



12481 - WISE-Selected Lyman-alpha Blobs: An Extreme Dusty Population at High-Z

Cycle: 19, Proposal Category: GO
(Availability Mode: SUPPORTED)

INVESTIGATORS

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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	(1) WISELAB1814+34	WFC3/IR	1	08-Sep-2011 21:14:58.0	yes
02	(1) WISELAB1814+34	ACS/WFC	1	08-Sep-2011 21:15:04.0	yes
03	(1) WISELAB1814+34	ACS/WFC	3	08-Sep-2011 21:15:12.0	yes
04	(1) WISELAB1814+34	ACS/WFC	3	08-Sep-2011 21:15:17.0	yes
05	(3) WISELAB1541+14	WFC3/IR	1	08-Sep-2011 21:15:23.0	yes

<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>
06	(3) WISELAB1541+14	ACS/WFC	1	08-Sep-2011 21:15:26.0	yes
07	(3) WISELAB1541+14	ACS/WFC	3	08-Sep-2011 21:15:31.0	yes
08	(3) WISELAB1541+14	ACS/WFC	3	08-Sep-2011 21:15:36.0	yes
09	(4) WISELAB0149+23	WFC3/IR	1	08-Sep-2011 21:15:40.0	yes
10	(4) WISELAB0149+23	ACS/WFC	1	08-Sep-2011 21:15:42.0	yes
11	(4) WISELAB0149+23	ACS/WFC	2	08-Sep-2011 21:15:46.0	yes
12	(5) WISELAB1136+42	WFC3/IR	1	08-Sep-2011 21:15:49.0	yes
13	(5) WISELAB1136+42	ACS/WFC	1	08-Sep-2011 21:15:52.0	yes
14	(5) WISELAB1136+42	ACS/WFC	2	08-Sep-2011 21:15:55.0	yes

24 Total Orbits Used

ABSTRACT

We have recently discovered a new class of WISE-selected dusty Ly-alpha emitters (LAEs) and Ly-alpha ``blobs" (LABs; >50 kpc). These systems have mid- and far-IR properties unlike other populations at $z>2$. They are likely to be amongst the most luminous galaxies in the Universe, making them unique laboratories for studying feedback, gas processing and accretion. We propose a unified HST program of narrow-band Ly-alpha imaging, UV continuum broad-band imaging and near-IR imaging to improve our understanding of these rare systems and place them in context with the related populations of sub-mm galaxies, and Lyman-break galaxies.

We request 4 orbits to image WISE discovered LABs with WFC3 (F160W) and 20 orbits with the ACS ramp and broad-band filters to map the Ly-alpha morphology for the 4 largest and most luminous WISE LABs. The 0.5-kpc resolution ACS-ramp imaging will reveal the spatial distribution of their strong Ly-alpha emission, and will dissect their complex ISM on scales that are not possible to address from ground-based observatories. If powerful AGN outflows are at work the Ly-alpha morphology will be collimated, in contrast to star-burst driven winds which will have larger opening angles, and clumpy line-emitting structures. The near-IR WFC3 imaging will allow us to characterize the formation processes via an assessment of the morphology, environment, and stellar population of this cosmological signpost population.

OBSERVING DESCRIPTION

Narrow-band ramp-filter imaging of redshifted Lyman alpha emission from ultraluminous, but heavily-obscured galaxies. Corresponding optical (ACS) broad band images in overlapping filters and NIR (WFC3) broad band images will also be taken for the 4 target galaxies.

Proposal 12481 - Visit 01 - WISE-Selected Lyman-alpha Blobs: An Extreme Dusty Population at High-z

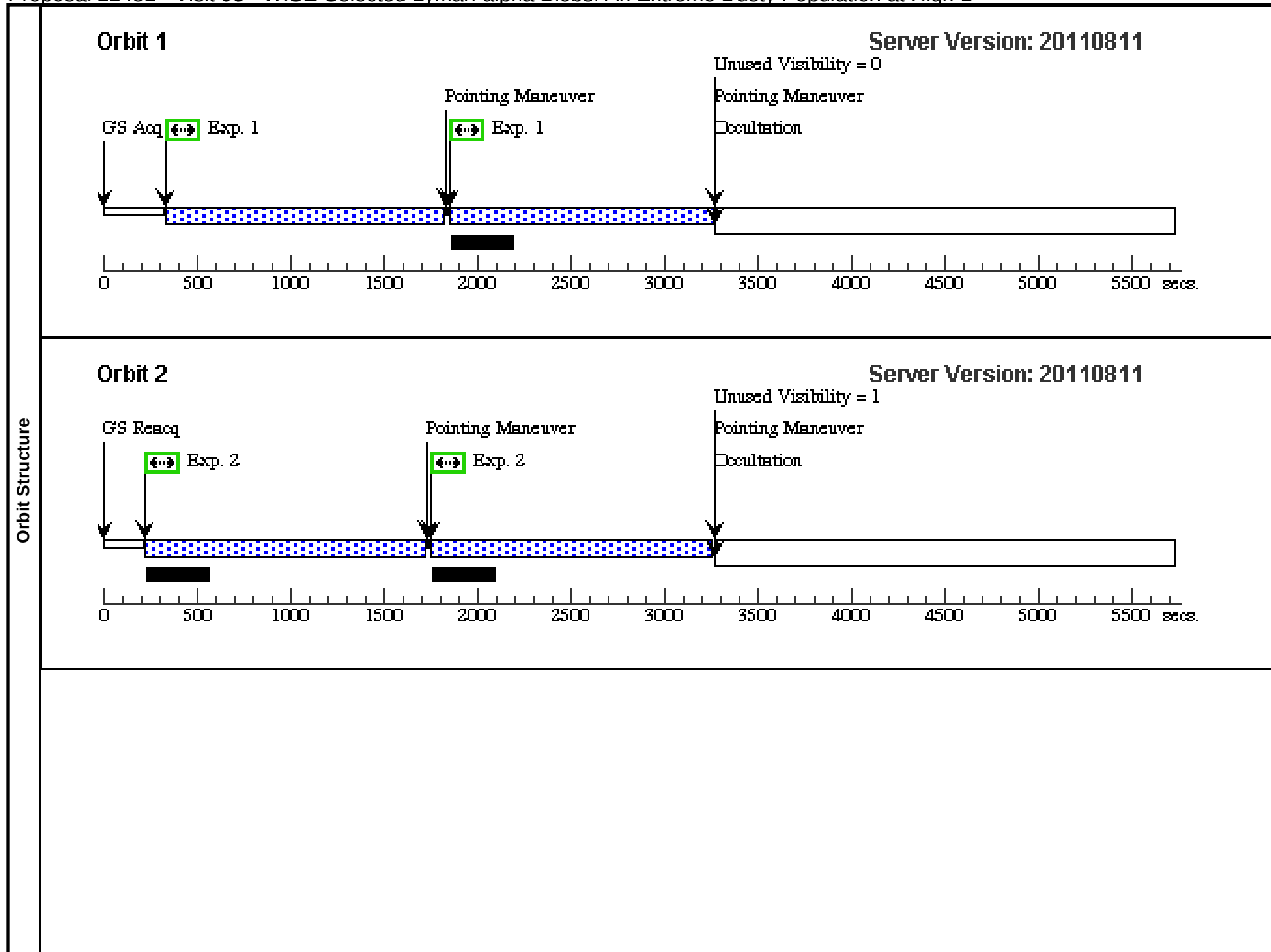
Visit	Proposal 12481, Visit 01, implementation Fri Sep 09 01:15:59 GMT 2011				
	Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: GROUP 01,02,03,04 WITHIN 120D				
Patterns	#	Primary Pattern		Secondary Pattern	Exposures
	(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365		Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	(1)
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(1)	WISELAB1814+34	RA: 18 14 17.3100 (273.5721250d) Dec: +34 12 24.80 (34.20689d) Equinox: J2000		V=25
Exposures					
	#	Label	Target	Config,Mode,Aperture	Spectral Els.
	1	(1) WISELAB1814+34	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 50; NSAMP=14
					Special Reqs.
					Pattern 2, Exps 1-1 in Visit 01 (2)
					Exp. Time/[Actual Dur.]
					[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]
Orbit Structure					
	Orbit 1 Server Version: 20110811				

