



11138 - The Physics of the Jets of Powerful Radio Galaxies and Quasars

Cycle: 16, Proposal Category: GO

(Availability Mode: SUPPORTED)

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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	(2) 1150+497	ACS/WFC	3	20-Nov-2009 21:00:54.0	yes
02	(2) 1150+497	ACS/WFC	3	20-Nov-2009 21:00:58.0	yes
03	(2) 1150+497	ACS/WFC	4	20-Nov-2009 21:01:05.0	yes
50	(1) PKS1136-135	WFPC2	5	20-Nov-2009 21:01:10.0	yes
51	(1) PKS1136-135	WFPC2	4	20-Nov-2009 21:01:18.0	yes
60	(1) PKS1136-135	WFPC2	5	20-Nov-2009 21:01:24.0	yes
61	(1) PKS1136-135	WFPC2	4	20-Nov-2009 21:01:28.0	yes
70	(1) PKS1136-135	WFPC2	5	20-Nov-2009 21:01:32.0	yes
71	(1) PKS1136-135	WFPC2	4	20-Nov-2009 21:01:36.0	yes

37 Total Orbits Used

ABSTRACT

We propose to obtain HST polarimetry of the jets of the quasars 1150+497 and PKS 1136-135. Our goal is to solve the riddle of their high-energy emission mechanism, and tackle issues such as particle acceleration and jet dynamics. Our targets are the optically brightest quasar jets, and they span the range of luminosities and beaming parameters seen in these objects. Recent observations with Spitzer, HST and Chandra have shed new light on the spectral morphology of quasar jets, throwing wide open the question of the nature of their optical and X-ray emission. Three mechanisms are possible, including synchrotron emission as well as two Comptonization processes. Polarimetry can uniquely determine which of these mechanisms operates in the optical. We will compare the optical polarimetry to in-hand radio polarimetry as well as in-hand and new Spitzer, HST and Chandra imaging to gain new insights on the structure of these jets, as well as particle acceleration mechanisms and jet dynamics.

OBSERVING DESCRIPTION

In this proposal, our aim is to obtain polarimetry of the jets of the quasars of PKS 1136-135 and 1150+497. We are doing these observations with NICMOS/NIC2/POLL for 1150+497 and with WFPC2/WF/F555W/POLQ for PKS1136-135. The different instruments and hence observing bands have been chosen to meet the needs of their respective spectral energy distributions. Observations of PKS 1136-135 have been broken down into 2 visits per polarizer because of the number of orbits (7 per polarizer).

We are requiring all observations of a given object to have the same ORIENT. This cuts down on rotations, which are an unnecessary complicating factor, particularly when the polarizers are in. We are restricting ORIENTs so that the jet is not near a diffraction spike.

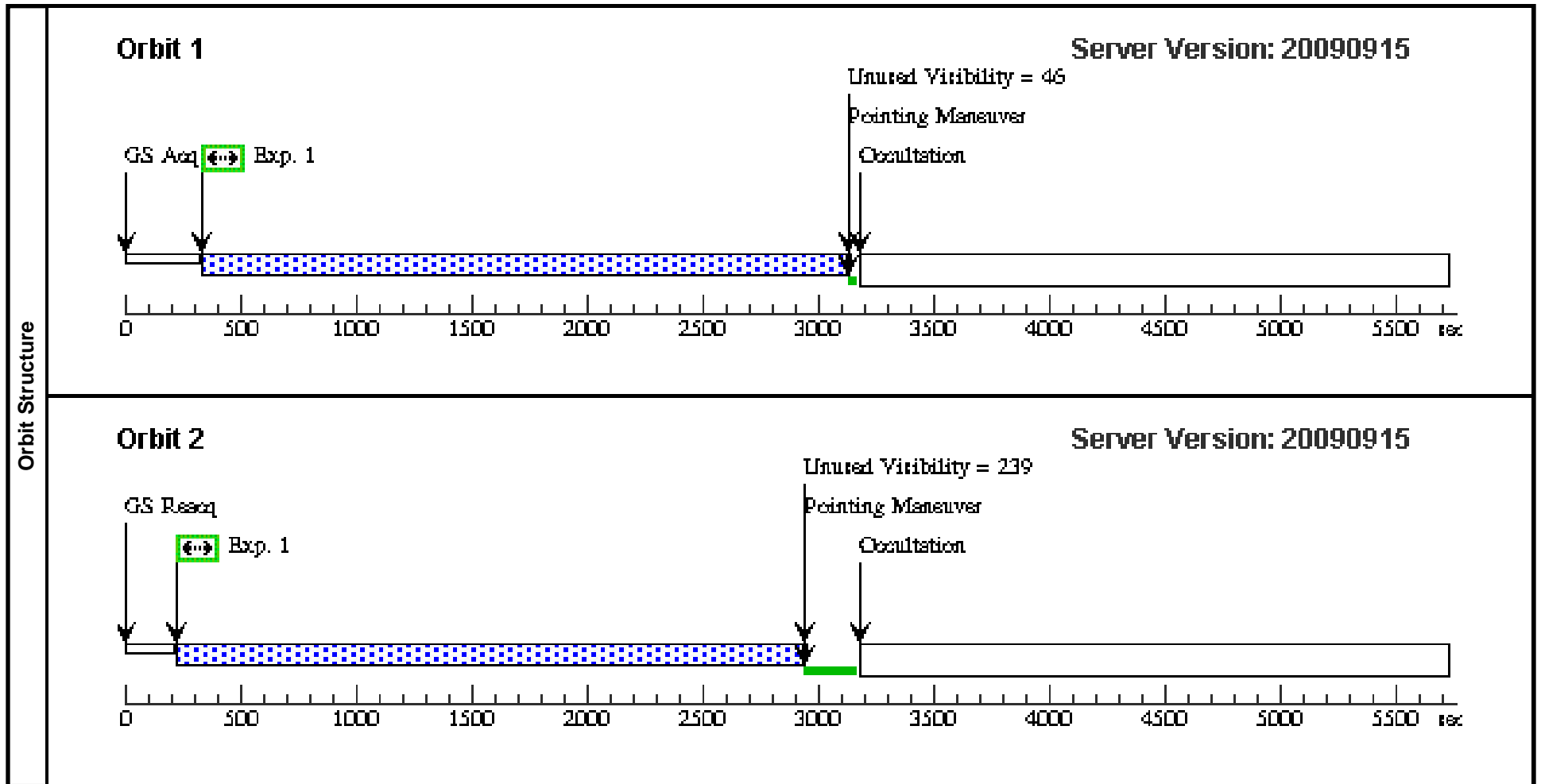
CALIBRATION JUSTIFICATION

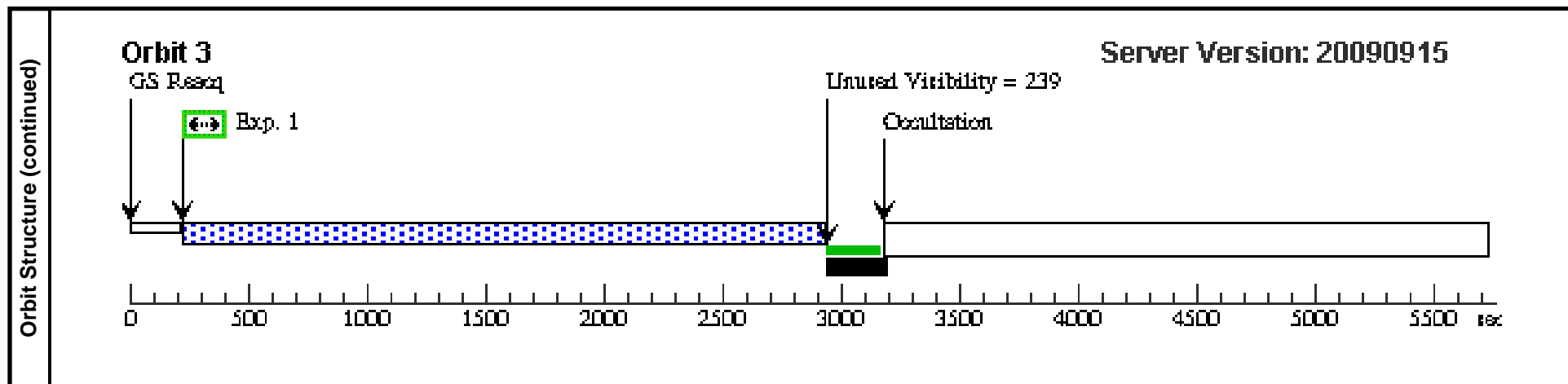
Observations of a background field have been included for 1150+497. We are doing this with a POS TARG, hence the warning. All background observations for 1150+497 are being done in a single orbit (orbit 4 within visit 03).

Proposal 11138 - Visit 01 - The Physics of the Jets of Powerful Radio Galaxies and Quasars

Sat Nov 21 02:01:40 GMT 2009

Visit	Proposal 11138, Visit 01, implementation Diagnostic Status: Warning Scientific Instruments: ACS/WFC Special Requirements: GYRO MODE 3GOBAD; ORIENT 270.0D TO 310.0 D; SEQ 01,02,03 WITHIN 14.0 D <i>Comments: 1150+497 OBSERVATIONS</i>										
	(Visit 01) Warning (Form): Gyro Mode overrides default value of 2G.										
Diagnosics											
Patterns	#	Primary Pattern				Secondary Pattern				Exposures	
	(4)	Pattern Type=ACS-WFC-DITHER- LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.170 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false						(1)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(2)	1150+497	RA: 11 53 24.5000 (178.3520833d) Dec: +49 31 8.80 (49.51911d) Equinox: J2000				V=19.1+/-0.1		Reference Frame: ICRS		
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1		(2) 1150+497	ACS/WFC, ACCUM, WFC1	F606W			Pattern 4, Exps 1-1 (4)	2534 Secs		
					POL0V				[==>(Pattern 1)]		[1]
									[==>(Pattern 2)]		[2]
								[==>(Pattern 3)]		[3]	

