



12790 - Through a Lens, Darkly - New Constraints on the Fundamental Components of the Cosmos

Cycle: 20, Proposal Category: GO

(Treasury)

(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>
A0	(1) MACS1423+2404 (3) MACS1423+2404-WFC3PAR1	ACS/WFC WFC3/IR WFC3/UVIS	1	04-Oct-2012 21:07:40.0	yes
A2	(1) MACS1423+2404 (2) MACS1423+2404-ACSPAR1	ACS/WFC WFC3/IR	1	04-Oct-2012 21:07:54.0	yes
A3	(1) MACS1423+2404 (3) MACS1423+2404-WFC3PAR1	ACS/WFC WFC3/IR WFC3/UVIS	1	04-Oct-2012 21:08:06.0	yes
A4	(1) MACS1423+2404 (2) MACS1423+2404-ACSPAR1	ACS/WFC WFC3/IR	1	04-Oct-2012 21:08:18.0	yes
A6	(1) MACS1423+2404 (2) MACS1423+2404-ACSPAR1	ACS/WFC WFC3/UVIS	2	04-Oct-2012 21:08:35.0	yes
A8	(1) MACS1423+2404 (3) MACS1423+2404-WFC3PAR1	ACS/WFC WFC3/IR WFC3/UVIS	1	04-Oct-2012 21:08:48.0	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>
A9	(1) MACS1423+2404 (2) MACS1423+2404-ACSPAR1	ACS/WFC WFC3/IR	1	04-Oct-2012 21:08:59.0	yes
B0	(1) MACS1423+2404 (5) MACS1423+2404-WFC3PAR2	ACS/WFC WFC3/IR WFC3/UVIS	1	04-Oct-2012 21:09:09.0	yes
B1	(1) MACS1423+2404 (4) MACS1423+2404-ACSPAR2	ACS/WFC WFC3/IR	1	04-Oct-2012 21:09:20.0	yes
B2	(1) MACS1423+2404 (5) MACS1423+2404-WFC3PAR2	ACS/WFC WFC3/IR WFC3/UVIS	1	04-Oct-2012 21:09:30.0	yes
B3	(1) MACS1423+2404 (4) MACS1423+2404-ACSPAR2	ACS/WFC WFC3/UVIS	2	04-Oct-2012 21:09:49.0	yes
B6	(1) MACS1423+2404 (4) MACS1423+2404-ACSPAR2	ACS/WFC WFC3/IR WFC3/UVIS	2	04-Oct-2012 21:10:07.0	yes
B7	(1) MACS1423+2404 (5) MACS1423+2404-WFC3PAR2	ACS/WFC WFC3/IR WFC3/UVIS	1	04-Oct-2012 21:10:20.0	yes
B8	(1) MACS1423+2404 (4) MACS1423+2404-ACSPAR2	ACS/WFC WFC3/IR	1	04-Oct-2012 21:10:30.0	yes

17 Total Orbits Used

ABSTRACT

As the most massive objects in the universe, galaxy clusters represent important signposts in our story of structure evolution, and are the ultimate telescopic lenses, placing gravitationally lensed galaxies from the earliest epochs in comfortable reach for careful study. We take full advantage of the refurbished ACS and WFC3 cameras to deliver deep 14-filter images of 25 carefully chosen clusters. These will enable us to address timely and substantive questions about dark matter, dark energy, and galaxy evolution well beyond $z=7$. These X-ray clusters are chosen to be free of lensing bias and to span a wide range of redshift and mass. By combining strong and weak lensing, we will obtain the definitive mass profile of relaxed

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clusters to confront the distinctive prediction of the standard LambdaCDM model. Detailed maps of internal structure will be enabled by ~1,000 new multiply-imaged lensed sources to $AB=26$, all with precise ($2\% \times (1+z)$) photometric redshift measurements, thanks to WFC3's UV and IR coverage. A supernovae search in parallel (with low magnification uncertainties) will extend the Hubble diagram of SN1a to $z>1.5$, testing the constancy of dark energy with time and probing progenitor evolution. Our homogeneous panchromatic deep imaging of this cluster sample will constitute a vast legacy archive for studies of the formation and evolution of structure.

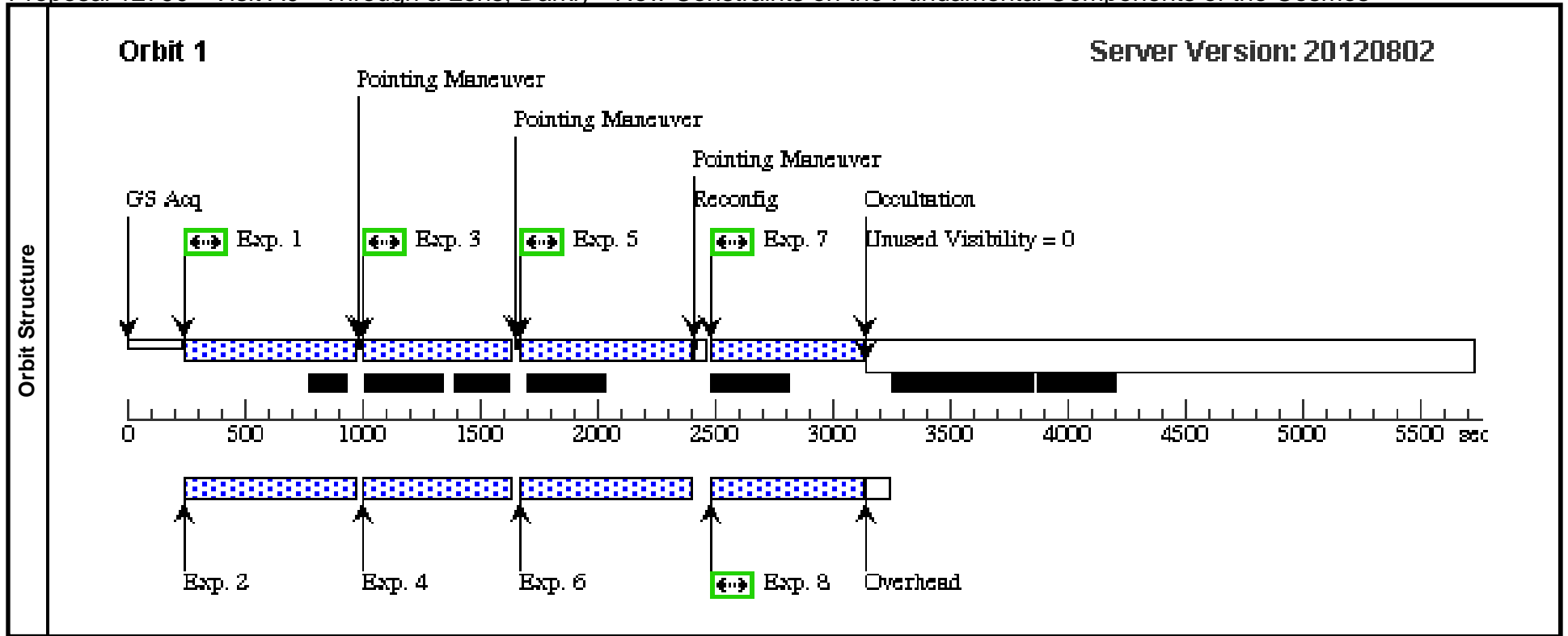
OBSERVING DESCRIPTION

There are two special requirements: orientation and cadence. Four epochs must be executed at the same orientation. Each epoch will be between 10 and 14 days, depending on the roll angle availability for the given target. There will be two orientations selected, which will be approximately 20-30 degrees apart.

Proposal 12790 - Visit A0 - Through a Lens, Darkly - New Constraints on the Fundamental Components of the Cosmos

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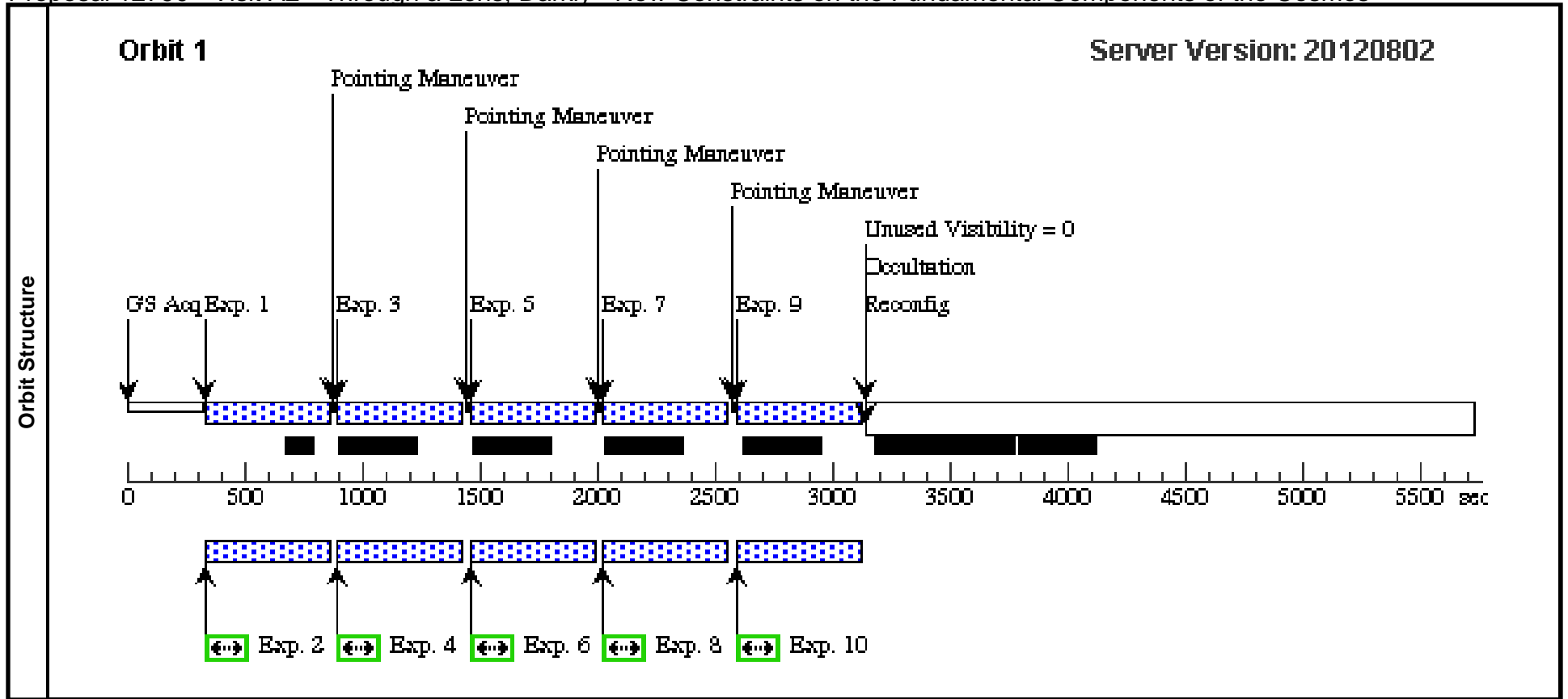
Visit	Proposal 12790, Visit A0, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC Special Requirements: SCHED 60%; ORIENT 75D TO 99 D; ORIENT 161D TO 186 D; ORIENT 265D TO 282 D; ORIENT 337D TO 339 D Comments: Visits A0-A2 represent epoch 1 (at orient 1) and should be taken concurrently Orient constraints are to avoid placing a bright star in the parallel fields.									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	MACS1423+2404	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
	(3)	MACS1423+2404-WFC3PAR1	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F775W		POS TARG 0,0; GS ACQ SCENARI O SINGLE	Prime + Parallel Group 1-2 in Visit A0	525 Secs [==>525 Secs]	[1]
	2		(3) MACS1423+2404-WFC3PAR1	WFC3/IR, MULTIACCUM, IR-FIX	F125W	SAMP-SEQ=SPARS 100; NSAMP=8		Prime + Parallel Group 1-2 in Visit A0	[==>]	[1]
	3		(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F775W		POS TARG 0.0741,0 .1295	Prime + Parallel Group 3-4 in Visit A0	507 Secs [==>507.0 Secs]	[1]
	4		(3) MACS1423+2404-WFC3PAR1	WFC3/IR, MULTIACCUM, IR-FIX	F160W	SAMP-SEQ=SPARS 50; NSAMP=13		Prime + Parallel Group 3-4 in Visit A0	[==>]	[1]
	5		(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F850LP		POS TARG 0.1729,- 0.0848	Prime + Parallel Group 5-6 in Visit A0	551 Secs [==>581 Secs]	[1]
	6		(3) MACS1423+2404-WFC3PAR1	WFC3/IR, MULTIACCUM, IR-FIX	F160W	SAMP-SEQ=SPARS 100; NSAMP=8		Prime + Parallel Group 5-6 in Visit A0	[==>]	[1]
	7		(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F850LP		POS TARG 0.247,0. 2423	Prime + Parallel Group 7-8 in Visit A0	564 Secs [==>522 Secs]	[1]
	8		(3) MACS1423+2404-WFC3PAR1	WFC3/UVIS, ACCUM, UVIS-FIX	F350LP	CR-SPLIT=NO		Prime + Parallel Group 7-8 in Visit A0	400 Secs [==>616 Secs]	[1]