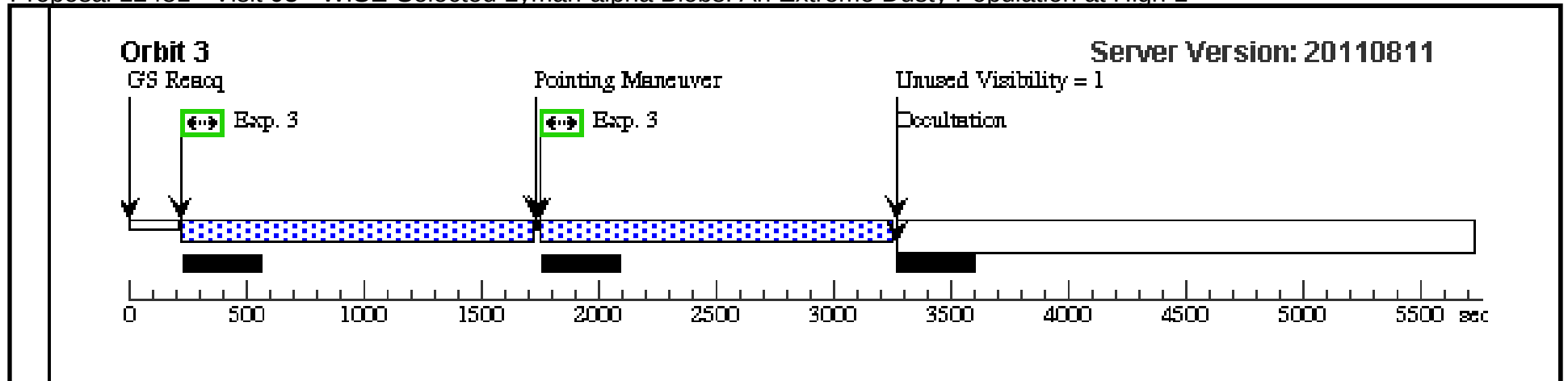
Proposal 12481 - Visit 02 - WISE-Selected Lyman-alpha Blobs: An Extreme Dusty Population at High-z

Visit	Proposal 12481, Visit 02, implementation										Fri Sep 09 01:16:00 GMT 2011			
	Diagnostic Status: No Diagnostics													
	Scientific Instruments: ACS/WFC													
	Special Requirements: GROUP 02,01,03,04 WITHIN 120D													
Patterns	#	Primary Pattern					Secondary Pattern				Exposures			
	(1)	Pattern Type=ACS-WFC-DITHER-BOX Coordinate Frame=POS-TARG Pattern Orientation=20.67 Purpose=DITHER Angle Between Sides=69.05 Number Of Points=4 Center Pattern=false Point Spacing=0.265 Line Spacing=0.187									(1)			
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Fluxes		Miscellaneous				
	(1)	WISELAB1814+34	RA: 18 14 17.3100 (273.5721250d) Dec: +34 12 24.80 (34.20689d) Equinox: J2000					V=25		Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit		
	1		(1) WISELAB1814+34	ACS/WFC, ACCUM, WFC		F435W		LOW-SKY	Pattern 1, Exps 1-1 in Visit 02 (1)	518 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]		[1]		
Orbit Structure	Orbit 1												Server Version: 20110811	

Proposal 12481 - Visit 03 - WISE-Selected Lyman-alpha Blobs: An Extreme Dusty Population at High-z

Visit	Proposal 12481, Visit 03, implementation Fri Sep 09 01:16:01 GMT 2011									
	Diagnostic Status: Warning Scientific Instruments: ACS/WFC Special Requirements: GROUP 03,01,02,04 WITHIN 120D									
Diagnostics	(Exposure 1 (Pattern 3, Exps 1-1 in Visit 03)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.									
	(Exposure 2 (Pattern 3, Exps 2-2 in Visit 03)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.									
	(Exposure 3 (Point Pattern 3, Exps 3-3 in Visit 03)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.									
Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
	(3)	Pattern Type=ACS-WFC-DITHER- LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.146 Line Spacing=				Coordinate Frame=POS-TARG Pattern Orientation=47.17 Angle Between Sides= Center Pattern=false			(1), (2), (3)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous	
	(1)	WISELAB1814+34	RA: 18 14 17.3100 (273.5721250d) Dec: +34 12 24.80 (34.20689d) Equinox: J2000				V=25		Reference Frame: ICRS	
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) WISELAB1814+34	ACS/WFC, ACCUM, WFC1-IRAMP	FR423N 4201.96 A			Pattern 3, Exps 1-1 in Visit 03 (3)	1282 Secs	
									[=>(Pattern 1)]	[1]
									[=>(Pattern 2)]	
	2		(1) WISELAB1814+34	ACS/WFC, ACCUM, WFC1-IRAMP	FR423N 4201.96 A			Pattern 3, Exps 2-2 in Visit 03 (3)	1378 Secs	
									[=>(Pattern 1)]	[2]
									[=>(Pattern 2)]	
	3		(1) WISELAB1814+34	ACS/WFC, ACCUM, WFC1-IRAMP	FR423N 4201.96 A			Pattern 3, Exps 3-3 in Visit 03 (3)	1378 Secs	
									[=>(Pattern 1)]	[3]
									[=>(Pattern 2)]	



