



## 11434 - WFC3 UVIS Fine Alignment

Cycle: 17, Proposal Category: SM4/WFC3

(Availability Mode: RESTRICTED)

### INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
<b>Dr. George Hartig (PI)</b>	<b>Space Telescope Science Institute</b>	<b>hartig@stsci.edu</b>

### VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) NGC188-58 NONE	WFC3/UVIS	4	02-Jul-2009 21:37:50.0	yes
51	(1) NGC188-58 NONE	WFC3/UVIS	4	02-Jul-2009 21:38:12.0	yes
02	(1) NGC188-58 NONE	WFC3/UVIS	4	02-Jul-2009 21:38:32.0	yes
52	(1) NGC188-58 NONE	WFC3/UVIS	4	02-Jul-2009 21:38:53.0	yes
03	NONE	WFC3/UVIS	1	02-Jul-2009 21:38:58.0	yes

17 Total Orbits Used

### ABSTRACT

The corrector mechanism will be used to bring the UVIS channel of WFC3 into optimal alignment with the OTA using analysis of star images over the field. Two visits are required; corrector offsets will be uplinked after each visit via realtime command.

This proposal is activity id WFC3-21

### **OBSERVING DESCRIPTION**

The UVIS corrector mechanism will be used to bring the instrument into optimal alignment with the OTA using analysis of star images over the field. Corrector mirror tip/tilt (inner/outer cylinders) will be adjusted to align the OTA and UVIS pupils, and the focus drive will be used to optimize image focus. The observed field must be sufficiently dense to provide good sampling over the FOV while providing enough isolated stars to permit accurate PSF measurement. If the field is astrometric and astrometric guide stars are used, the plate scale and image orientation may also be determined. NGC-188 star 58 meets these requirements, is available year-round and was used previously for ACS alignment. The F410M filter will be used to limit the passband at relatively short wavelength for improved PR accuracy. Full frame CR-split images will be obtained at 9 focus positions. Two visits are required; corrector offsets will be uplinked after each visit via realtime command, no sooner than 24 hrs after receipt of full data set.

### **REAL TIME JUSTIFICATION**

Realtime uplinks of the UVIS corrector settings needed to improve image quality are required after each visit and prior to the following observations, in order to iteratively progress to the optimized alignment. Uplinks should be scheduled no sooner than 24 hrs after receipt of data; requested corrector moves will be specified within 12 hrs after data receipt. Data should be fast-tracked through OPUS to permit timely analysis.

### **CALIBRATION JUSTIFICATION**

The image quality of all WFC3 UVIS science data relies on these alignment adjustments.

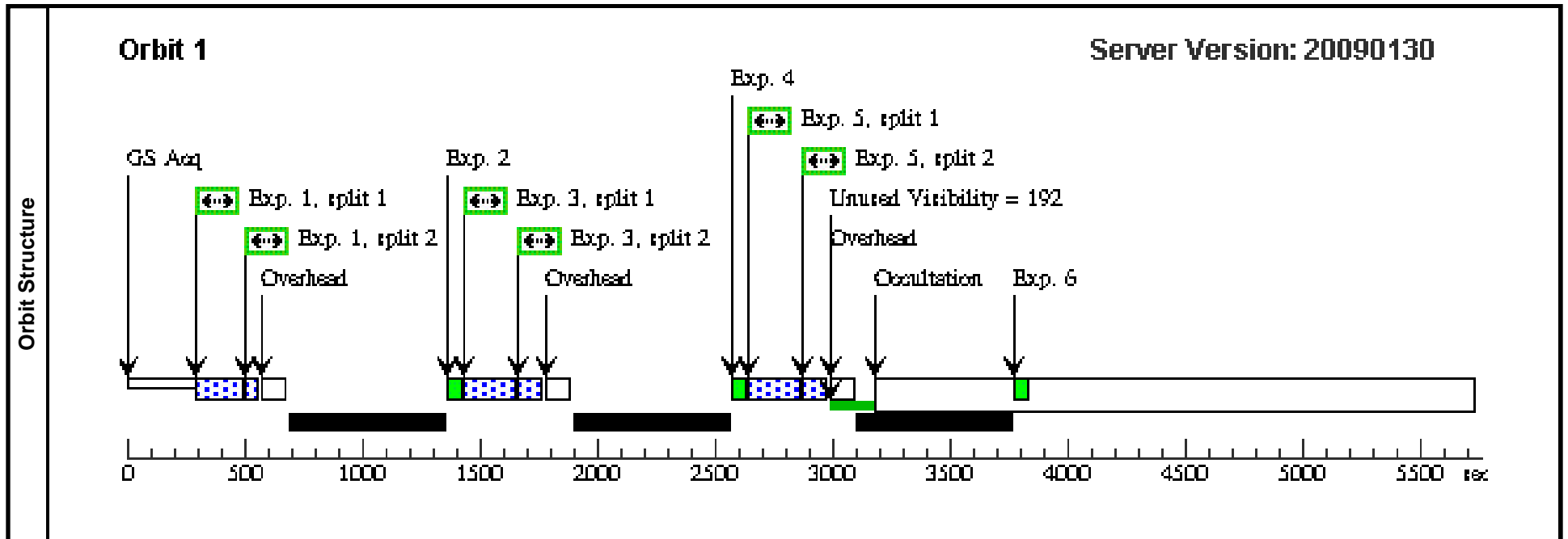
Proposal 11434 - Visit 01 - WFC3 UVIS Fine Alignment