Proposal 12790 - Visit A2 - Through a Lens, Darkly - New Constraints on the Fundamental Components of the Cosmos

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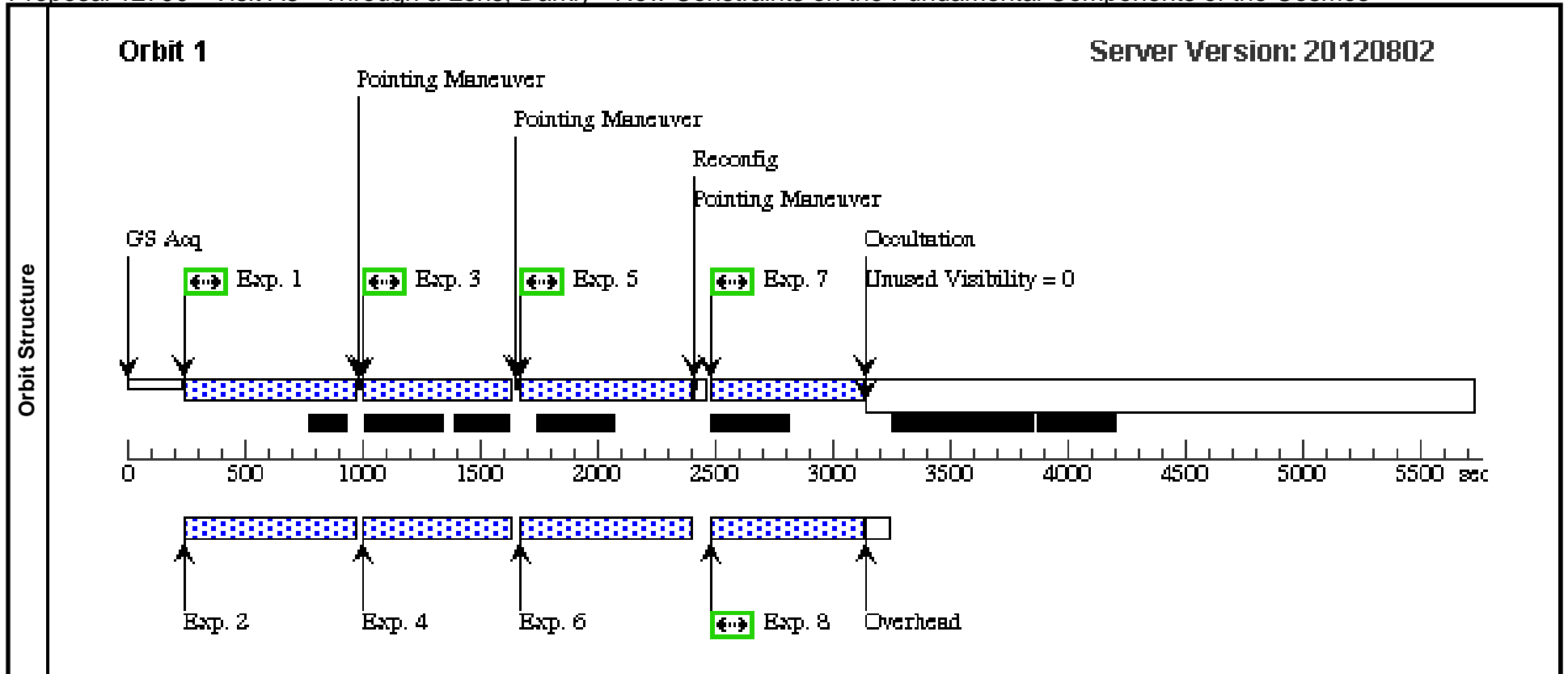
Visit	Proposal 12790, Visit A2, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: SCHED 60%; SAME ORIENT AS A0; SEQ A0,A2 WITHIN 1.2 Orbits Comments: Visits A0-A2 represent epoch 1 (at orient 1) and should be taken concurrently									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	MACS1423+2404	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
	(2)	MACS1423+2404-ACSPAR1	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F110W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG 0,0; GS ACQ SCENARI O BASE1B3	Prime + Parallel Group 1-2 in Visit A2	[==>]	[1]
	2		(2) MACS1423+2404-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 1-2 in Visit A2	525 Secs [==>325.0 Secs]	[1]
	3		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F110W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG 0.20325, -0.18165	Prime + Parallel Group 3-4 in Visit A2	[==>]	[1]
	4		(2) MACS1423+2404-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 3-4 in Visit A2	607 Secs [==>407.0 Secs]	[1]
	5		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F110W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG 0.47425, 0.6055	Prime + Parallel Group 5-6 in Visit A2	[==>]	[1]
	6		(2) MACS1423+2404-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 5-6 in Visit A2	582 Secs [==>407.0 Secs]	[1]
	7		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F160W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG -0.271,0 .42385	Prime + Parallel Group 7-8 in Visit A2	[==>]	[1]
	8		(2) MACS1423+2404-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 7-8 in Visit A2	587 Secs [==>407.0 Secs]	[1]
	9		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F160W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG 0.47425, 0.6055	Prime + Parallel Group 9-10 in Visit A2	[==>]	[1]
10		(2) MACS1423+2404-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 9-10 in Visit A2	587 Secs [==>385.0 Secs]	[1]	



Proposal 12790 - Visit A3 - Through a Lens, Darkly - New Constraints on the Fundamental Components of the Cosmos

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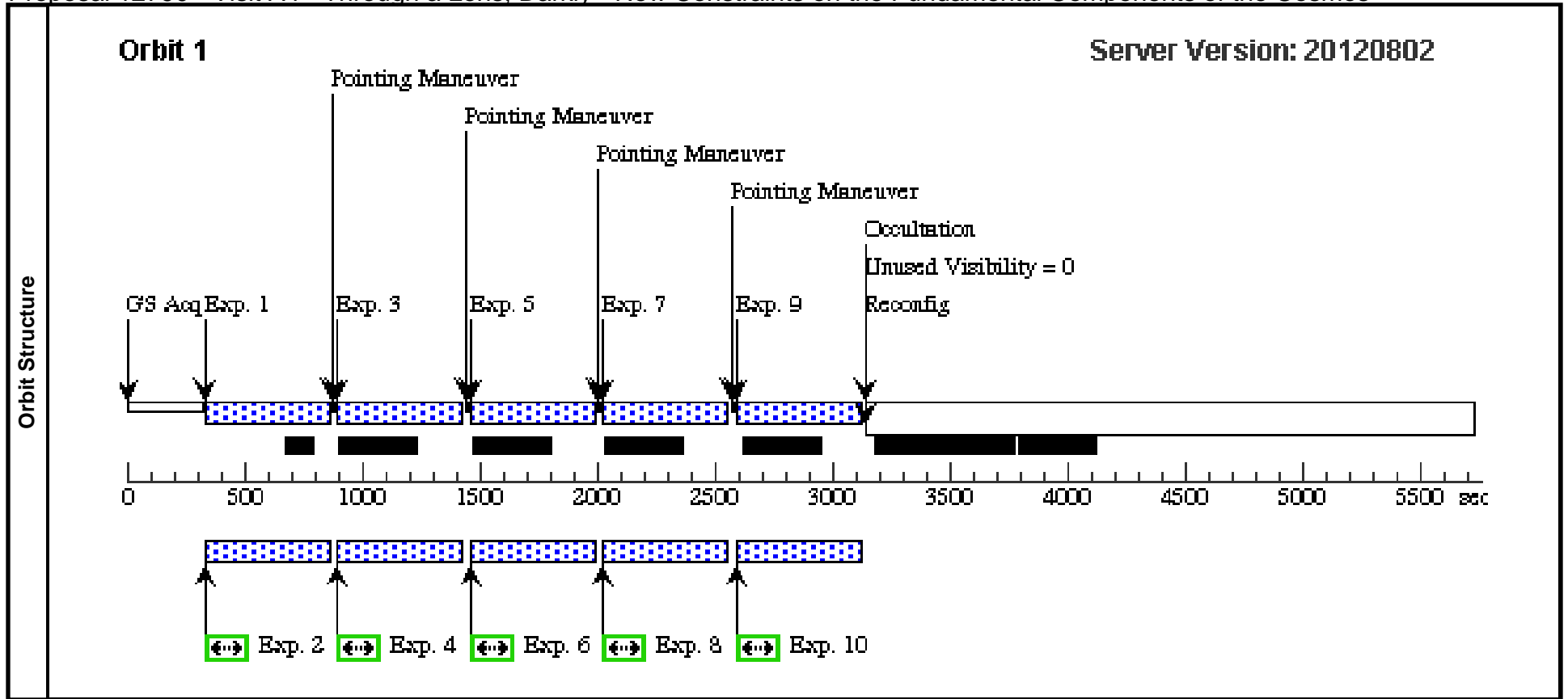
Visit	Proposal 12790, Visit A3, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC Special Requirements: SCHED 60%; SAME ORIENT AS A0; AFTER A0 BY 17 D TO 19 D Comments: Visits A3-A4 represent epoch 2 (at orient 1) and should be taken concurrently									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	MACS1423+2404	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
	(3)	MACS1423+2404-WFC3PAR1	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(1) MACS1423+2404	(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F606W		POS TARG 0,0; GS ACQ SCENARI O SINGLE	Prime + Parallel Group 1-2 in Visit A3	525 Secs [==>525 Secs]	[1]
	2	(3) MACS1423+2404-WFC3PAR1	(3) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F125W		SAMP-SEQ=SPARS 100; NSAMP=8	Prime + Parallel Group 1-2 in Visit A3	[==>]	[1]
	3	(1) MACS1423+2404	(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F606W		POS TARG 0.3211,0 .7917	Prime + Parallel Group 3-4 in Visit A3	507 Secs [==>507.0 Secs]	[1]
	4	(3) MACS1423+2404-WFC3PAR1	(3) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F160W		SAMP-SEQ=SPARS 50; NSAMP=13	Prime + Parallel Group 3-4 in Visit A3	[==>]	[1]
	5	(1) MACS1423+2404	(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F435W		POS TARG 1.0868,0 .5573	Prime + Parallel Group 5-6 in Visit A3	551 Secs [==>544 Secs]	[1]
	6	(3) MACS1423+2404-WFC3PAR1	(3) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F160W		SAMP-SEQ=SPARS 100; NSAMP=8	Prime + Parallel Group 5-6 in Visit A3	[==>]	[1]
	7	(1) MACS1423+2404	(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F435W		POS TARG -0.3211, -0.1742	Prime + Parallel Group 7-8 in Visit A3	564 Secs [==>522 Secs]	[1]
8	(3) MACS1423+2404-WFC3PAR1	(3) MACS1423+2404	WFC3/UVIS, ACCUM, UVIS-FIX	F350LP		CR-SPLIT=NO	Prime + Parallel Group 7-8 in Visit A3	400 Secs [==>616 Secs]	[1]	