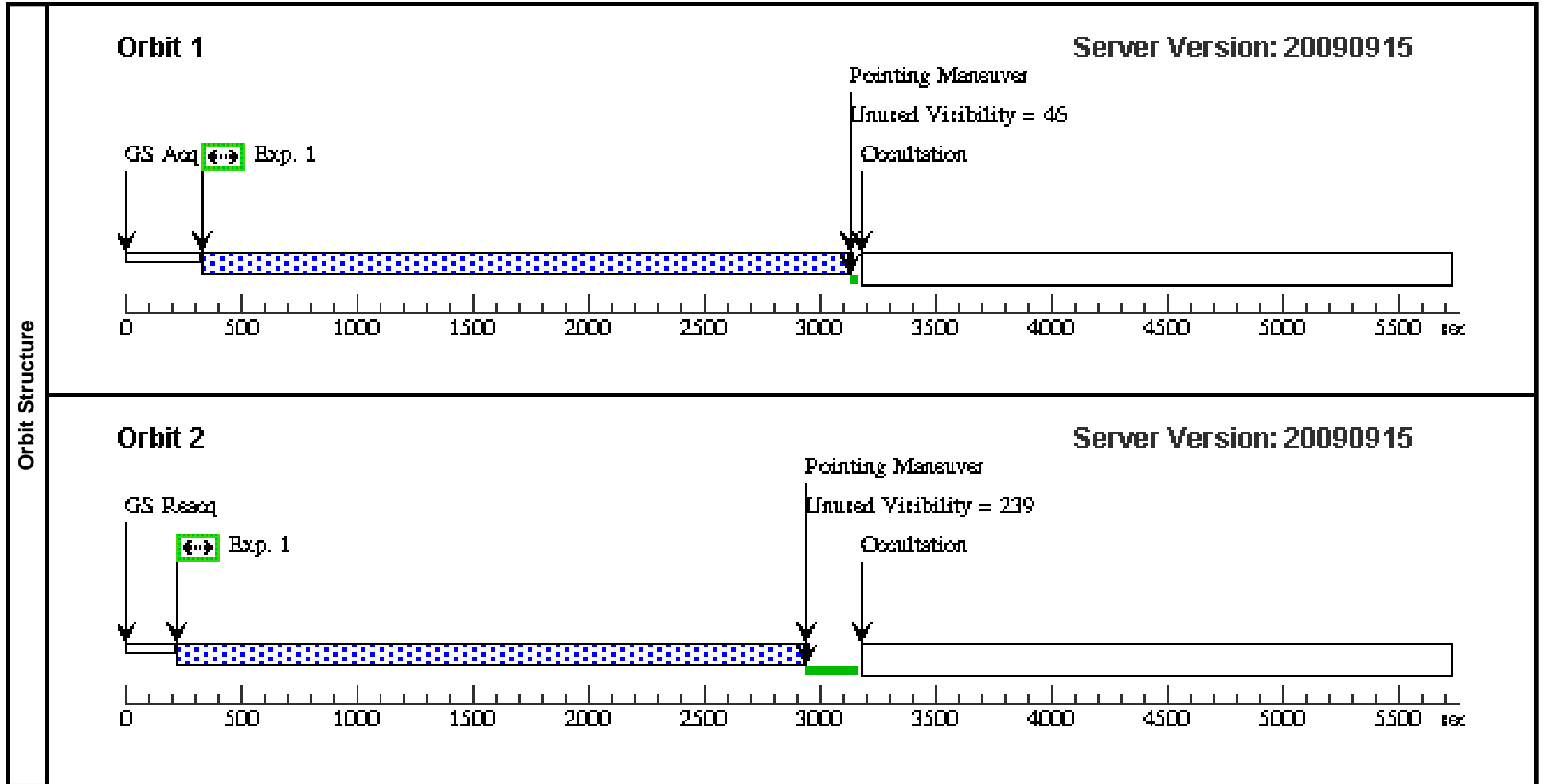


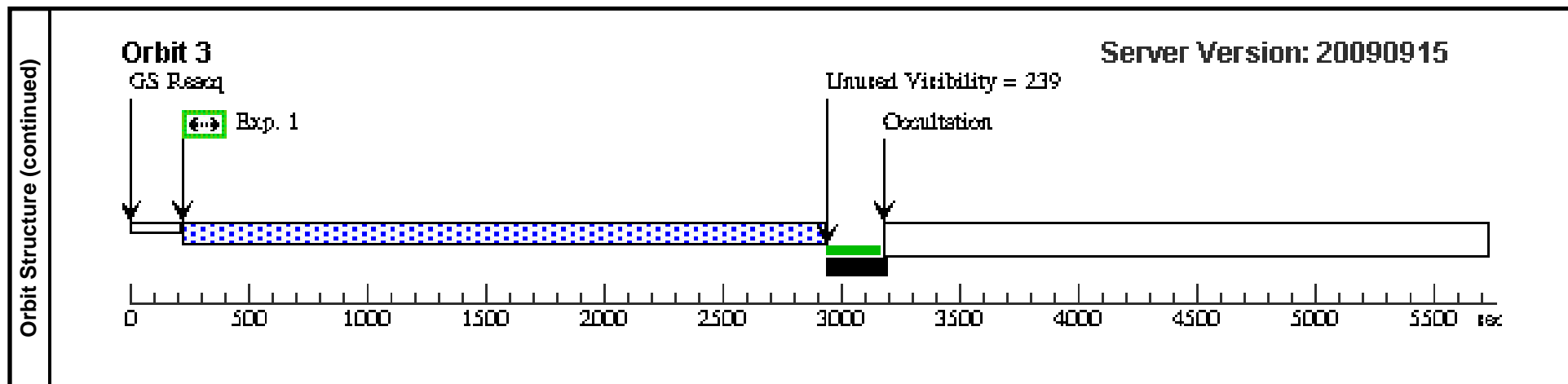


Proposal 11138 - Visit 02 - The Physics of the Jets of Powerful Radio Galaxies and Quasars

Sat Nov 21 02:01:41 GMT 2009

Visit	Proposal 11138, Visit 02, implementation Diagnostic Status: Warning Scientific Instruments: ACS/WFC Special Requirements: GYRO MODE 3GOBAD; SAME ORIENT AS 01; AFTER 01 BY 1.0 Orbits TO 14.0 D <i>Comments: 1150+497 OBSERVATIONS visit 2</i>											
	(Visit 02) Warning (Form): Gyro Mode overrides default value of 2G.											
Diagnosics												
Patterns	#	Primary Pattern				Secondary Pattern				Exposures		
	(4)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.170 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false						(1)		
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(2)	1150+497	RA: 11 53 24.5000 (178.3520833d) Dec: +49 31 8.80 (49.51911d) Equinox: J2000				V=19.1+/-0.1		Reference Frame: ICRS			
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>												
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit	
	1		(2) 1150+497	ACS/WFC, ACCUM, WFC1	F606W			Pattern 4, Exps 1-1 (4)	2534 Secs			
										[==>(Pattern 1)]	[1]	
										[==>(Pattern 2)]	[2]	
										[==>(Pattern 3)]	[3]	





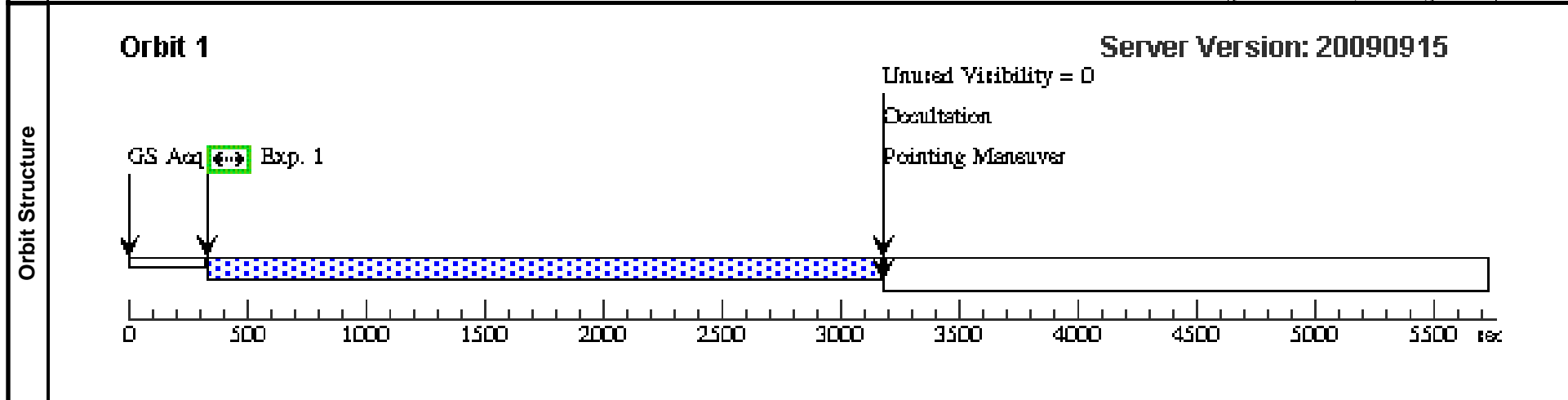
Proposal 11138 - Visit 03 - The Physics of the Jets of Powerful Radio Galaxies and Quasars