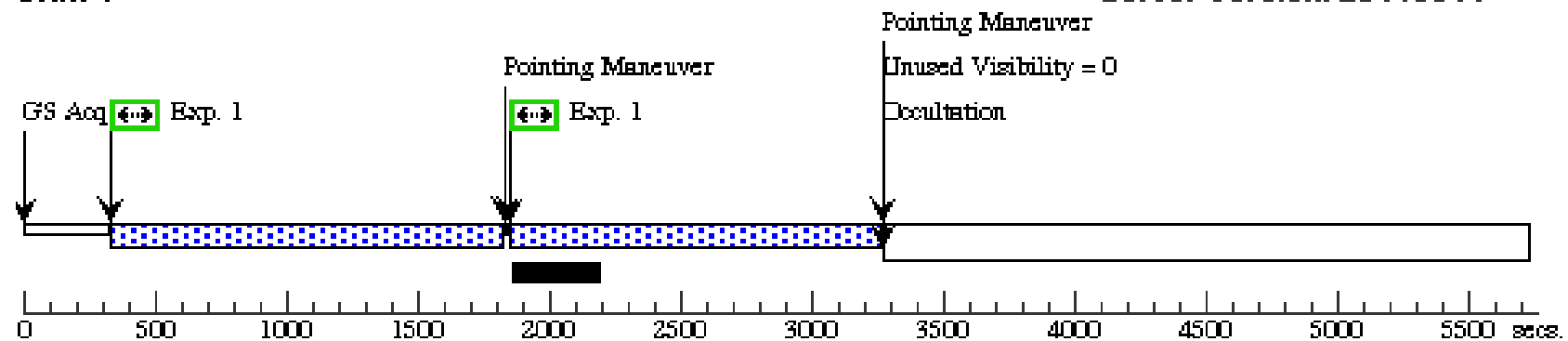


Proposal 12481 - Visit 04 - WISE-Selected Lyman-alpha Blobs: An Extreme Dusty Population at High-z

Visit	Proposal 12481, Visit 04, implementation Fri Sep 09 01:16:02 GMT 2011									
	Diagnostic Status: Warning Scientific Instruments: ACS/WFC Special Requirements: GROUP 04,01,02,03 WITHIN 120D									
Diagnostics	(Exposure 1 (Pattern 3, Exps 1-1 in Visit 04)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures. (Exposure 2 (Pattern 3, Exps 2-2 in Visit 04)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures. (Exposure 3 (Pattern 3, Exps 3-3 in Visit 04)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.									
Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
	(3)	Pattern Type=ACS-WFC-DITHER- LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.146 Line Spacing=				Coordinate Frame=POS-TARG Pattern Orientation=47.17 Angle Between Sides= Center Pattern=false			(1), (2), (3)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous	
	(1)	WISELAB1814+34	RA: 18 14 17.3100 (273.5721250d) Dec: +34 12 24.80 (34.20689d) Equinox: J2000				V=25		Reference Frame: ICRS	
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) WISELAB1814+34	ACS/WFC, ACCUM, WFC1-IRAMP	FR423N 4201.96 A			Pattern 3, Exps 1-1 in Visit 04 (3)	1282 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(1) WISELAB1814+34	ACS/WFC, ACCUM, WFC1-IRAMP	FR423N 4201.96 A			Pattern 3, Exps 2-2 in Visit 04 (3)	1378 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[2]
	3		(1) WISELAB1814+34	ACS/WFC, ACCUM, WFC1-IRAMP	FR423N 4201.96 A			Pattern 3, Exps 3-3 in Visit 04 (3)	1378 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[3]