Proposal 12790 - Visit A4 - Through a Lens, Darkly - New Constraints on the Fundamental Components of the Cosmos

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Visit	Proposal 12790, Visit A4, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: SCHED 60%; SAME ORIENT AS A0; SEQ A3,A4 WITHIN 1.2 Orbits Comments: Visits A3-A4 represent epoch 2 (at orient 1) and should be taken concurrently									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	MACS1423+2404	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
	(2)	MACS1423+2404-ACSPAR1	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F105W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG 0,0; GS ACQ SCENARI O BASE1B3	Prime + Parallel Group 1-2 in Visit A4	[==>]	[1]
	2		(2) MACS1423+2404-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 1-2 in Visit A4	525 Secs [==>325.0 Secs]	[1]
	3		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F105W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG -1.1517 5,0.42385	Prime + Parallel Group 3-4 in Visit A4	[==>]	[1]
	4		(2) MACS1423+2404-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 3-4 in Visit A4	607 Secs [==>407 Secs]	[1]
	5		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F105W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG -0.813,- 0.30275	Prime + Parallel Group 5-6 in Visit A4	[==>]	[1]
	6		(2) MACS1423+2404-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 5-6 in Visit A4	582 Secs [==>407 Secs]	[1]
	7		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F140W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG 0.33875, -0.1211	Prime + Parallel Group 7-8 in Visit A4	[==>]	[1]
	8		(2) MACS1423+2404-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 7-8 in Visit A4	587 Secs [==>407.0 Secs]	[1]
	9		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F140W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG -0.813,- 0.30275	Prime + Parallel Group 9-10 in Visit A4	[==>]	[1]
10		(2) MACS1423+2404-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 9-10 in Visit A4	587 Secs [==>385 Secs]	[1]	



Proposal 12790 - Visit A6 - Through a Lens, Darkly - New Constraints on the Fundamental Components of the Cosmos

Fri Oct 05 01:10:46 GMT 2012

Visit	<p>Proposal 12790, Visit A6, implementation</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: WFC3/UVIS, ACS/WFC</p> <p>Special Requirements: SCHED 60%; SAME ORIENT AS A0; AFTER A0 BY 34 D TO 36 D</p> <p><i>Comments: Visits A5-A6 represent epoch 3 (at orient 1) and should be taken concurrently</i></p>					
Diagnostics	<p>(Primary Exposure 1 (Prime + Parallel Group 1-2 in Visit A6)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p> <p>(Primary Exposure 3 (Prime + Parallel Group 3-4 in Visit A6)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p> <p>(Primary Exposure 5 (Prime + Parallel Group 5-6 in Visit A6)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p> <p>(Primary Exposure 7 (Prime + Parallel Group 7-8 in Visit A6)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p> <p>(Primary Exposure 9 (Prime + Parallel Group 9-10 in Visit A6)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p> <p>(Primary Exposure 11 (Prime + Parallel Group 11-12 in Visit A6)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p> <p>(Primary Exposure 13 (Prime + Parallel Group 13-14 in Visit A6)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p> <p>(Primary Exposure 15 (Prime + Parallel Group 15-16 in Visit A6)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p>					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	MACS1423+2404	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS
	(2)	MACS1423+2404- ACSPAR1	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS

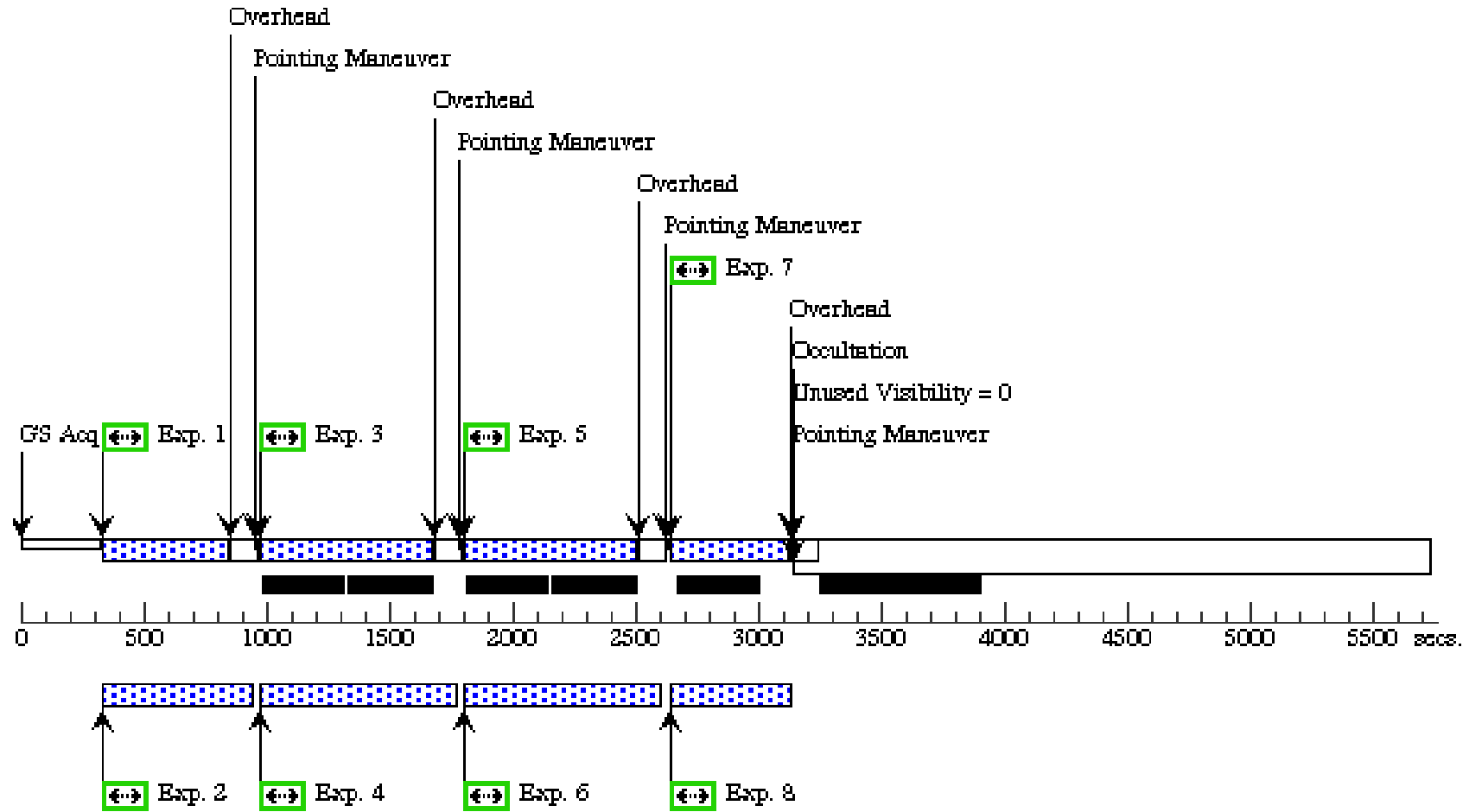
Proposal 12790 - Visit A6 - Through a Lens, Darkly - New Constraints on the Fundamental Components of the Cosmos

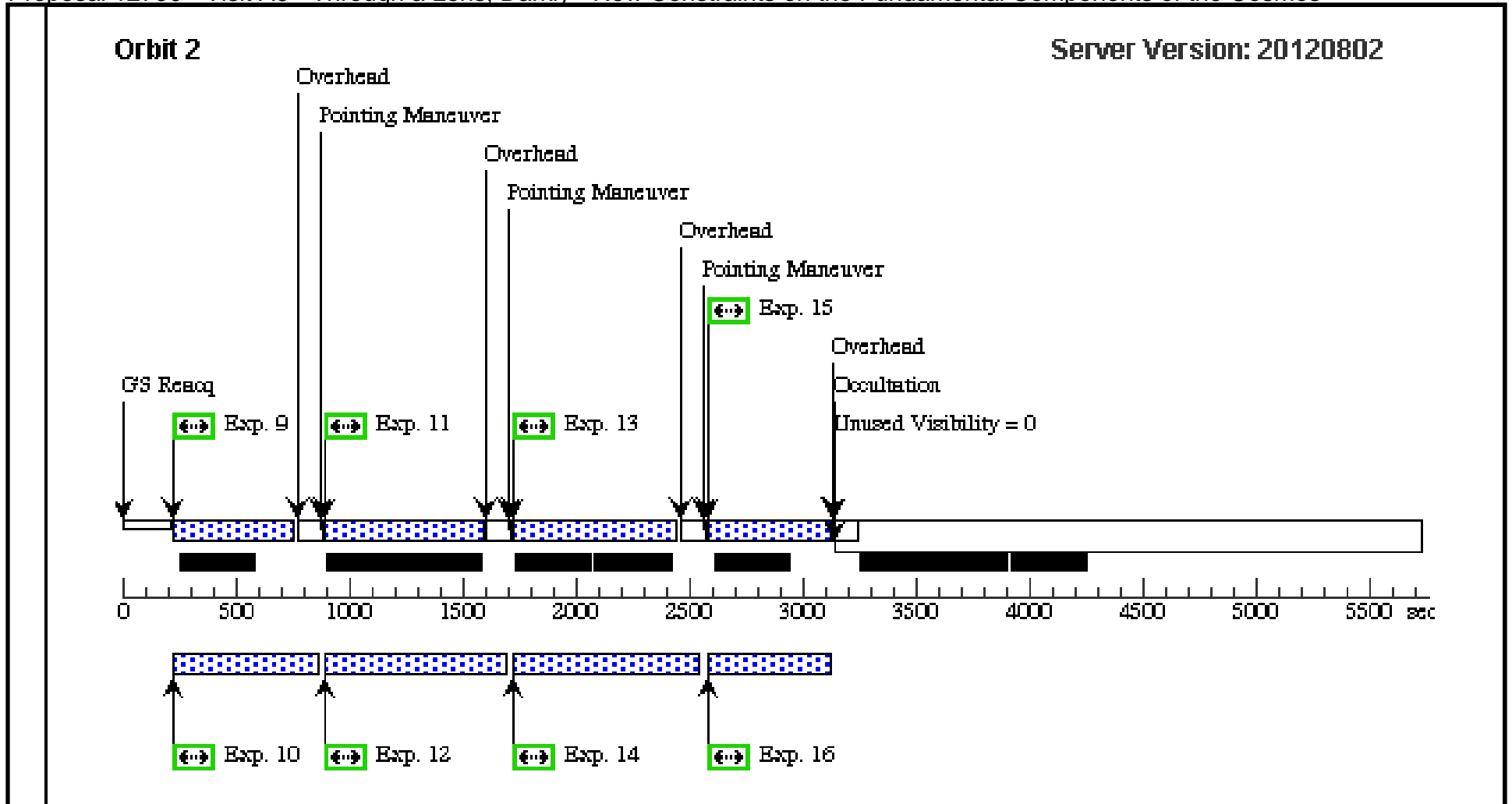
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F225W	CR-SPLIT=NO; FLASH=10	POS TARG 0,0; GS ACQ SCENARI O.BASE1B3	Prime + Parallel Gro up 1-2 in Visit A6	600 Secs [==>476 Secs]	[1]
	2		(2) MACS1423+240 4-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Gro up 1-2 in Visit A6	600 Secs [==>402 Secs]	[1]
	3		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F225W	CR-SPLIT=NO; FLASH=10	POS TARG 0.0594,- 0.0552	Prime + Parallel Gro up 3-4 in Visit A6	600 Secs [==>699.0 Secs]	[1]
	4		(2) MACS1423+240 4-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Gro up 3-4 in Visit A6	600 Secs [==>675 Secs]	[1]
	5		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F225W	CR-SPLIT=NO; FLASH=10	POS TARG 0.1188,0 .06735	Prime + Parallel Gro up 5-6 in Visit A6	600 Secs [==>699.0 Secs]	[1]
	6		(2) MACS1423+240 4-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Gro up 5-6 in Visit A6	600 Secs [==>675 Secs]	[1]
	7		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F225W	CR-SPLIT=NO; FLASH=10	POS TARG -0.0594, 0.15395	Prime + Parallel Gro up 7-8 in Visit A6	600 Secs [==>482 Secs]	[1]
	8		(2) MACS1423+240 4-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Gro up 7-8 in Visit A6	600 Secs [==>337 Secs]	[1]
	9		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F225W	CR-SPLIT=NO; FLASH=10	POS TARG 0,0	Prime + Parallel Gro up 9-10 in Visit A6	600 Secs [==>537 Secs]	[2]
	10		(2) MACS1423+240 4-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Gro up 9-10 in Visit A6	600 Secs [==>487 Secs]	[2]
	11		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F225W	CR-SPLIT=NO; FLASH=10	POS TARG 0.0594,- 0.0552	Prime + Parallel Gro up 11-12 in Visit A6	600 Secs [==>699.0 Secs]	[2]
	12		(2) MACS1423+240 4-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Gro up 11-12 in Visit A6	600 Secs [==>675 Secs]	[2]
	13		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F390W	CR-SPLIT=NO; FLASH=9	POS TARG 0.1188,0 .06735	Prime + Parallel Gro up 13-14 in Visit A6	600 Secs [==>699.0 Secs]	[2]
	14		(2) MACS1423+240 4-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Gro up 13-14 in Visit A6	600 Secs [==>701.0 Secs]	[2]
	15		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F390W	CR-SPLIT=NO; FLASH=9	POS TARG -0.0594, 0.15395	Prime + Parallel Gro up 15-16 in Visit A6	600 Secs [==>538.0 Secs]	[2]
16		(2) MACS1423+240 4-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Gro up 15-16 in Visit A6	600 Secs [==>393.0 Secs]	[2]	