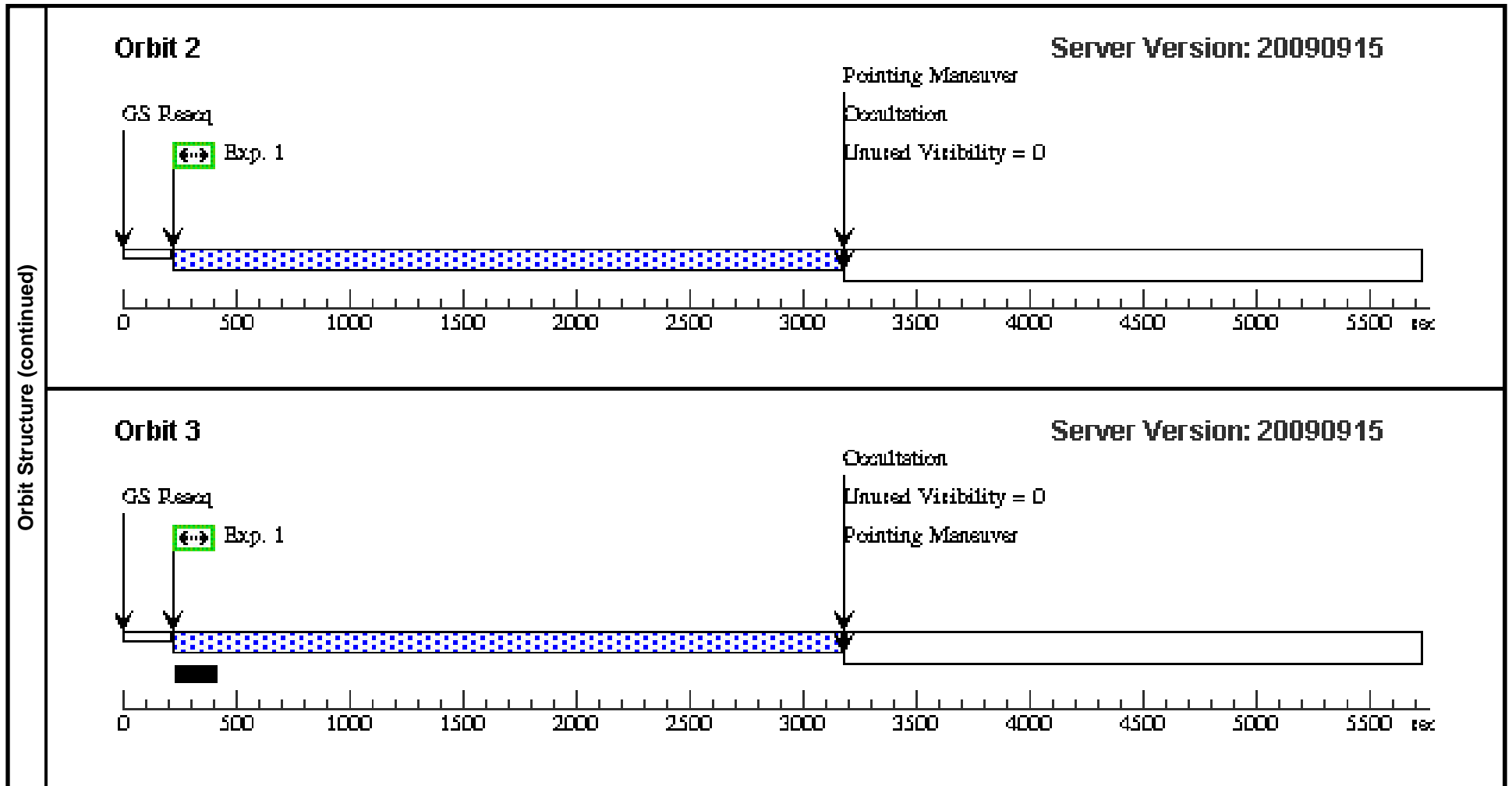
Sat Nov 21 02:01:42 GMT 2009

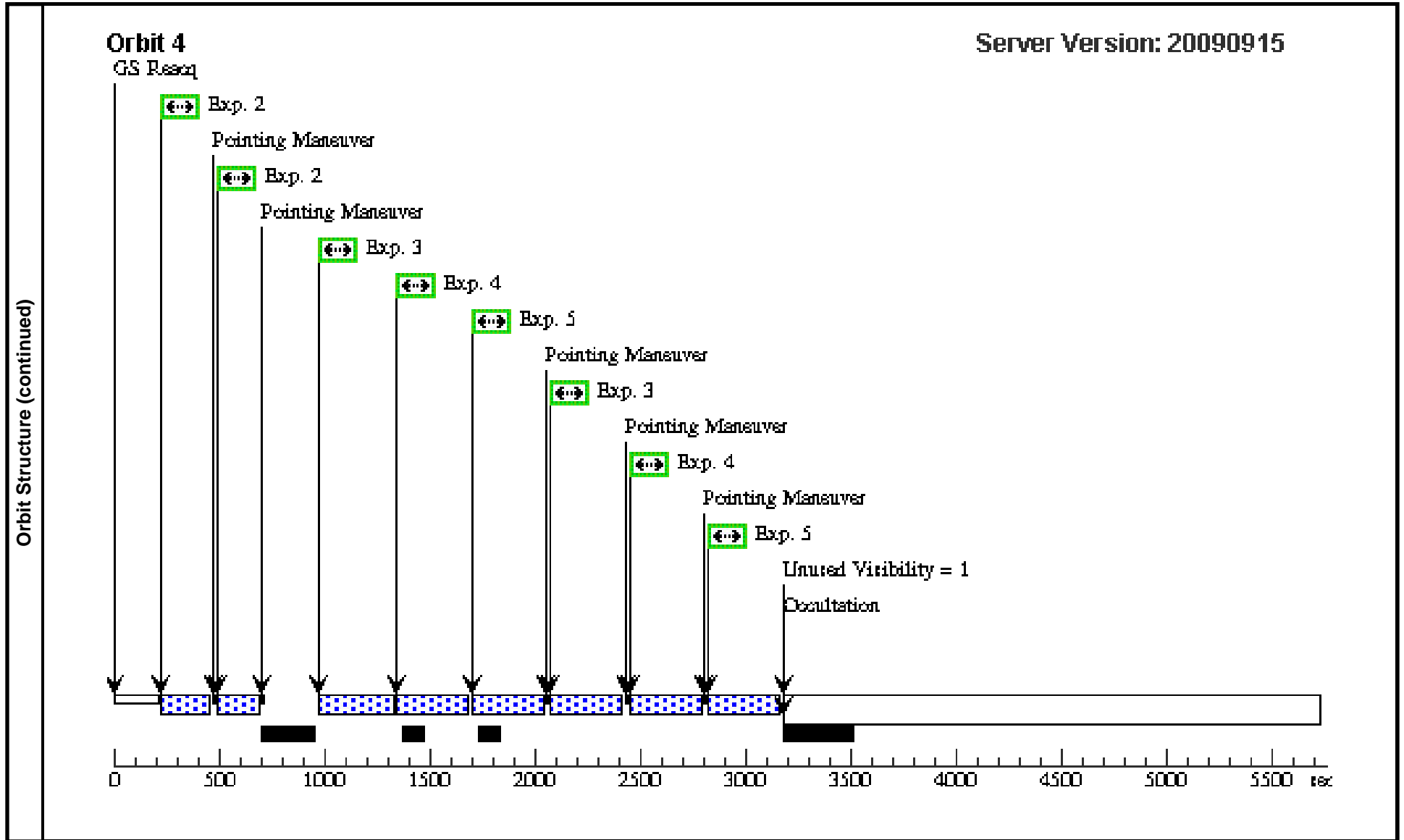
Visit	Proposal 11138, Visit 03, implementation Diagnostic Status: Warning Scientific Instruments: ACS/WFC Special Requirements: GYRO MODE 3GOBAD; SAME ORIENT AS 01; AFTER 01 BY 1.0 Orbits TO 14.0 D <i>Comments: 1150+497 OBSERVATIONS visit 3</i>									
	Diagnostics (Visit 03) Warning (Form): Gyro Mode overrides default value of 2G.									
Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
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(5)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.170 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false				(2), (3-5)				
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(2)	1150+497	RA: 11 53 24.5000 (178.3520833d) Dec: +49 31 8.80 (49.51911d) Equinox: J2000			V=19.1+/-0.1	Reference Frame: ICRS			
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(2) 1150+497		ACS/WFC, ACCUM, WFC1	F606W POL120V			Pattern 4, Exps 1-1 (4)	2534 Secs	
									[==>2580.0 Secs (Pattern 1)]	[1]
									[==>2773.0 Secs (Pattern 2)]	[2]
									[==>2773.0 Secs (Pattern 3)]	[3]
2	(2) 1150+497		ACS/WFC, ACCUM, WFC1-2K	F606W			Pattern 5, Exps 2-2 (5)	48 Secs		
								[==>22.0 Secs (Pattern 1)]		
								[==>22.0 Secs (Pattern 2)]	[4]	

Proposal 11138 - Visit 03 - The Physics of the Jets of Powerful Radio Galaxies and Quasars

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures (continued)	3	(2) 1150+497	ACS/WFC, ACCUM, WFC1	F606W POL0V			Pattern 5, Exps 3-5 (5)	170 Secs [==>144.0 Secs (Pattern 1)] [==>144.0 Secs (Pattern 2)]	[4]
	4	(2) 1150+497	ACS/WFC, ACCUM, WFC1	F606W POL60V			Pattern 5, Exps 3-5 (5)	170 Secs [==>144.0 Secs (Pattern 1)] [==>144.0 Secs (Pattern 2)]	[4]
	5	(2) 1150+497	ACS/WFC, ACCUM, WFC1	F606W POL120V			Pattern 5, Exps 3-5 (5)	170 Secs [==>144.0 Secs (Pattern 1)] [==>144.0 Secs (Pattern 2)]	[4]





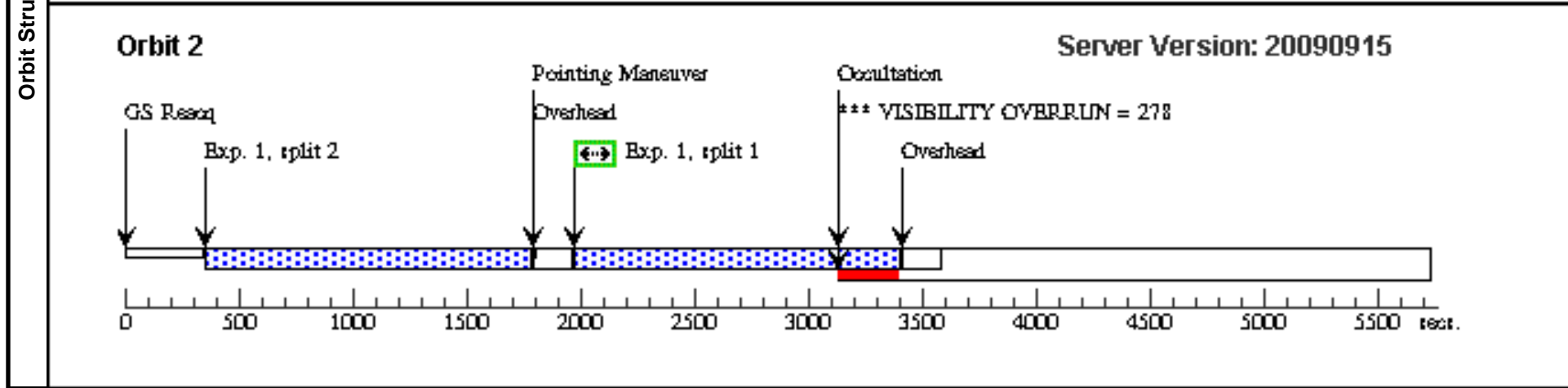
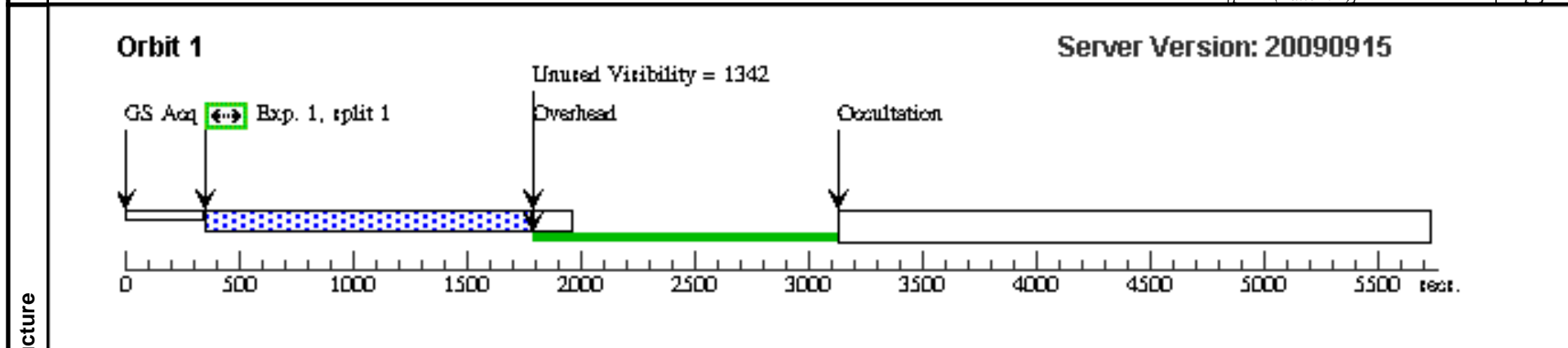


