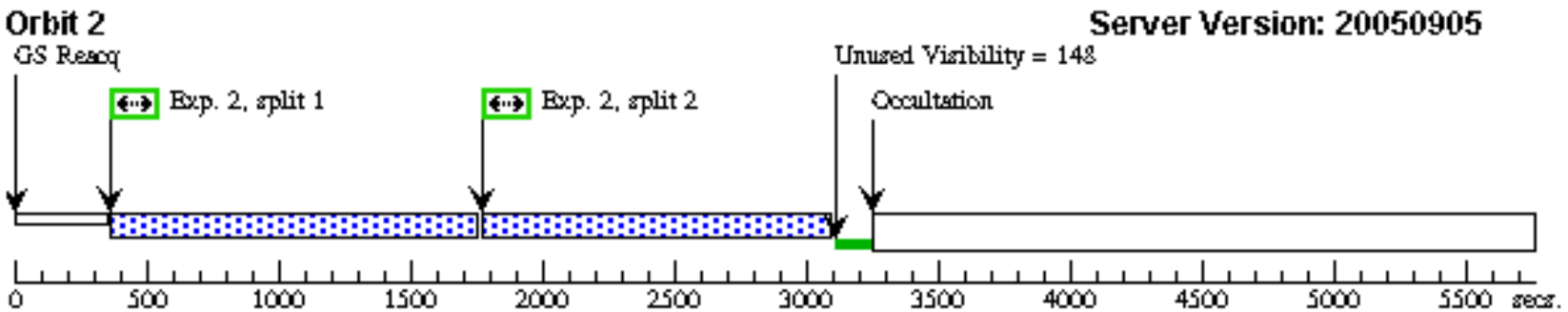
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	CRAB	RA: 05 34 32.1100 (83.6337917d) Dec: +22 01 6.80 (22.01856d) Equinox: J2000 Plate Id: (?)		V=15.0	Coordinate Source: HST_IMAGE

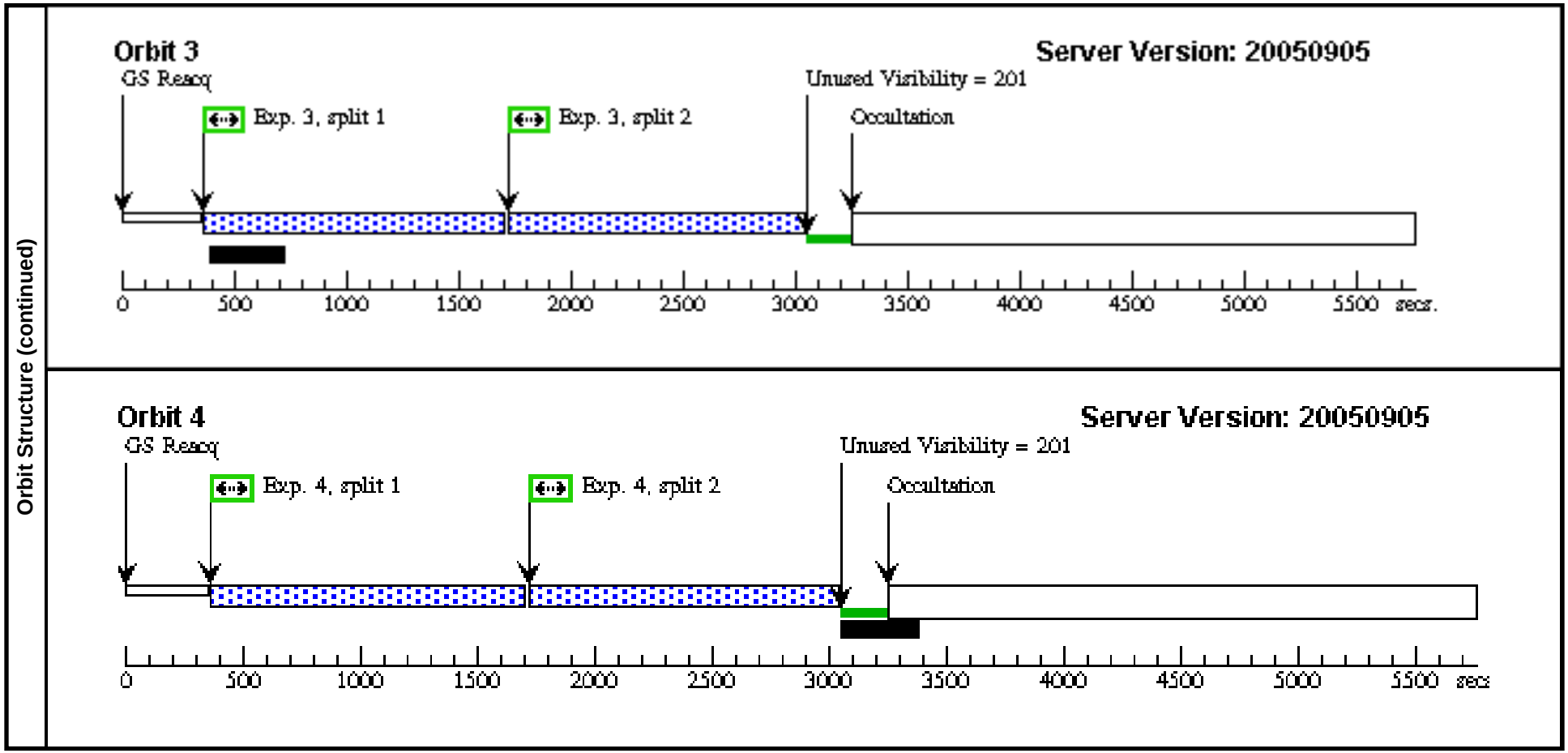
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	NOPOL	(1) CRAB	ACS/WFC, ACCUM, WFC1-2K	F550M				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[1]***
2	POL0V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL0V				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[2]***
3	POL60V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL60V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[3]***
4	POL120V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL120V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[4]***

Orbit Structure



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secs

Visit

Proposal 10526, Visit 02 Sat Oct 29 01:01:57 GMT 2005

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: AFTER 01 BY 8 D TO 10 D

Diagnostics

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(Visit 02) Warning: SAME POS MAY NOT BE APPROPRIATE

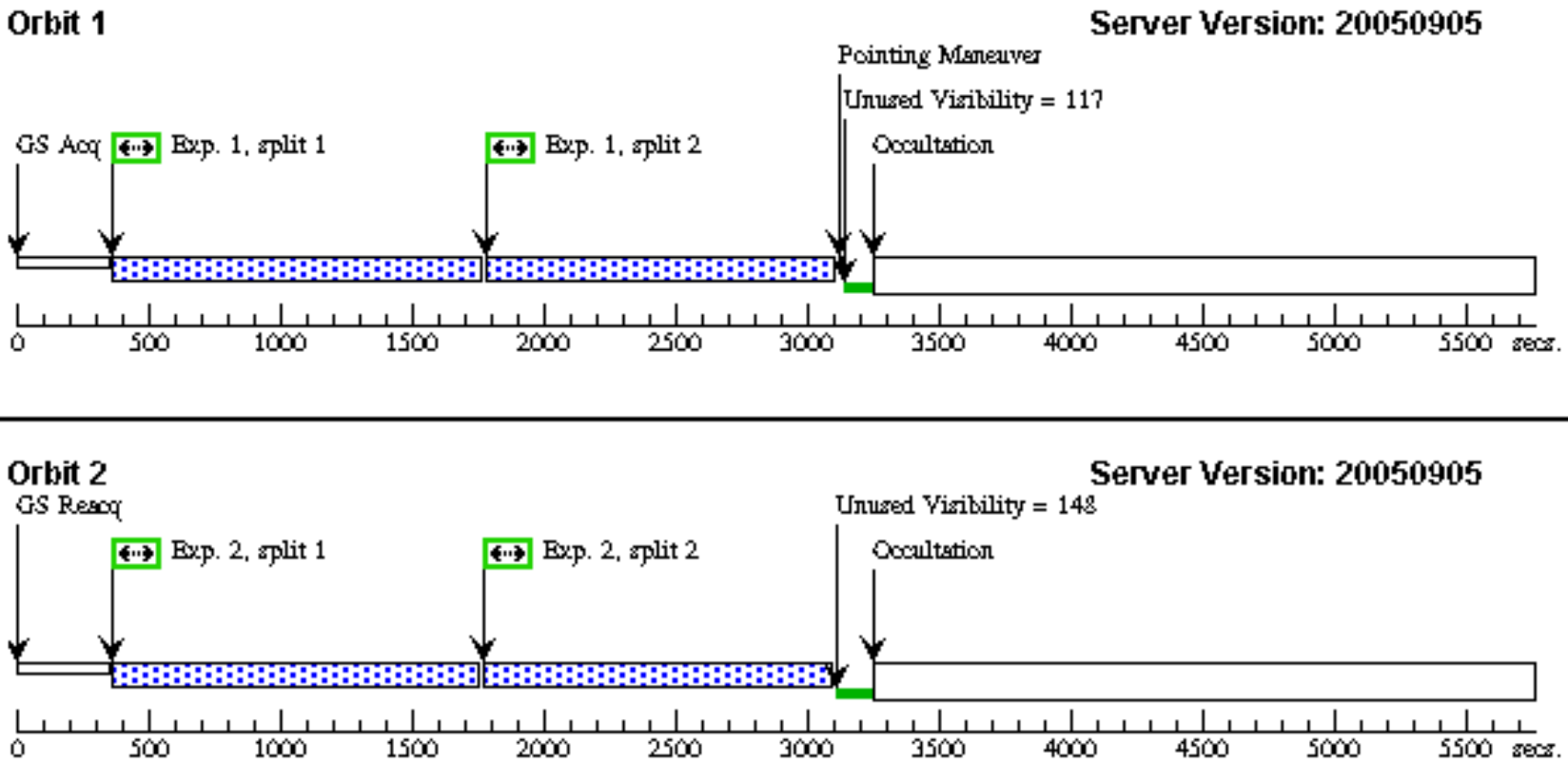
Fixed Targets

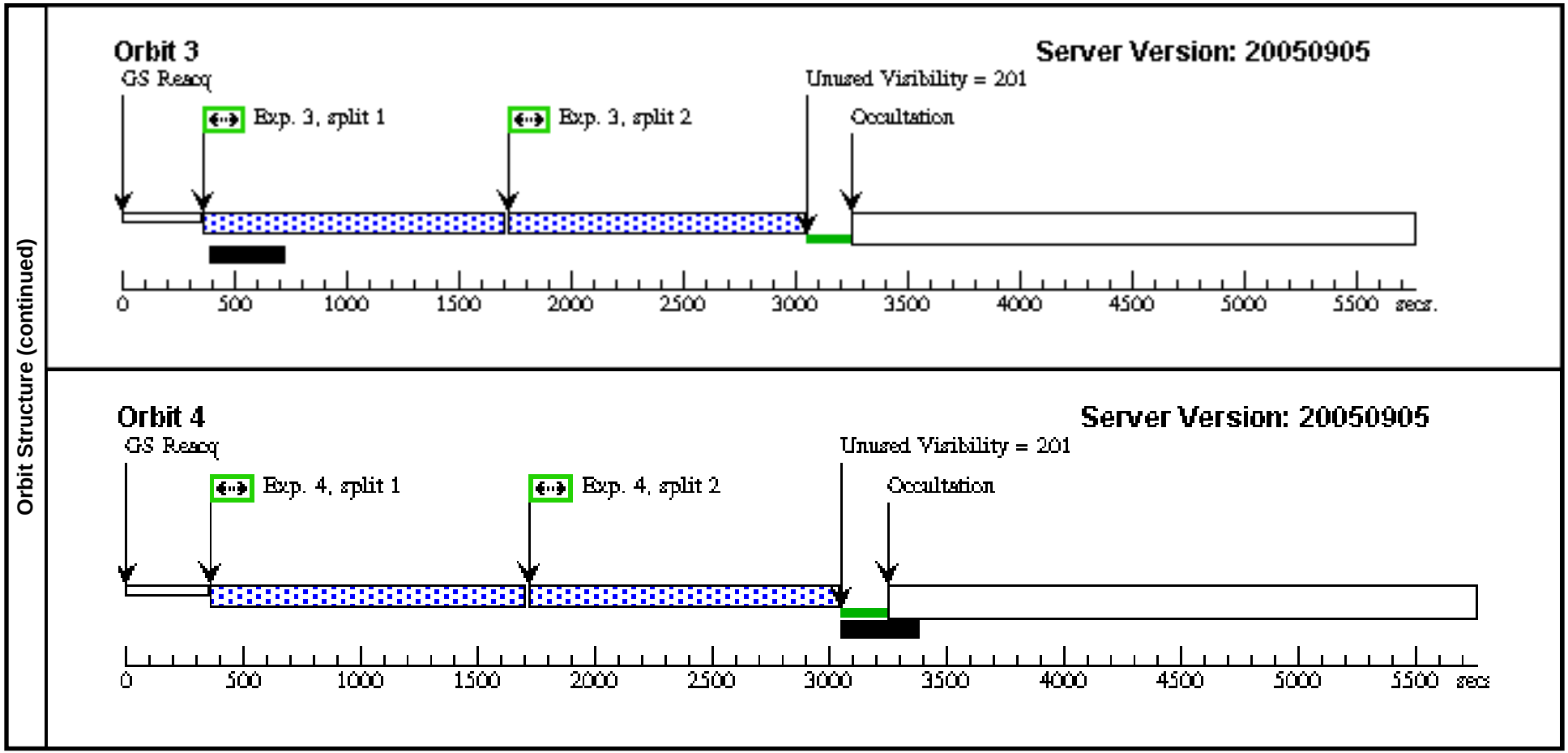
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	CRAB	RA: 05 34 32.1100 (83.6337917d) Dec: +22 01 6.80 (22.01856d) Equinox: J2000 Plate Id: (?)		V=15.0	Coordinate Source: HST_IMAGE