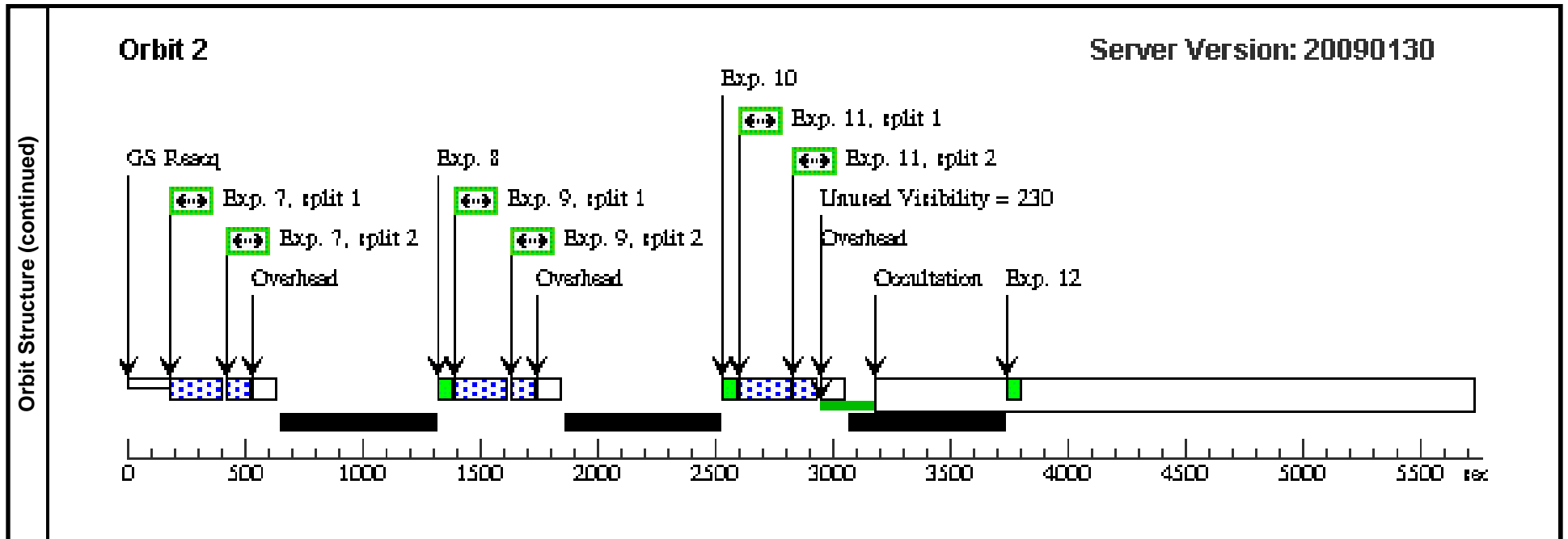
Fri Jul 03 01:39:01 GMT 2009

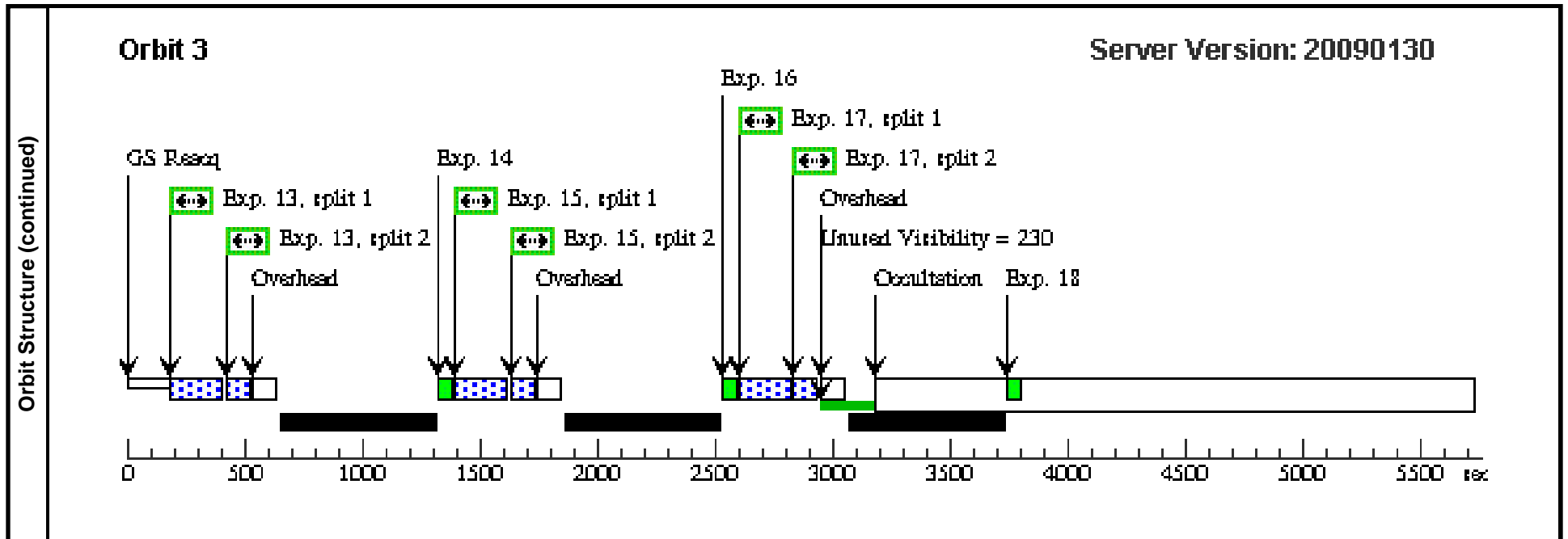
Visit	<b>Proposal 11434, Visit 01, scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none) <i>Comments: Execute after prop 11424, visit 4 (uplink).</i>									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	NGC188-58	RA: 00 47 4.4540 (11.7685583d) Dec: +85 16 32.70 (85.27575d) Equinox: J2000 Plate Id: ZZZZ	Proper Motion RA: -0.00257s/yr Proper Motion Dec: -0.0112"/yr Parallax: 0.0" Epoch of Position: 2000	V=14.65+/-0.05	Reference Frame: GSC1				
	<i>Comments: Use guide stars from the NGC188 Astrometric Catalog (Plate-ID ZZZZ)</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			100 Secs [==>(Split 1)] [==>(Split 2)]	[1]
	2		NONE	WFC3/UVIS, ALIGN			FOCUS=-1000		10 Secs [==>]	[1]
	3		(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[1]
	4		NONE	WFC3/UVIS, ALIGN			FOCUS=-750		10 Secs [==>]	[1]
	5		(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[1]
	6		NONE	WFC3/UVIS, ALIGN			FOCUS=-500		10 Secs [==>]	[1]
	7		(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[2]
	8		NONE	WFC3/UVIS, ALIGN			FOCUS=-250		10 Secs [==>]	[2]
	9		(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[2]
10		NONE	WFC3/UVIS, ALIGN			FOCUS=0		10 Secs [==>]	[2]	

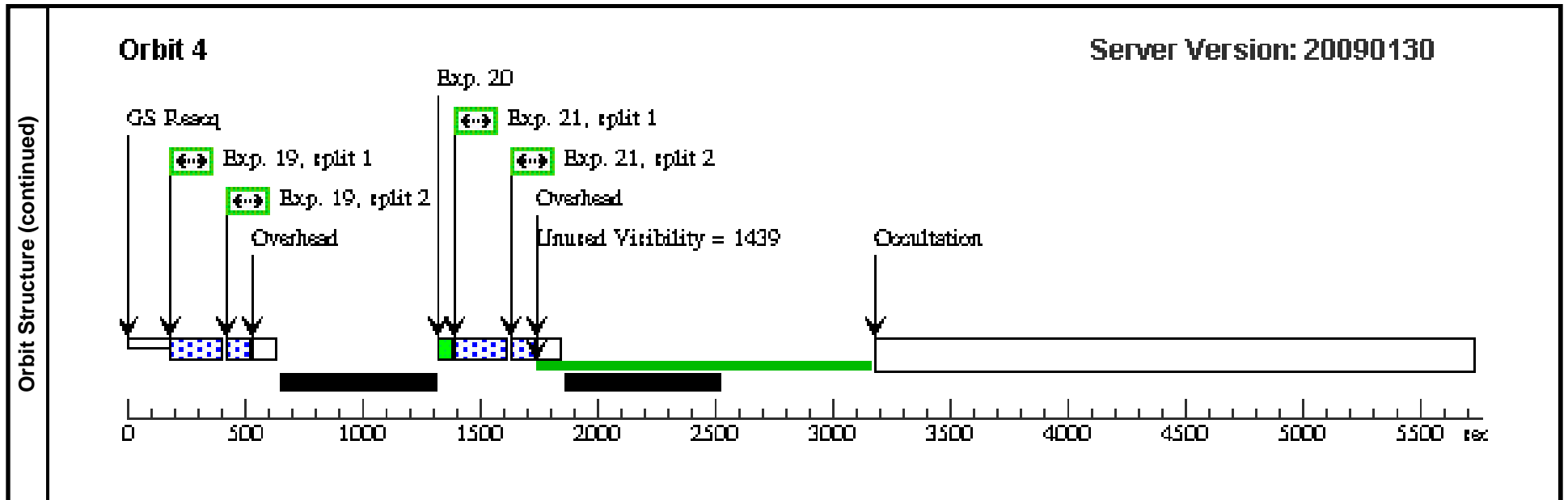
Proposal 11434 - Visit 01 - WFC3 UVIS Fine Alignment

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures (continued)	11	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[2]
	12	NONE	WFC3/UVIS, ALIGN		FOCUS=250			10 Secs [==>]	[2]
	13	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[3]
	14	NONE	WFC3/UVIS, ALIGN		FOCUS=500			10 Secs [==>]	[3]
	15	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[3]
	16	NONE	WFC3/UVIS, ALIGN		FOCUS=750			10 Secs [==>]	[3]
	17	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[3]
	18	NONE	WFC3/UVIS, ALIGN		FOCUS=1000			10 Secs [==>]	[3]
	19	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[4]
	20	NONE	WFC3/UVIS, ALIGN		FOCUS=0			10 Secs [==>]	[4]
	21	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[4]