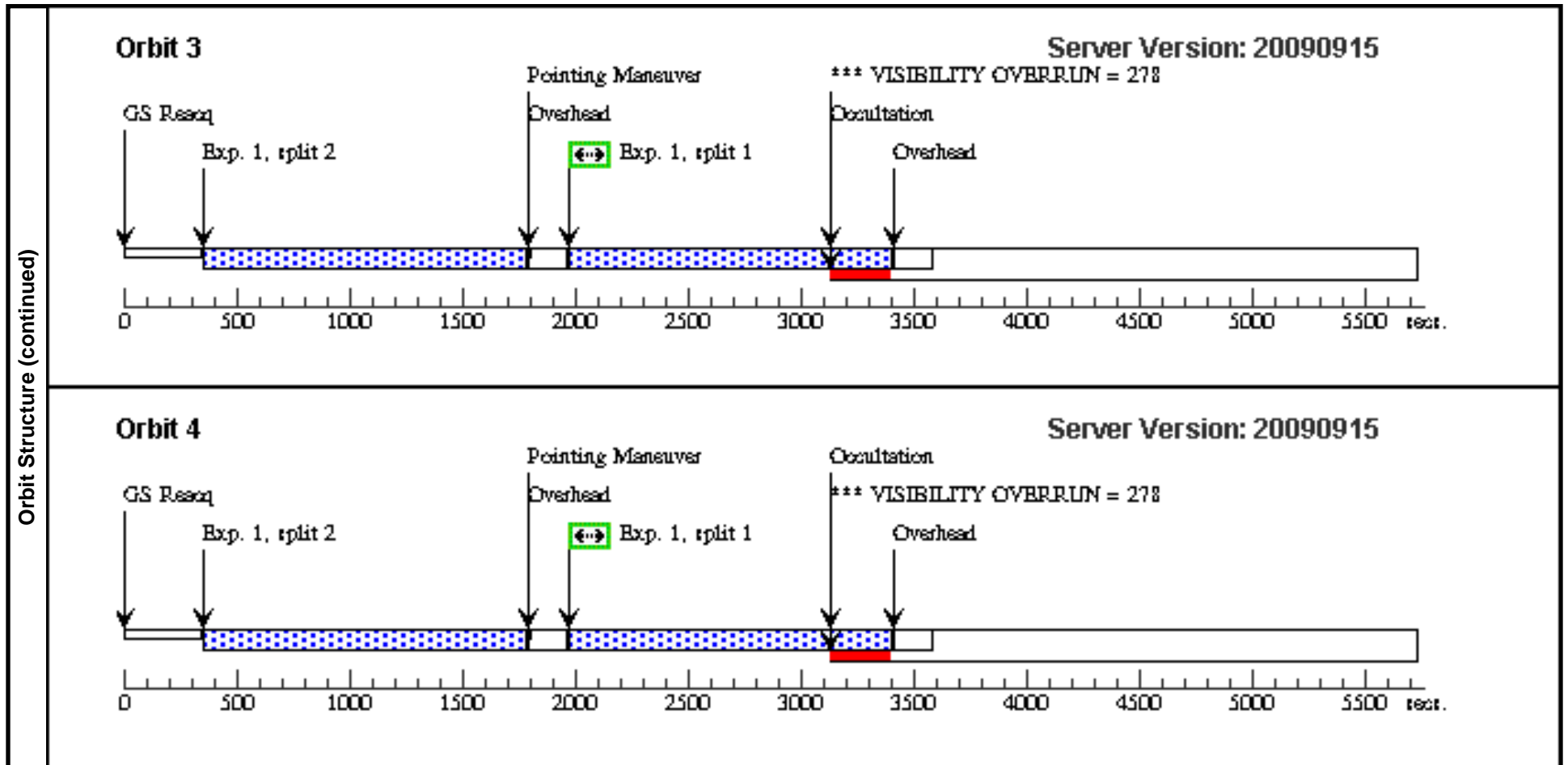
Proposal 11138 - Visit 50 - The Physics of the Jets of Powerful Radio Galaxies and Quasars

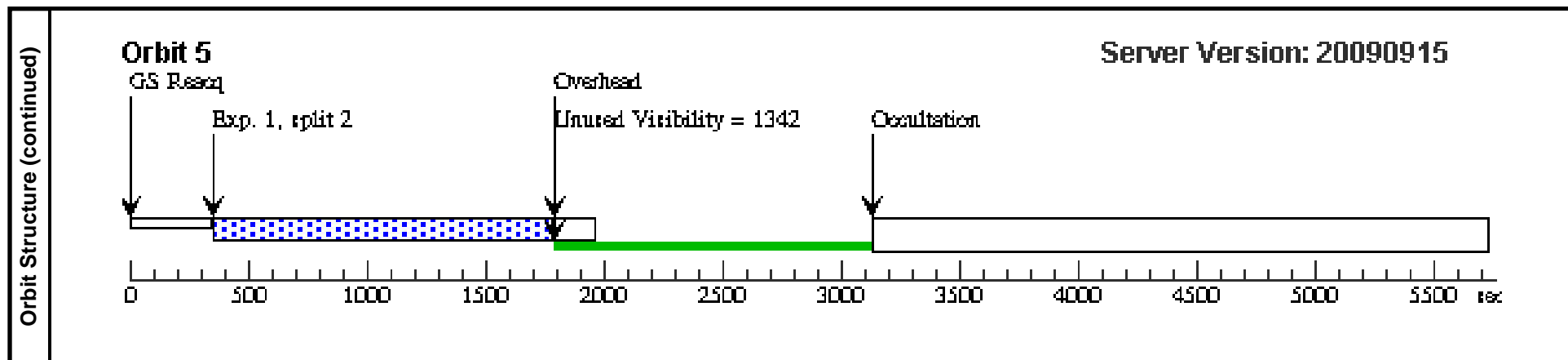
Sat Nov 21 02:01:43 GMT 2009

Visit	Proposal 11138, Visit 50, completed Diagnostic Status: Error Scientific Instruments: WFPC2 Special Requirements: ORIENT 325.0D TO 5.0 D; SEQ 50,51,60,61,70,71 WITHIN 14.0 D <i>Comments: 1136-135 OBSERVATIONS visit 1</i>						
	Diagnostics	(Exposure 1 (Pattern 2, Exps 1-1)) Error (Form): WFPC2 is not from the legal values [ACS/SBC, ACS/WFC, COS/FUV, COS/NUV, FGS, NIC1, NIC2, NIC3, STIS/CCD, STIS/FUV-MAMA, STIS/NUV-MAMA, WFC3/IR, WFC3/UVIS] (Exposure 1 (Pattern 2, Exps 1-1)) Error (Form): This attribute cannot have this value due to other choices: Mode=IMAGE This value is by default illegal. (Exposure 1 (Pattern 2, Exps 1-1)) Error (Form): IMAGE is not a valid selection (Exposure 1 (Pattern 2, Exps 1-1)) Error (Form): CR-SPLIT is not a valid selection (Exposure 1 (Pattern 2, Exps 1-1)) Error (Form): This attribute is not allowed to have this value: Config = WFPC2 It is a Restricted option and can only be used in an engineering proposal. (Visit 50) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 50) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 50) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 50) Warning (Orbit Planner): VISIBILITY OVERRUN (Visit 50) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 50) Warning (Orbit Planner): VISIBILITY OVERRUN (Visit 50) Warning (Orbit Planner): VISIBILITY OVERRUN (Visit 50) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 50) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 50) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 50) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC					
Patterns		#	Primary Pattern	Secondary Pattern	Exposures		
		(2)	Pattern Type=WFPC2-LINE Coordinate Frame=POS-TARG Purpose=DITHER Pattern Orientation=45.0 Number Of Points=4 Angle Between Sides= Point Spacing=0.3535 Center Pattern=false Line Spacing=		(1)		
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
		(1)	PKS1136-135	RA: 11 39 10.7000 (174.7945833d) Dec: -13 50 44.00 (-13.84556d) Equinox: J2000		V=16.1+/-1	Reference Frame: ICRS
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>							

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) PKS1136-135	WFPC2, IMAGE, WF2	F555W POLQ	CR-SPLIT=NO		Pattern 2, Exps 1-1 (2)	2500.0 Secs	
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									[=>(Pattern 2)]	[2]
									[=>(Pattern 3)]	[3]
								[=>(Pattern 4)]	[4]	