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	NOPOL	(1) CRAB	ACS/WFC, ACCUM, WFC1-2K	F550M				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[1]***
2	POL0V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL0V				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[2]***
3	POL60V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL60V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[3]***
4	POL120V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL120V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[4]***

Orbit Structure

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secs.
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Visit

Proposal 10526, Visit 03 Sat Oct 29 01:01:58 GMT 2005

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: AFTER 01 BY 17 D TO 19 D

Diagnostics

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(Visit 03) Warning: SAME POS MAY NOT BE APPROPRIATE

(Visit 03) Warning: SAME POS MAY NOT BE APPROPRIATE

(Visit 03) Warning: SAME POS MAY NOT BE APPROPRIATE

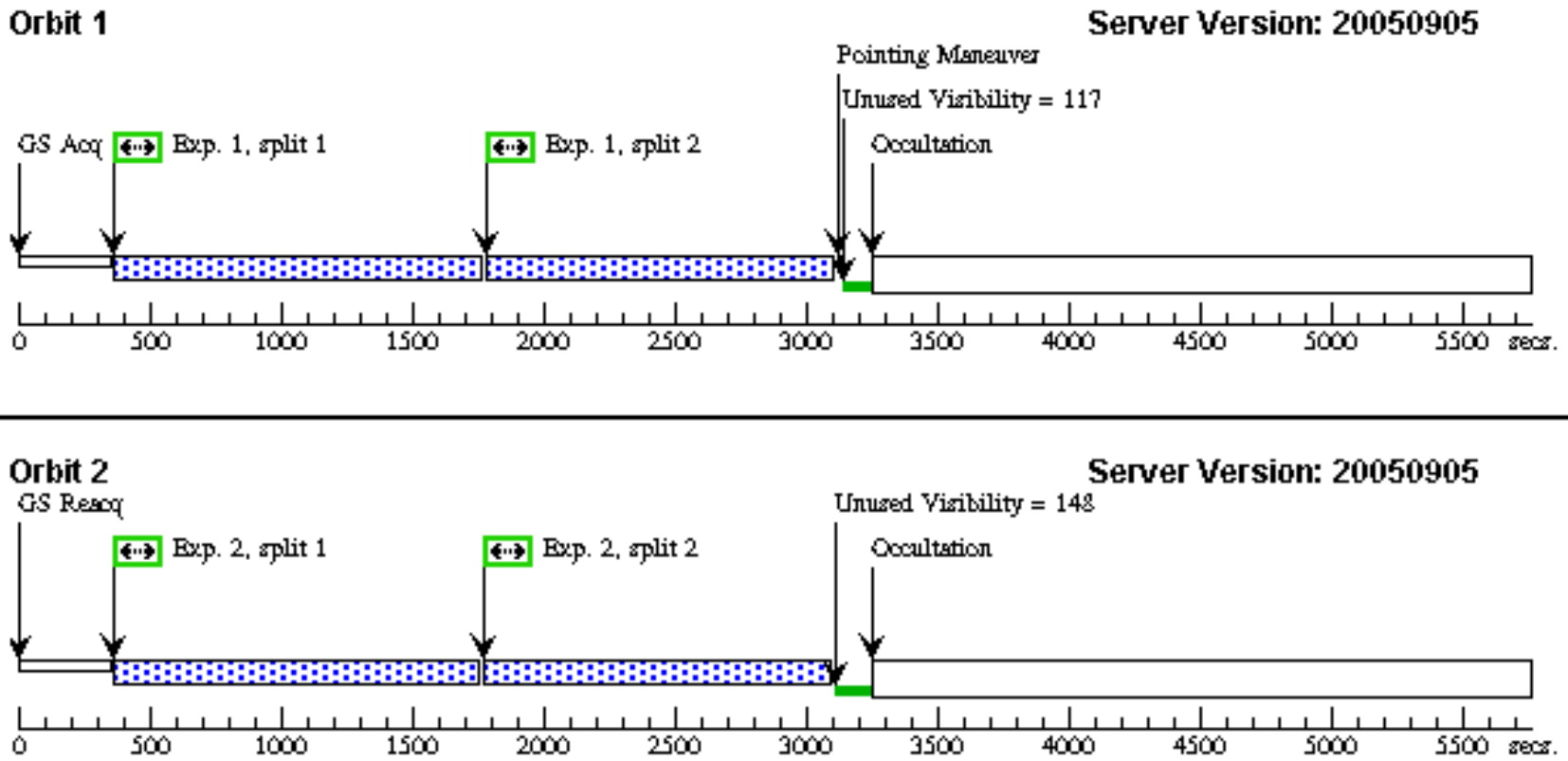
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	CRAB	RA: 05 34 32.1100 (83.6337917d) Dec: +22 01 6.80 (22.01856d) Equinox: J2000 Plate Id: (?)		V=15.0	Coordinate Source: HST_IMAGE

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	NOPOL	(1) CRAB	ACS/WFC, ACCUM, WFC1-2K	F550M				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[1]***
2	POL0V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL0V				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[2]***
3	POL60V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL60V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[3]***
4	POL120V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL120V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[4]***

Orbit Structure



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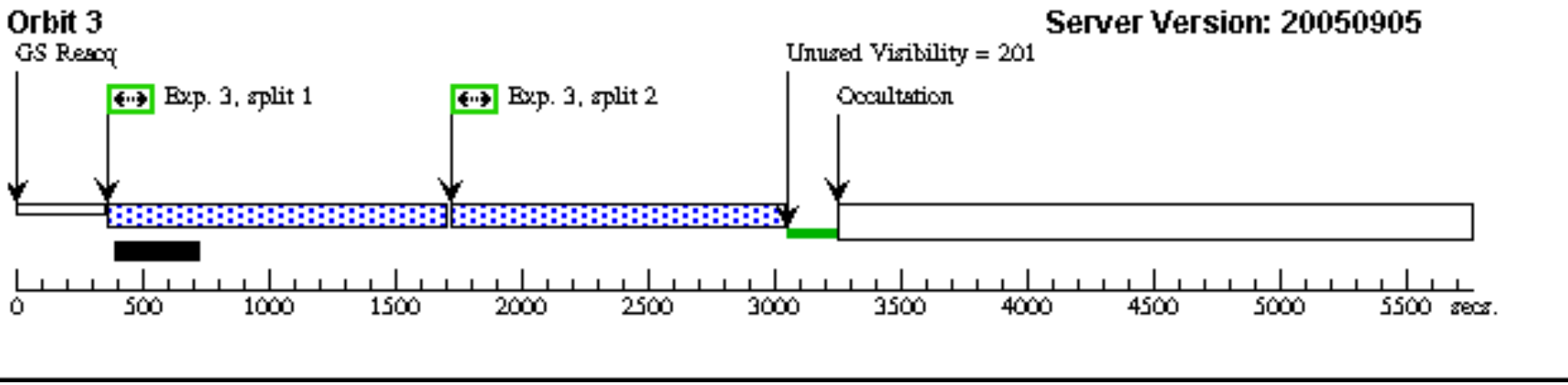

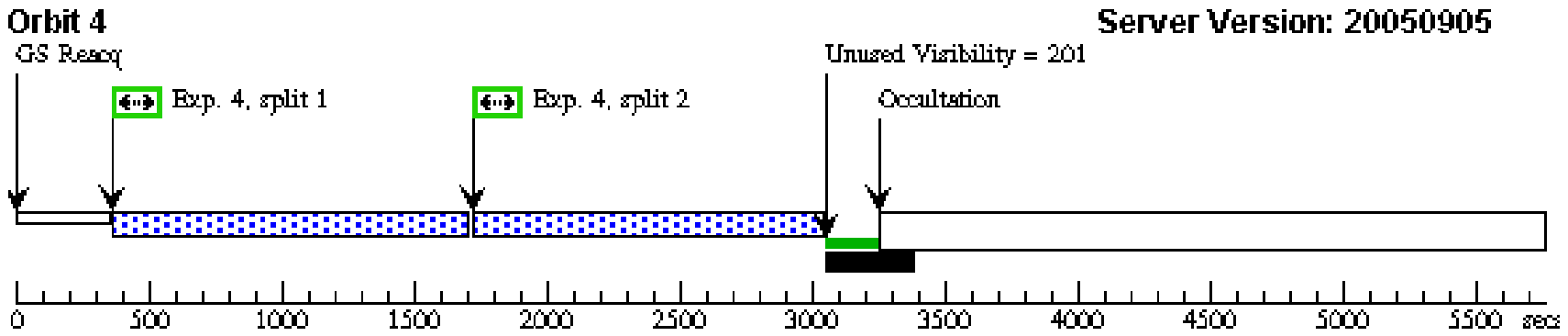

Visit

Proposal 10526, Visit 04 Sat Oct 29 01:01:58 GMT 2005

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: AFTER 01 BY 26 D TO 28 D

Diagnostics

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(Visit 04) Warning: SAME POS MAY NOT BE APPROPRIATE

(Visit 04) Warning: SAME POS MAY NOT BE APPROPRIATE

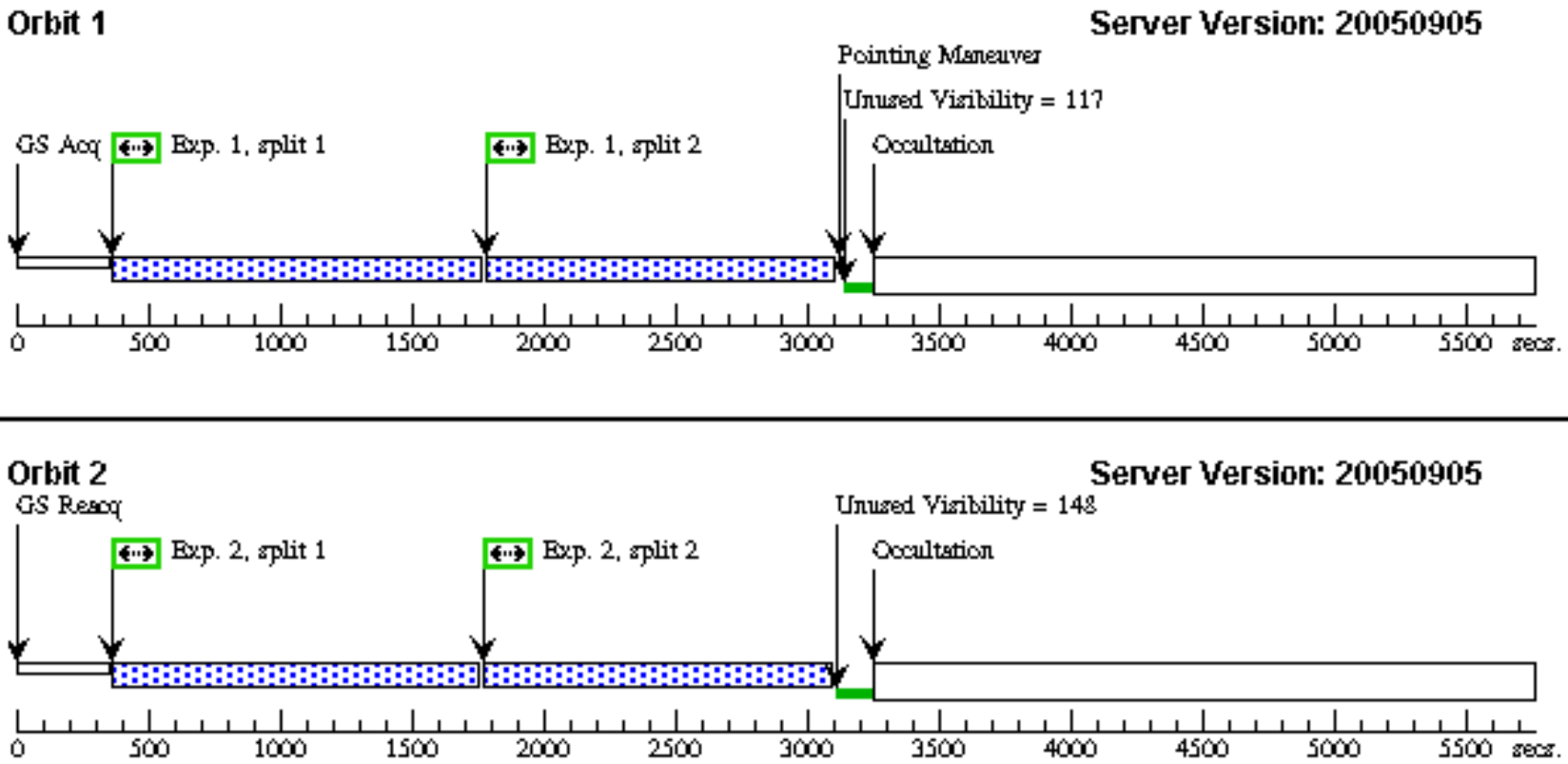
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	CRAB	RA: 05 34 32.1100 (83.6337917d) Dec: +22 01 6.80 (22.01856d) Equinox: J2000 Plate Id: (?)		V=15.0	Coordinate Source: HST_IMAGE