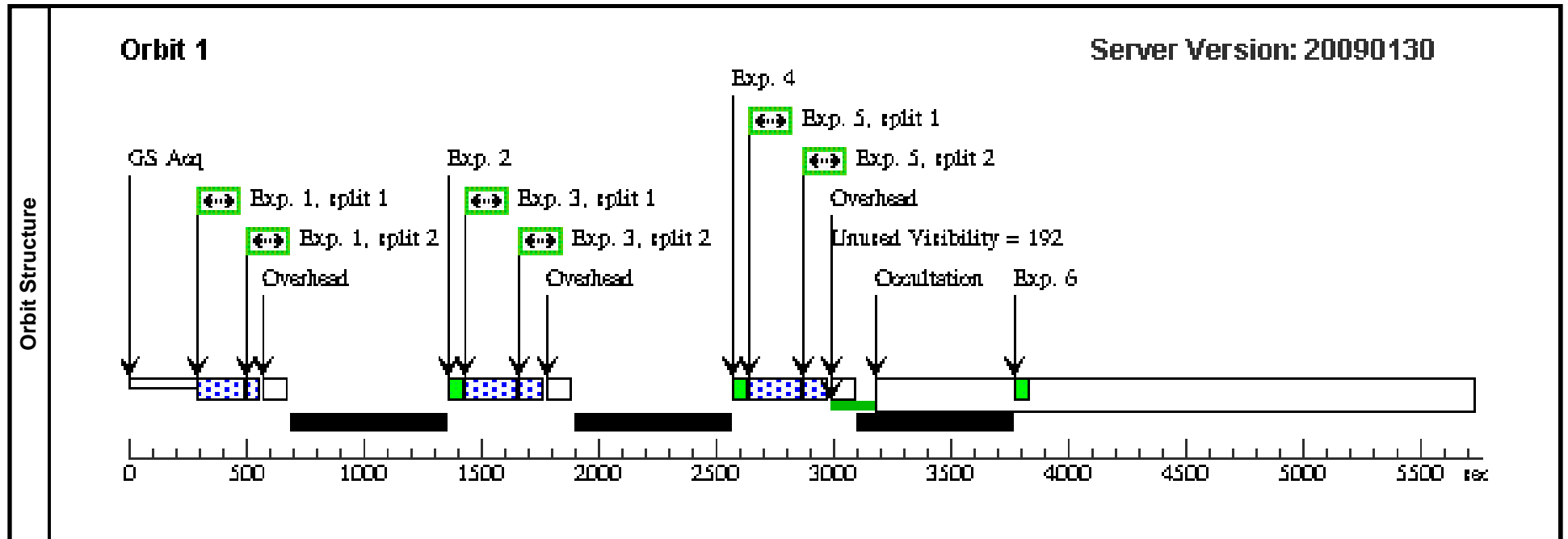
Proposal 11434 - Visit 51 - WFC3 UVIS Fine Alignment

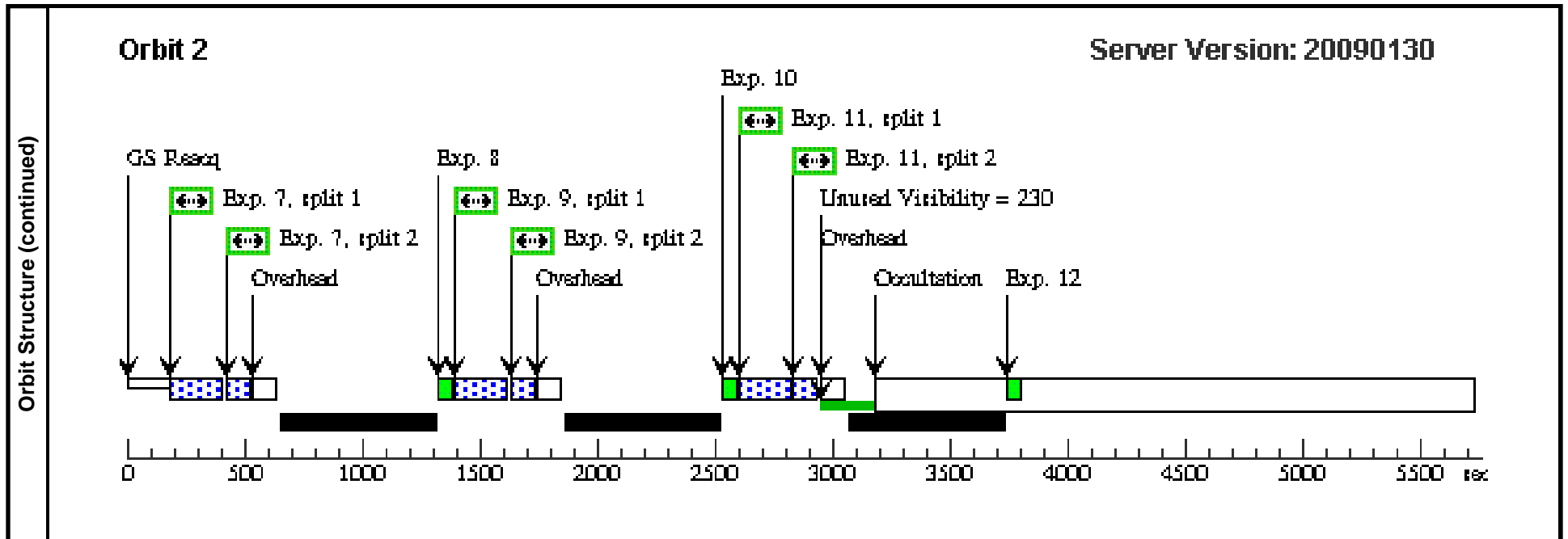
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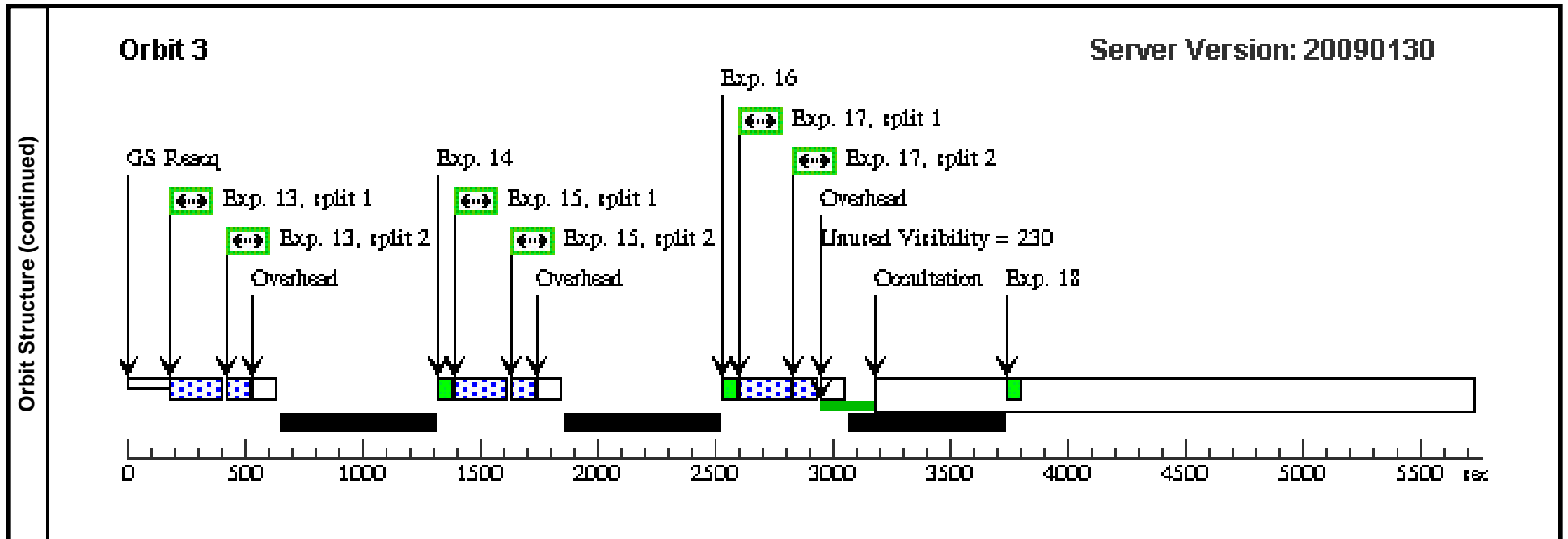
<b>Visit</b>	<b>Proposal 11434, Visit 51, implementation</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none) <i>Comments: Repeat of visit 01</i>										
	(Exposure 1 (Visit 51) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.										
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>					
	(1)	NGC188-58	RA: 00 47 4.4540 (11.7685583d) Dec: +85 16 32.70 (85.27575d) Equinox: J2000 Plate Id: ZZZZ	Proper Motion RA: -0.00257s/yr Proper Motion Dec: -0.0112"/yr Parallax: 0.0" Epoch of Position: 2000	V=14.65+/-0.05	Reference Frame: GSC1					
<i>Comments: Use guide stars from the NGC188 Astrometric Catalog (Plate-ID ZZZZ)</i>											
<b>Exposures</b>	<b>#</b>	<b>Label</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time/[Actual Dur.]</b>	<b>Orbit</b>	
	1		(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2	GS ACQ SCENARI O BASE1BR		100 Secs		
									[==>(Split 1)]	[1]	
									[==>(Split 2)]		
	2		NONE	WFC3/UVIS, ALIGN			FOCUS=-1000			10 Secs	
									[==>]	[1]	
	3		(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M		CR-SPLIT=2			200 Secs	
									[==>(Split 1)]	[1]	
									[==>(Split 2)]		
4		NONE	WFC3/UVIS, ALIGN			FOCUS=-750			10 Secs		
								[==>]	[1]		
5		(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M		CR-SPLIT=2			200 Secs		
								[==>(Split 1)]	[1]		
								[==>(Split 2)]			
6		NONE	WFC3/UVIS, ALIGN			FOCUS=-500			10 Secs		
								[==>]	[1]		
7		(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M		CR-SPLIT=2			200 Secs		
								[==>(Split 1)]	[2]		
								[==>(Split 2)]			
8		NONE	WFC3/UVIS, ALIGN			FOCUS=-250			10 Secs		
								[==>]	[2]		