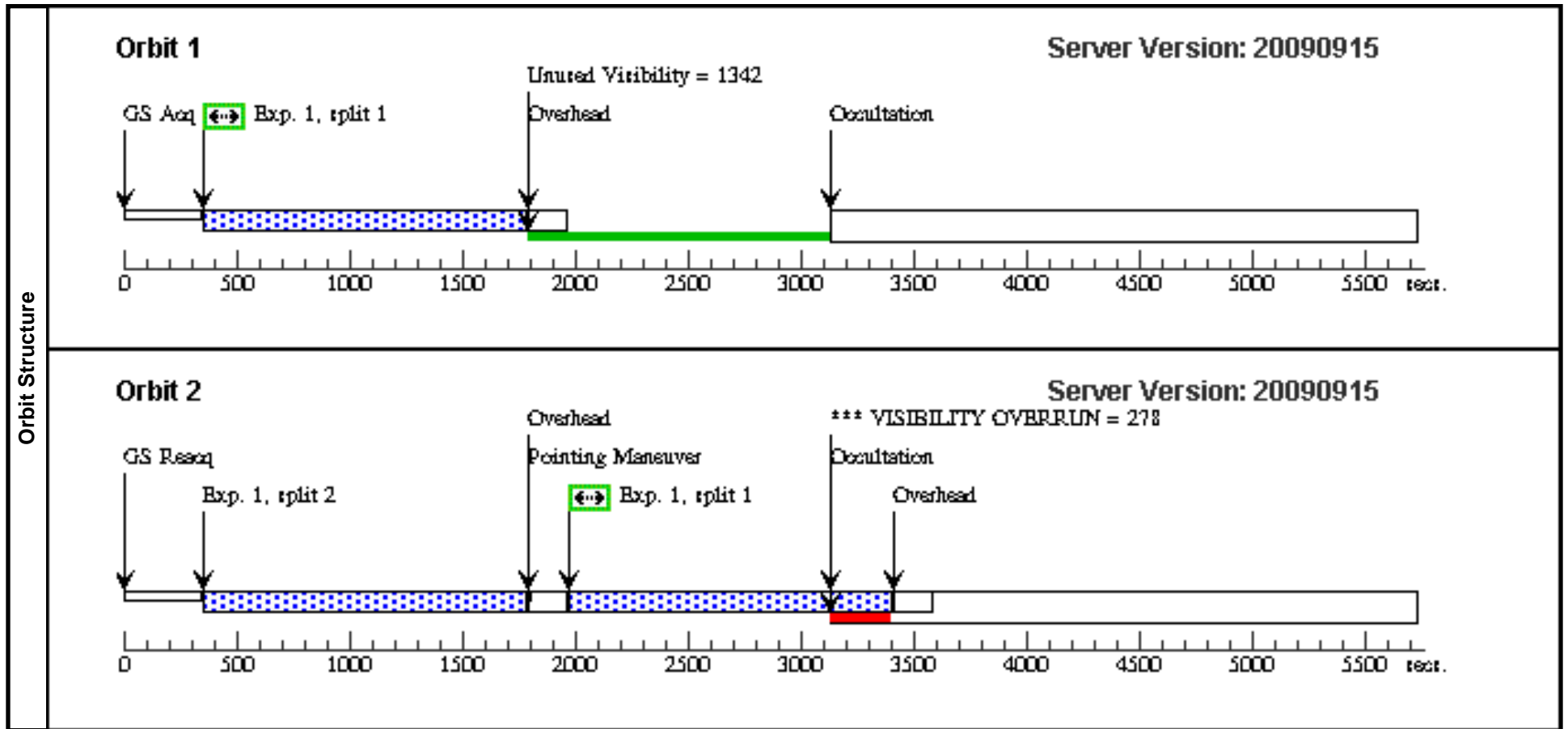


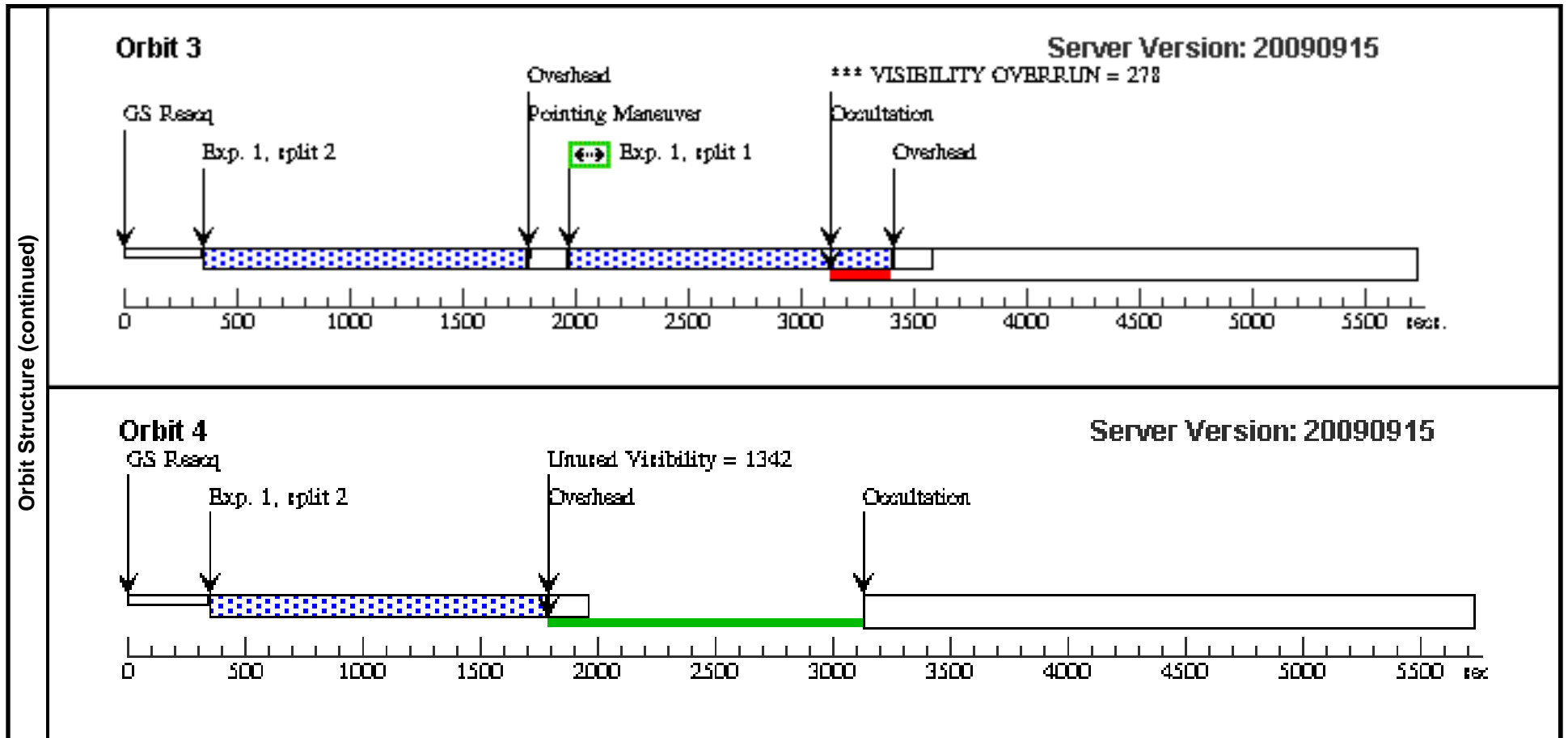


Proposal 11138 - Visit 51 - The Physics of the Jets of Powerful Radio Galaxies and Quasars

Sat Nov 21 02:01:44 GMT 2009

Visit	Proposal 11138, Visit 51, completed Diagnostic Status: Error Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 50; AFTER 50 BY 1.0 Orbits TO 14.0 D <i>Comments: 1136-135 OBSERVATIONS visit 1</i>										
	Diagnostics	(Exposure 1 (Pattern 3, Exps 1-1)) Error (Form): IMAGE is not a valid selection (Exposure 1 (Pattern 3, Exps 1-1)) Error (Form): This attribute cannot have this value due to other choices: Mode=IMAGE This value is by default illegal. (Exposure 1 (Pattern 3, Exps 1-1)) Error (Form): CR-SPLIT is not a valid selection (Exposure 1 (Pattern 3, Exps 1-1)) Error (Form): WFPC2 is not from the legal values [ACS/SBC, ACS/WFC, COS/FUV, COS/NUV, FGS, NIC1, NIC2, NIC3, STIS/CCD, STIS/FUV-MAMA, STIS/NUV-MAMA, WFC3/IR, WFC3/UVIS] (Exposure 1 (Pattern 3, Exps 1-1)) Error (Form): This attribute is not allowed to have this value: Config = WFPC2 It is a Restricted option and can only be used in an engineering proposal. (Visit 51) Warning (Orbit Planner): VISIBILITY OVERRUN (Visit 51) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 51) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 51) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 51) Warning (Orbit Planner): VISIBILITY OVERRUN (Visit 51) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 51) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 51) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC									
Patterns		#	Primary Pattern				Secondary Pattern				Exposures
		(3)	Pattern Type=WFPC2-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.3535 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=45.0 Angle Between Sides= Center Pattern=false					(1)		
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
		(1)	PKS1136-135	RA: 11 39 10.7000 (174.7945833d) Dec: -13 50 44.00 (-13.84556d) Equinox: J2000			V=16.1+/-1	Reference Frame: ICRS			
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>											
Exposures		#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
		1	(1) PKS1136-135	WFPC2, IMAGE, WF2	F555W POLQ	CR-SPLIT=NO		Pattern 3, Exps 1-1 (3)	2500.0 Secs		
									[=>(Pattern 1)]	[1]	
									[=>(Pattern 2)]	[2]	
							[=>(Pattern 3)]	[3]			