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	NOPOL	(1) CRAB	ACS/WFC, ACCUM, WFC1-2K	F550M				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[1]***
2	POL0V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL0V				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[2]***
3	POL60V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL60V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[3]***
4	POL120V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL120V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[4]***

Orbit Structure



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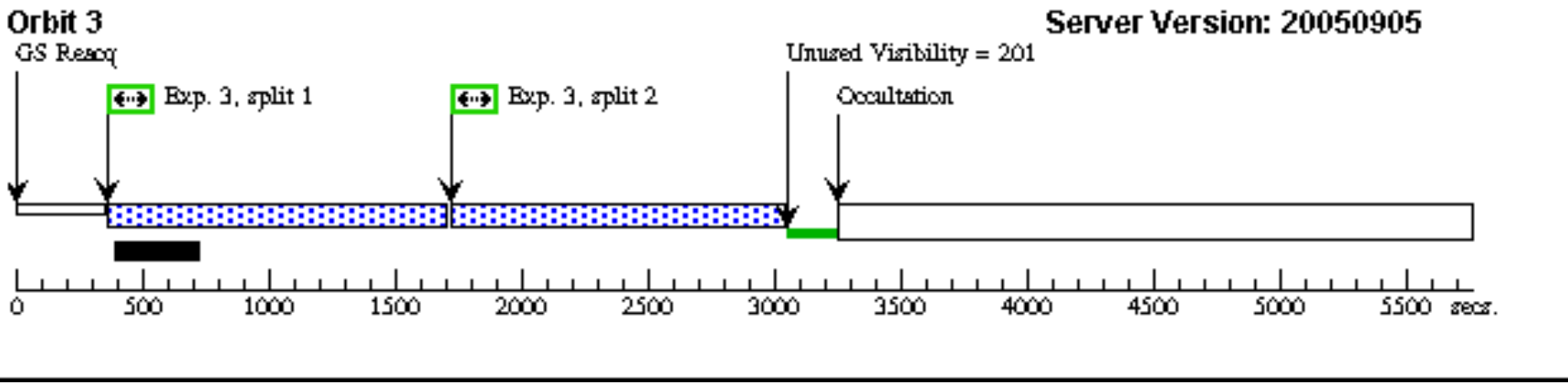

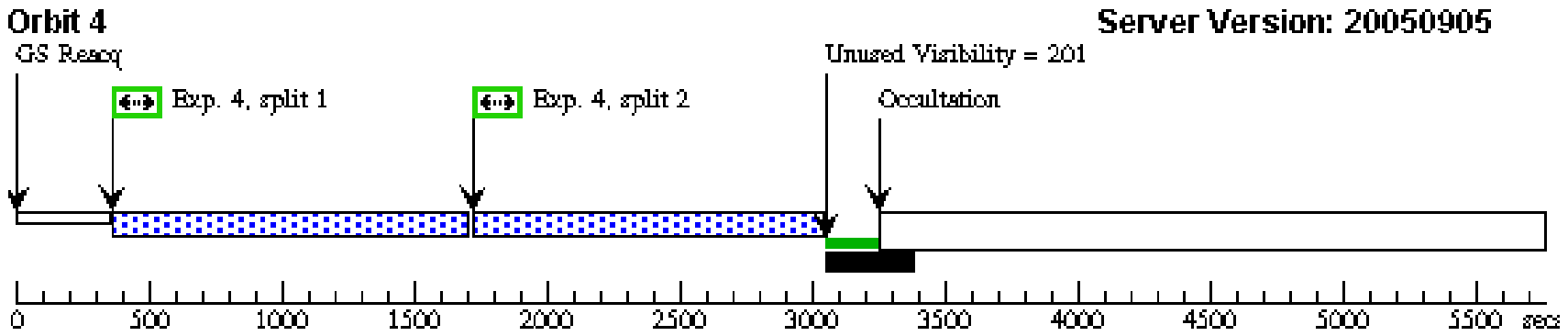

Visit

Proposal 10526, Visit 05 Sat Oct 29 01:01:59 GMT 2005

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: AFTER 01 BY 35 D TO 37 D

Diagnostics

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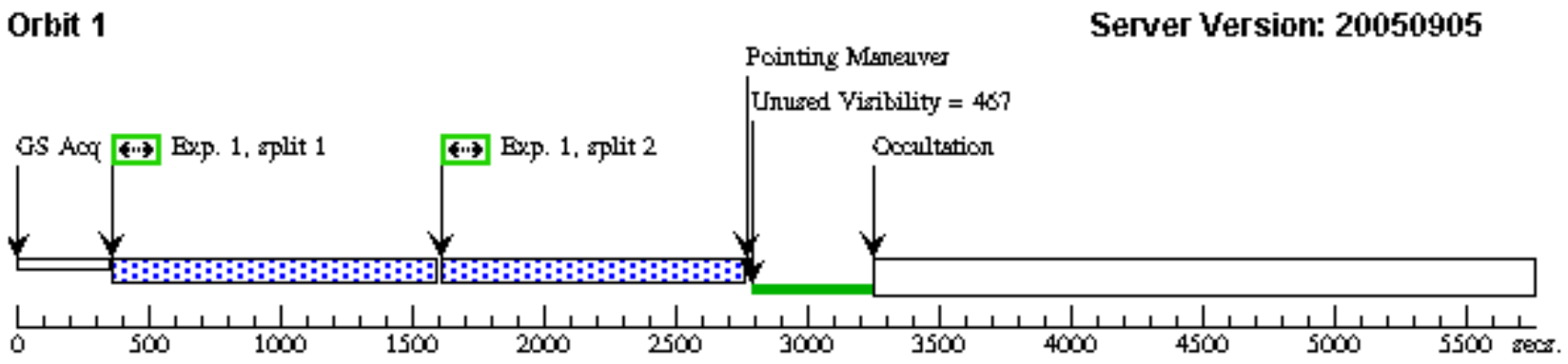
Fixed Targets

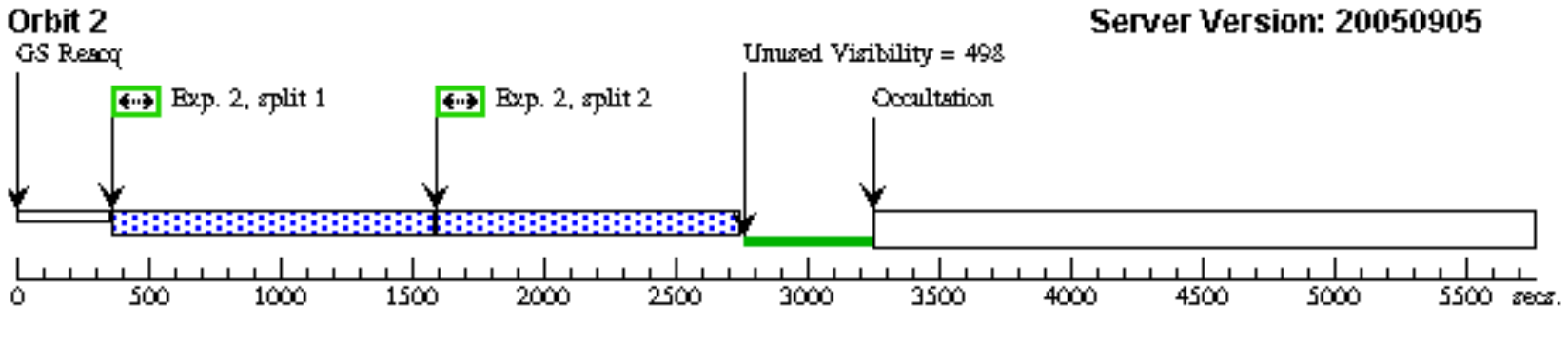
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	CRAB	RA: 05 34 32.1100 (83.6337917d) Dec: +22 01 6.80 (22.01856d) Equinox: J2000 Plate Id: (?)		V=15.0	Coordinate Source: HST_IMAGE

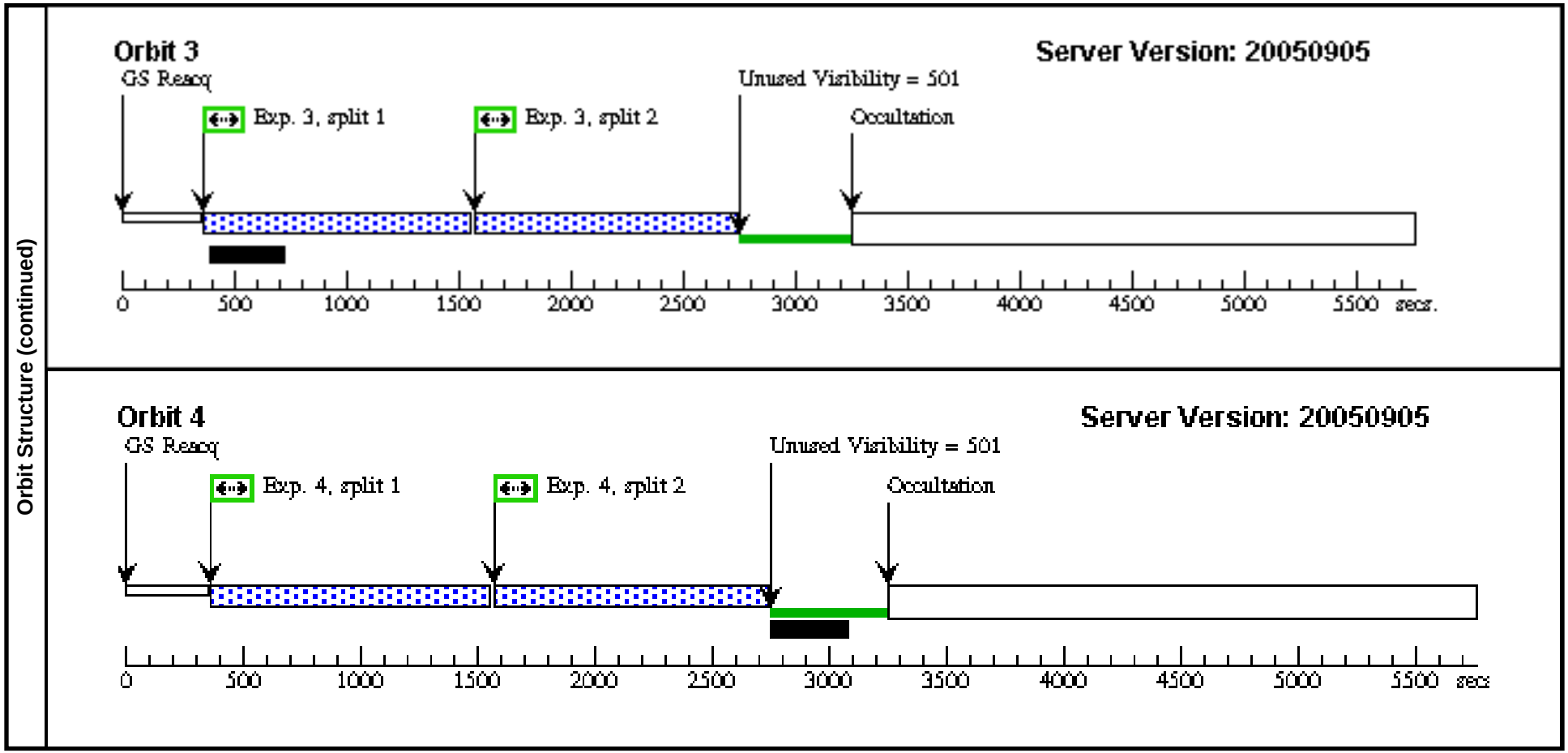
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	NOPOL	(1) CRAB	ACS/WFC, ACCUM, WFC1-2K	F550M				1950.0 Secs	
								[==>(Split 1)] *[==>(Split 2)]*	***[1]***
2	POL0V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL0V				1950.0 Secs	
								[==>(Split 1)] *[==>(Split 2)]*	***[2]***
3	POL60V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL60V		SAME POS AS 2		2000.0 Secs	
								[==>(Split 1)] *[==>(Split 2)]*	***[3]***
4	POL120V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL120V		SAME POS AS 2		2000.0 Secs	
								[==>(Split 1)] *[==>(Split 2)]*	***[4]***