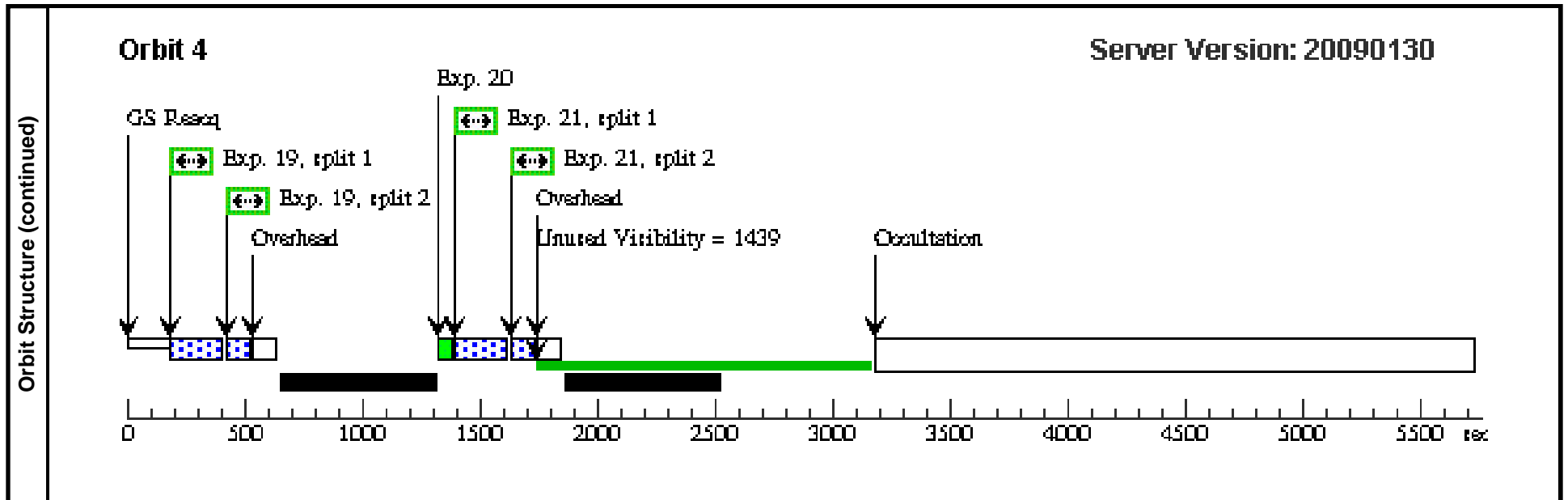
Proposal 11434 - Visit 51 - WFC3 UVIS Fine Alignment

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures (continued)	9	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[2]
	10	NONE	WFC3/UVIS, ALIGN		FOCUS=0			10 Secs [==>]	[2]
	11	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[2]
	12	NONE	WFC3/UVIS, ALIGN		FOCUS=250			10 Secs [==>]	[2]
	13	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[3]
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	15	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[3]
	16	NONE	WFC3/UVIS, ALIGN		FOCUS=750			10 Secs [==>]	[3]
	17	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[3]
	18	NONE	WFC3/UVIS, ALIGN		FOCUS=1000			10 Secs [==>]	[3]
	19	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[4]
	20	NONE	WFC3/UVIS, ALIGN		FOCUS=0			10 Secs [==>]	[4]
	21	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[4]









Proposal 11434 - Visit 02 - WFC3 UVIS Fine Alignment

Fri Jul 03 01:39:05 GMT 2009

<b>Visit</b>	<b>Proposal 11434, Visit 02, scheduling</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 01 BY 48 H TO 96 H <i>Comments: Begin with uplink to set focus and cylinder positions for UVIS corrector per visit 1 results.</i>																																																																											
	(Visit 02) Warning (Orbit Planner): VISIBILITY OVERRUN																																																																											
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<b>Fixed Targets</b>	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>NGC188-58</td> <td>RA: 00 47 4.4540 (11.7685583d) Dec: +85 16 32.70 (85.27575d) Equinox: J2000 Plate Id: ZZZZ</td> <td>Proper Motion RA: -0.00257s/yr Proper Motion Dec: -0.0112"/yr Parallax: 0.0" Epoch of Position: 2000</td> <td>V=14.65+/-0.05</td> <td>Reference Frame: GSC1</td> </tr> </tbody> </table>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	NGC188-58	RA: 00 47 4.4540 (11.7685583d) Dec: +85 16 32.70 (85.27575d) Equinox: J2000 Plate Id: ZZZZ	Proper Motion RA: -0.00257s/yr Proper Motion Dec: -0.0112"/yr Parallax: 0.0" Epoch of Position: 2000	V=14.65+/-0.05	Reference Frame: GSC1	<i>Comments: Use guide stars from the NGC188 Astrometric Catalog (Plate-ID ZZZZ)</i>																																																														
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Proposal 11434 - Visit 02 - WFC3 UVIS Fine Alignment

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
Exposures (continued)	5	NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS 0; QESIPARM OSTEP S 3; QELOGSHEET SP_ 2 -3; QELOGSHEET SP_ 3 0		10 Secs [==>]	[1]	
	<i>Comments: iINNER=-3, OUTER=0; ISTEPS=0, OSTEPS=3</i>									
	6	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[1]	
	7	NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS 0; QESIPARM OSTEP S 3; QELOGSHEET SP_ 2 -3; QELOGSHEET SP_ 3 3		10 Secs [==>]	[1]	
	<i>Comments: iINNER=-3, OUTER=3; ISTEPS=0, OSTEPS=3</i>									
	8	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[2]	
	9	NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS 3; QESIPARM OSTEP S -6; QELOGSHEET SP_ 2 0; QELOGSHEET SP_ 3 -3		10 Secs [==>]	[2]	
	<i>Comments: iINNER=0, OUTER=-3; ISTEPS=3, OSTEPS=-6</i>									
	10	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[2]	