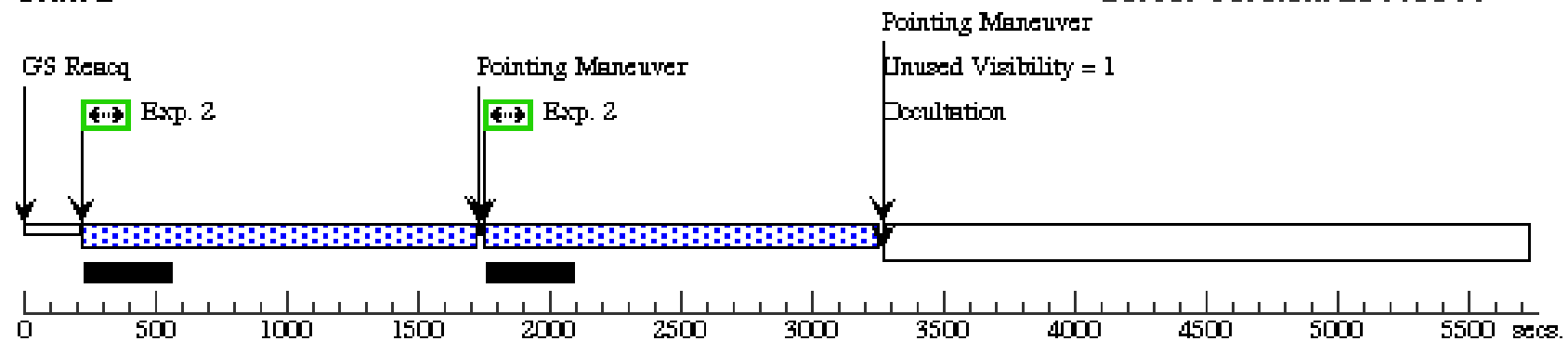
Orbit 1

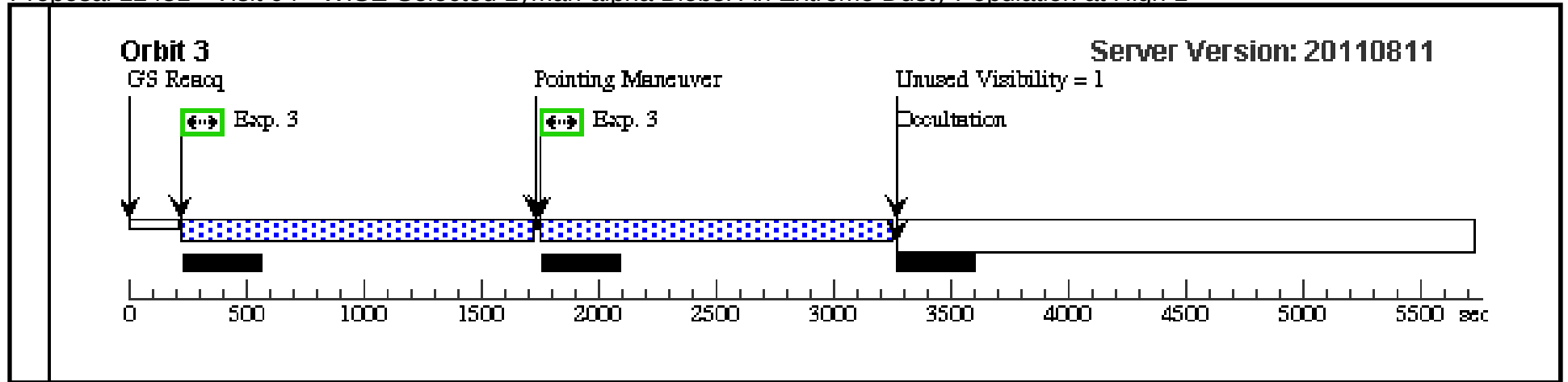
Server Version: 20110811



Orbit 2

Server Version: 20110811





Proposal 12481 - Visit 05 - WISE-Selected Lyman-alpha Blobs: An Extreme Dusty Population at High-z

Visit	Proposal 12481, Visit 05, implementation Fri Sep 09 01:16:03 GMT 2011				
	Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: GROUP 05,06,07,08 WITHIN 120D				
Patterns	#	Primary Pattern		Secondary Pattern	Exposures
	(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365		Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	(1)
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(3)	WISELAB1541+14	RA: 15 41 17.5900 (235.3232917d) Dec: +14 25 44.90 (14.42914d) Equinox: J2000		V=25
Exposures					Miscellaneous
	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.
	1	(3) WISELAB1541+14	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 50; NSAMP=14
Exposures					Opt. Params.
					Special Reqs.
Exposures					Groups
					Exp. Time/[Actual Dur.]
Exposures					Orbit
					[1]
Orbit Structure					
	Orbit 1 Server Version: 20110811				

Proposal 12481 - Visit 06 - WISE-Selected Lyman-alpha Blobs: An Extreme Dusty Population at High-z

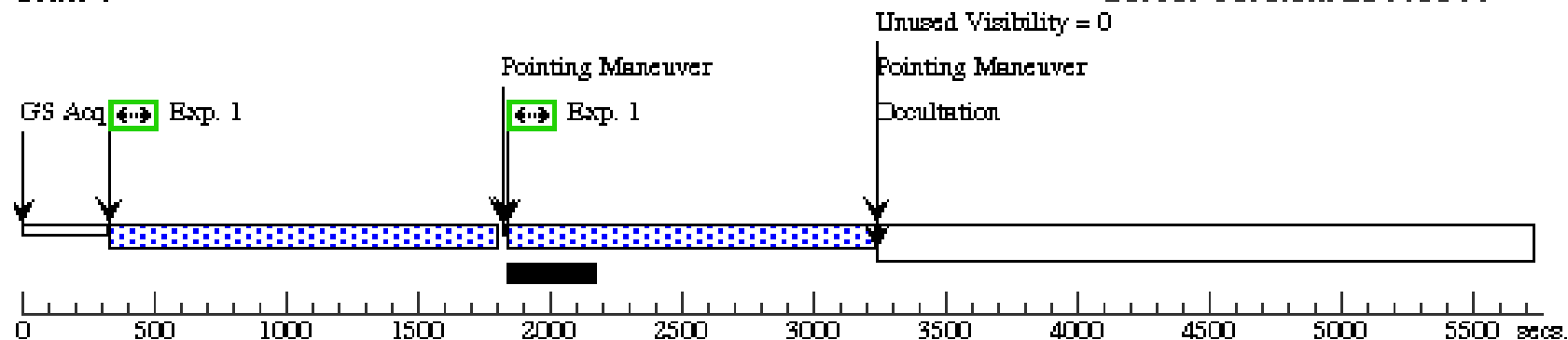
Visit	Proposal 12481, Visit 06, implementation Fri Sep 09 01:16:03 GMT 2011				
	Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: GROUP 06,05,07,08 WITHIN 120D				
Patterns	#	Primary Pattern		Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-BOX Coordinate Frame=POS-TARG Pattern Orientation=20.67 Purpose=DITHER Angle Between Sides=69.05 Number Of Points=4 Center Pattern=false Point Spacing=0.265 Line Spacing=0.187			(1)
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(3)	WISELAB1541+14	RA: 15 41 17.5900 (235.3232917d) Dec: +14 25 44.90 (14.42914d) Equinox: J2000		V=25
Exposures					Miscellaneous
	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.
	1		(3) WISELAB1541+14	ACS/WFC, ACCUM, WFC	F435W
Exposures					Opt. Params.
					LOW-SKY
Exposures					Special Reqs.
					Pattern 1, Exps 1-1 in Visit 06 (1)
Exposures					Groups
					Pattern 1, Exps 1-1 in Visit 06 (1)
Exposures					Exp. Time/[Actual Dur.]
					521 Secs
Exposures					[==>(Pattern 1)]
					[==>(Pattern 2)]
Exposures					[==>(Pattern 3)]
					[==>(Pattern 4)]
Exposures					Orbit
					[1]
Orbit Structure	Orbit 1 Server Version: 20110811				
	The diagram illustrates the orbit structure for Orbit 1, showing a sequence of events over a 5500-second period. Key events include a GS Acq at 0s, four exposures (Exp. 1) at approximately 400s, 1200s, 1900s, and 2600s, each preceded by a Pointing Maneuver. An Occultation occurs at approximately 3200s, followed by a Low Sky Limit period. The timeline ends with Unused Visibility = 67.				