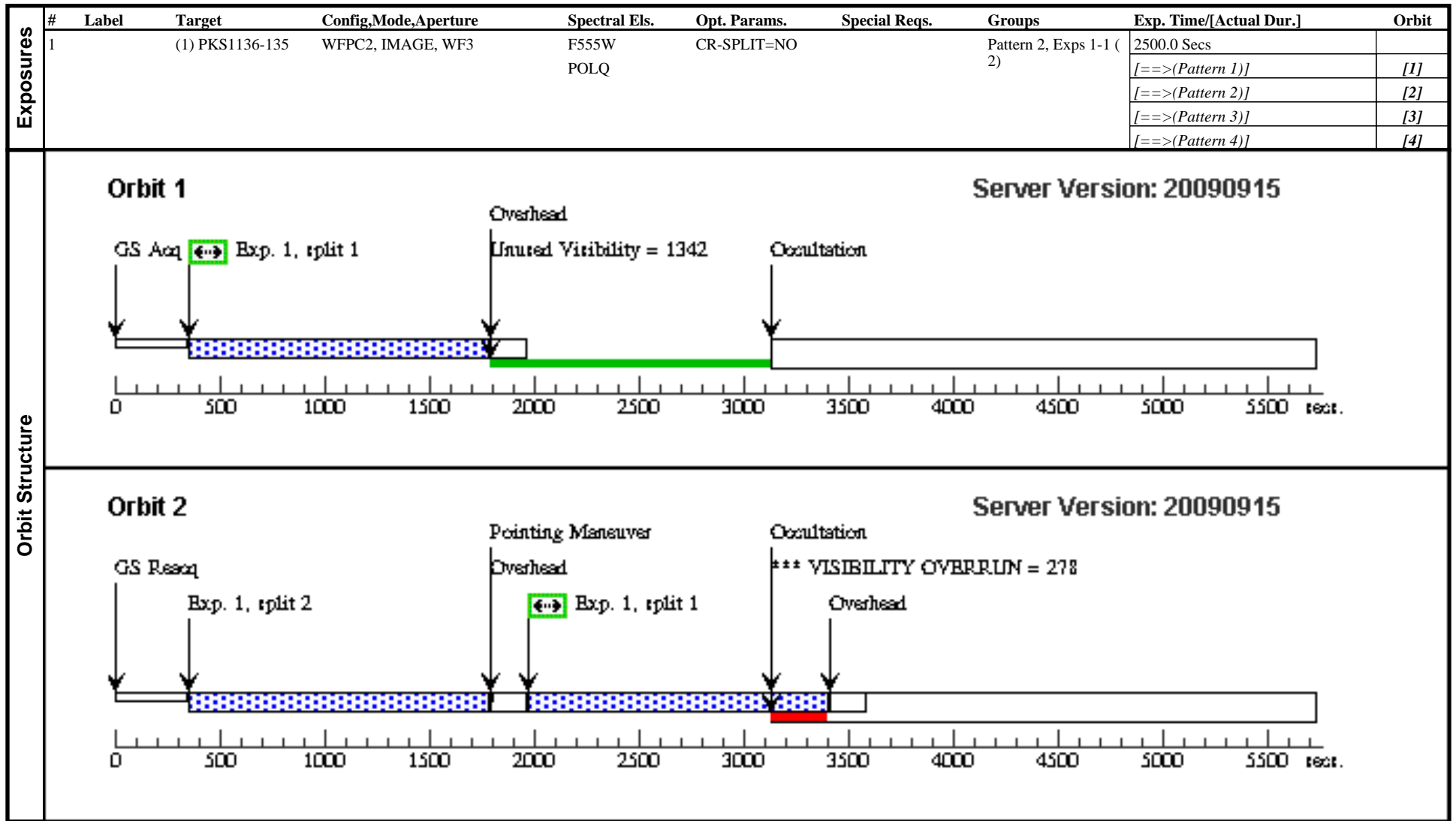


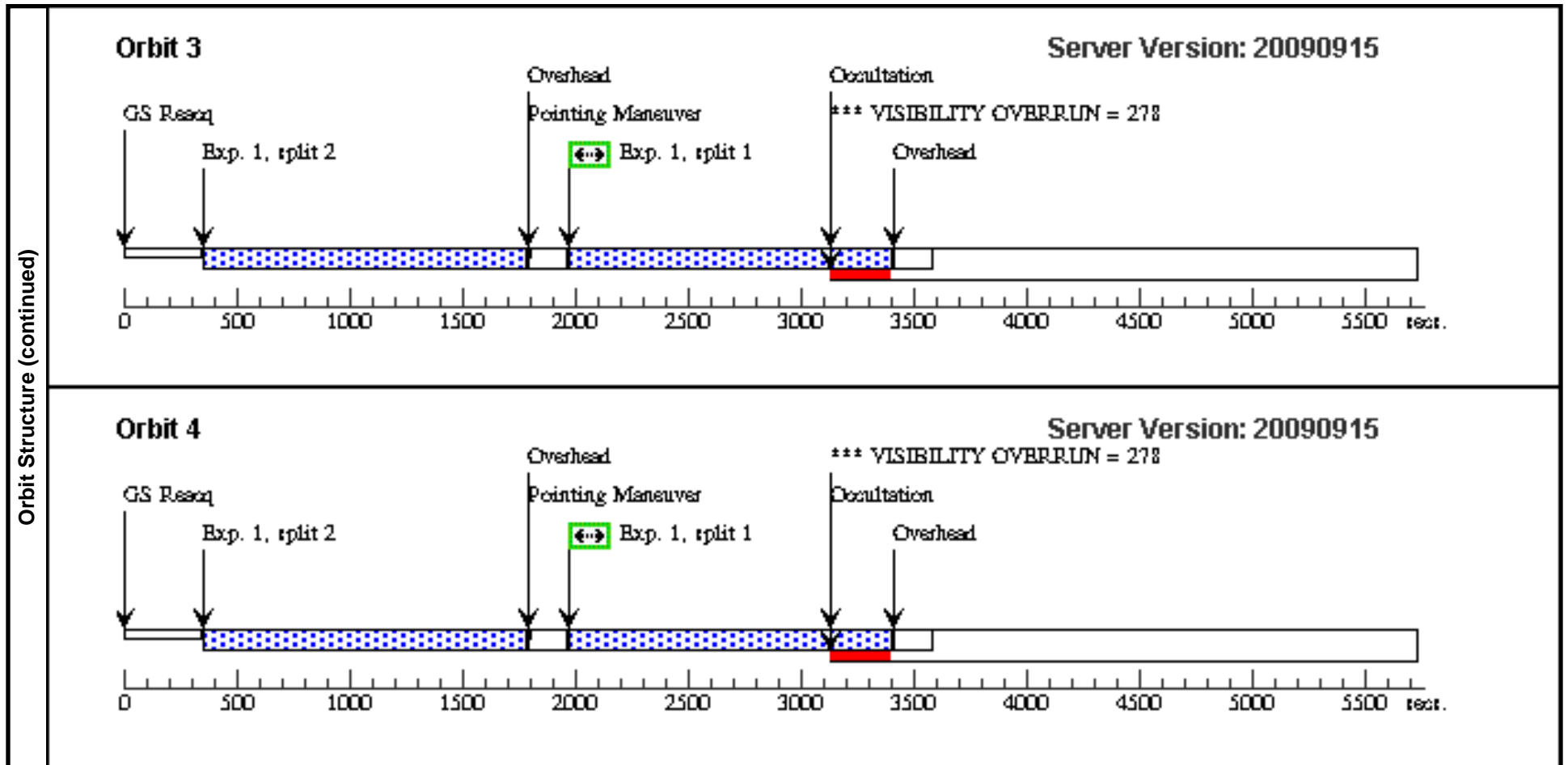


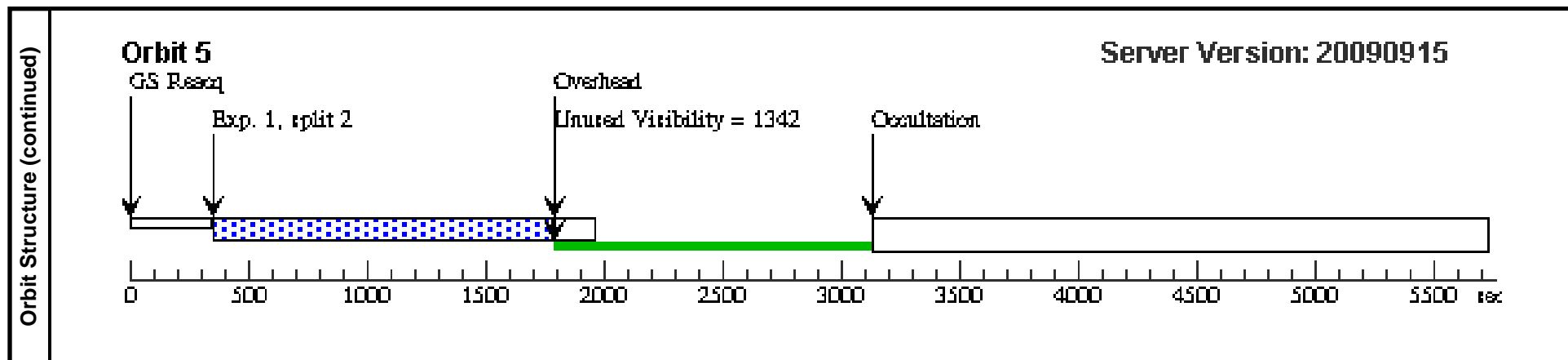
Proposal 11138 - Visit 60 - The Physics of the Jets of Powerful Radio Galaxies and Quasars

Sat Nov 21 02:01:45 GMT 2009

Visit	Proposal 11138, Visit 60, completed Diagnostic Status: Error Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 50; AFTER 50 BY 1.0 Orbits TO 14.0 D <i>Comments: 1136-135 OBSERVATION VISIT 2</i>															
	(Exposure 1 (Pattern 2, Exps 1-1)) Error (Form): IMAGE is not a valid selection (Exposure 1 (Pattern 2, Exps 1-1)) Error (Form): This attribute cannot have this value due to other choices: Mode=IMAGE This value is by default illegal. (Exposure 1 (Pattern 2, Exps 1-1)) Error (Form): WFPC2 is not from the legal values [ACS/SBC, ACS/WFC, COS/FUV, COS/NUV, FGS, NIC1, NIC2, NIC3, STIS/CCD, STIS/FUV-MAMA, STIS/NUV-MAMA, WFC3/IR, WFC3/UVIS] (Exposure 1 (Pattern 2, Exps 1-1)) Error (Form): CR-SPLIT is not a valid selection (Exposure 1 (Pattern 2, Exps 1-1)) Error (Form): This attribute is not allowed to have this value: Config = WFPC2 It is a Restricted option and can only be used in an engineering proposal. (Visit 60) Warning (Orbit Planner): VISIBILITY OVERRUN (Visit 60) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 60) Warning (Orbit Planner): VISIBILITY OVERRUN (Visit 60) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 60) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 60) Warning (Orbit Planner): VISIBILITY OVERRUN (Visit 60) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 60) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 60) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 60) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 60) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC															
Diagnosics																
Patterns	<table border="1"> <thead> <tr> <th>#</th> <th>Primary Pattern</th> <th>Secondary Pattern</th> <th>Exposures</th> </tr> </thead> <tbody> <tr> <td>(2)</td> <td> Pattern Type=WFPC2-LINE Coordinate Frame=POS-TARG Purpose=DITHER Pattern Orientation=45.0 Number Of Points=4 Angle Between Sides= Point Spacing=0.3535 Center Pattern=false Line Spacing= </td> <td></td> <td>(1)</td> </tr> </tbody> </table>	#	Primary Pattern	Secondary Pattern	Exposures	(2)	Pattern Type=WFPC2-LINE Coordinate Frame=POS-TARG Purpose=DITHER Pattern Orientation=45.0 Number Of Points=4 Angle Between Sides= Point Spacing=0.3535 Center Pattern=false Line Spacing=		(1)							
	#	Primary Pattern	Secondary Pattern	Exposures												
(2)	Pattern Type=WFPC2-LINE Coordinate Frame=POS-TARG Purpose=DITHER Pattern Orientation=45.0 Number Of Points=4 Angle Between Sides= Point Spacing=0.3535 Center Pattern=false Line Spacing=		(1)													
Fixed Targets	<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>PKS1136-135</td> <td> RA: 11 39 10.7000 (174.7945833d) Dec: -13 50 44.00 (-13.84556d) Equinox: J2000 </td> <td></td> <td>V=16.1+/-1</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	PKS1136-135	RA: 11 39 10.7000 (174.7945833d) Dec: -13 50 44.00 (-13.84556d) Equinox: J2000		V=16.1+/-1	Reference Frame: ICRS			
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous										
(1)	PKS1136-135	RA: 11 39 10.7000 (174.7945833d) Dec: -13 50 44.00 (-13.84556d) Equinox: J2000		V=16.1+/-1	Reference Frame: ICRS											
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>																