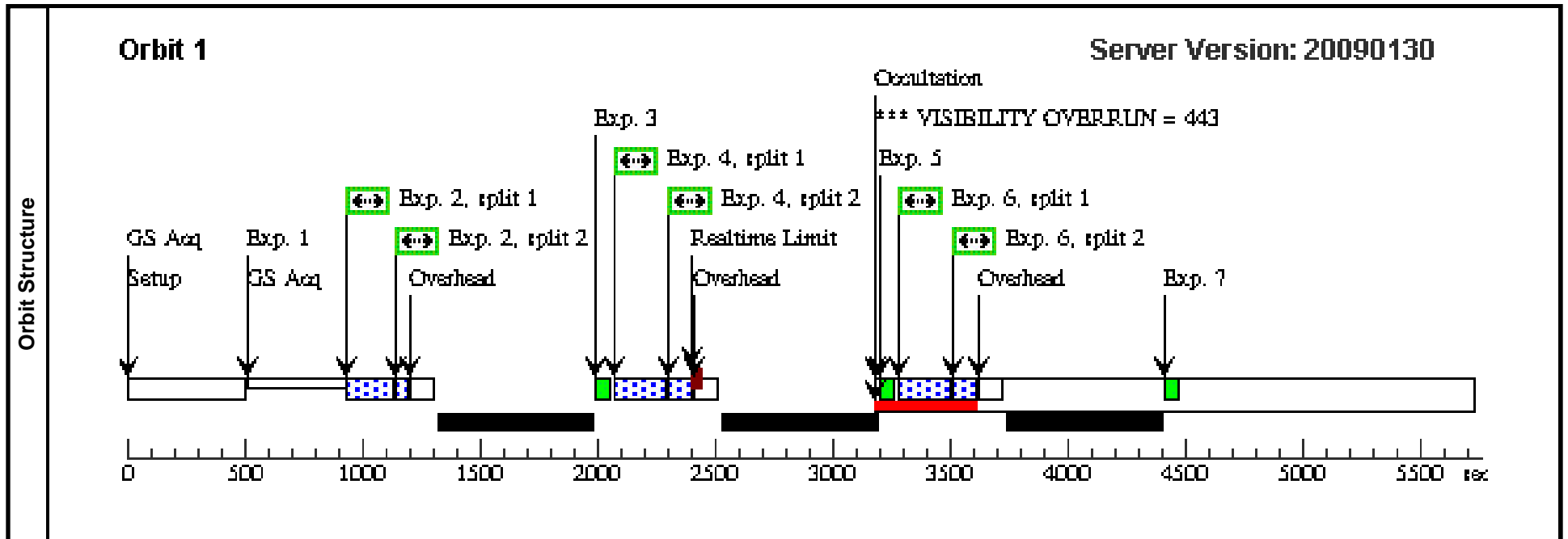


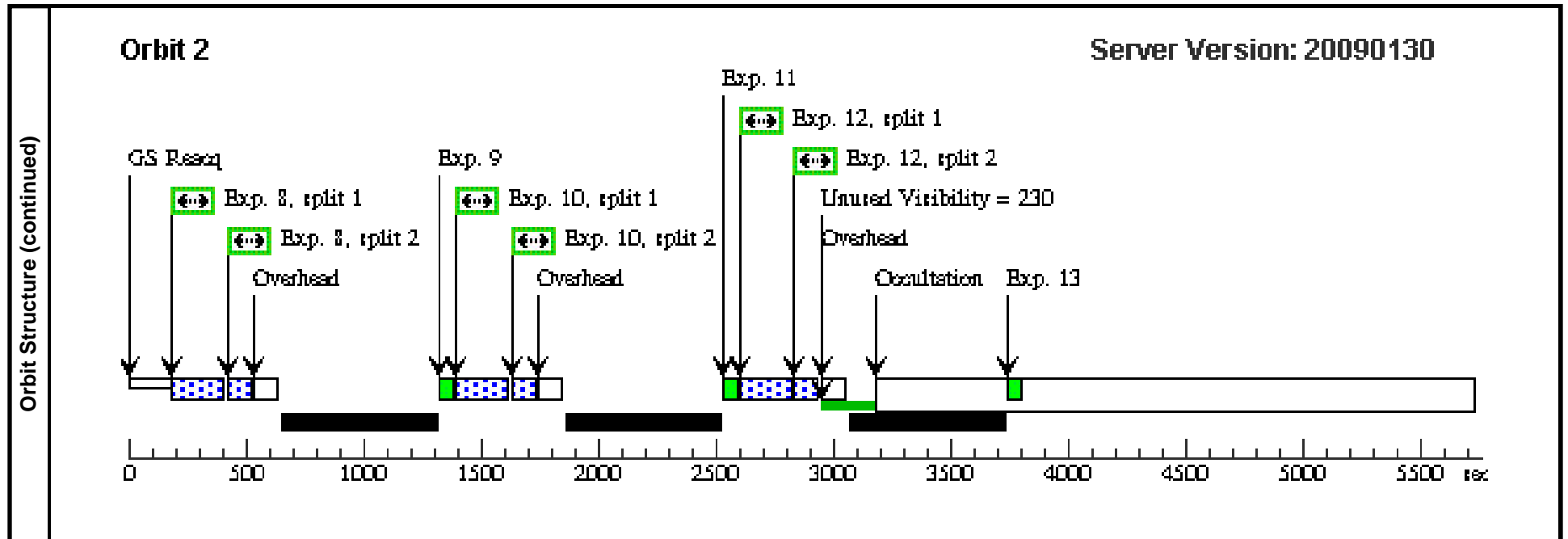
Proposal 11434 - Visit 02 - WFC3 UVIS Fine Alignment

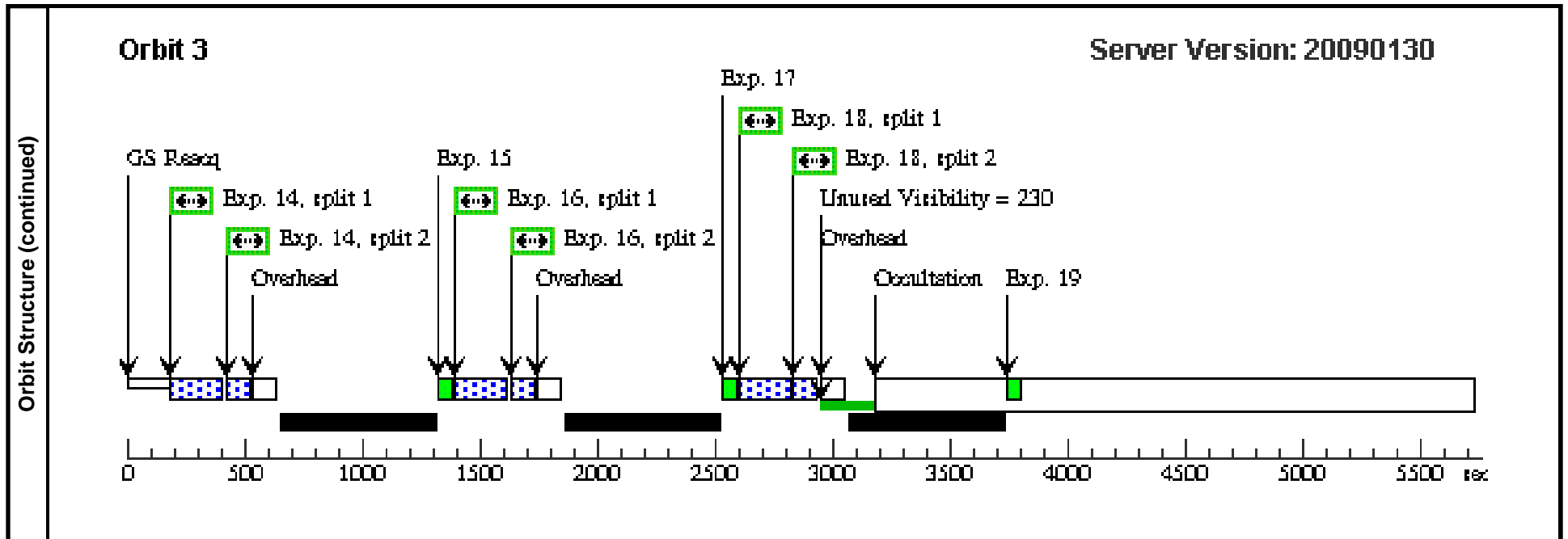
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
Exposures (continued)	11	NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS 0; QESIPARM OSTEP S 3; QELOGSHEET SP_ 2 0; QELOGSHEET SP_ 3 0		10 Secs [==>]	[2]	
	<i>Comments: iINNER=0, OUTER=0; ISTEPS=0, OSTEPS=3</i>									
	12	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2				200 Secs [==>(Split 1)] [==>(Split 2)]	[2]
	13	NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS 0; QESIPARM OSTEP S 3; QELOGSHEET SP_ 2 0; QELOGSHEET SP_ 3 3		10 Secs [==>]	[2]	
	<i>Comments: iINNER=0, OUTER=3; ISTEPS=0, OSTEPS=3</i>									
	14	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2				200 Secs [==>(Split 1)] [==>(Split 2)]	[3]
15	NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS 3; QESIPARM OSTEP S -6; QELOGSHEET SP_ 2 3; QELOGSHEET SP_ 3 -3		10 Secs [==>]	[3]		
<i>Comments: iINNER=3, OUTER=-3; ISTEPS=3, OSTEPS=-6</i>										
16	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2				200 Secs [==>(Split 1)] [==>(Split 2)]	[3]	