Proposal 12481 - Visit 07 - WISE-Selected Lyman-alpha Blobs: An Extreme Dusty Population at High-z

Visit	Proposal 12481, Visit 07, implementation										Fri Sep 09 01:16:04 GMT 2011		
	Diagnostic Status: Warning												
	Scientific Instruments: ACS/WFC												
	Special Requirements: GROUP 07,05,06,08 WITHIN 120D												
Diagnostics	(Exposure 1 (Pattern 3, Exps 1-1 in Visit 07)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.												
	(Exposure 2 (Pattern 3, Exps 2-2 in Visit 07)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.												
	(Exposure 3 (Pattern 3, Exps 3-3 in Visit 07)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.												
Patterns	#	Primary Pattern					Secondary Pattern					Exposures	
	(3)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.146 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=47.17 Angle Between Sides= Center Pattern=false										(1), (2), (3)	
Fixed Targets	#	Name		Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(3)	WISELAB1541+14		RA: 15 41 17.5900 (235.3232917d) Dec: +14 25 44.90 (14.42914d) Equinox: J2000				V=25		Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture		Spectral Els.		Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1		(3) WISELAB1541+14	ACS/WFC, ACCUM, WFC1-MRAMP		FR388N 3796.76 A				Pattern 3, Exps 1-1 in Visit 07 (3)	1267 Secs		
											[==>(Pattern 1)]	[1]	
											[==>(Pattern 2)]		
	2		(3) WISELAB1541+14	ACS/WFC, ACCUM, WFC1-MRAMP		FR388N 3796.76 A				Pattern 3, Exps 2-2 in Visit 07 (3)	1363 Secs		
											[==>(Pattern 1)]	[2]	
											[==>(Pattern 2)]		
3		(3) WISELAB1541+14	ACS/WFC, ACCUM, WFC1-MRAMP		FR388N 3796.76 A				Pattern 3, Exps 3-3 in Visit 07 (3)	1357 Secs			
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										[==>(Pattern 2)]			