Orbit 1

Server Version: 20120802

Orbit Structure

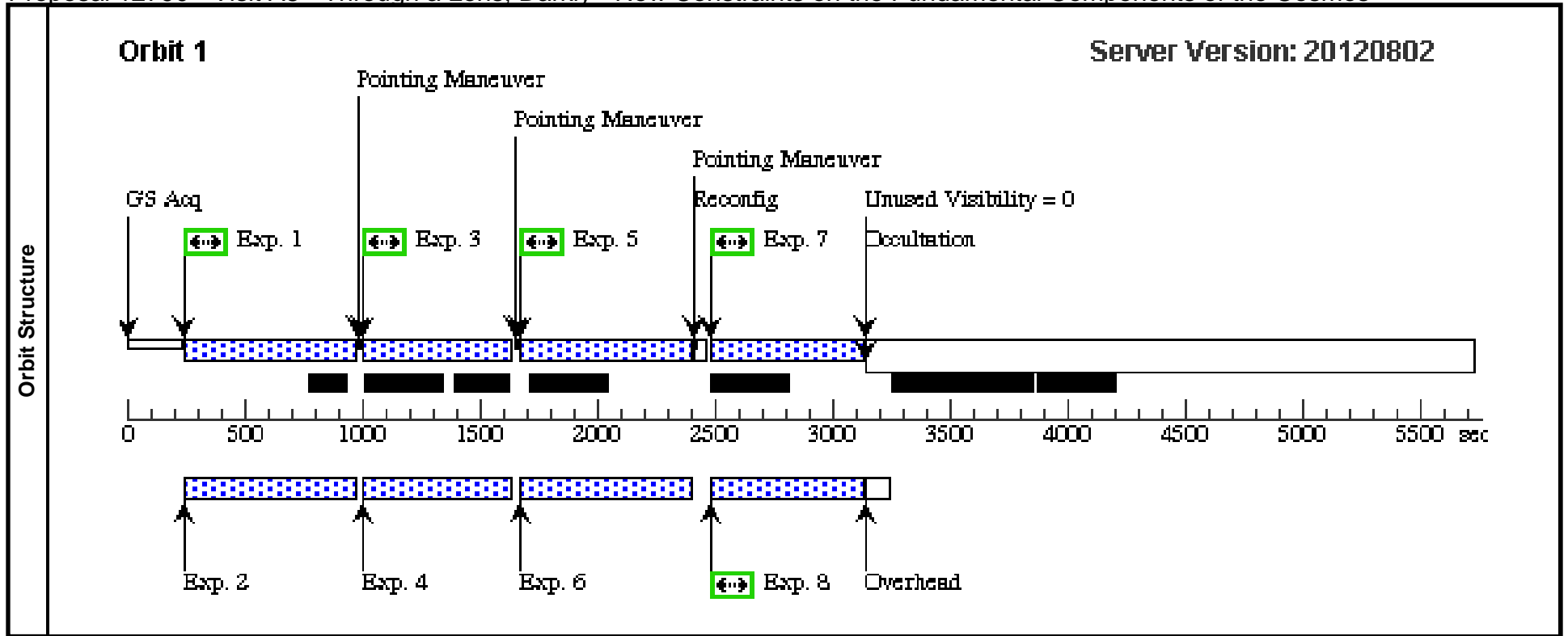




Proposal 12790 - Visit A8 - Through a Lens, Darkly - New Constraints on the Fundamental Components of the Cosmos

Fri Oct 05 01:10:48 GMT 2012

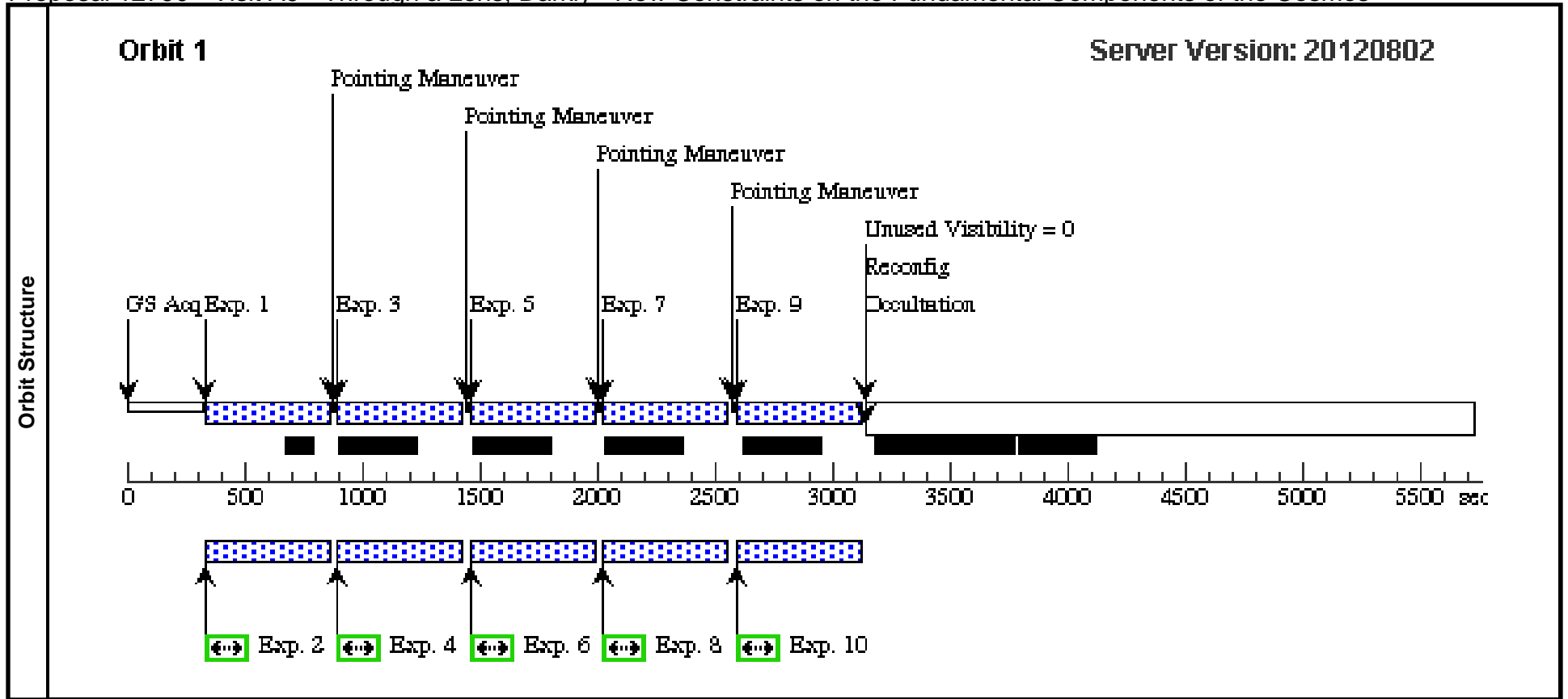
Visit	Proposal 12790, Visit A8, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC Special Requirements: SCHED 60%; SAME ORIENT AS A0; AFTER A0 BY 52 D TO 54 D Comments: Visits A8-A9 represent epoch 4 (at orient 1) and should be taken concurrently									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	MACS1423+2404	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
	(3)	MACS1423+2404-WFC3PAR1	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(1) MACS1423+2404	(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F850LP		POS TARG 0,0; GS ACQ SCENARI O SINGLE	Prime + Parallel Group 1-2 in Visit A8	525 Secs [==>525 Secs]	[1]
	2	(3) MACS1423+2404-WFC3PAR1	(3) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F125W		SAMP-SEQ=SPARS 100; NSAMP=8	Prime + Parallel Group 1-2 in Visit A8	[==>]	[1]
	3	(1) MACS1423+2404	(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F850LP		POS TARG 0.3211,0 .7917	Prime + Parallel Group 3-4 in Visit A8	507 Secs [==>507.0 Secs]	[1]
	4	(3) MACS1423+2404-WFC3PAR1	(3) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F160W		SAMP-SEQ=SPARS 50; NSAMP=13	Prime + Parallel Group 3-4 in Visit A8	[==>]	[1]
	5	(1) MACS1423+2404	(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F475W		POS TARG 1.0868,0 .5573	Prime + Parallel Group 5-6 in Visit A8	551 Secs [==>570 Secs]	[1]
	6	(3) MACS1423+2404-WFC3PAR1	(3) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F160W		SAMP-SEQ=SPARS 100; NSAMP=8	Prime + Parallel Group 5-6 in Visit A8	[==>]	[1]
	7	(1) MACS1423+2404	(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F475W		POS TARG -0.3211, -0.1742	Prime + Parallel Group 7-8 in Visit A8	564 Secs [==>522 Secs]	[1]
8	(3) MACS1423+2404-WFC3PAR1	(3) MACS1423+2404	WFC3/UVIS, ACCUM, UVIS-FIX	F350LP		CR-SPLIT=NO	Prime + Parallel Group 7-8 in Visit A8	400 Secs [==>616 Secs]	[1]	



Proposal 12790 - Visit A9 - Through a Lens, Darkly - New Constraints on the Fundamental Components of the Cosmos