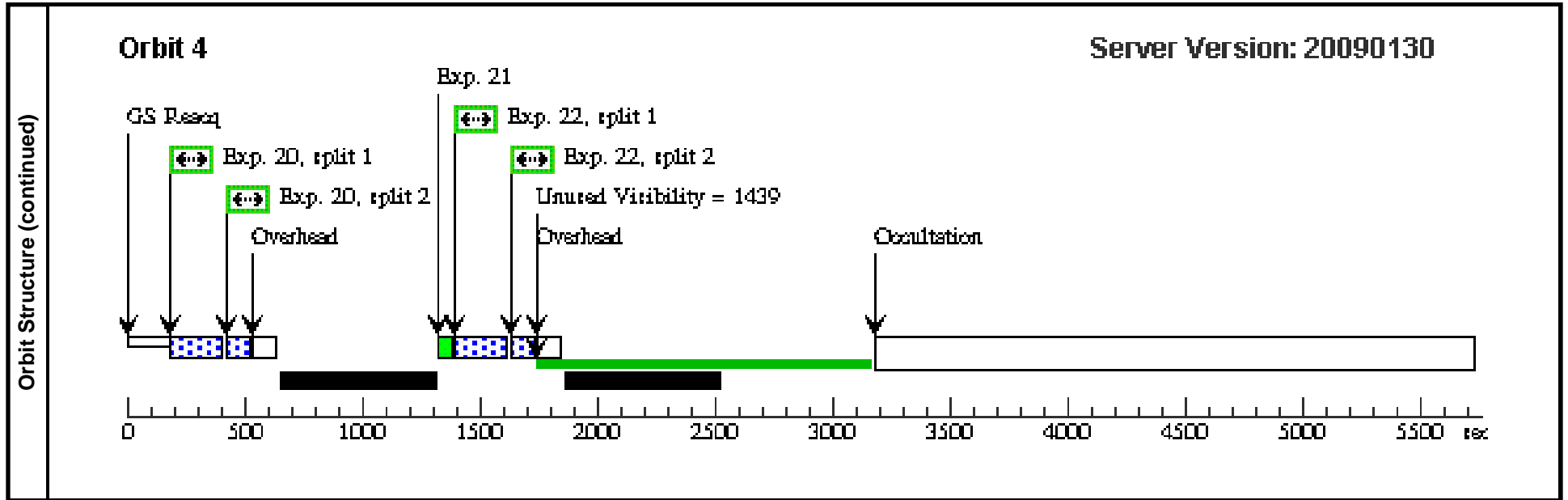
Proposal 11434 - Visit 02 - WFC3 UVIS Fine Alignment

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
Exposures (continued)	17	NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS 0; QESIPARM OSTEP S 3; QELOGSHEET SP_ 2 3; QELOGSHEET SP_ 3 0		10 Secs [==>]	[3]	
	<i>Comments: iINNER=3, OUTER=0; ISTEPS=0, OSTEPS=3</i>									
	18	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2				200 Secs [==>(Split 1)] [==>(Split 2)]	[3]
	19	NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS 0; QESIPARM OSTEP S 3; QELOGSHEET SP_ 2 3; QELOGSHEET SP_ 3 3		10 Secs [==>]	[3]	
	<i>Comments: iINNER=3, OUTER=3; ISTEPS=0, OSTEPS=3</i>									
	20	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2				200 Secs [==>(Split 1)] [==>(Split 2)]	[4]
21	NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS -3; QESIPARM OSTEP S -3; QELOGSHEET SP_ 2 0; QELOGSHEET SP_ 3 0		10 Secs [==>]	[4]		
<i>Comments: iINNER=0, OUTER=0; ISTEPS=-3, OSTEPS=-3</i>										
22	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2				200 Secs [==>(Split 1)] [==>(Split 2)]	[4]	









Proposal 11434 - Visit 52 - WFC3 UVIS Fine Alignment

Fri Jul 03 01:39:07 GMT 2009

<b>Visit</b>	<b>Proposal 11434, Visit 52, implementation</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none) <i>Comments: Should be scheduled about 2 days after visit 51.</i>																																																																						
	<b>Diagnosics</b> (Visit 52) Warning (Orbit Planner): VISIBILITY OVERRUN (Exposure 2 (Visit 52) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.																																																																						
<b>Fixed Targets</b>	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>NGC188-58</td> <td>RA: 00 47 4.4540 (11.7685583d) Dec: +85 16 32.70 (85.27575d) Equinox: J2000 Plate Id: ZZZZ</td> <td>Proper Motion RA: -0.00257s/yr Proper Motion Dec: -0.0112"/yr Parallax: 0.0" Epoch of Position: 2000</td> <td>V=14.65+/-0.05</td> <td>Reference Frame: GSC1</td> </tr> </tbody> </table>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	NGC188-58	RA: 00 47 4.4540 (11.7685583d) Dec: +85 16 32.70 (85.27575d) Equinox: J2000 Plate Id: ZZZZ	Proper Motion RA: -0.00257s/yr Proper Motion Dec: -0.0112"/yr Parallax: 0.0" Epoch of Position: 2000	V=14.65+/-0.05	Reference Frame: GSC1	<i>Comments: Use guide stars from the NGC188 Astrometric Catalog (Plate-ID ZZZZ)</i>																																																									
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3		NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS -3; QESIPARM OSTEP S -3; QELOGSHEET SP_ 2 -3; QELOGSHEET SP_ 3 -3		10 Secs [==>]	[1]																																																														
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4		(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[1]																																																														