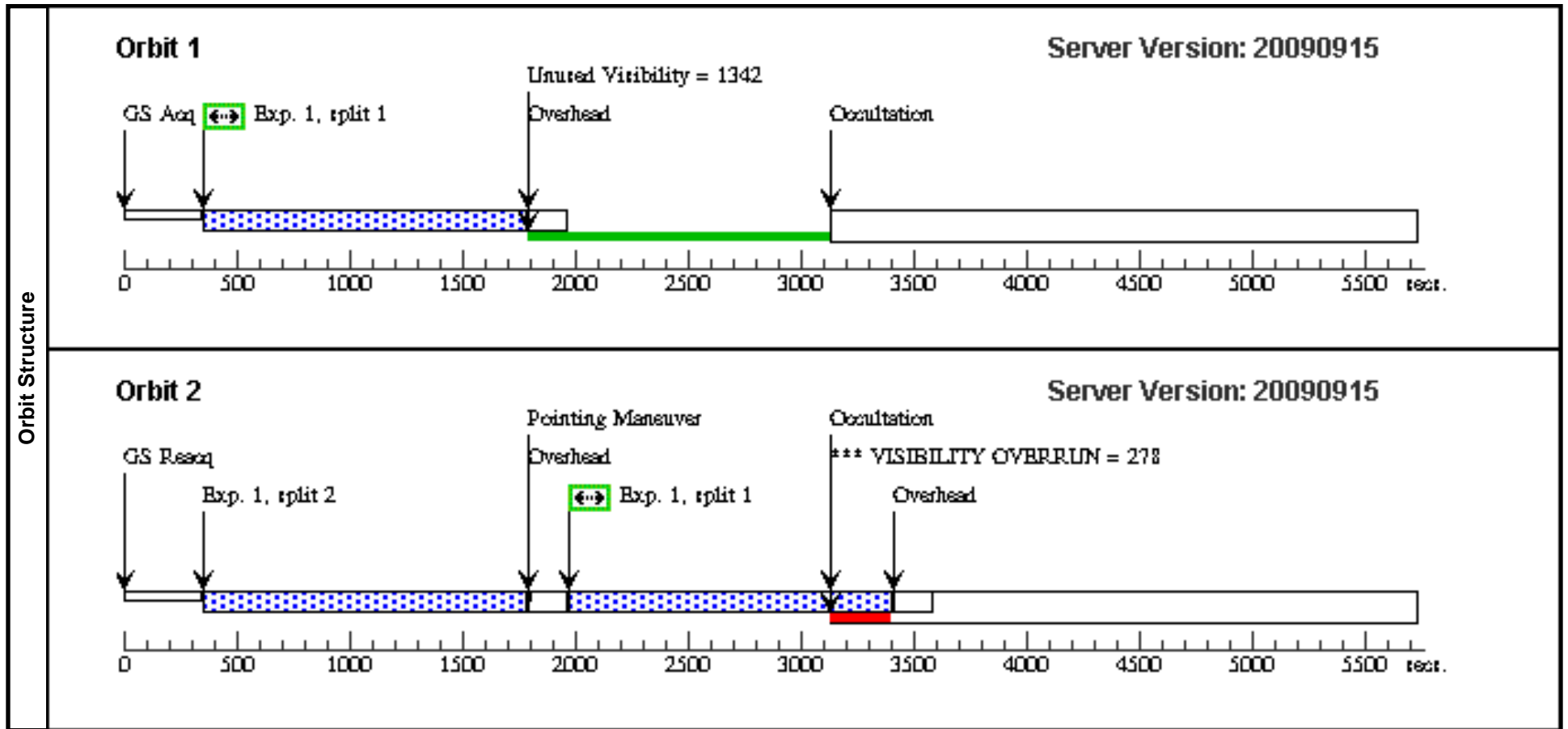


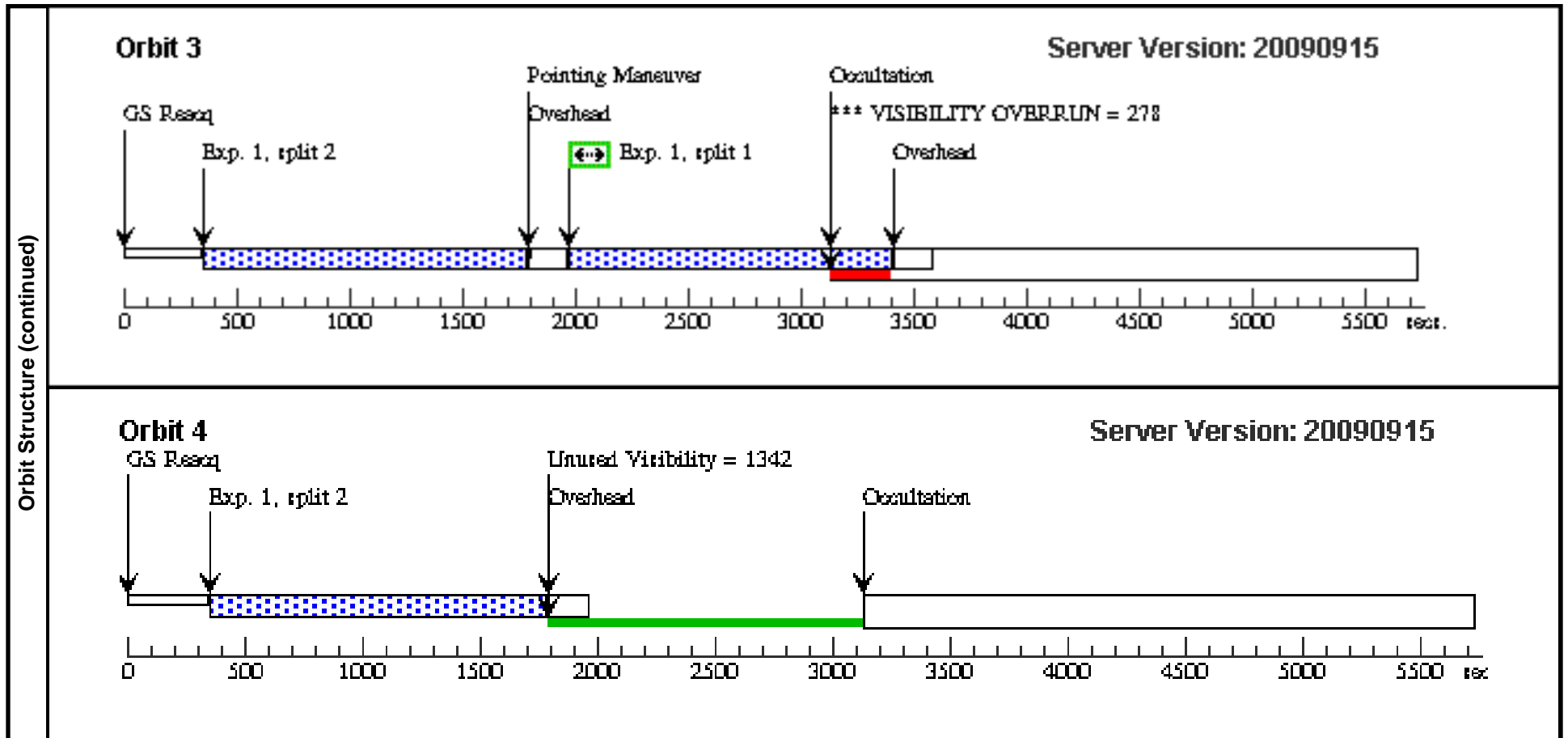


Proposal 11138 - Visit 61 - The Physics of the Jets of Powerful Radio Galaxies and Quasars

Sat Nov 21 02:01:46 GMT 2009

Visit	Proposal 11138, Visit 61, completed Diagnostic Status: Error Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 50; AFTER 50 BY 1.0 Orbits TO 14.0 D <i>Comments: 1136-135 OBSERVATION VISIT 2</i>										
	Diagnostics	(Exposure 1 (Pattern 3, Exps 1-1)) Error (Form): CR-SPLIT is not a valid selection (Exposure 1 (Pattern 3, Exps 1-1)) Error (Form): This attribute cannot have this value due to other choices: Mode=IMAGE This value is by default illegal. (Exposure 1 (Pattern 3, Exps 1-1)) Error (Form): WFPC2 is not from the legal values [ACS/SBC, ACS/WFC, COS/FUV, COS/NUV, FGS, NIC1, NIC2, NIC3, STIS/CCD, STIS/FUV-MAMA, STIS/NUV-MAMA, WFC3/IR, WFC3/UVIS] (Exposure 1 (Pattern 3, Exps 1-1)) Error (Form): This attribute is not allowed to have this value: Config = WFPC2 It is a Restricted option and can only be used in an engineering proposal. (Exposure 1 (Pattern 3, Exps 1-1)) Error (Form): IMAGE is not a valid selection (Visit 61) Warning (Orbit Planner): VISIBILITY OVERRUN (Visit 61) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 61) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 61) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 61) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 61) Warning (Orbit Planner): VISIBILITY OVERRUN (Visit 61) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 61) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC									
Patterns		#	Primary Pattern				Secondary Pattern			Exposures	
		(3)	Pattern Type=WFPC2-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.3535 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=45.0 Angle Between Sides= Center Pattern=false				(1)			
Fixed Targets		#	Name	Target Coordinates		Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(1)	PKS1136-135	RA: 11 39 10.7000 (174.7945833d) Dec: -13 50 44.00 (-13.84556d) Equinox: J2000			V=16.1+/-1	Reference Frame: ICRS			
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>											
Exposures		#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
		1	(1) PKS1136-135	WFPC2, IMAGE, WF3	F555W POLQ	CR-SPLIT=NO		Pattern 3, Exps 1-1 (3)	2500.0 Secs		
									[=>(Pattern 1)]	[1]	
									[=>(Pattern 2)]	[2]	
							[=>(Pattern 3)]	[3]			



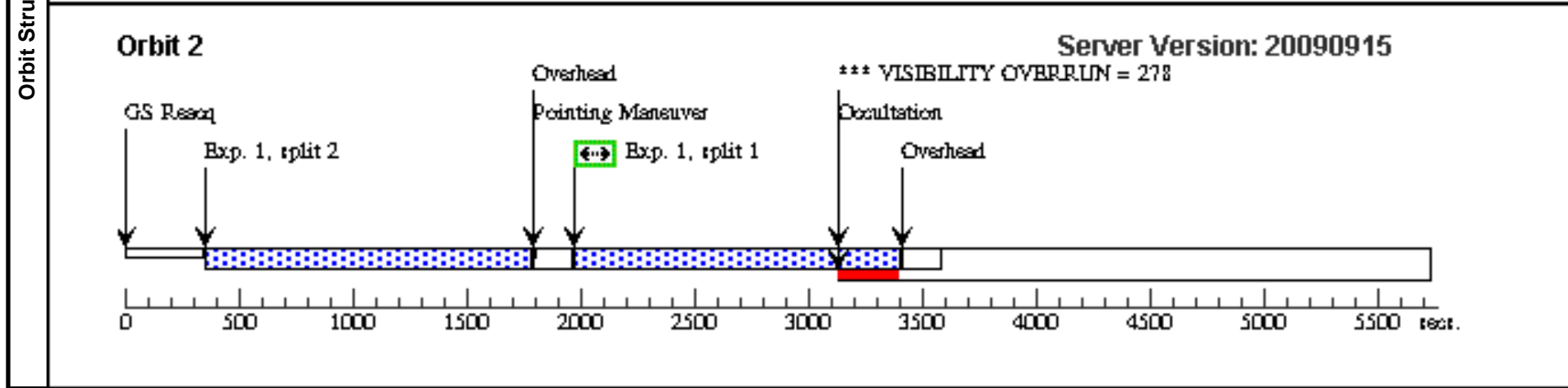
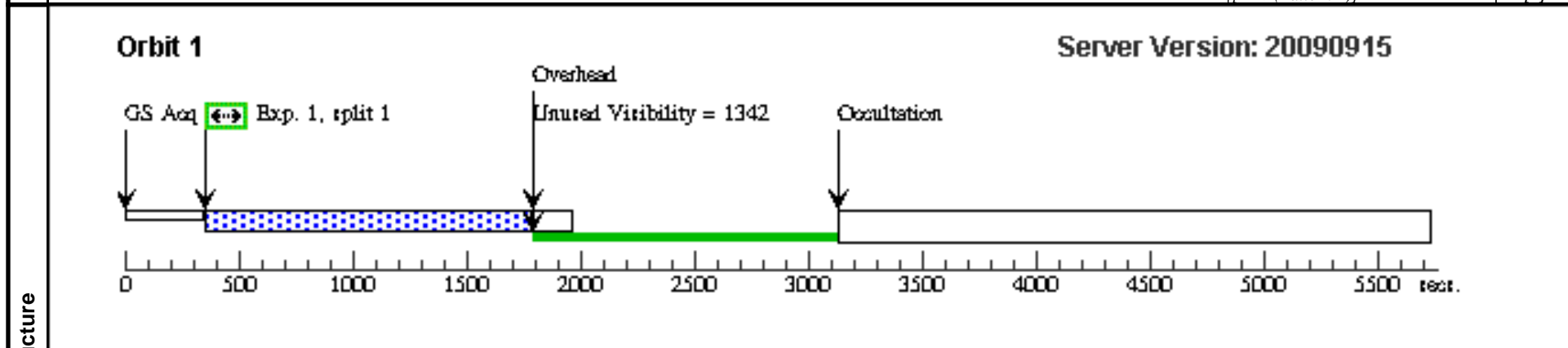