Fri Oct 05 01:10:50 GMT 2012

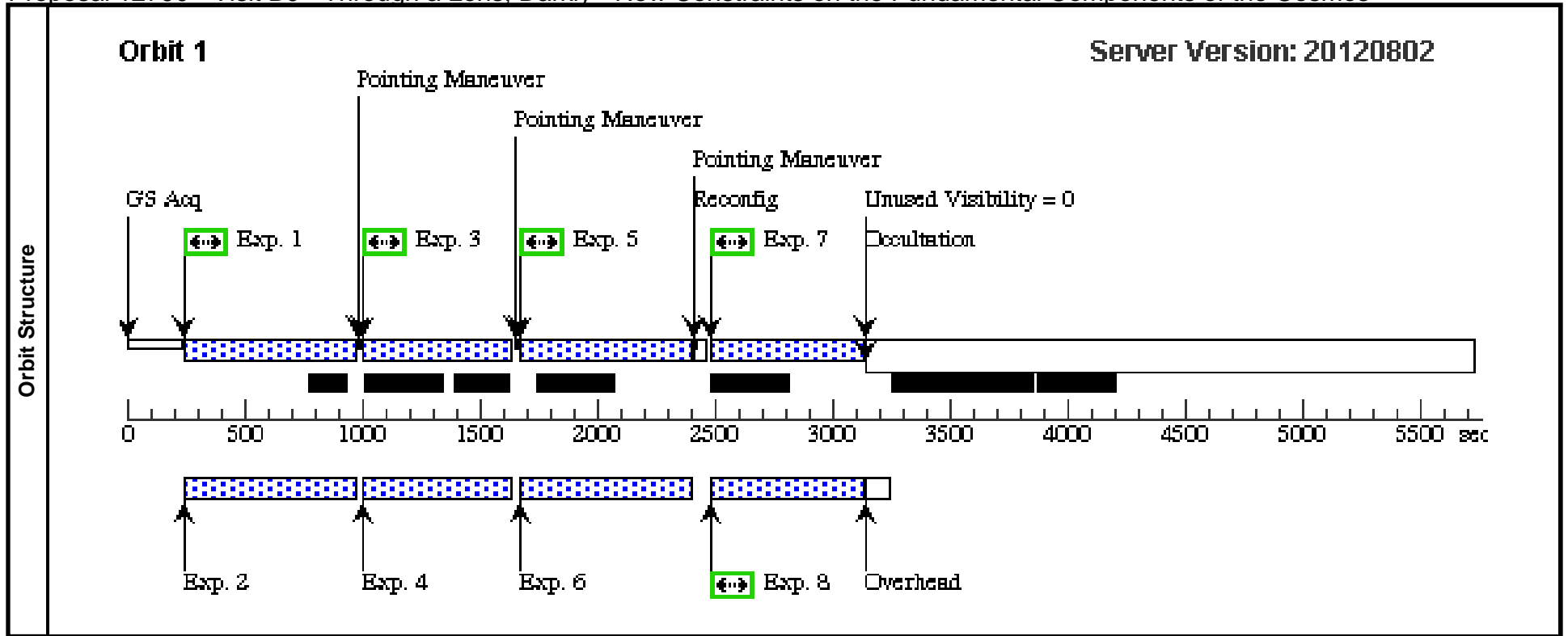
Visit	Proposal 12790, Visit A9, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: SCHED 60%; SAME ORIENT AS A0; SEQ A8,A9 WITHIN 1.2 Orbits Comments: Visits A8-A9 represent epoch 4 (at orient 1) and should be taken concurrently									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	MACS1423+2404	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
	(2)	MACS1423+2404-ACSPAR1	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F160W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG 0,0; GS ACQ SCENARI O BASE1B3	Prime + Parallel Group 1-2 in Visit A9	[==>]	[1]
	2		(2) MACS1423+2404-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 1-2 in Visit A9	525 Secs [==>325.0 Secs]	[1]
	3		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F160W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG -1.1517 5,0.42385	Prime + Parallel Group 3-4 in Visit A9	[==>]	[1]
	4		(2) MACS1423+2404-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 3-4 in Visit A9	607 Secs [==>407 Secs]	[1]
	5		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F160W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG -0.813,- 0.30275	Prime + Parallel Group 5-6 in Visit A9	[==>]	[1]
	6		(2) MACS1423+2404-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 5-6 in Visit A9	582 Secs [==>407 Secs]	[1]
	7		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F110W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG 0.33875, -0.1211	Prime + Parallel Group 7-8 in Visit A9	[==>]	[1]
	8		(2) MACS1423+2404-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 7-8 in Visit A9	587 Secs [==>407.0 Secs]	[1]
	9		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F110W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG -0.813,- 0.30275	Prime + Parallel Group 9-10 in Visit A9	[==>]	[1]
10		(2) MACS1423+2404-ACSPAR1	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 9-10 in Visit A9	587 Secs [==>385 Secs]	[1]	



Proposal 12790 - Visit B0 - Through a Lens, Darkly - New Constraints on the Fundamental Components of the Cosmos

Fri Oct 05 01:10:51 GMT 2012

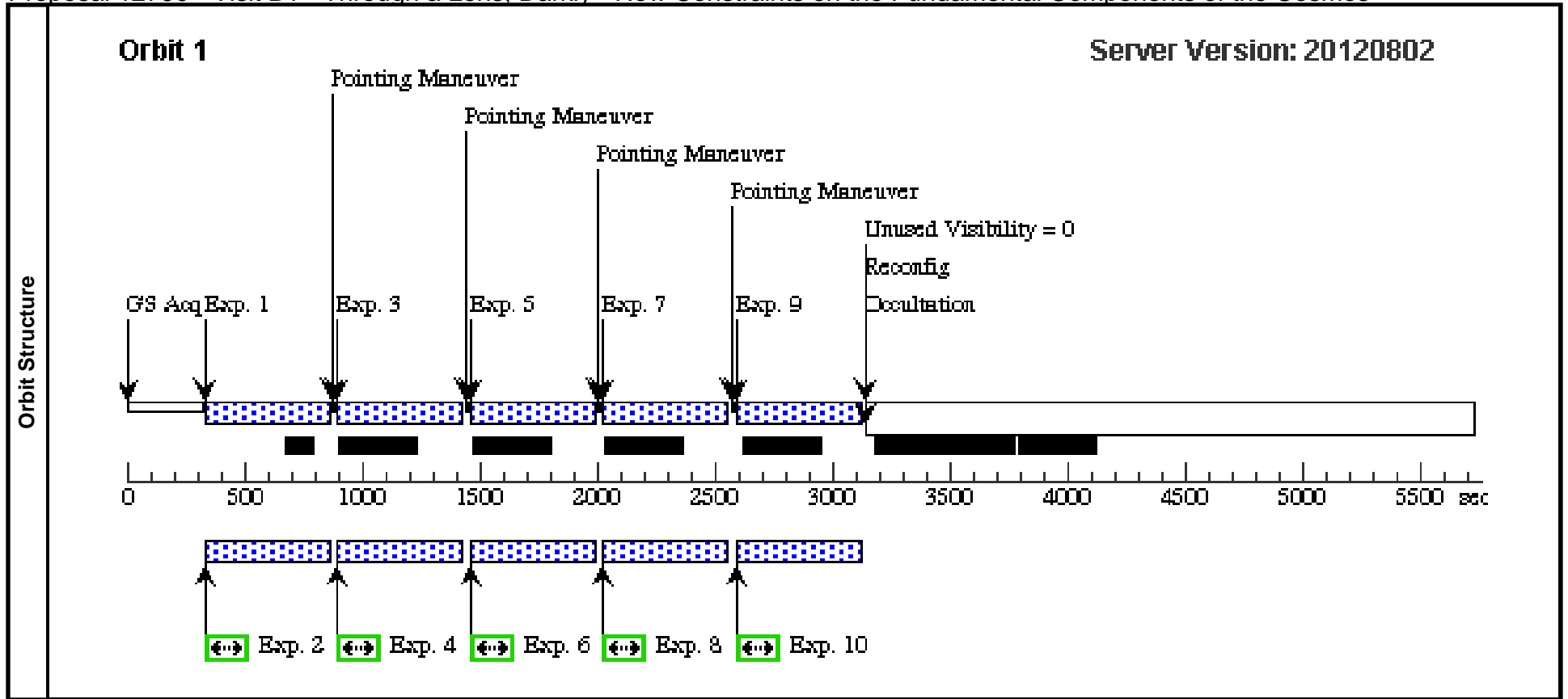
Visit	Proposal 12790, Visit B0, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC Special Requirements: SCHED 60%; ORIENT 29D TO 31D FROM A0 Comments: Visits B0-B1 represent epoch 1 (at orient 2) and should be taken concurrently									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	MACS1423+2404	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
	(5)	MACS1423+2404-WFC3PAR2	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F435W		POS TARG 0,0; GS ACQ SCENARI O SINGLE	Prime + Parallel Group 1-2 in Visit B0	525 Secs [==>525 Secs]	[1]
	2		(5) MACS1423+2404-WFC3PAR2	WFC3/IR, MULTIACCUM, IR-FIX	F125W		SAMP-SEQ=SPARS 100; NSAMP=8	Prime + Parallel Group 1-2 in Visit B0	[==>]	[1]
	3		(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F435W		POS TARG 0.0741,0 .1295	Prime + Parallel Group 3-4 in Visit B0	507 Secs [==>507.0 Secs]	[1]
	4		(5) MACS1423+2404-WFC3PAR2	WFC3/IR, MULTIACCUM, IR-FIX	F160W		SAMP-SEQ=SPARS 50; NSAMP=13	Prime + Parallel Group 3-4 in Visit B0	[==>]	[1]
	5		(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F850LP		POS TARG 0.1729,- 0.0848	Prime + Parallel Group 5-6 in Visit B0	551 Secs [==>543 Secs]	[1]
	6		(5) MACS1423+2404-WFC3PAR2	WFC3/IR, MULTIACCUM, IR-FIX	F160W		SAMP-SEQ=SPARS 100; NSAMP=8	Prime + Parallel Group 5-6 in Visit B0	[==>]	[1]
	7		(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F850LP		POS TARG 0.247,0. 2423	Prime + Parallel Group 7-8 in Visit B0	564 Secs [==>522 Secs]	[1]
8		(5) MACS1423+2404-WFC3PAR2	WFC3/UVIS, ACCUM, UVIS-FIX	F350LP		CR-SPLIT=NO	Prime + Parallel Group 7-8 in Visit B0	400 Secs [==>616 Secs]	[1]	



Proposal 12790 - Visit B1 - Through a Lens, Darkly - New Constraints on the Fundamental Components of the Cosmos

Fri Oct 05 01:10:52 GMT 2012

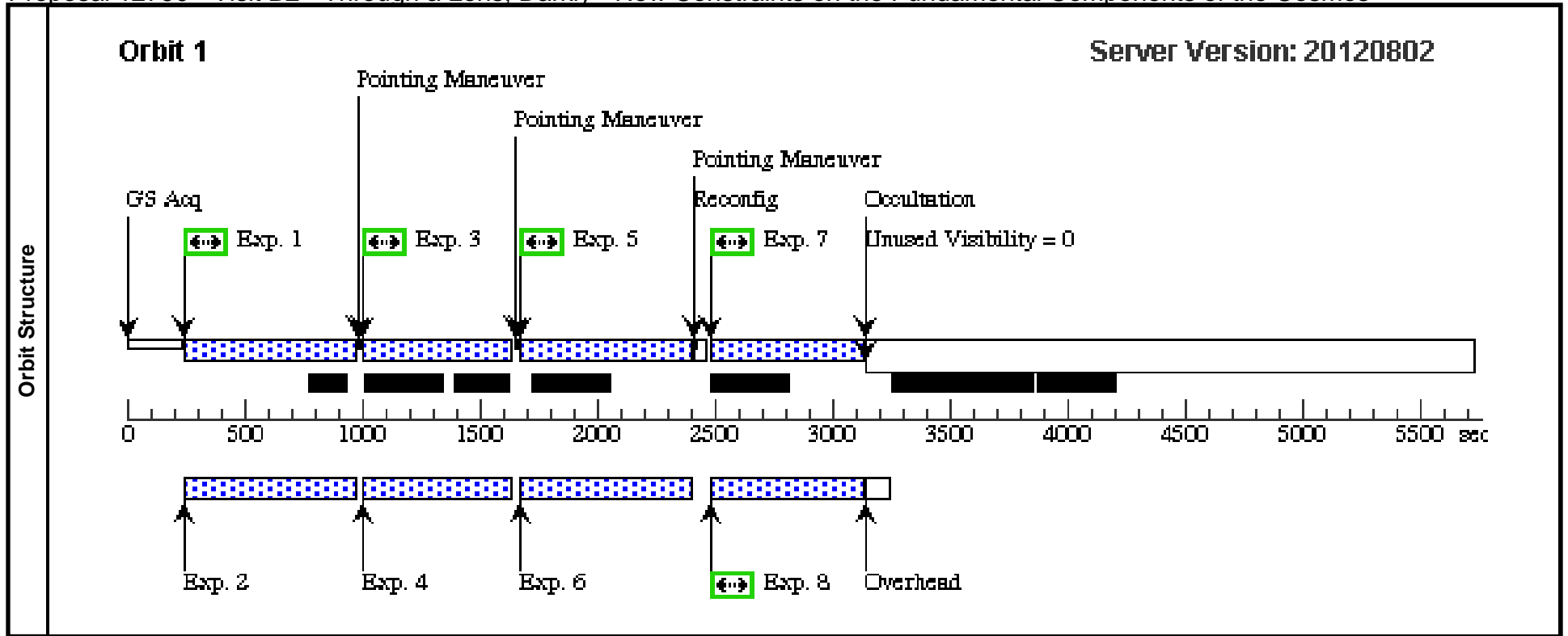
Visit	Proposal 12790, Visit B1, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: SCHED 60%; SAME ORIENT AS B0; SEQ B0,B1 WITHIN 1.2 Orbits Comments: Visits B0-B1 represent epoch 1 (at orient 2) and should be taken concurrently									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	MACS1423+2404	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
	(4)	MACS1423+2404-ACSPAR2	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F125W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG 0,0; GS ACQ SCENARI O BASE1B3	Prime + Parallel Group 1-2 in Visit B1	[==>]	[1]
	2		(4) MACS1423+2404-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 1-2 in Visit B1	525 Secs [==>325.0 Secs]	[1]
	3		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F125W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG 0.20325, -0.18165	Prime + Parallel Group 3-4 in Visit B1	[==>]	[1]
	4		(4) MACS1423+2404-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 3-4 in Visit B1	607 Secs [==>407 Secs]	[1]
	5		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F125W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG 0.47425, 0.6055	Prime + Parallel Group 5-6 in Visit B1	[==>]	[1]
	6		(4) MACS1423+2404-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 5-6 in Visit B1	582 Secs [==>407 Secs]	[1]
	7		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F160W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG -0.271,0 .42385	Prime + Parallel Group 7-8 in Visit B1	[==>]	[1]
	8		(4) MACS1423+2404-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 7-8 in Visit B1	587 Secs [==>407.0 Secs]	[1]
	9		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F160W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG 0.47425, 0.6055	Prime + Parallel Group 9-10 in Visit B1	[==>]	[1]
10		(4) MACS1423+2404-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 9-10 in Visit B1	587 Secs [==>385 Secs]	[1]	