Orbit Structure



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secs.
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Visit

Proposal 10526, Visit 06 Sat Oct 29 01:02:00 GMT 2005

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: AFTER 01 BY 44 D TO 46 D

Diagnostics

(Visit 06) Warning: SAME POS MAY NOT BE APPROPRIATE
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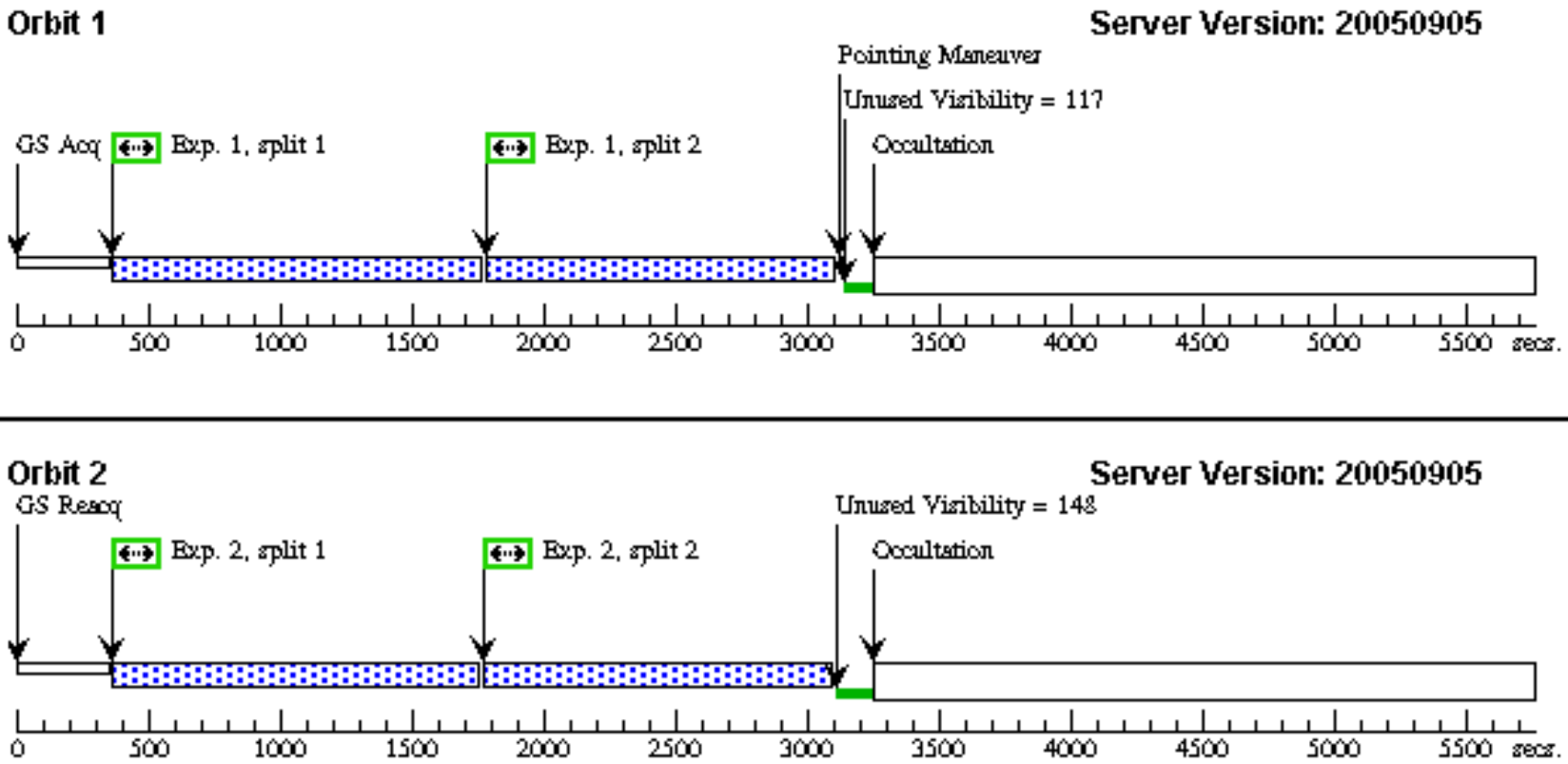
Fixed Targets

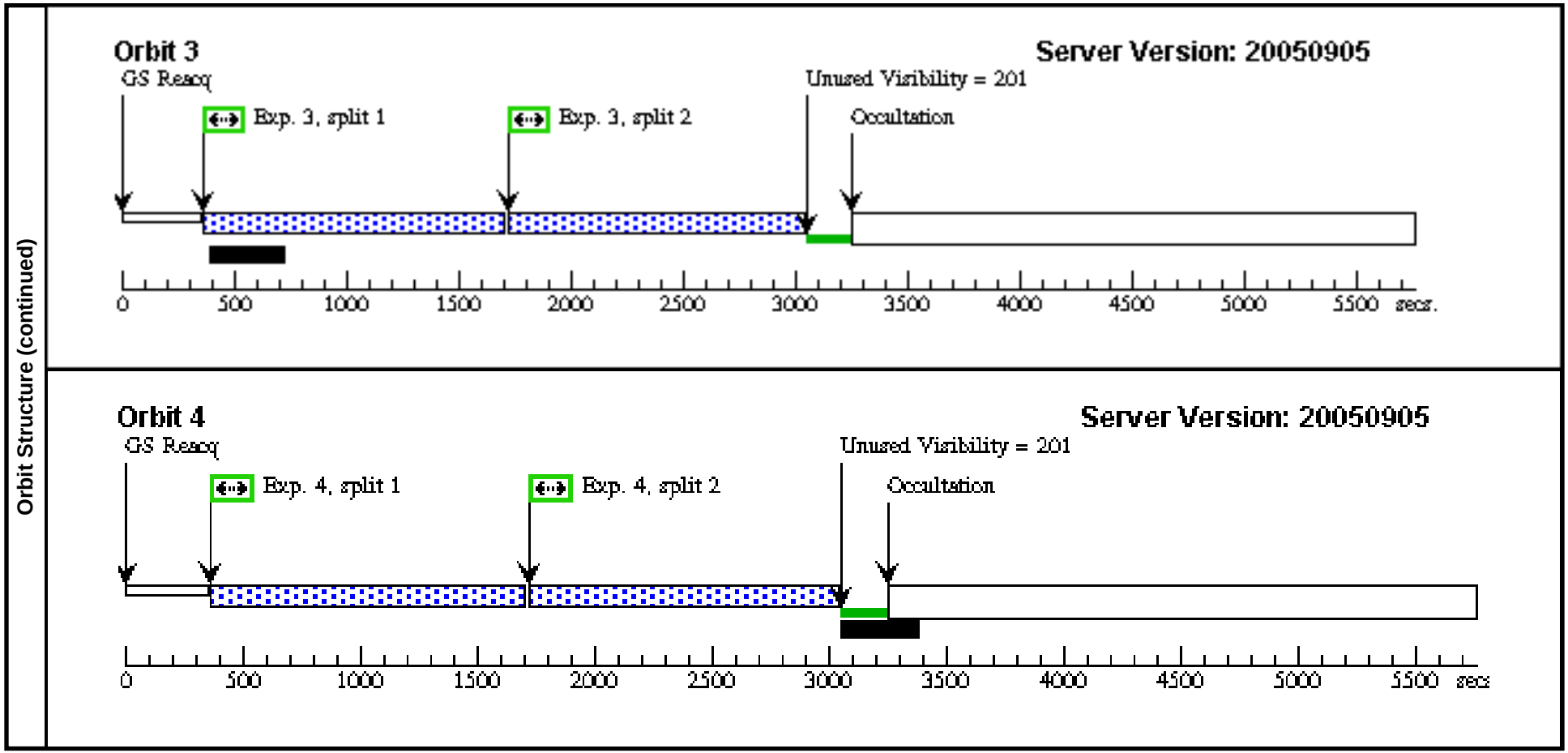
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	CRAB	RA: 05 34 32.1100 (83.6337917d) Dec: +22 01 6.80 (22.01856d) Equinox: J2000 Plate Id: (?)		V=15.0	Coordinate Source: HST_IMAGE

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	NOPOL	(1) CRAB	ACS/WFC, ACCUM, WFC1-2K	F550M				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[1]***
2	POL0V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL0V				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[2]***
3	POL60V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL60V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[3]***
4	POL120V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL120V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[4]***

Orbit Structure

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secs.
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Unused Visibility = 201
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Visit

Proposal 10526, Visit 07 Sat Oct 29 01:02:01 GMT 2005

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: AFTER 01 BY 53 D TO 55 D

Diagnostics

(Visit 07) Warning: SAME POS MAY NOT BE APPROPRIATE
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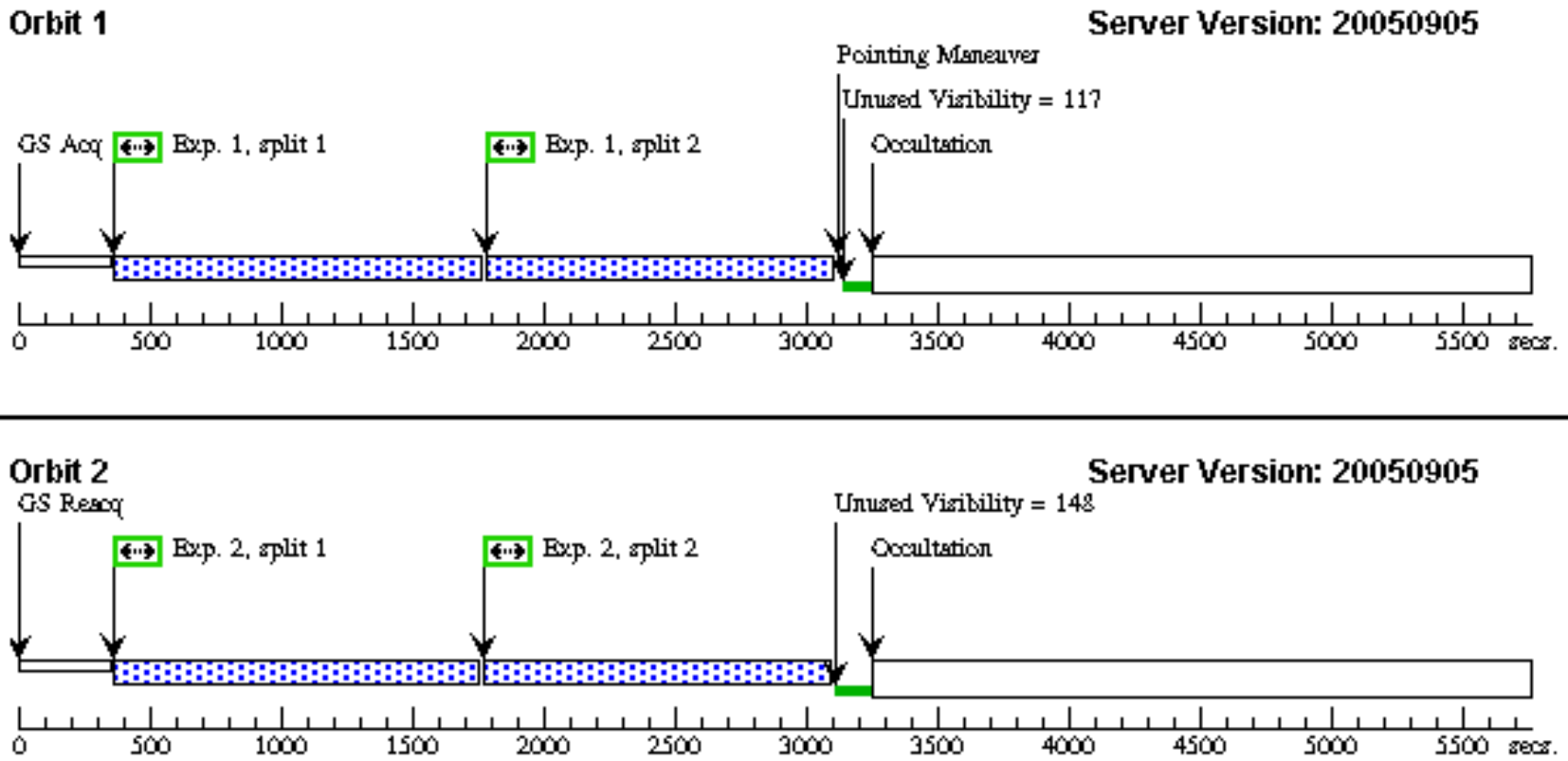
Fixed Targets