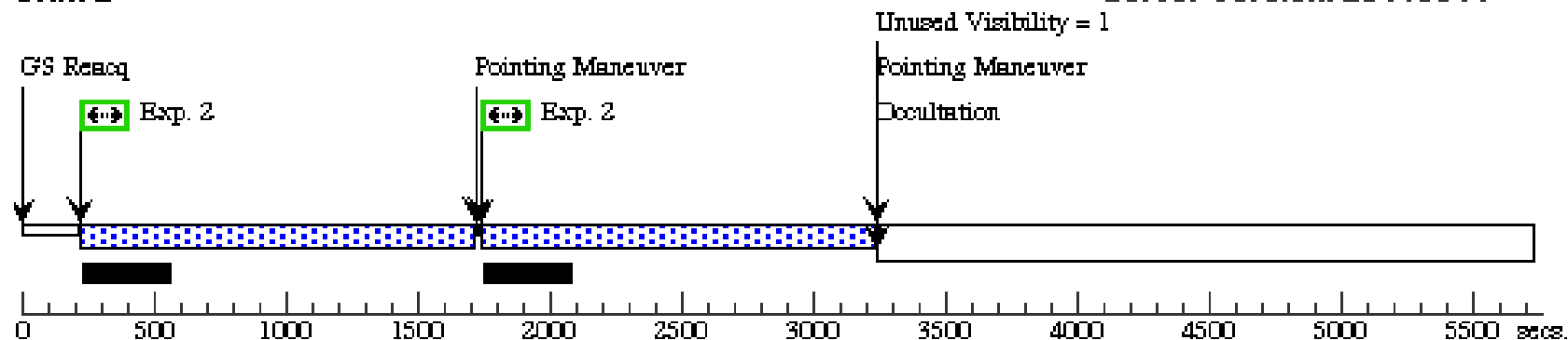
Orbit 1

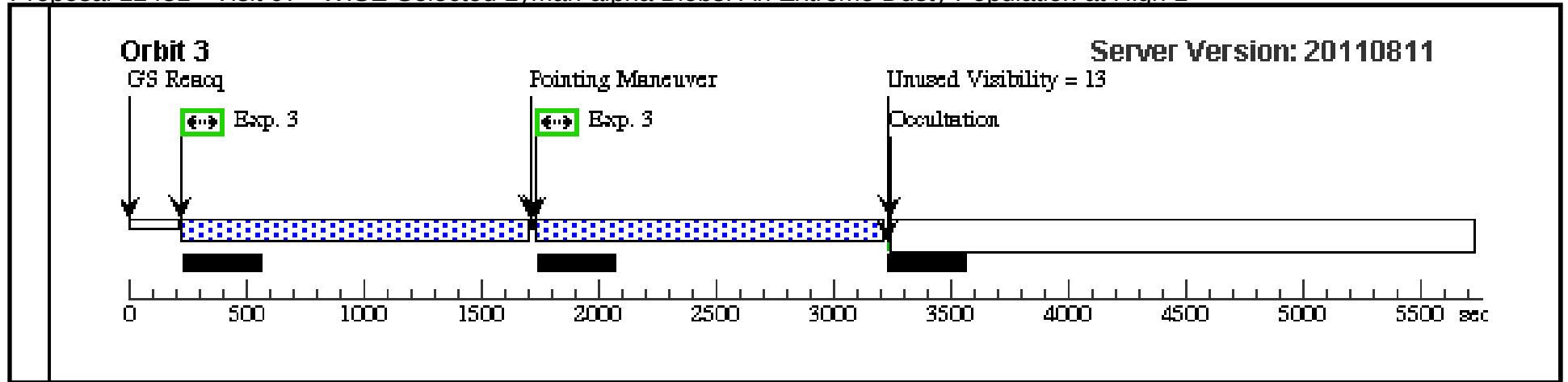
Server Version: 20110811



Orbit 2

Server Version: 20110811



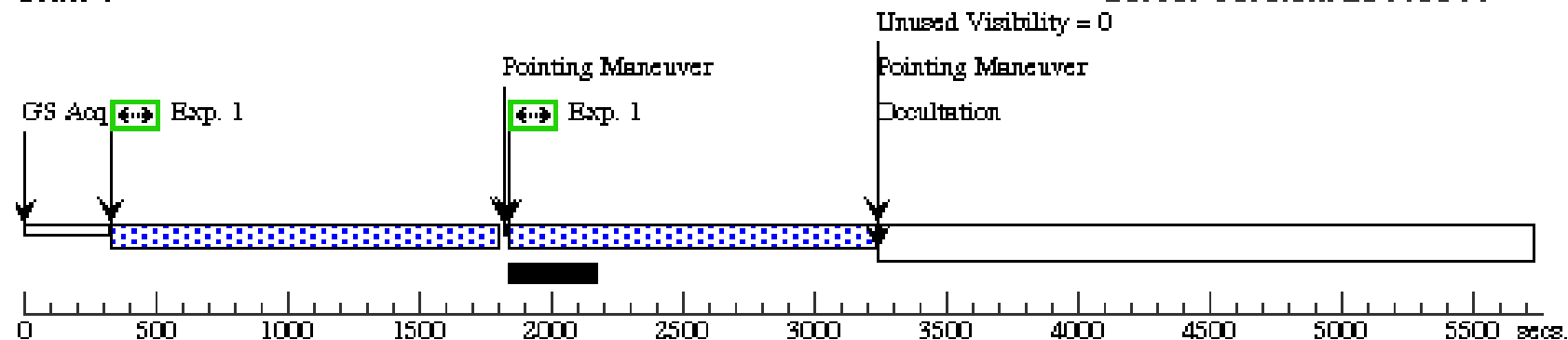


Proposal 12481 - Visit 08 - WISE-Selected Lyman-alpha Blobs: An Extreme Dusty Population at High-z

Visit	Proposal 12481, Visit 08, implementation Fri Sep 09 01:16:04 GMT 2011									
	Diagnostic Status: Warning Scientific Instruments: ACS/WFC Special Requirements: GROUP 08,05,06,07 WITHIN 120D									
Diagnostics	(Exposure 1 (Pattern 3, Exps 1-1 in Visit 08)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.									
	(Exposure 2 (Pattern 3, Exps 2-2 in Visit 08)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.									
	(Exposure 3 (Point Pattern 3, Exps 3-3 in Visit 08)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.									
Patterns	#	Primary Pattern				Secondary Pattern				Exposures
	(3)	Pattern Type=ACS-WFC-DITHER- LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.146 Line Spacing=				Coordinate Frame=POS-TARG Pattern Orientation=47.17 Angle Between Sides= Center Pattern=false				(1), (2), (3)
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous	
	(3)	WISELAB1541+14	RA: 15 41 17.5900 (235.3232917d) Dec: +14 25 44.90 (14.42914d) Equinox: J2000				V=25		Reference Frame: ICRS	
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(3) WISELAB1541+14	ACS/WFC, ACCUM, WFC1-MRAMP	FR388N 3796.76 A			Pattern 3, Exps 1-1 in Visit 08 (3)	1267 Secs	
									[=>(Pattern 1)]	[1]
									[=>(Pattern 2)]	
	2		(3) WISELAB1541+14	ACS/WFC, ACCUM, WFC1-MRAMP	FR388N 3796.76 A			Pattern 3, Exps 2-2 in Visit 08 (3)	1363 Secs	
									[=>(Pattern 1)]	[2]
									[=>(Pattern 2)]	
	3		(3) WISELAB1541+14	ACS/WFC, ACCUM, WFC1-MRAMP	FR388N 3796.76 A			Pattern 3, Exps 3-3 in Visit 08 (3)	1363 Secs	
									[=>(Pattern 1)]	[3]
									[=>(Pattern 2)]	