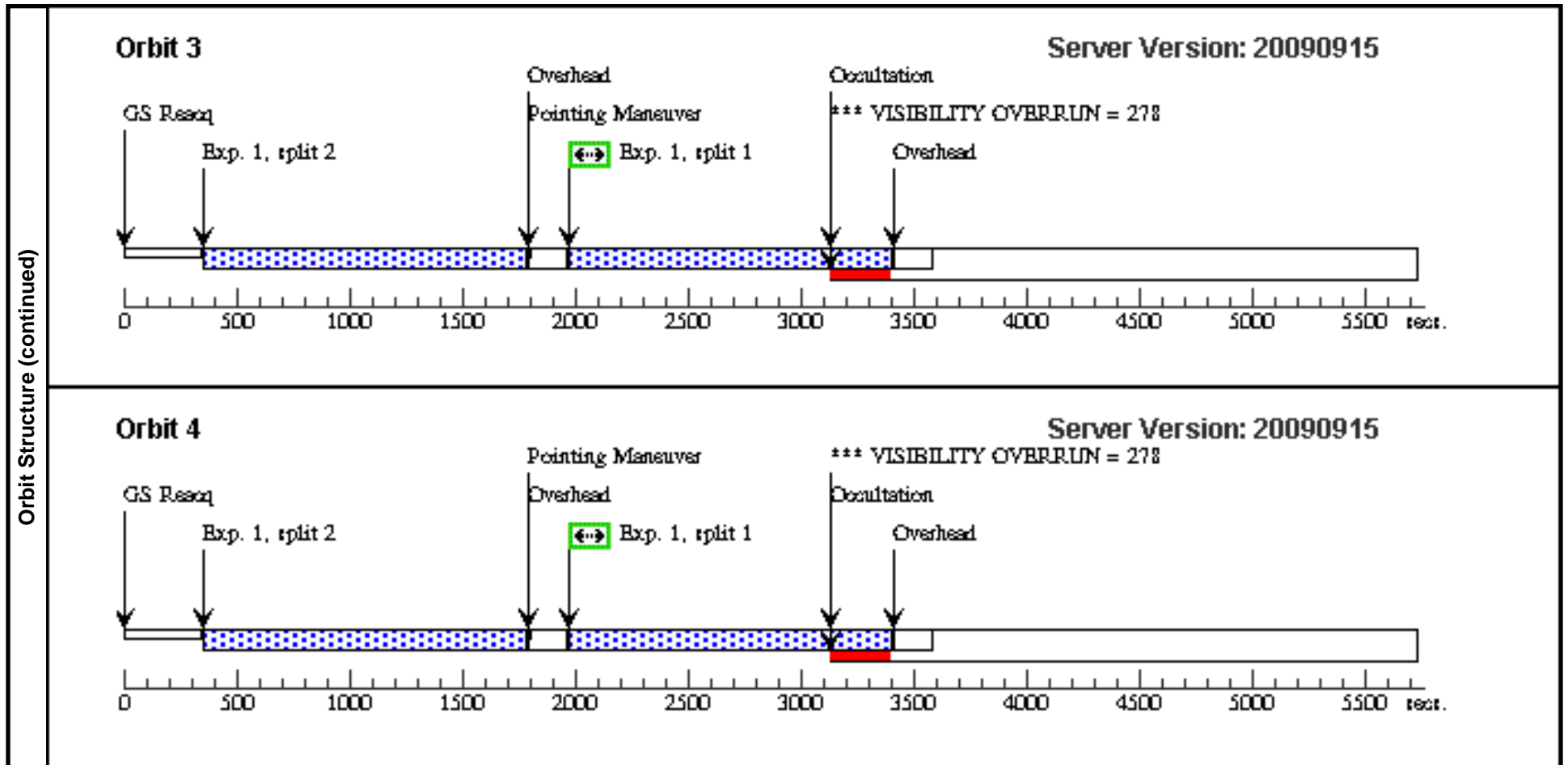
Proposal 11138 - Visit 70 - The Physics of the Jets of Powerful Radio Galaxies and Quasars

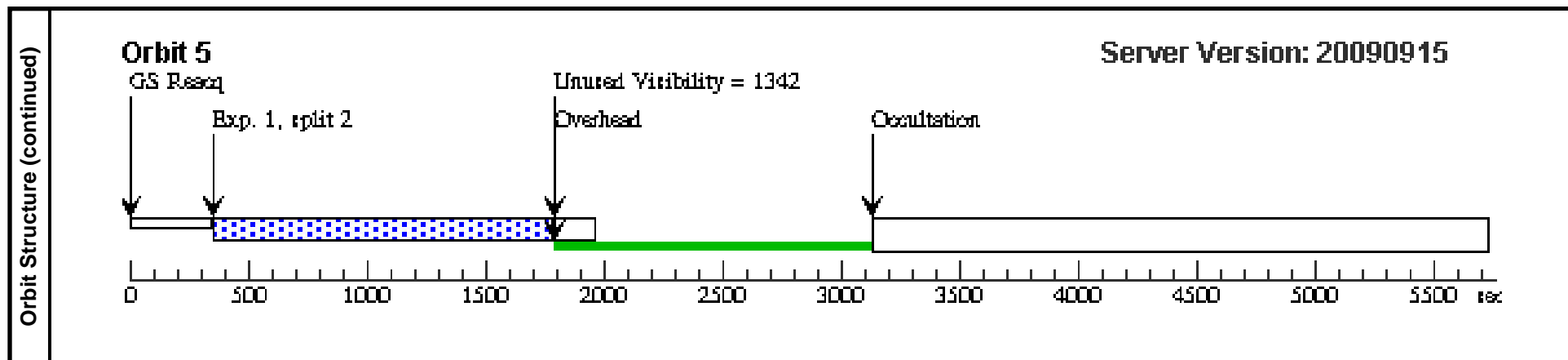
Sat Nov 21 02:01:46 GMT 2009

Visit	Proposal 11138, Visit 70, completed Diagnostic Status: Error Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 50; AFTER 50 BY 1.0 Orbits TO 14.0 D <i>Comments: 1136-135 OBSERVATION VISIT 3</i>					
	Diagnostics	(Exposure 1 (Pattern 2, Exps 1-1)) Error (Form): CR-SPLIT is not a valid selection (Exposure 1 (Pattern 2, Exps 1-1)) Error (Form): WFPC2 is not from the legal values [ACS/SBC, ACS/WFC, COS/FUV, COS/NUV, FGS, NIC1, NIC2, NIC3, STIS/CCD, STIS/FUV-MAMA, STIS/NUV-MAMA, WFC3/IR, WFC3/UVIS] (Exposure 1 (Pattern 2, Exps 1-1)) Error (Form): This attribute is not allowed to have this value: Config = WFPC2 It is a Restricted option and can only be used in an engineering proposal. (Exposure 1 (Pattern 2, Exps 1-1)) Error (Form): IMAGE is not a valid selection (Exposure 1 (Pattern 2, Exps 1-1)) Error (Form): This attribute cannot have this value due to other choices: Mode=IMAGE This value is by default illegal. (Visit 70) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 70) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 70) Warning (Orbit Planner): VISIBILITY OVERRUN (Visit 70) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 70) Warning (Orbit Planner): VISIBILITY OVERRUN (Visit 70) Warning (Orbit Planner): VISIBILITY OVERRUN (Visit 70) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 70) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 70) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 70) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 70) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC				
Patterns		#	Primary Pattern	Secondary Pattern	Exposures	
	(2)	Pattern Type=WFPC2-LINE Coordinate Frame=POS-TARG Purpose=DITHER Pattern Orientation=45.0 Number Of Points=4 Angle Between Sides= Point Spacing=0.3535 Center Pattern=false Line Spacing=		(1)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	PKS1136-135	RA: 11 39 10.7000 (174.7945833d) Dec: -13 50 44.00 (-13.84556d) Equinox: J2000		V=16.1+/-1	Reference Frame: ICRS
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>						

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) PKS1136-135	WFPC2, IMAGE, WF4	F555W POLQ	CR-SPLIT=NO		Pattern 2, Exps 1-1 (2)	2500.0 Secs	
									[=>(Pattern 1)]	[1]
									[=>(Pattern 2)]	[2]
									[=>(Pattern 3)]	[3]
								[=>(Pattern 4)]	[4]	







Proposal 11138 - Visit 71 - The Physics of the Jets of Powerful Radio Galaxies and Quasars

Sat Nov 21 02:01:47 GMT 2009

Visit	Proposal 11138, Visit 71, completed Diagnostic Status: Error Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 50; AFTER 50 BY 1.0 Orbits TO 14.0 D <i>Comments: 1136-135 OBSERVATION VISIT 3</i>										
	Diagnostics	(Exposure 1 (Pattern 3, Exps 1-1)) Error (Form): CR-SPLIT is not a valid selection (Exposure 1 (Pattern 3, Exps 1-1)) Error (Form): This attribute is not allowed to have this value: Config = WFPC2 It is a Restricted option and can only be used in an engineering proposal. (Exposure 1 (Pattern 3, Exps 1-1)) Error (Form): This attribute cannot have this value due to other choices: Mode=IMAGE This value is by default illegal. (Exposure 1 (Pattern 3, Exps 1-1)) Error (Form): IMAGE is not a valid selection (Exposure 1 (Pattern 3, Exps 1-1)) Error (Form): WFPC2 is not from the legal values [ACS/SBC, ACS/WFC, COS/FUV, COS/NUV, FGS, NIC1, NIC2, NIC3, STIS/CCD, STIS/FUV-MAMA, STIS/NUV-MAMA, WFC3/IR, WFC3/UVIS] (Visit 71) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 71) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 71) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 71) Warning (Orbit Planner): VISIBILITY OVERRUN (Visit 71) Warning (Orbit Planner): VISIBILITY OVERRUN (Visit 71) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 71) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC (Visit 71) Warning (Orbit Planner): EXPOSURE TIME DECREASED FOR WFPC									
Patterns		#	Primary Pattern				Secondary Pattern				Exposures
		(3)	Pattern Type=WFPC2-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.3535 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=45.0 Angle Between Sides= Center Pattern=false					(1)		
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes		Miscellaneous		
		(1)	PKS1136-135	RA: 11 39 10.7000 (174.7945833d) Dec: -13 50 44.00 (-13.84556d) Equinox: J2000			V=16.1+/-1		Reference Frame: ICRS		
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>											
Exposures		#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
		1	(1) PKS1136-135	WFPC2, IMAGE, WF4	F555W POLQ	CR-SPLIT=NO		Pattern 3, Exps 1-1 (3)	2500.0 Secs		
									[=>(Pattern 1)]	[1]	
									[=>(Pattern 2)]	[2]	
							[=>(Pattern 3)]	[3]			