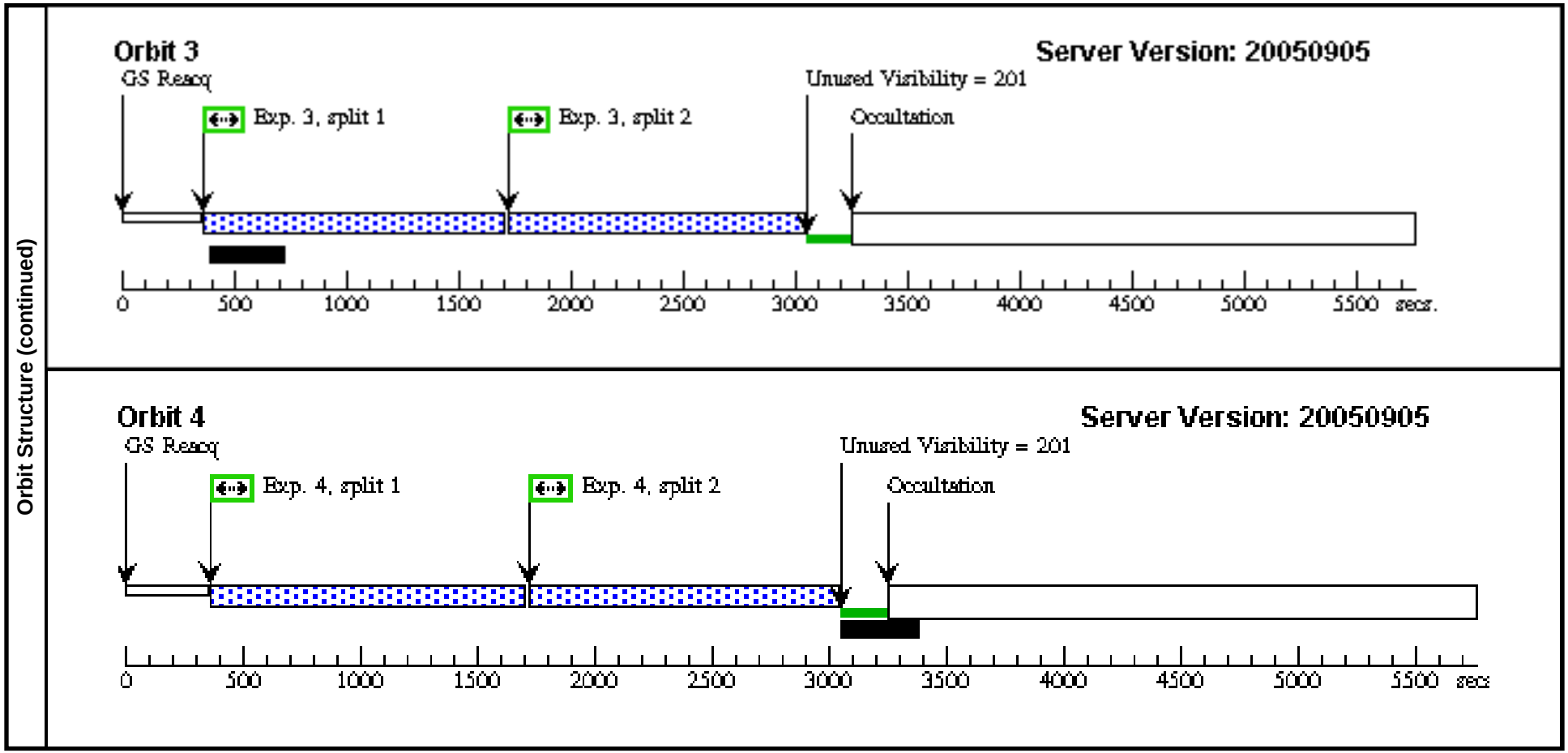
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	CRAB	RA: 05 34 32.1100 (83.6337917d) Dec: +22 01 6.80 (22.01856d) Equinox: J2000 Plate Id: (?)		V=15.0	Coordinate Source: HST_IMAGE

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	NOPOL	(1) CRAB	ACS/WFC, ACCUM, WFC1-2K	F550M				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[1]***
2	POL0V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL0V				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[2]***
3	POL60V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL60V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[3]***
4	POL120V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL120V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[4]***

Orbit Structure

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secs.
Orbit 4
Server Version: 20050905
GS Reacq
Exp. 4, split 1
Exp. 4, split 2
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5000
5500
secs

Visit

Proposal 10526, Visit 08 Sat Oct 29 01:02:01 GMT 2005

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: AFTER 01 BY 62 D TO 64 D

Diagnostics

(Visit 08) Warning: SAME POS MAY NOT BE APPROPRIATE
(Visit 08) Warning: SAME POS MAY NOT BE APPROPRIATE
(Visit 08) Warning: SAME POS MAY NOT BE APPROPRIATE
(Visit 08) Warning: SAME POS MAY NOT BE APPROPRIATE

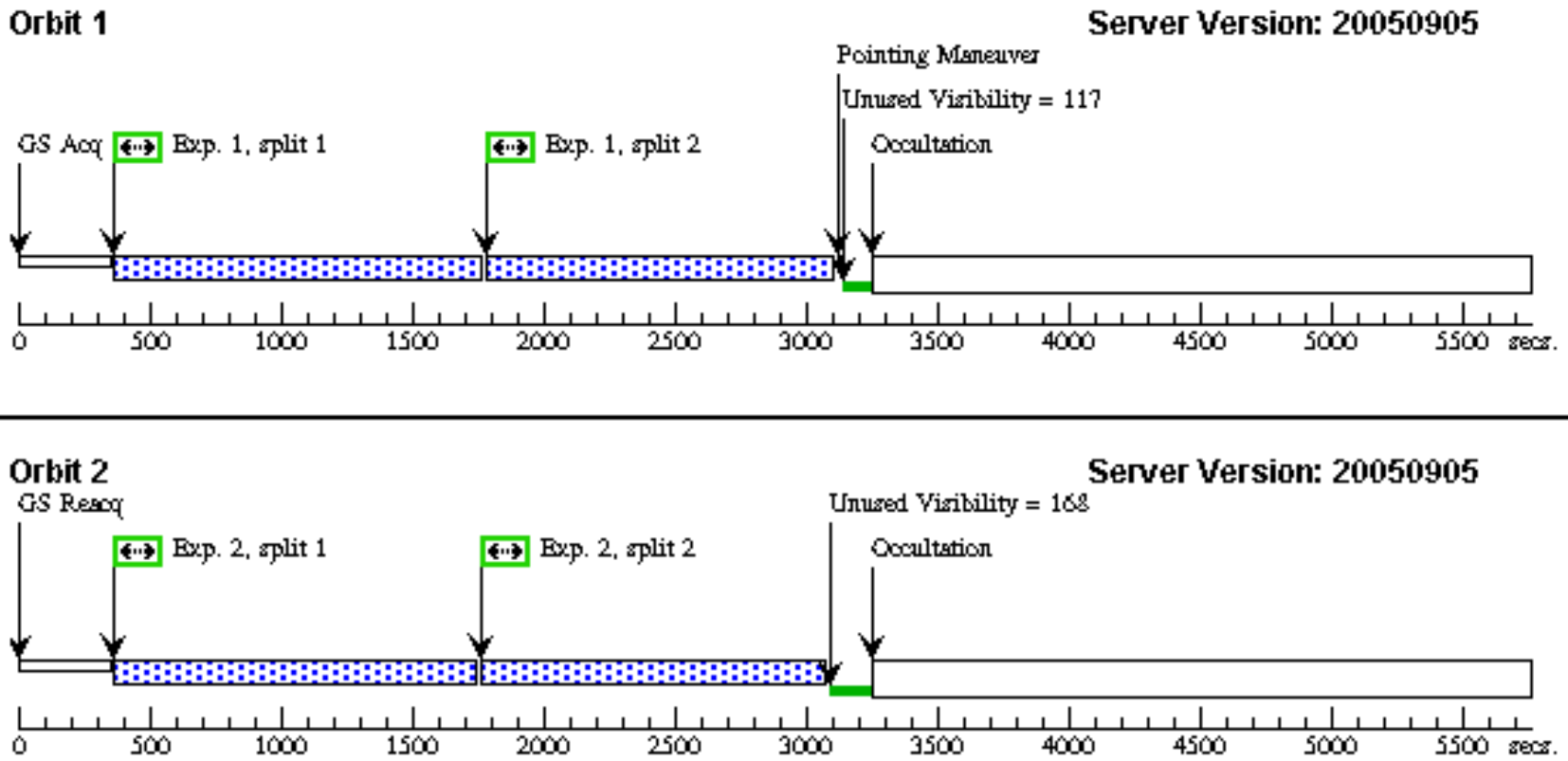
Fixed Targets

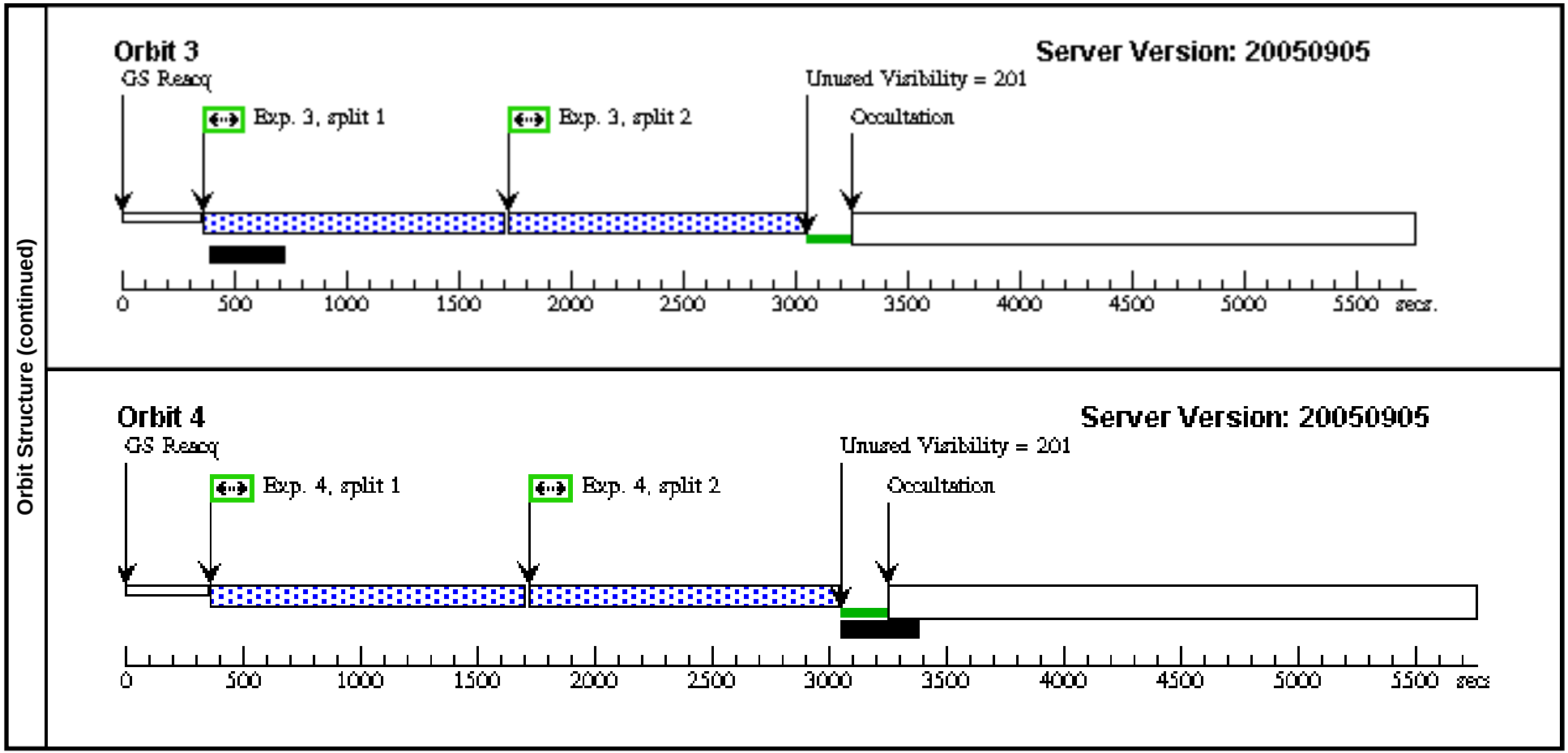
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	CRAB	RA: 05 34 32.1100 (83.6337917d) Dec: +22 01 6.80 (22.01856d) Equinox: J2000 Plate Id: (?)		V=15.0	Coordinate Source: HST_IMAGE