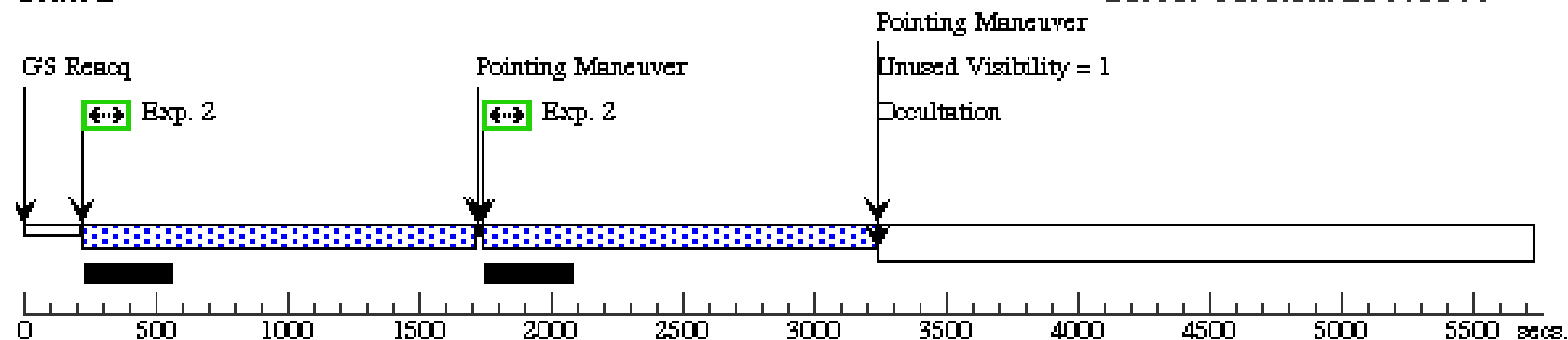
Orbit 1

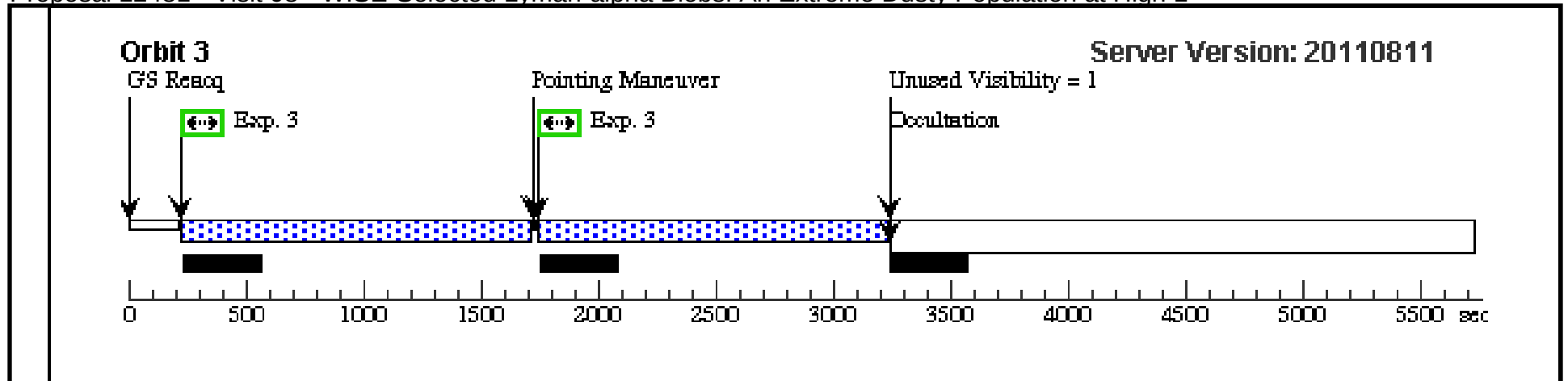
Server Version: 20110811



Orbit 2

Server Version: 20110811





Proposal 12481 - Visit 09 - WISE-Selected Lyman-alpha Blobs: An Extreme Dusty Population at High-z

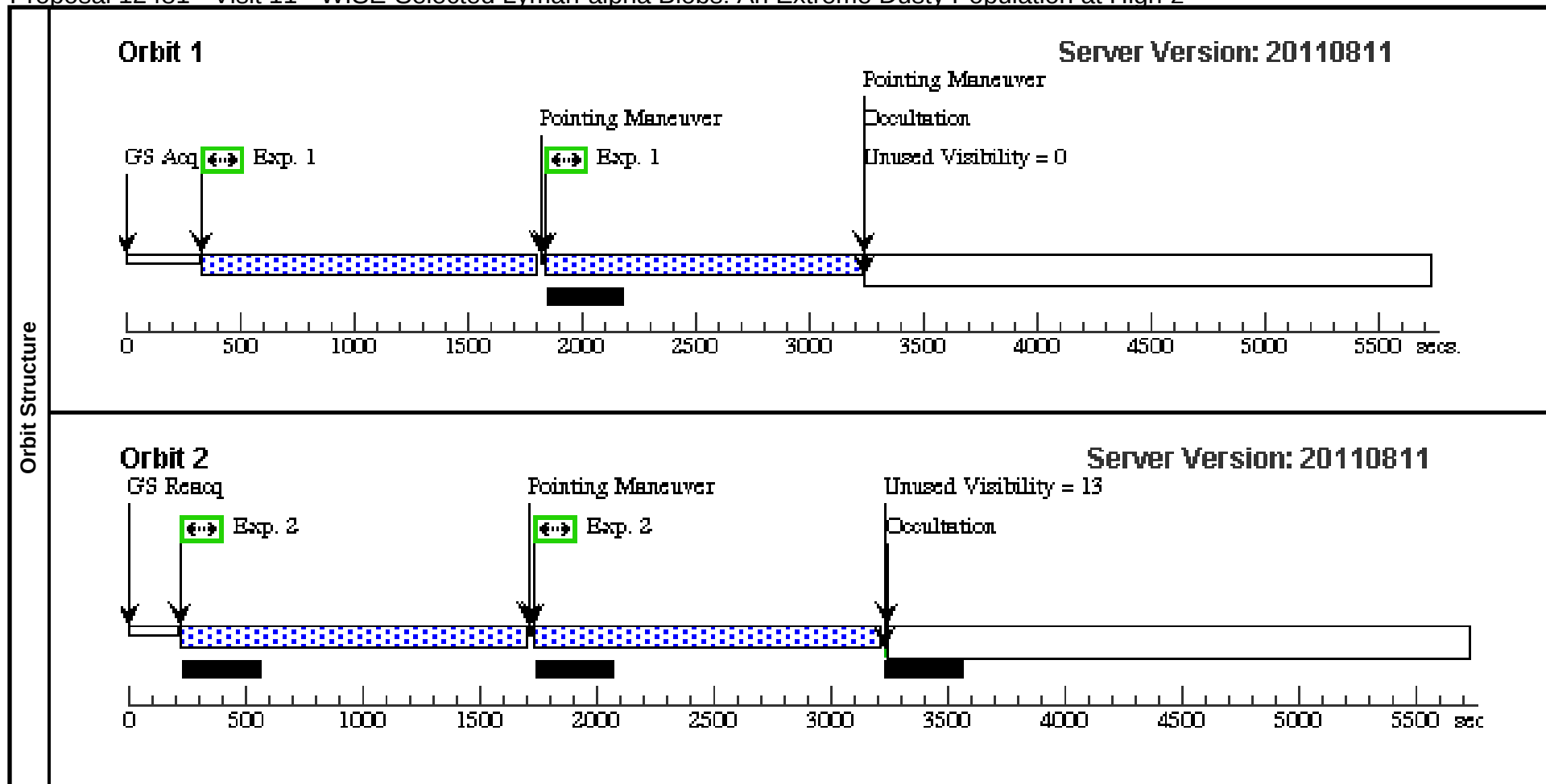
Visit	Proposal 12481, Visit 09, implementation										Fri Sep 09 01:16:05 GMT 2011																					
	Diagnostic Status: No Diagnostics																															
	Scientific Instruments: WFC3/IR																															
	Special Requirements: GROUP 09,10,11 WITHIN 120D																															
Patterns	#	Primary Pattern										Secondary Pattern										Exposures										
	(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365										Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false										(1)										
Fixed Targets	#	Name				Target Coordinates				Targ. Coord. Corrections				Fluxes				Miscellaneous														
	(4)	WISELAB0149+23				RA: 01 49 46.1700 (27.4423750d) Dec: +23 50 15.10 (23.83753d) Equinox: J2000								V=25				Reference Frame: ICRS														
Exposures	#	Label	Target		Config,Mode,Aperture				Spectral Els.		Opt. Params.		Special Reqs.		Groups		Exp. Time/[Actual Dur.]		Orbit													
	1		(4) WISELAB0149+23		WFC3/IR, MULTIACCUM, IR				F160W		SAMP-SEQ=SPARS 50; NSAMP=14				Pattern 2, Exps 1-1 in Visit 09 (2)		[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]		[1]													
Orbit Structure	Orbit 1																						Server Version: 20110811									

Proposal 12481 - Visit 10 - WISE-Selected Lyman-alpha Blobs: An Extreme Dusty Population at High-z