Proposal 11434 - Visit 52 - WFC3 UVIS Fine Alignment

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
Exposures (continued)	5	NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS 0; QESIPARM OSTEP S 3; QELOGSHEET SP_ 2 -3; QELOGSHEET SP_ 3 0		10 Secs [==>]	[1]	
	<i>Comments: iINNER=-3, OUTER=0; ISTEPS=0, OSTEPS=3</i>									
	6	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2				200 Secs [==>(Split 1)] [==>(Split 2)]	[1]
	7	NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS 0; QESIPARM OSTEP S 3; QELOGSHEET SP_ 2 -3; QELOGSHEET SP_ 3 3		10 Secs [==>]	[1]	
	<i>Comments: iINNER=-3, OUTER=3; ISTEPS=0, OSTEPS=3</i>									
	8	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2				200 Secs [==>(Split 1)] [==>(Split 2)]	[2]
9	NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS 3; QESIPARM OSTEP S -6; QELOGSHEET SP_ 2 0; QELOGSHEET SP_ 3 -3		10 Secs [==>]	[2]		
<i>Comments: iINNER=0, OUTER=-3; ISTEPS=3, OSTEPS=-6</i>										
10	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2				200 Secs [==>(Split 1)] [==>(Split 2)]	[2]	

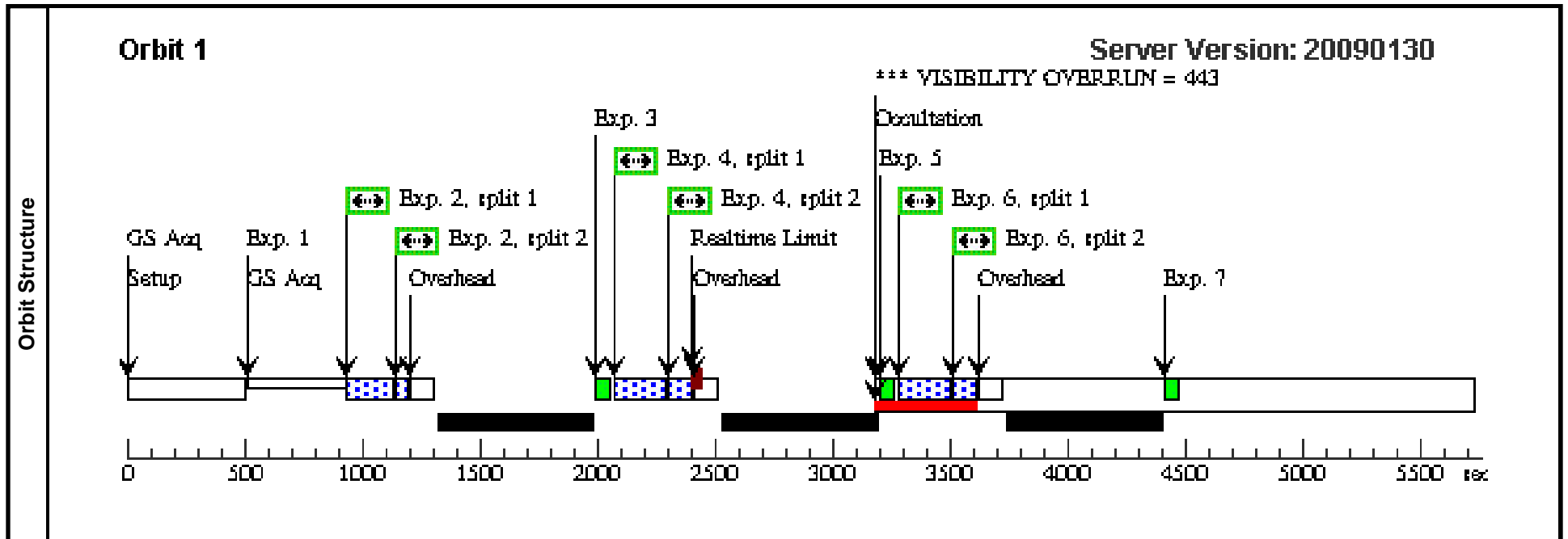


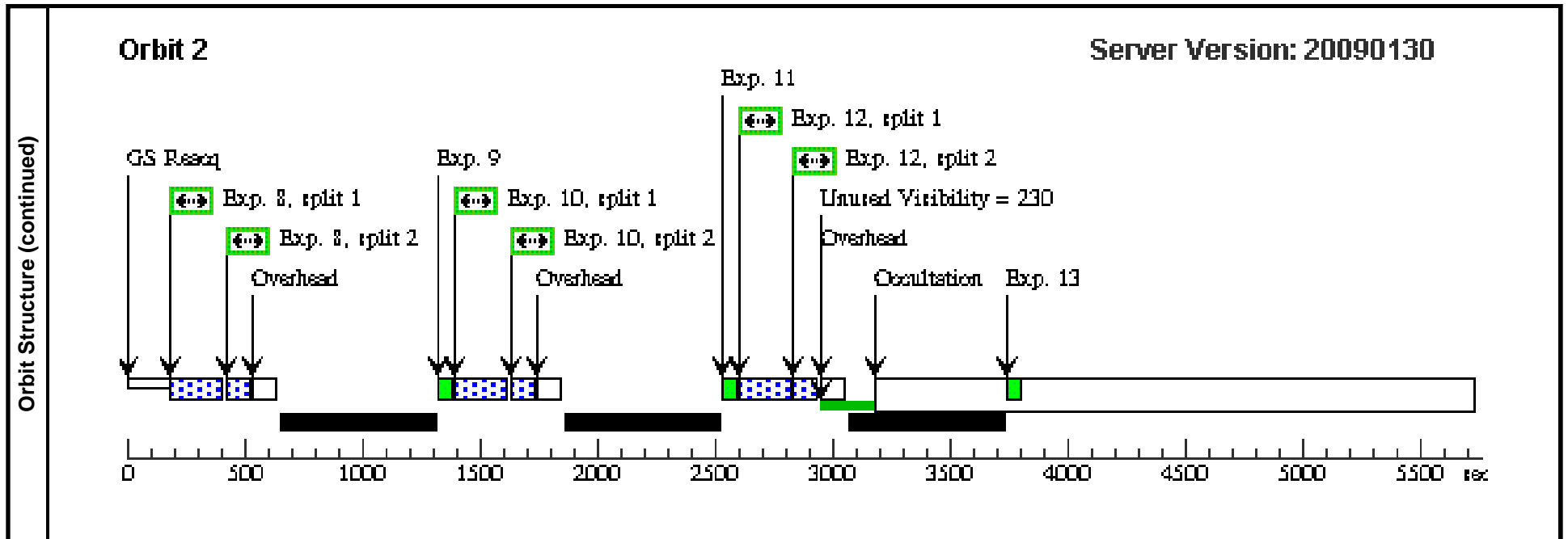
Proposal 11434 - Visit 52 - WFC3 UVIS Fine Alignment