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	NOPOL	(1) CRAB	ACS/WFC, ACCUM, WFC1-2K	F550M				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[1]***
2	POL0V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL0V				2280.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[2]***
3	POL60V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL60V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[3]***
4	POL120V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL120V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[4]***

Orbit Structure




Orbit Structure (continued)
Orbit 3
Server Version: 20050905
GS Reacq
Exp. 3, split 1
Exp. 3, split 2
Unused Visibility = 201
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 4
Server Version: 20050905
GS Reacq
Exp. 4, split 1
Exp. 4, split 2
Unused Visibility = 201
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs

Visit

Proposal 10526, Visit 09 Sat Oct 29 01:02:02 GMT 2005

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: AFTER 01 BY 71 D TO 73 D

Diagnostics

(Visit 09) Warning: SAME POS MAY NOT BE APPROPRIATE

(Visit 09) Warning: SAME POS MAY NOT BE APPROPRIATE

(Visit 09) Warning: SAME POS MAY NOT BE APPROPRIATE

(Visit 09) Warning: SAME POS MAY NOT BE APPROPRIATE

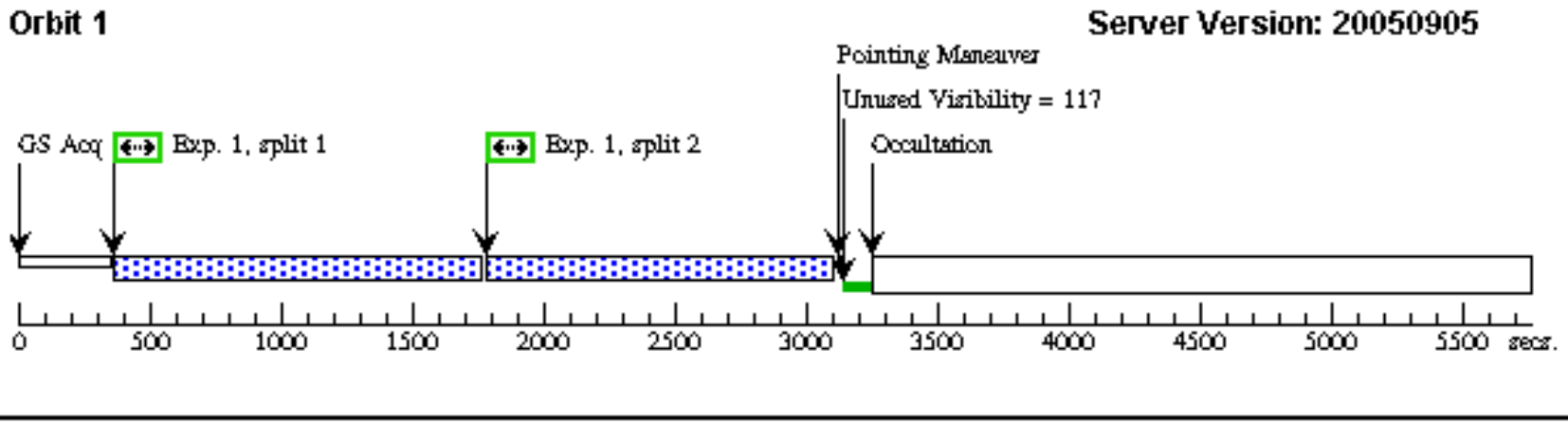
Fixed Targets

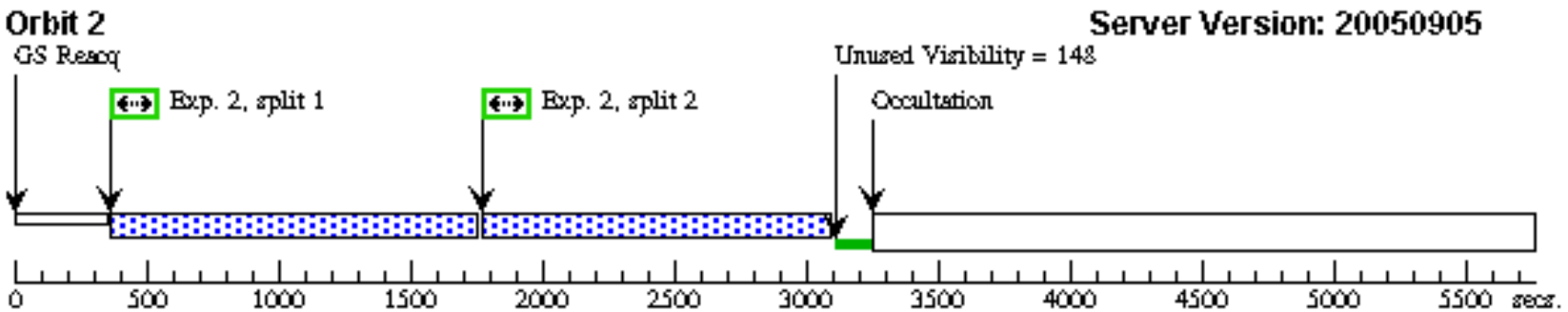
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	CRAB	RA: 05 34 32.1100 (83.6337917d) Dec: +22 01 6.80 (22.01856d) Equinox: J2000 Plate Id: (?)		V=15.0	Coordinate Source: HST_IMAGE

Exposures

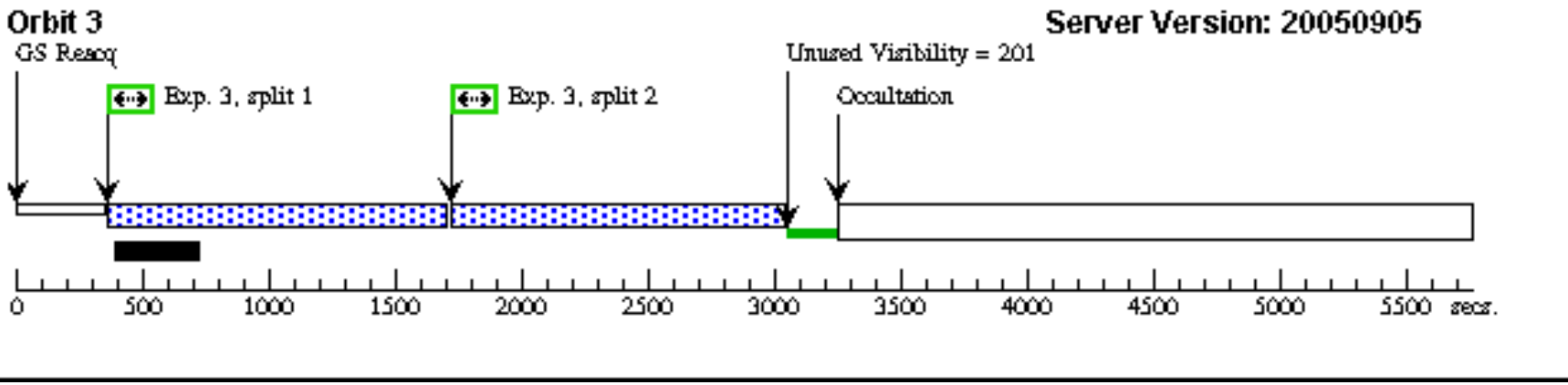
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	NOPOL	(1) CRAB	ACS/WFC, ACCUM, WFC1-2K	F550M				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[1]***
2	POL0V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL0V				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[2]***
3	POL60V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL60V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[3]***
4	POL120V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL120V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[4]***

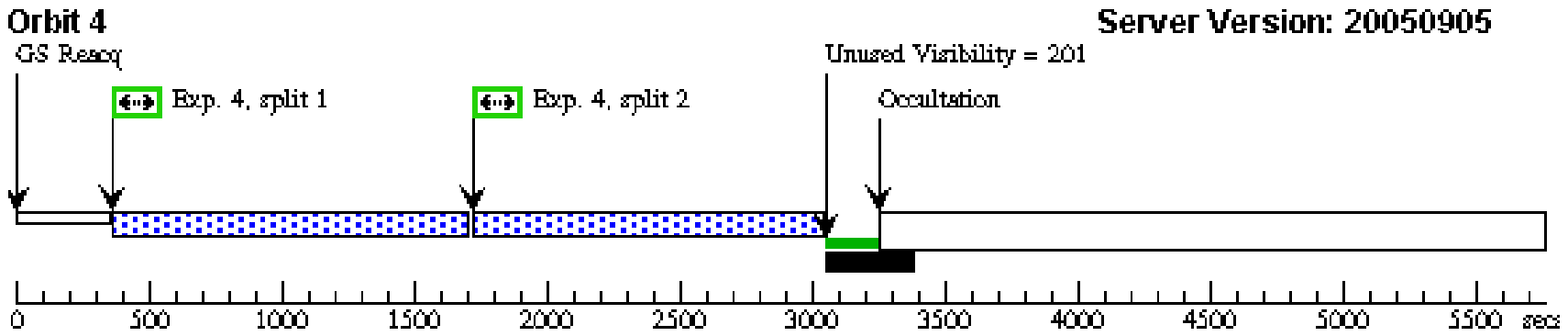
Orbit Structure





Orbit Structure (continued)