Visit	Proposal 12481, Visit 10, implementation										Fri Sep 09 01:16:05 GMT 2011			
	Diagnostic Status: No Diagnostics													
	Scientific Instruments: ACS/WFC													
	Special Requirements: GROUP 10,09,11 WITHIN 120D													
Patterns	#	Primary Pattern					Secondary Pattern				Exposures			
	(1)	Pattern Type=ACS-WFC-DITHER-BOX Coordinate Frame=POS-TARG Pattern Orientation=20.67 Purpose=DITHER Angle Between Sides=69.05 Number Of Points=4 Center Pattern=false Point Spacing=0.265 Line Spacing=0.187									(1)			
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous					
	(4)	WISELAB0149+23	RA: 01 49 46.1700 (27.4423750d) Dec: +23 50 15.10 (23.83753d) Equinox: J2000				V=25		Reference Frame: ICRS					
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit			
	1		(4) WISELAB0149+23	ACS/WFC, ACCUM, WFC	F475W		LOW-SKY	Pattern 1, Exps 1-1 in Visit 10 (1)	524 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]		[1]			
Orbit Structure	Orbit 1												Server Version: 20110811	

Proposal 12481 - Visit 11 - WISE-Selected Lyman-alpha Blobs: An Extreme Dusty Population at High-z

Visit	Proposal 12481, Visit 11, implementation Fri Sep 09 01:16:06 GMT 2011									
	Diagnostic Status: Warning Scientific Instruments: ACS/WFC Special Requirements: GROUP 11,09,10 WITHIN 120D									
Diagnostics	(Exposure 1 (Pattern 3, Exps 1-1 in Visit 11)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures. (Exposure 2 (Pattern 3, Exps 2-2 in Visit 11)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.									
Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
	(3)	Pattern Type=ACS-WFC-DITHER- LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.146 Line Spacing=				Coordinate Frame=POS-TARG Pattern Orientation=47.17 Angle Between Sides= Center Pattern=false			(1), (2)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous	
	(4)	WISELAB0149+23	RA: 01 49 46.1700 (27.4423750d) Dec: +23 50 15.10 (23.83753d) Equinox: J2000				V=25		Reference Frame: ICRS	
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(4) WISELAB0149+23	ACS/WFC, ACCUM, WFC1-MRAMP	FR505N 5150.0 A			Pattern 3, Exps 1-1 in Visit 11 (3)	1269 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(4) WISELAB0149+23	ACS/WFC, ACCUM, WFC1-MRAMP	FR505N 5150.0 A			Pattern 3, Exps 2-2 in Visit 11 (3)	1359 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[2]



Proposal 12481 - Visit 12 - WISE-Selected Lyman-alpha Blobs: An Extreme Dusty Population at High-z

Visit	Proposal 12481, Visit 12, implementation										Fri Sep 09 01:16:06 GMT 2011																					
	Diagnostic Status: No Diagnostics																															
	Scientific Instruments: WFC3/IR																															
	Special Requirements: GROUP 12,13,14 WITHIN 120D																															
Patterns	#	Primary Pattern										Secondary Pattern										Exposures										
	(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365										Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false										(1)										
Fixed Targets	#	Name		Target Coordinates				Targ. Coord. Corrections				Fluxes				Miscellaneous																
	(5)	WISELAB1136+42		RA: 11 36 34.3070 (174.1429458d) Dec: +42 36 2.15 (42.60060d) Equinox: J2000								V=25				Reference Frame: ICRS																
Exposures	#	Label	Target	Config,Mode,Aperture				Spectral Els.		Opt. Params.		Special Reqs.		Groups		Exp. Time/[Actual Dur.]				Orbit												
	1		(5) WISELAB1136+42	WFC3/IR, MULTIACCUM, IR				F160W		SAMP-SEQ=SPARS 50; NSAMP=14		GS ACQ SCENARIO BASE1B3		Pattern 2, Exps 1-1 in Visit 12 (2)		[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]				[1]												
Orbit Structure	Orbit 1																						Server Version: 20110811									

Proposal 12481 - Visit 13 - WISE-Selected Lyman-alpha Blobs: An Extreme Dusty Population at High-z

Visit	Proposal 12481, Visit 13, implementation Fri Sep 09 01:16:06 GMT 2011				
	Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: GROUP 13,12,14 WITHIN 120D				
Patterns	#	Primary Pattern		Secondary Pattern	
	(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187		Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(5)	WISELAB1136+42	RA: 11 36 34.3070 (174.1429458d) Dec: +42 36 2.15 (42.60060d) Equinox: J2000		V=25
Exposures					
	#	Label	Target	Config,Mode,Aperture	Spectral Els.
	1		(5) WISELAB1136+42	ACS/WFC, ACCUM, WFC	F435W
					Opt. Params.
					Special Reqs.
					Groups
					Exp. Time/[Actual Dur.]
					Orbit
					[1]
Orbit Structure	Orbit 1 Server Version: 20110811				

Proposal 12481 - Visit 14 - WISE-Selected Lyman-alpha Blobs: An Extreme Dusty Population at High-z

Visit	Proposal 12481, Visit 14, implementation Fri Sep 09 01:16:06 GMT 2011									
	Diagnostic Status: Warning Scientific Instruments: ACS/WFC Special Requirements: GROUP 14,12,13 WITHIN 120D									
Diagnostics	(Exposure 1 (Pattern 3, Exps 1-1 in Visit 14)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures. (Exposure 2 (Pattern 3, Exps 2-2 in Visit 14)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.									
Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
	(3)	Pattern Type=ACS-WFC-DITHER- LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.146 Line Spacing=				Coordinate Frame=POS-TARG Pattern Orientation=47.17 Angle Between Sides= Center Pattern=false			(1), (2)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous	
	(5)	WISELAB1136+42	RA: 11 36 34.3070 (174.1429458d) Dec: +42 36 2.15 (42.60060d) Equinox: J2000				V=25		Reference Frame: ICRS	
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(5) WISELAB1136+42	ACS/WFC, ACCUM, WFC1-IRAMP	FR423N 4134.09 A			Pattern 3, Exps 1-1 in Visit 14 (3)	1315 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(5) WISELAB1136+42	ACS/WFC, ACCUM, WFC1-IRAMP	FR423N 4134.09 A			Pattern 3, Exps 2-2 in Visit 14 (3)	1411 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[2]