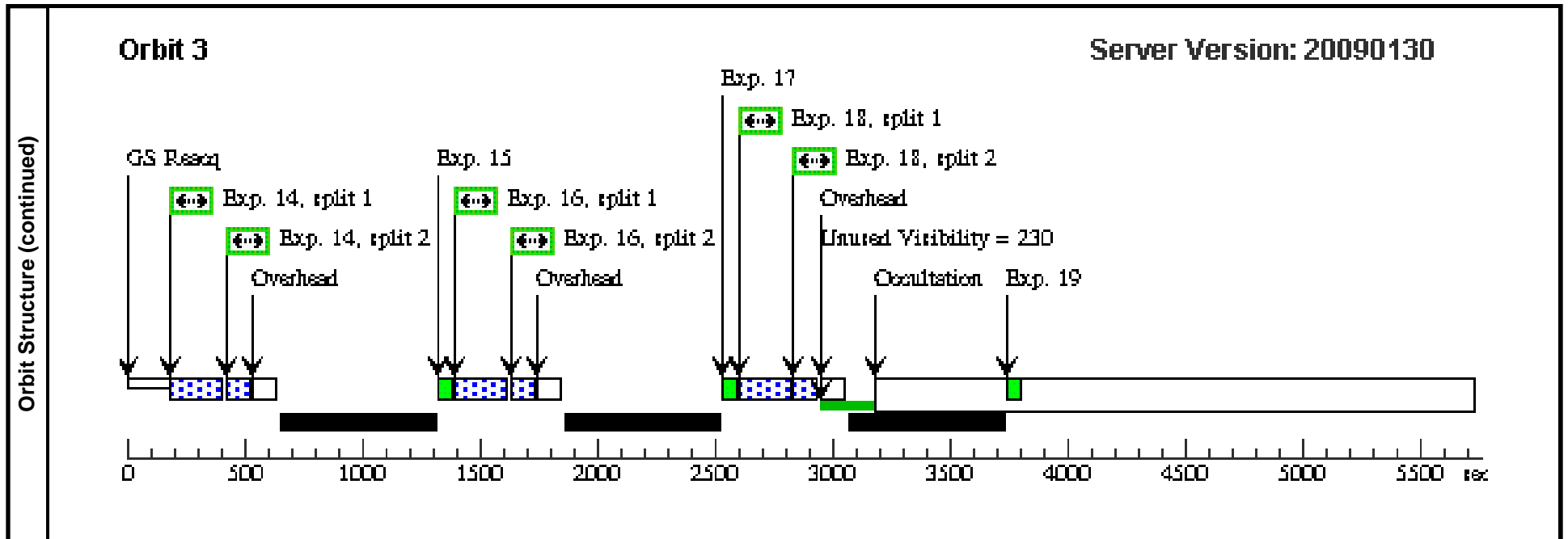
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures (continued)	11	NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS 0; QESIPARM OSTEP S 3; QELOGSHEET SP_ 2 0; QELOGSHEET SP_ 3 0		10 Secs [==>]	[2]
	<i>Comments: iINNER=0, OUTER=0; ISTEPS=0, OSTEPS=3</i>								
	12	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[2]
	13	NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS 0; QESIPARM OSTEP S 3; QELOGSHEET SP_ 2 0; QELOGSHEET SP_ 3 3		10 Secs [==>]	[2]
	<i>Comments: iINNER=0, OUTER=3; ISTEPS=0, OSTEPS=3</i>								
	14	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[3]
15	NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS 3; QESIPARM OSTEP S -6; QELOGSHEET SP_ 2 3; QELOGSHEET SP_ 3 -3		10 Secs [==>]	[3]	
<i>Comments: iINNER=3, OUTER=-3; ISTEPS=3, OSTEPS=-6</i>									
16	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2			200 Secs [==>(Split 1)] [==>(Split 2)]	[3]	

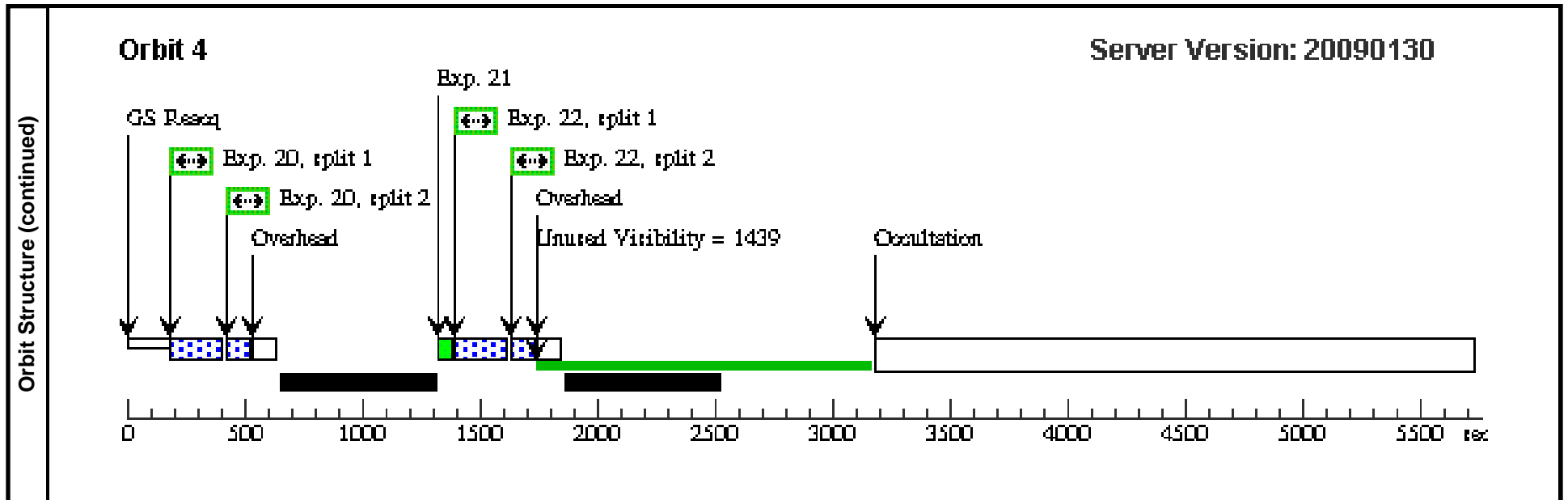
Proposal 11434 - Visit 52 - WFC3 UVIS Fine Alignment

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
Exposures (continued)	17	NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS 0; QESIPARM OSTEP S 3; QELOGSHEET SP_ 2 3; QELOGSHEET SP_ 3 0		10 Secs [==>]	[3]	
	<i>Comments: iINNER=3, OUTER=0; ISTEPS=0, OSTEPS=3</i>									
	18	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2				200 Secs [==>(Split 1)] [==>(Split 2)]	[3]
	19	NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS 0; QESIPARM OSTEP S 3; QELOGSHEET SP_ 2 3; QELOGSHEET SP_ 3 3		10 Secs [==>]	[3]	
	<i>Comments: iINNER=3, OUTER=3; ISTEPS=0, OSTEPS=3</i>									
	20	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2				200 Secs [==>(Split 1)] [==>(Split 2)]	[4]
21	NONE	WFC3/UVIS, ALIGN		TILT=YES	QESIPARM ISTEPS -3; QESIPARM OSTEP S -3; QELOGSHEET SP_ 2 0; QELOGSHEET SP_ 3 0		10 Secs [==>]	[4]		
<i>Comments: iINNER=0, OUTER=0; ISTEPS=-3, OSTEPS=-3</i>										
22	(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F410M	CR-SPLIT=2				200 Secs [==>(Split 1)] [==>(Split 2)]	[4]	









<b>Visit</b>	Proposal 11434, Visit 03, scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 02 BY 48 H TO 96 H Comments: Uplink to offset UVIS corrector focus and cylinder positions from vist 2 results using ICORREL commands.																																							
	<b>Exposures</b>	<table border="1"> <thead> <tr> <th>#</th> <th>Label</th> <th>Target</th> <th>Config,Mode,Aperture</th> <th>Spectral Els.</th> <th>Opt. Params.</th> <th>Special Reqs.</th> <th>Groups</th> <th>Exp. Time/[Actual Dur.]</th> <th>Orbit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td>NONE</td> <td>WFC3/UVIS, ALIGN</td> <td></td> <td></td> <td>REQ UPLINK</td> <td></td> <td>0 Secs</td> <td></td> </tr> <tr> <td colspan="8"></td> <td>[==&gt;]</td> <td>[1]</td> </tr> </tbody> </table>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	1		NONE	WFC3/UVIS, ALIGN			REQ UPLINK		0 Secs										[==>]	[1]	Comments: Uplink to offset UVIS corrector focus and cylinder positions from visit 2 using ICORREL commands.							
#		Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit																														
1		NONE	WFC3/UVIS, ALIGN			REQ UPLINK		0 Secs																																
								[==>]	[1]																															
<b>Orbit Structure</b>	<p><b>Orbit 1</b> <span style="float: right;"><b>Server Version: 20090130</b></span></p> <p>GS Acq Unused Visibility = 3025</p> <p>Timeline labels: Setup, Exp. 1, Realtime Limit, Occultation</p> <p>X-axis: 0, 500, 1000, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000, 5500 sec</p>																																							
	(This section contains the detailed orbit structure diagram described above.)																																							