Proposal 12790 - Visit B2 - Through a Lens, Darkly - New Constraints on the Fundamental Components of the Cosmos

Fri Oct 05 01:10:53 GMT 2012

Visit	Proposal 12790, Visit B2, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC Special Requirements: SCHED 60%; SAME ORIENT AS B0; AFTER B0 BY 11 D TO 13 D Comments: Visits B2-B3 represent epoch 2 (at orient 2) and should be taken concurrently									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	MACS1423+2404	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
	(5)	MACS1423+2404-WFC3PAR2	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F775W		POS TARG 0,0; GS ACQ SCENARI O SINGLE	Prime + Parallel Group 1-2 in Visit B2	525 Secs [==>525 Secs]	[1]
	2		(5) MACS1423+2404-WFC3PAR2	WFC3/IR, MULTIACCUM, IR-FIX	F125W		SAMP-SEQ=SPARS 100; NSAMP=8	Prime + Parallel Group 1-2 in Visit B2	[==>]	[1]
	3		(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F775W		POS TARG 0.3211,0 .7917	Prime + Parallel Group 3-4 in Visit B2	507 Secs [==>507.0 Secs]	[1]
	4		(5) MACS1423+2404-WFC3PAR2	WFC3/IR, MULTIACCUM, IR-FIX	F160W		SAMP-SEQ=SPARS 50; NSAMP=13	Prime + Parallel Group 3-4 in Visit B2	[==>]	[1]
	5		(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F606W		POS TARG 1.0868,0 .5573	Prime + Parallel Group 5-6 in Visit B2	551 Secs [==>566 Secs]	[1]
	6		(5) MACS1423+2404-WFC3PAR2	WFC3/IR, MULTIACCUM, IR-FIX	F160W		SAMP-SEQ=SPARS 100; NSAMP=8	Prime + Parallel Group 5-6 in Visit B2	[==>]	[1]
	7		(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F606W		POS TARG -0.3211, -0.1742	Prime + Parallel Group 7-8 in Visit B2	564 Secs [==>522 Secs]	[1]
8		(5) MACS1423+2404-WFC3PAR2	WFC3/UVIS, ACCUM, UVIS-FIX	F350LP		CR-SPLIT=NO	Prime + Parallel Group 7-8 in Visit B2	400 Secs [==>616 Secs]	[1]	



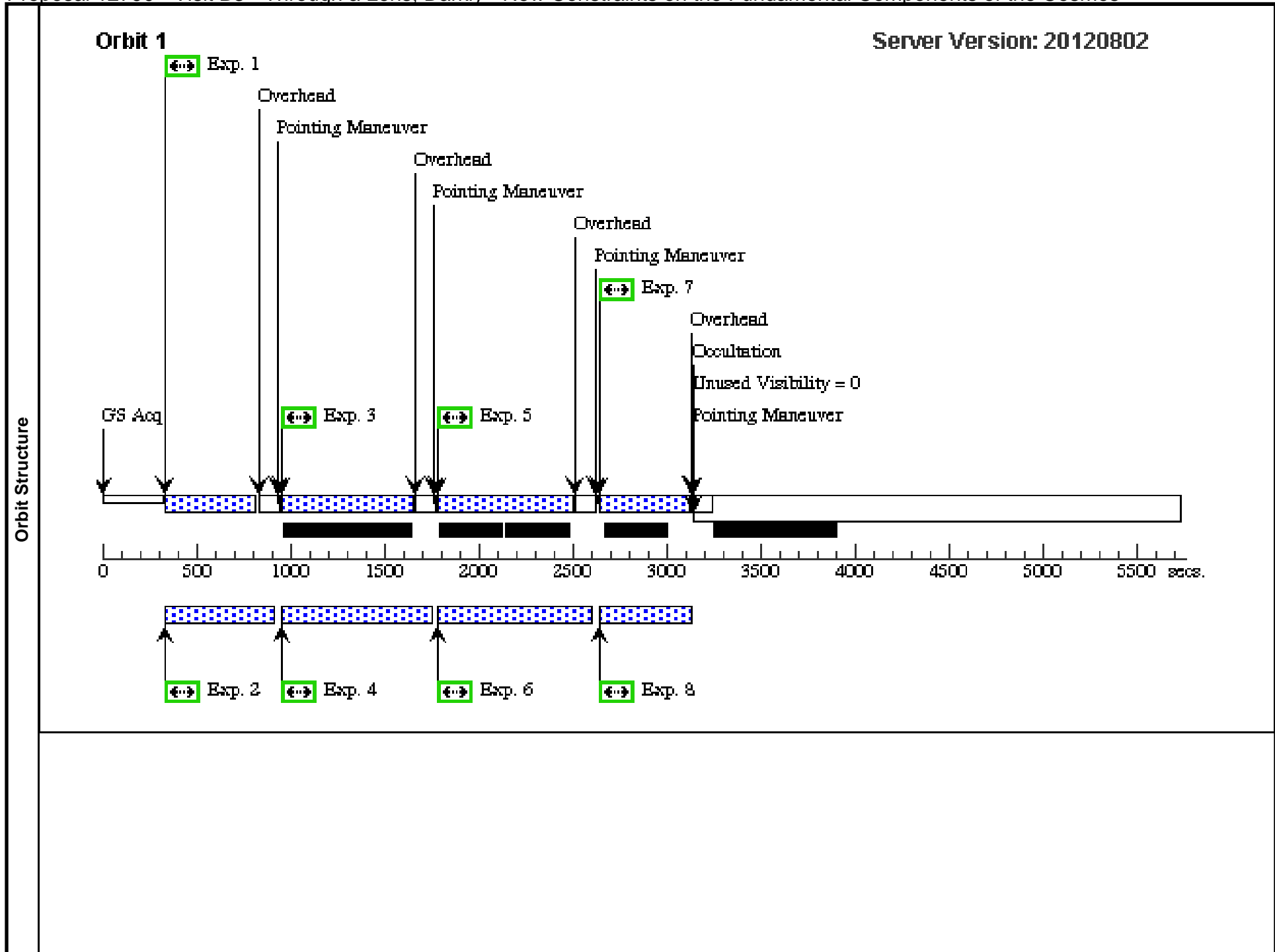
Proposal 12790 - Visit B3 - Through a Lens, Darkly - New Constraints on the Fundamental Components of the Cosmos

Fri Oct 05 01:10:54 GMT 2012

Visit	<p>Proposal 12790, Visit B3, implementation</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: WFC3/UVIS, ACS/WFC</p> <p>Special Requirements: SCHED 60%; SAME ORIENT AS B0; SEQ B2,B3 WITHIN 1.2 Orbits</p> <p><i>Comments: Visits B2-B3 represent epoch 2 (at orient 2) and should be taken concurrently</i></p>					
Diagnostics	<p>(Primary Exposure 1 (Prime + Parallel Group 1-2 in Visit B3)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p> <p>(Primary Exposure 3 (Prime + Parallel Group 3-4 in Visit B3)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p> <p>(Primary Exposure 5 (Prime + Parallel Group 5-6 in Visit B3)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p> <p>(Primary Exposure 7 (Prime + Parallel Group 7-8 in Visit B3)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p> <p>(Primary Exposure 9 (Prime + Parallel Group 9-10 in Visit B3)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p> <p>(Primary Exposure 11 (Prime + Parallel Group 11-12 in Visit B3)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p> <p>(Primary Exposure 13 (Prime + Parallel Group 13-14 in Visit B3)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p> <p>(Primary Exposure 15 (Prime + Parallel Group 15-16 in Visit B3)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p>					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	MACS1423+2404	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS
	(4)	MACS1423+2404- ACSPAR2	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS

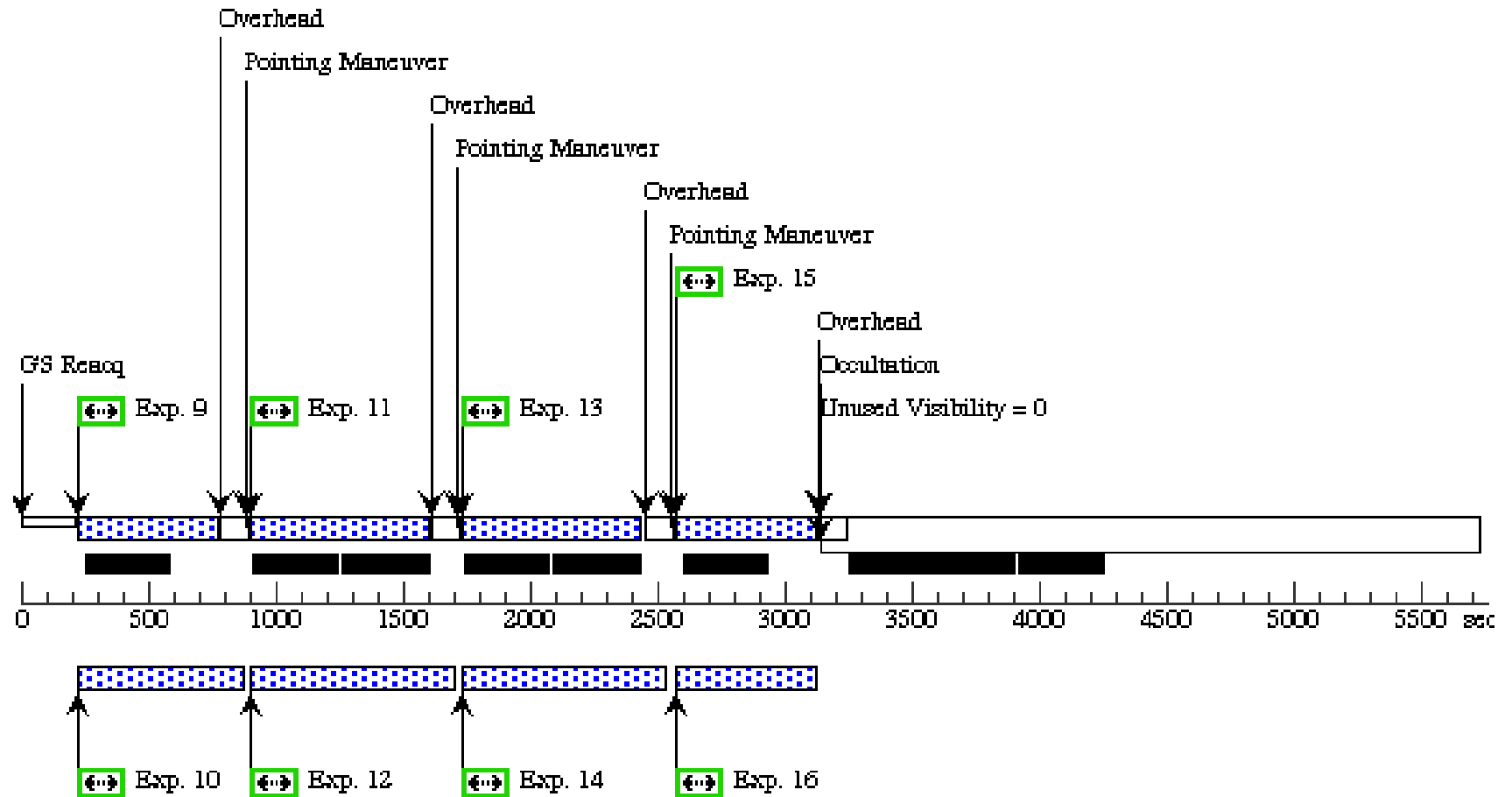
Proposal 12790 - Visit B3 - Through a Lens, Darkly - New Constraints on the Fundamental Components of the Cosmos

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F390W	CR-SPLIT=NO; FLASH=9	POS TARG 0,0; GS ACQ SCENARI O.BASE1B3	Prime + Parallel Gro up 1-2 in Visit B3	600 Secs [==>453 Secs]	[1]
	2		(4) MACS1423+240 4-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Gro up 1-2 in Visit B3	600 Secs [==>379 Secs]	[1]
	3		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F390W	CR-SPLIT=NO; FLASH=9	POS TARG 0.0594,- 0.0552	Prime + Parallel Gro up 3-4 in Visit B3	600 Secs [==>699.0 Secs]	[1]
	4		(4) MACS1423+240 4-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Gro up 3-4 in Visit B3	600 Secs [==>675 Secs]	[1]
	5		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F275W	CR-SPLIT=NO; FLASH=10	POS TARG 0.1188,0 .06735	Prime + Parallel Gro up 5-6 in Visit B3	600 Secs [==>699.0 Secs]	[1]
	6		(4) MACS1423+240 4-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Gro up 5-6 in Visit B3	600 Secs [==>698 Secs]	[1]
	7		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F275W	CR-SPLIT=NO; FLASH=10	POS TARG -0.0594, 0.15395	Prime + Parallel Gro up 7-8 in Visit B3	600 Secs [==>482 Secs]	[1]
	8		(4) MACS1423+240 4-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Gro up 7-8 in Visit B3	600 Secs [==>337 Secs]	[1]
	9		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F275W	CR-SPLIT=NO; FLASH=10	POS TARG 0,0	Prime + Parallel Gro up 9-10 in Visit B3	600 Secs [==>550 Secs]	[2]
	10		(4) MACS1423+240 4-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Gro up 9-10 in Visit B3	600 Secs [==>500 Secs]	[2]
	11		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F275W	CR-SPLIT=NO; FLASH=10	POS TARG 0.0594,- 0.0552	Prime + Parallel Gro up 11-12 in Visit B3	600 Secs [==>699.0 Secs]	[2]
	12		(4) MACS1423+240 4-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Gro up 11-12 in Visit B3	600 Secs [==>675 Secs]	[2]
	13		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F275W	CR-SPLIT=NO; FLASH=10	POS TARG 0.1188,0 .06735	Prime + Parallel Gro up 13-14 in Visit B3	600 Secs [==>699.0 Secs]	[2]
	14		(4) MACS1423+240 4-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Gro up 13-14 in Visit B3	600 Secs [==>675 Secs]	[2]
	15		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F275W	CR-SPLIT=NO; FLASH=10	POS TARG -0.0594, 0.15395	Prime + Parallel Gro up 15-16 in Visit B3	600 Secs [==>551 Secs]	[2]
16		(4) MACS1423+240 4-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Gro up 15-16 in Visit B3	600 Secs [==>406 Secs]	[2]	



Orbit 2

Server Version: 20120802



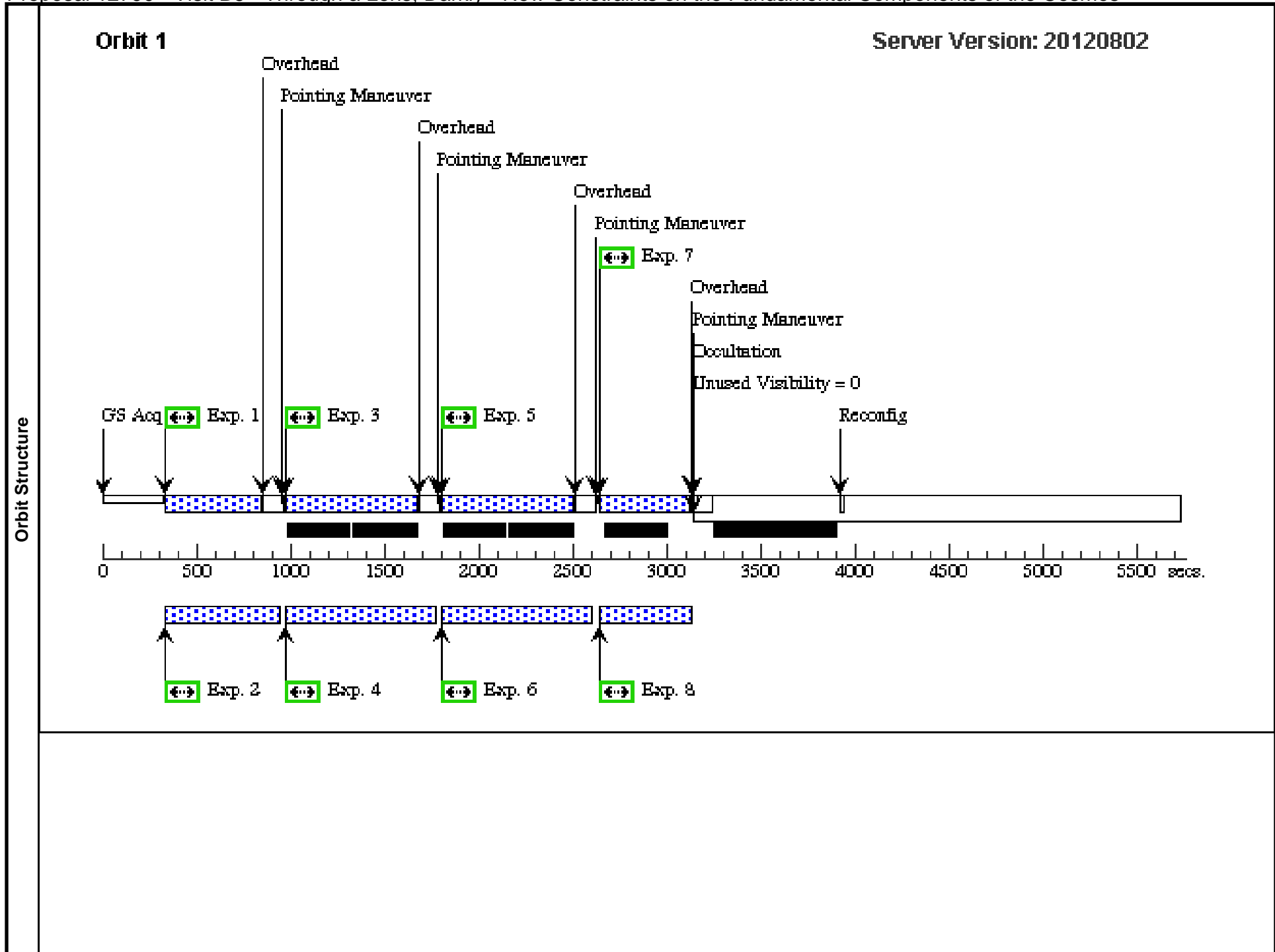
Proposal 12790 - Visit B6 - Through a Lens, Darkly - New Constraints on the Fundamental Components of the Cosmos

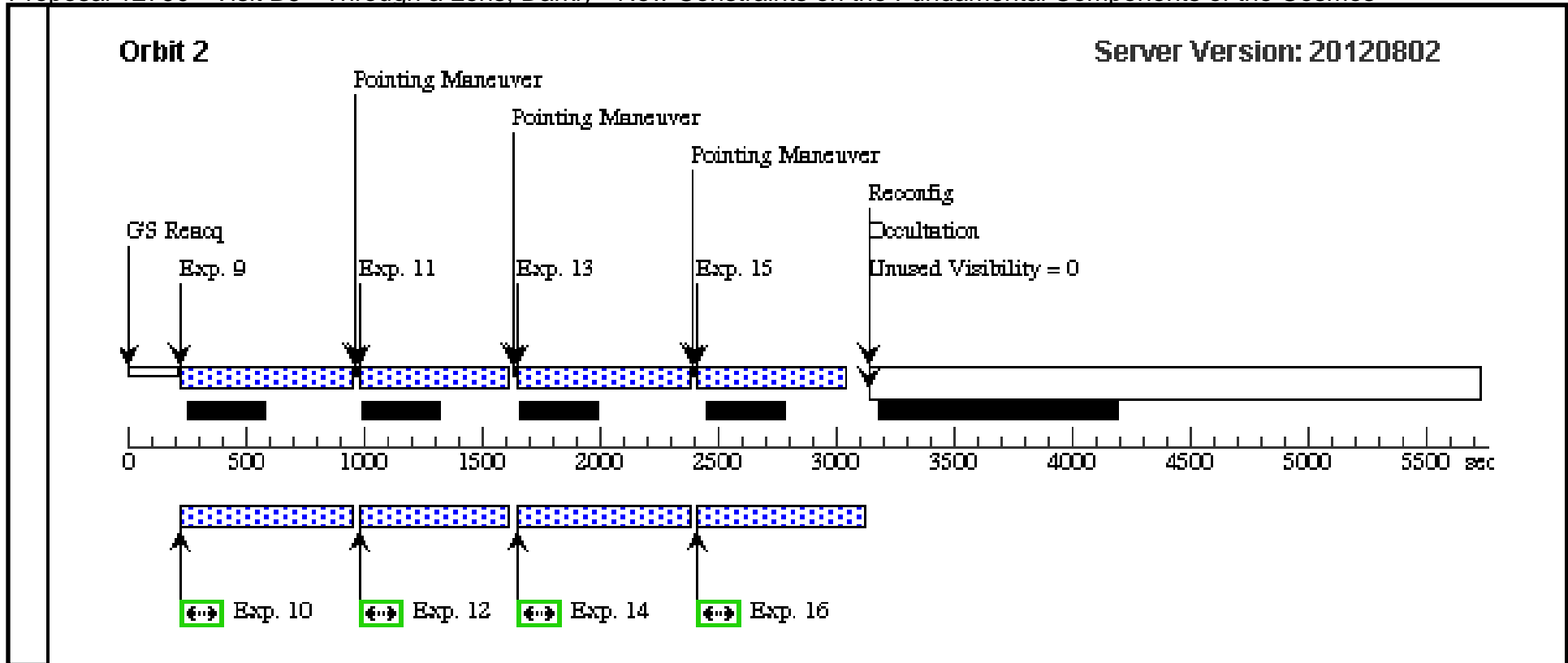
Fri Oct 05 01:10:56 GMT 2012

Visit	<p>Proposal 12790, Visit B6, implementation</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC</p> <p>Special Requirements: SCHED 60%; SAME ORIENT AS B0; AFTER B0 BY 22 D TO 24 D</p> <p><i>Comments: Visits B5-B6 represent epoch 3 (at orient 2) and should be taken concurrently</i></p>					
Diagnostics	<p>(Visit B6) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME</p> <p>(Primary Exposure 1 (Prime + Parallel Group 1-2 in Visit B6)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p> <p>(Primary Exposure 3 (Prime + Parallel Group 3-4 in Visit B6)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p> <p>(Primary Exposure 5 (Prime + Parallel Group 5-6 in Visit B6)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p> <p>(Primary Exposure 7 (Prime + Parallel Group 7-8 in Visit B6)) Warning (Form): Light from the flash may escape from WFC3 and possibly contaminate exposures in other SIs.</p>					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	MACS1423+2404	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS
	(4)	MACS1423+2404-ACSPAR2	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS

Proposal 12790 - Visit B6 - Through a Lens, Darkly - New Constraints on the Fundamental Components of the Cosmos

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F336W	CR-SPLIT=NO; FLASH=10	POS TARG 0,0; GS ACQ SCENARI O BASE1B3	Prime + Parallel Gro up 1-2 in Visit B6	600 Secs [==>476 Secs]	[1]
	2		(4) MACS1423+240 4-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Gro up 1-2 in Visit B6	600 Secs [==>402 Secs]	[1]
	3		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F336W	CR-SPLIT=NO; FLASH=10	POS TARG 0.0594,- 0.0552	Prime + Parallel Gro up 3-4 in Visit B6	600 Secs [==>699.0 Secs]	[1]
	4		(4) MACS1423+240 4-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Gro up 3-4 in Visit B6	600 Secs [==>675 Secs]	[1]
	5		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F336W	CR-SPLIT=NO; FLASH=10	POS TARG 0.1188,0 .06735	Prime + Parallel Gro up 5-6 in Visit B6	600 Secs [==>699.0 Secs]	[1]
	6		(4) MACS1423+240 4-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Gro up 5-6 in Visit B6	600 Secs [==>675 Secs]	[1]
	7		(1) MACS1423+240 4	WFC3/UVIS, ACCUM, UVIS-FIX	F336W	CR-SPLIT=NO; FLASH=10	POS TARG -0.0594, 0.15395	Prime + Parallel Gro up 7-8 in Visit B6	600 Secs [==>482 Secs]	[1]
	8		(4) MACS1423+240 4-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Gro up 7-8 in Visit B6	600 Secs [==>337 Secs]	[1]
	9		(1) MACS1423+240 4	WFC3/IR, MULTIACCUM, IR-FIX	F140W	SAMP-SEQ=SPARS 100; NSAMP=8	POS TARG 0,0	Prime + Parallel Gro up 9-10 in Visit B6	[==>]	[2]
	10		(4) MACS1423+240 4-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Gro up 9-10 in Visit B6	525 Secs [==>581.0 Secs]	[2]
	11		(1) MACS1423+240 4	WFC3/IR, MULTIACCUM, IR-FIX	F140W	SAMP-SEQ=SPARS 100; NSAMP=7	POS TARG -1.1517 5.042385	Prime + Parallel Gro up 11-12 in Visit B6	[==>]	[2]
	12		(4) MACS1423+240 4-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Gro up 11-12 in Visit B6	607 Secs [==>507.0 Secs]	[2]
	13		(1) MACS1423+240 4	WFC3/IR, MULTIACCUM, IR-FIX	F105W	SAMP-SEQ=SPARS 100; NSAMP=8	POS TARG -0.813,- 0.30275	Prime + Parallel Gro up 13-14 in Visit B6	[==>]	[2]
	14		(4) MACS1423+240 4-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Gro up 13-14 in Visit B6	481 Secs [==>607.0 Secs]	[2]
	15		(1) MACS1423+240 4	WFC3/IR, MULTIACCUM, IR-FIX	F105W	SAMP-SEQ=SPARS 100; NSAMP=7	POS TARG 0.33875, -0.1211	Prime + Parallel Gro up 15-16 in Visit B6	[==>]	[2]
16		(4) MACS1423+240 4-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Gro up 15-16 in Visit B6	576 Secs [==>561.0 Secs]	[2]	

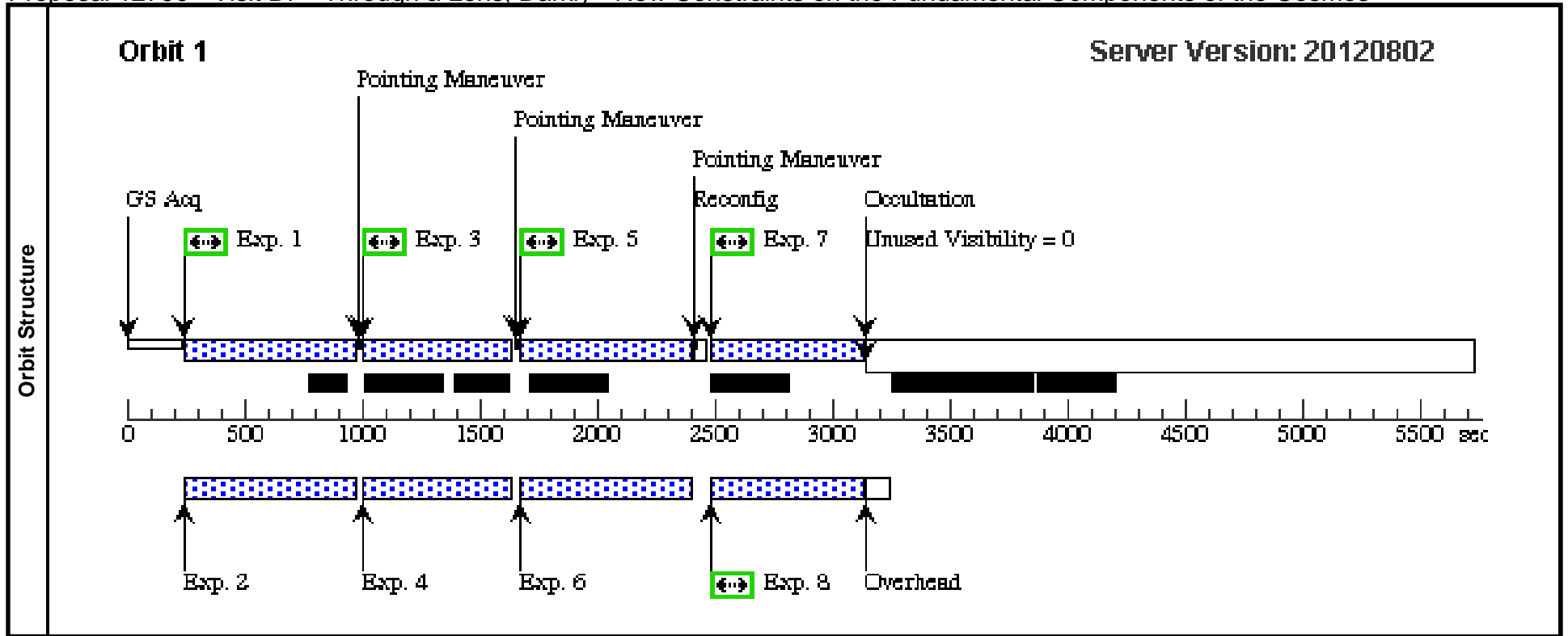




Proposal 12790 - Visit B7 - Through a Lens, Darkly - New Constraints on the Fundamental Components of the Cosmos

Fri Oct 05 01:10:58 GMT 2012

Visit	Proposal 12790, Visit B7, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC Special Requirements: SCHED 60%; SAME ORIENT AS B0; AFTER B0 BY 34 D TO 36 D Comments: Visits B7-B8 represent epoch 4 (at orient 2) and should be taken concurrently									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	MACS1423+2404	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
	(5)	MACS1423+2404-WFC3PAR2	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(1) MACS1423+2404	(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F850LP		POS TARG 0,0; GS ACQ SCENARI O SINGLE	Prime + Parallel Group 1-2 in Visit B7	525 Secs [==>525 Secs]	[1]
	2	(5) MACS1423+2404-WFC3PAR2	(5) MACS1423+2404-WFC3PAR2	WFC3/IR, MULTIACCUM, IR-FIX	F125W		SAMP-SEQ=SPARS 100; NSAMP=8	Prime + Parallel Group 1-2 in Visit B7	[==>]	[1]
	3	(1) MACS1423+2404	(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F850LP		POS TARG 0.3211,0 .7917	Prime + Parallel Group 3-4 in Visit B7	507 Secs [==>507.0 Secs]	[1]
	4	(5) MACS1423+2404-WFC3PAR2	(5) MACS1423+2404-WFC3PAR2	WFC3/IR, MULTIACCUM, IR-FIX	F160W		SAMP-SEQ=SPARS 50; NSAMP=13	Prime + Parallel Group 3-4 in Visit B7	[==>]	[1]
	5	(1) MACS1423+2404	(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F475W		POS TARG 1.0868,0 .5573	Prime + Parallel Group 5-6 in Visit B7	551 Secs [==>570.0 Secs]	[1]
	6	(5) MACS1423+2404-WFC3PAR2	(5) MACS1423+2404-WFC3PAR2	WFC3/IR, MULTIACCUM, IR-FIX	F160W		SAMP-SEQ=SPARS 100; NSAMP=8	Prime + Parallel Group 5-6 in Visit B7	[==>]	[1]
	7	(1) MACS1423+2404	(1) MACS1423+2404	ACS/WFC, ACCUM, WFC-FIX	F475W		POS TARG -0.3211, -0.1742	Prime + Parallel Group 7-8 in Visit B7	564 Secs [==>522 Secs]	[1]
8	(5) MACS1423+2404-WFC3PAR2	(5) MACS1423+2404-WFC3PAR2	WFC3/UVIS, ACCUM, UVIS-FIX	F350LP		CR-SPLIT=NO	Prime + Parallel Group 7-8 in Visit B7	400 Secs [==>616 Secs]	[1]	



Proposal 12790 - Visit B8 - Through a Lens, Darkly - New Constraints on the Fundamental Components of the Cosmos

Fri Oct 05 01:10:59 GMT 2012

Visit	Proposal 12790, Visit B8, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: SCHED 60%; SAME ORIENT AS B0; SEQ B7,B8 WITHIN 1.2 Orbits Comments: Visits B7-B8 represent epoch 4 (at orient 2) and should be taken concurrently									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	MACS1423+2404	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
	(4)	MACS1423+2404-ACSPAR2	RA: 14 23 47.8800 (215.9495000d) Dec: +24 04 42.50 (24.07847d) Equinox: J2000		V=15	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F160W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG 0,0; GS ACQ SCENARI O BASE1B3	Prime + Parallel Group 1-2 in Visit B8	[==>]	[1]
	2		(4) MACS1423+2404-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 1-2 in Visit B8	525 Secs [==>325.0 Secs]	[1]
	3		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F160W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG -1.1517 5,0.42385	Prime + Parallel Group 3-4 in Visit B8	[==>]	[1]
	4		(4) MACS1423+2404-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 3-4 in Visit B8	607 Secs [==>407 Secs]	[1]
	5		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F160W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG -0.813,- 0.30275	Prime + Parallel Group 5-6 in Visit B8	[==>]	[1]
	6		(4) MACS1423+2404-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 5-6 in Visit B8	582 Secs [==>407 Secs]	[1]
	7		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F125W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG 0.33875, -0.1211	Prime + Parallel Group 7-8 in Visit B8	[==>]	[1]
	8		(4) MACS1423+2404-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F850LP			Prime + Parallel Group 7-8 in Visit B8	587 Secs [==>407.0 Secs]	[1]
	9		(1) MACS1423+2404	WFC3/IR, MULTIACCUM, IR-FIX	F125W	SAMP-SEQ=SPARS 100; NSAMP=6	POS TARG -0.813,- 0.30275	Prime + Parallel Group 9-10 in Visit B8	[==>]	[1]
10		(4) MACS1423+2404-ACSPAR2	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 9-10 in Visit B8	587 Secs [==>385 Secs]	[1]	