Visit

Proposal 10526, Visit 10 Sat Oct 29 01:02:03 GMT 2005

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: AFTER 01 BY 80 D TO 82 D

Diagnostics

(Visit 10) Warning: SAME POS MAY NOT BE APPROPRIATE

(Visit 10) Warning: SAME POS MAY NOT BE APPROPRIATE

(Visit 10) Warning: SAME POS MAY NOT BE APPROPRIATE

(Visit 10) Warning: SAME POS MAY NOT BE APPROPRIATE

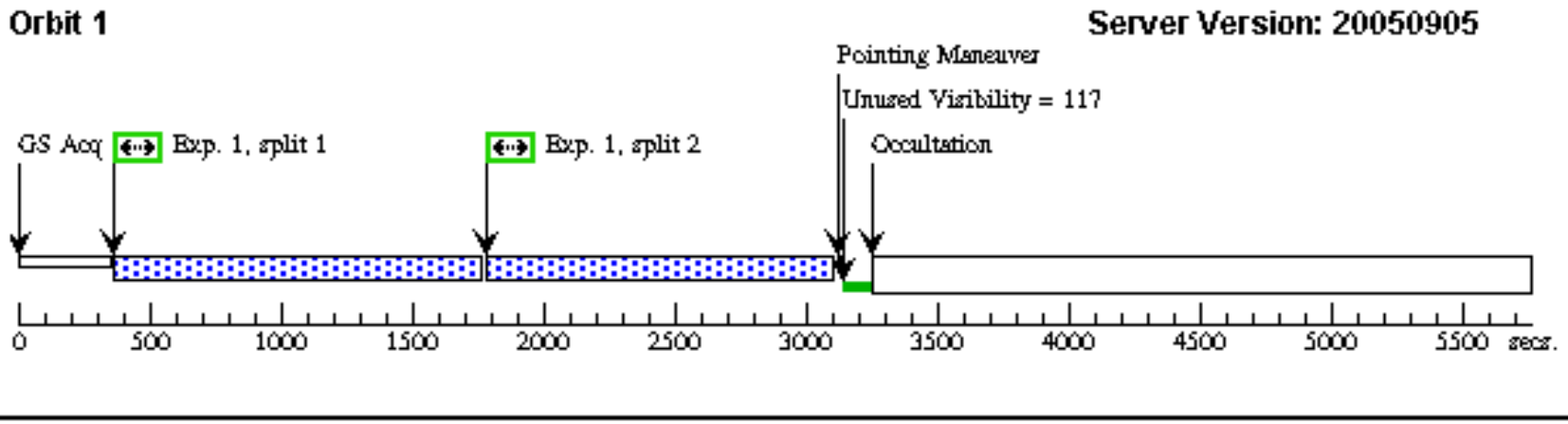
Fixed Targets

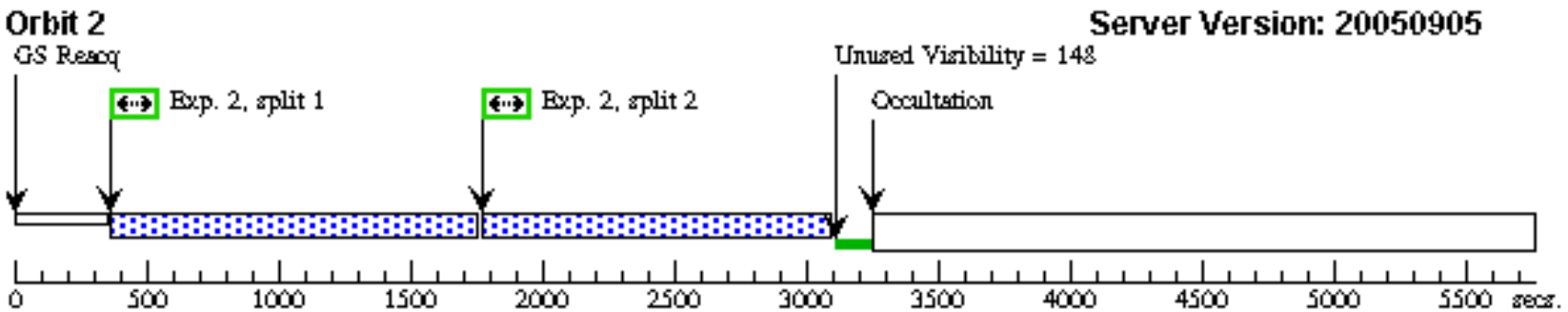
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	CRAB	RA: 05 34 32.1100 (83.6337917d) Dec: +22 01 6.80 (22.01856d) Equinox: J2000 Plate Id: (?)		V=15.0	Coordinate Source: HST_IMAGE

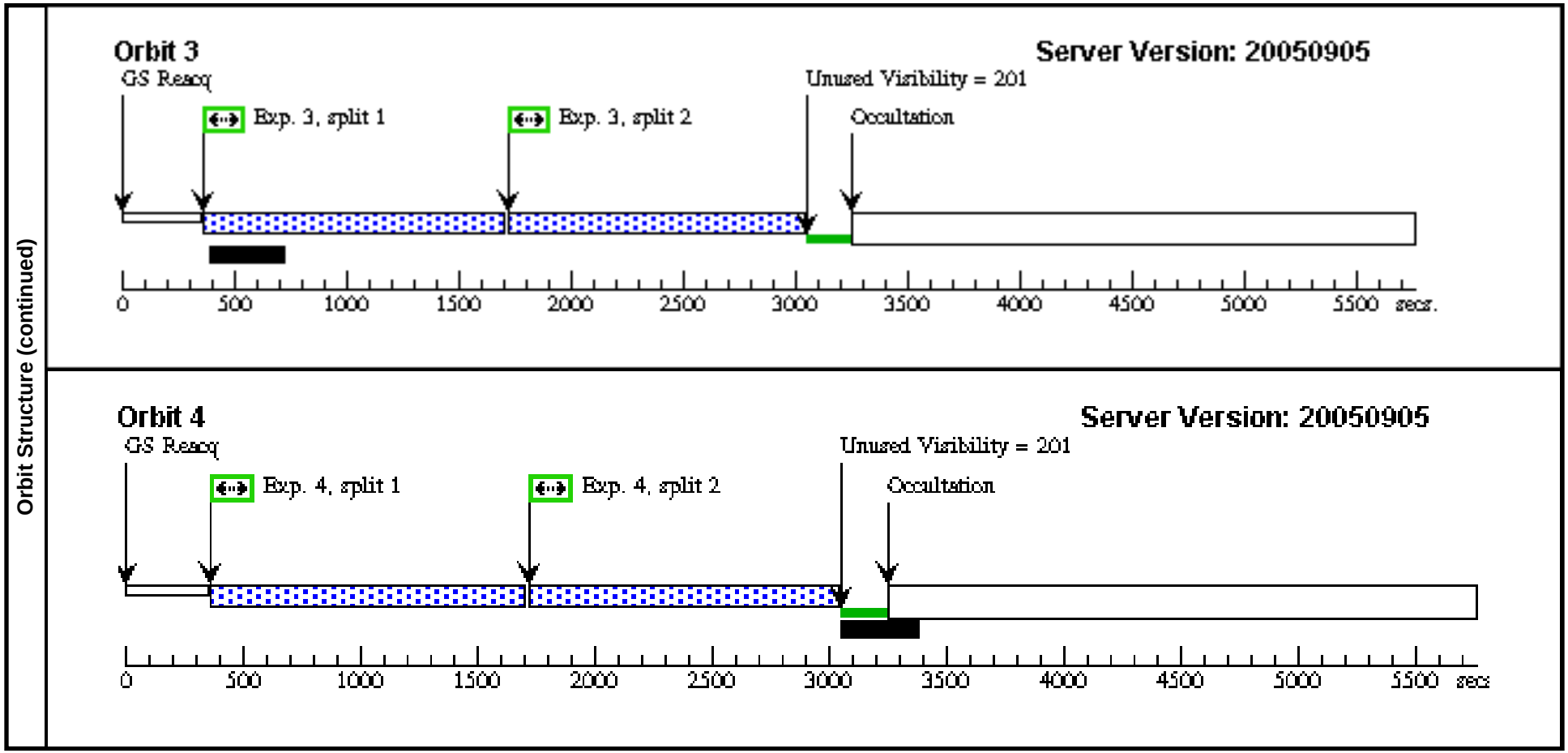
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	NOPOL	(1) CRAB	ACS/WFC, ACCUM, WFC1-2K	F550M				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[1]***
2	POL0V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL0V				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[2]***
3	POL60V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL60V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[3]***
4	POL120V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL120V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[4]***

Orbit Structure






Orbit Structure (continued)
Orbit 3
Server Version: 20050905
GS Reacq
Exp. 3, split 1
Exp. 3, split 2
Unused Visibility = 201
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 4
Server Version: 20050905
GS Reacq
Exp. 4, split 1
Exp. 4, split 2
Unused Visibility = 201
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs

Visit

Proposal 10526, Visit 11 Sat Oct 29 01:02:04 GMT 2005

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: AFTER 01 BY 89 D TO 91 D

Diagnostics

(Visit 11) Warning: SAME POS MAY NOT BE APPROPRIATE

(Visit 11) Warning: SAME POS MAY NOT BE APPROPRIATE

(Visit 11) Warning: SAME POS MAY NOT BE APPROPRIATE

(Visit 11) Warning: SAME POS MAY NOT BE APPROPRIATE

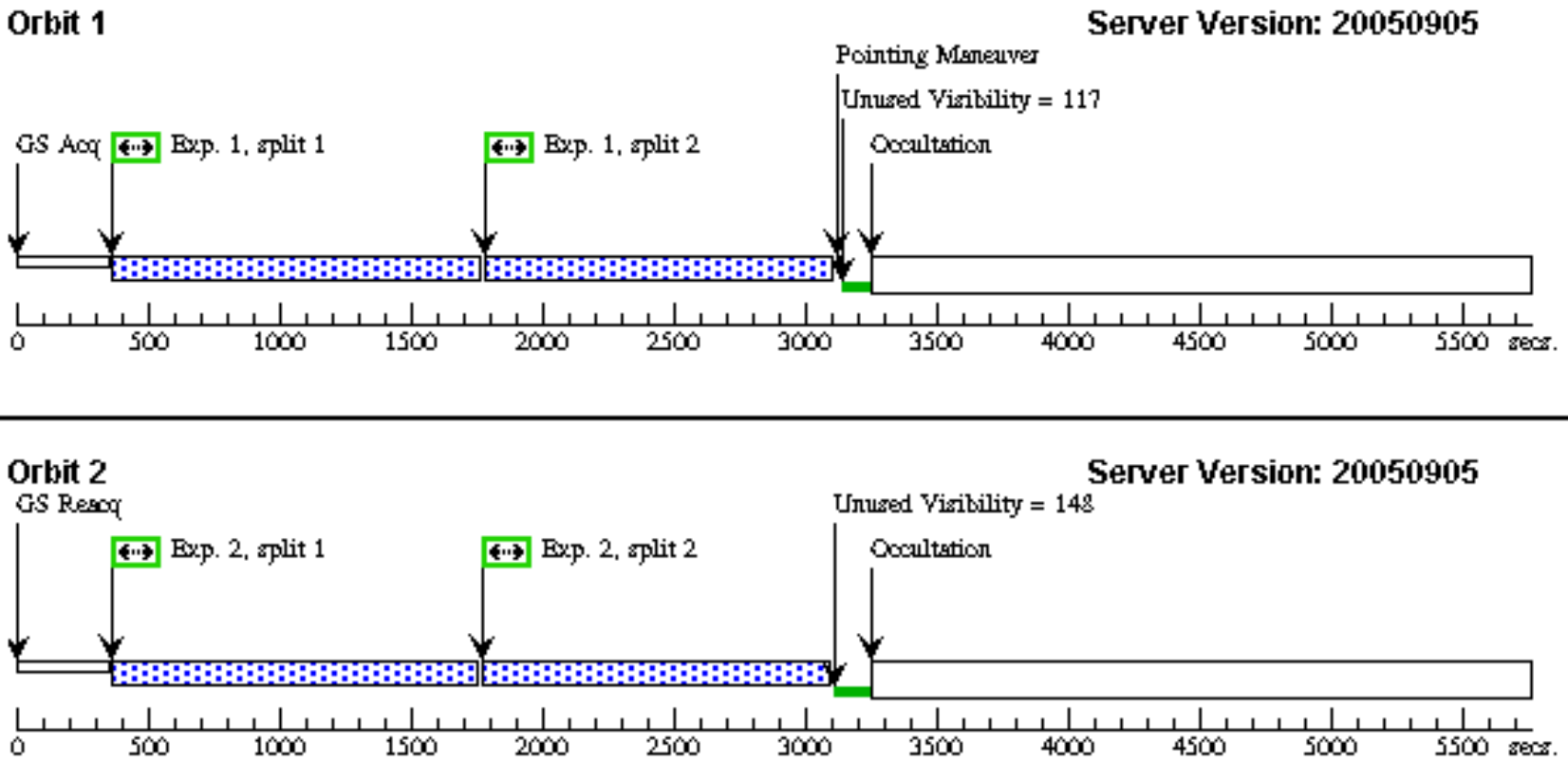
Fixed Targets

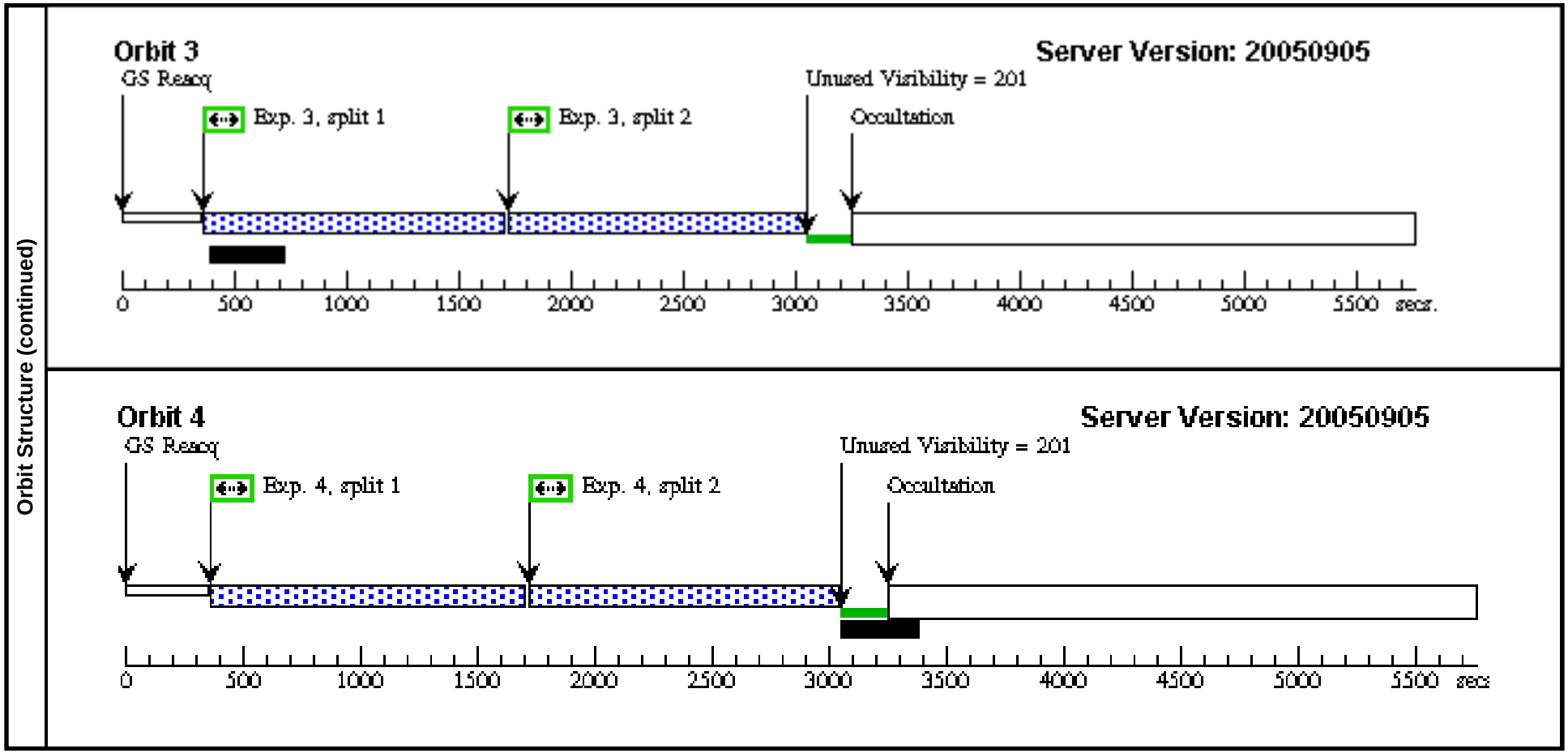
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	CRAB	RA: 05 34 32.1100 (83.6337917d) Dec: +22 01 6.80 (22.01856d) Equinox: J2000 Plate Id: (?)		V=15.0	Coordinate Source: HST_IMAGE

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	NOPOL	(1) CRAB	ACS/WFC, ACCUM, WFC1-2K	F550M				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[1]***
2	POL0V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL0V				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[2]***
3	POL60V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL60V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[3]***
4	POL120V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL120V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[4]***

Orbit Structure




Orbit Structure (continued)
Orbit 3
Server Version: 20050905
GS Reacq
Exp. 3, split 1
Exp. 3, split 2
Unused Visibility = 201
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 4
Server Version: 20050905
GS Reacq
Exp. 4, split 1
Exp. 4, split 2
Unused Visibility = 201
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs

Visit

Proposal 10526, Visit 12 Sat Oct 29 01:02:04 GMT 2005

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: AFTER 01 BY 98 D TO 100 D

Diagnostics

(Visit 12) Warning: SAME POS MAY NOT BE APPROPRIATE

(Visit 12) Warning: SAME POS MAY NOT BE APPROPRIATE

(Visit 12) Warning: SAME POS MAY NOT BE APPROPRIATE

(Visit 12) Warning: SAME POS MAY NOT BE APPROPRIATE

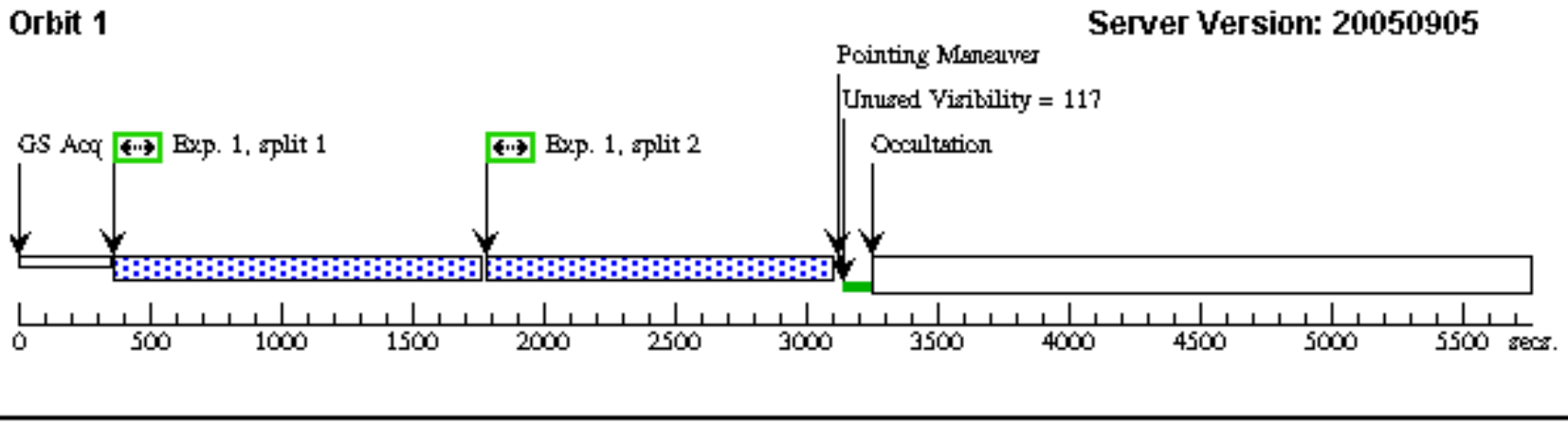
Fixed Targets

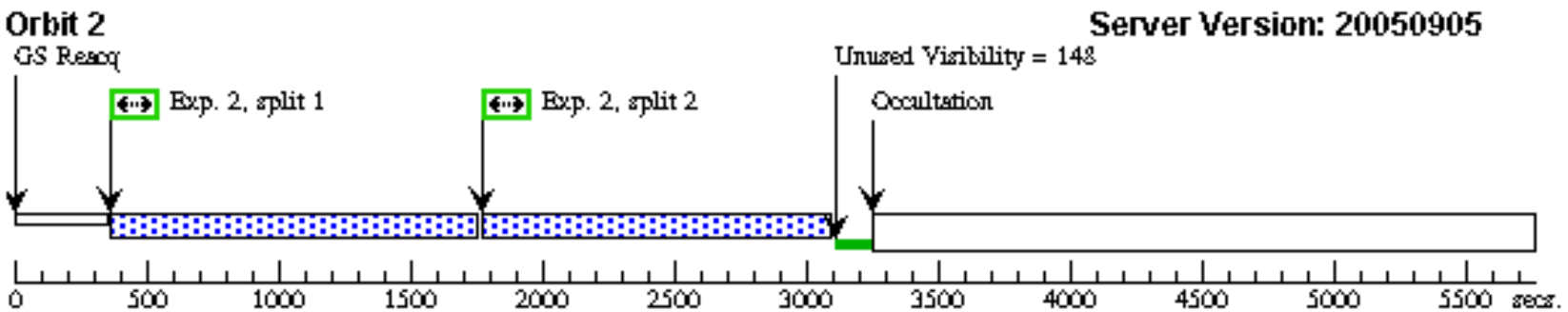
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	CRAB	RA: 05 34 32.1100 (83.6337917d) Dec: +22 01 6.80 (22.01856d) Equinox: J2000 Plate Id: (?)		V=15.0	Coordinate Source: HST_IMAGE

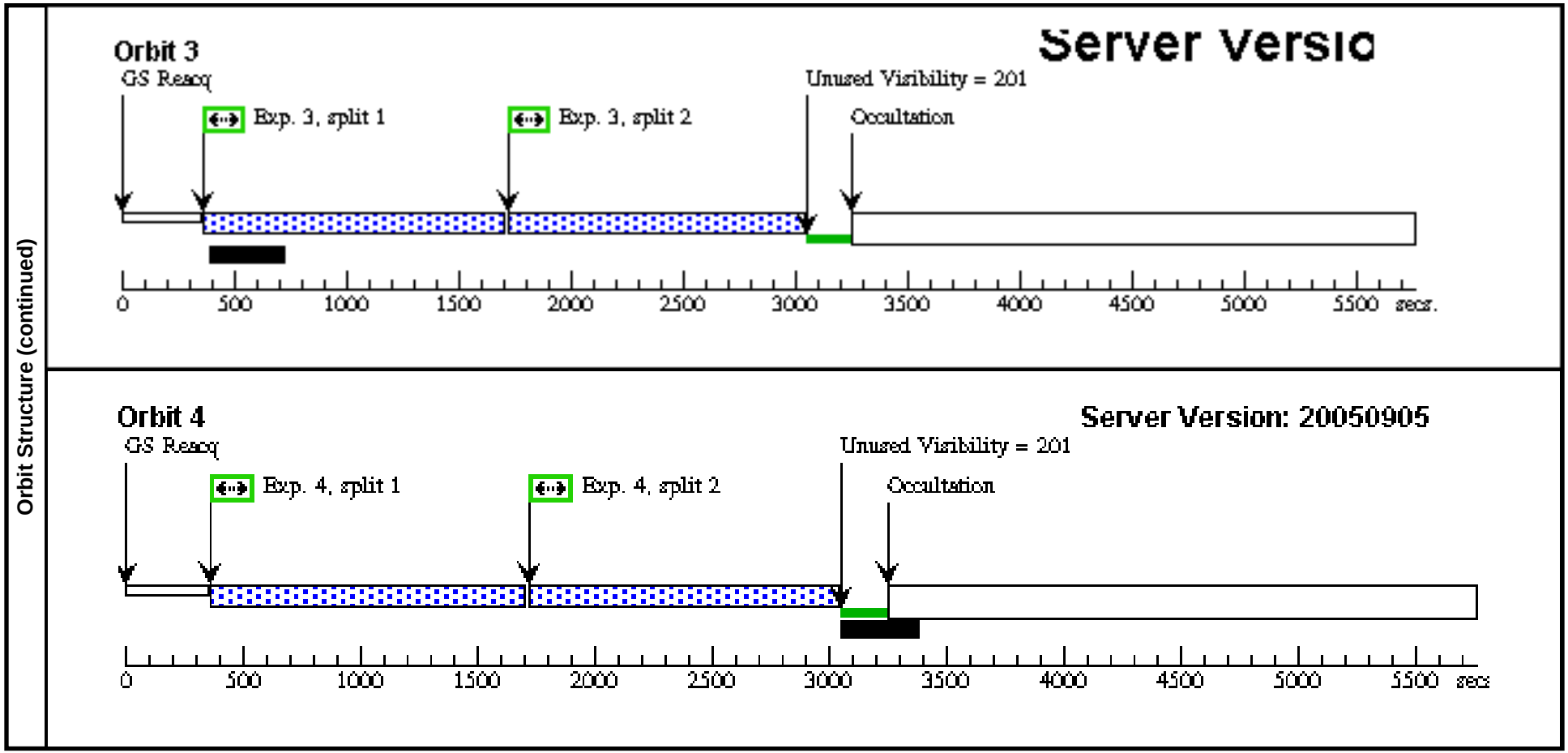
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	NOPOL	(1) CRAB	ACS/WFC, ACCUM, WFC1-2K	F550M				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[1]***
2	POL0V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL0V				2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[2]***
3	POL60V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL60V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[3]***
4	POL120V	(1) CRAB	ACS/WFC, ACCUM, WFC	F606W POL120V		SAME POS AS 2		2300.0 Secs *[==>(Split 1)]* *[==>(Split 2)]*	***[4]***

Orbit Structure






Orbit Structure (continued)
Orbit 3
Server Versio
GS Reacq
Exp. 3, split 1
Exp. 3, split 2
Unused Visibility = 201
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 4
Server Version: 20050905
GS Reacq
Exp. 4, split 1
Exp. 4, split 2
Unused Visibility = 201
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs