12896 - At the Turn of the Tide: WFC3/IR Imaging and Spectroscopy of Two Galaxy Clusters at z~2

Cycle: 20, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

Name	*Institution*	*E-Mail*
Dr. Kim-Vy Tran (PI) (Contact)	**Texas A & M Research Foundation**	**vy@physics.tamu.edu**
Prof. Casey Papovich (CoI)	Texas A & M Research Foundation	papovich@physics.tamu.edu
Mr. Adam Richard Tomczak (CoI)	Texas A & M Research Foundation	tomczak@physics.tamu.edu
Dr. Gabriel Brammer (CoI) (ESA Member)	European Southern Observatory - Chile	gbrammer@eso.org
Prof. Pieter van Dokkum (CoI)	Yale University	pieter.vandokkum@yale.edu
Dr. Steven L. Finkelstein (CoI)	University of Texas at Austin	stevenf@astro.as.utexas.edu
Dr. Jennifer Lotz (CoI)	Space Telescope Science Institute	lotz@stsci.edu
Dr. Ivelina Momcheva (CoI)	Yale University	ivelina.momcheva@yale.com
Dr. Gregory Brian Poole (CoI)	University of Melbourne	gpoole@astro.swin.edu.au
Prof. Gregory Rudnick (CoI)	University of Kansas Center for Research, Inc.	grudnick@ku.edu
Dr. Christopher Willmer (CoI)	University of Arizona	cnaw@as.arizona.edu

VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
13	(1) IRC0222A	WFC3/IR	5	15-Aug-2012 21:15:35.0	yes
09	(1) IRC0222A	WFC3/IR	5	15-Aug-2012 21:15:59.0	yes
03	(1) IRC0222A	WFC3/IR	1	15-Aug-2012 21:16:14.0	yes
04	(1) IRC0222A	WFC3/IR	2	15-Aug-2012 21:16:33.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
05	(2) IRC0222B	WFC3/IR	4	15-Aug-2012 21:16:48.0	yes
10	(2) IRC0222B	WFC3/IR	4	15-Aug-2012 21:17:03.0	yes
11	(2) IRC0222B	WFC3/IR	1	15-Aug-2012 21:17:15.0	yes
12	(2) IRC0222B	WFC3/IR	2	15-Aug-2012 21:17:34.0	yes

24 Total Orbits Used

ABSTRACT

We propose WFC3/IR imaging and grism spectroscopy of two newly discovered galaxy clusters at z~2, both of which are independently identified using Spitzer/IRAC colors and accurate photometric redshifts from medium-band near-infrared filters. Only with WFC/IR can we obtain the ~hundreds of spectra needed to separate both active and quiescent cluster galaxies from the field. We will combine the grism spectroscopy with our multi-wavelength data to measure redshifts for ~30 massive members and push down the luminosity function to L~0.3L* with an accuracy of sigma(z)/(1+z)=0.0034. The spectra also provide D4000 to measure stellar ages and oxygen emission to track star formation. The WFC3/IR imaging provides resolution of ~2 kpc to measure the physical properties of individual members and classify fainter members and their companions to H(160)~25.5. We will combine these WFC3/IR observations with public CANDELS and 3D-HST datasets of field galaxies to: (1) Compare the morphologies, sizes, stellar masses, luminosities, color maps, and star formation histories of cluster galaxies at z~2 to well-studied relations at lower redshift to determine how cluster galaxies evolve; (2) Compare to the field at z~2 to test for accelerated evolution in the clusters; (3) Measure the minor/major merger fraction to determine if cluster galaxies grow by accretion or in-situ star formation; and (4) Determine why cluster galaxies stop forming stars, i.e. via "mass-quenching" or "environment-quenching". We will effectively double our cluster sample at this pivotal epoch when members are transitioning from intensely star-forming systems to the passive galaxies that dominate local clusters.

OBSERVING DESCRIPTION

Obtain WFC3/IR imaging and grism spectroscopy of two galaxy clusters at z~2

For IRC0222A (z~1.6), we require 10 orbits with the G102 grism and for IRC0222B (z~2), we require 8 orbits with the G141 grism. Each set of orbits will be divided into two visits separated by ORIENT of ~10 degrees to minimize overlap of spectra. To maximize the scheduling window, we have selected the primary roll angle to be ~60 degrees and the second roll angle to be ~70 degrees.

Each galaxy cluster will also be imaged with WFC3/IR for 3 orbits: F105W (1 orbit), F125W (2/3rd orbits), and F160W (4/3rd orbits).

Visit

Proposal 12896, IRC0222A: Grism Visit 1 (5 orbits) (13), implementation Thu Aug 16 01:17:44 GMT 2012

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: SCHED 100%; ORIENT 76D TO 76 D

Comments: Direct imaging of high redshift galaxy cluster using F105W, then multiple exposures using Grism 102W. Second visit of 2 where each visit contains 5 orbits. The visits are separated by ORIENT of ~10 degrees to minimize overlapping spectra.

Fixed Targets

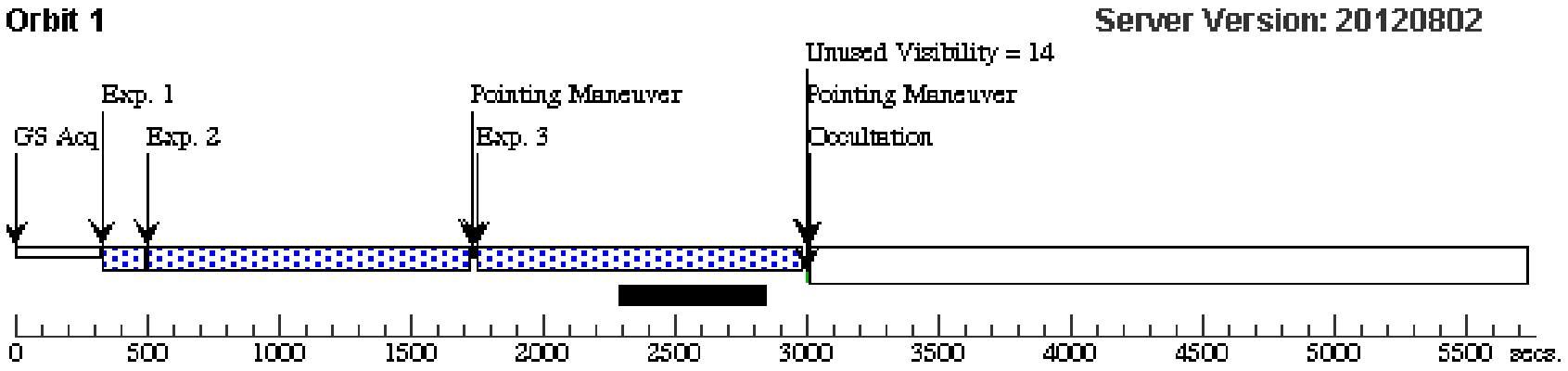
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	IRC0222A	RA: 02 22 3.5000 (35.5145833d) Dec: -04 12 6.00 (-4.20167d) Equinox: J2000		V=25.0 redshift=1.6	Reference Frame: ICRS

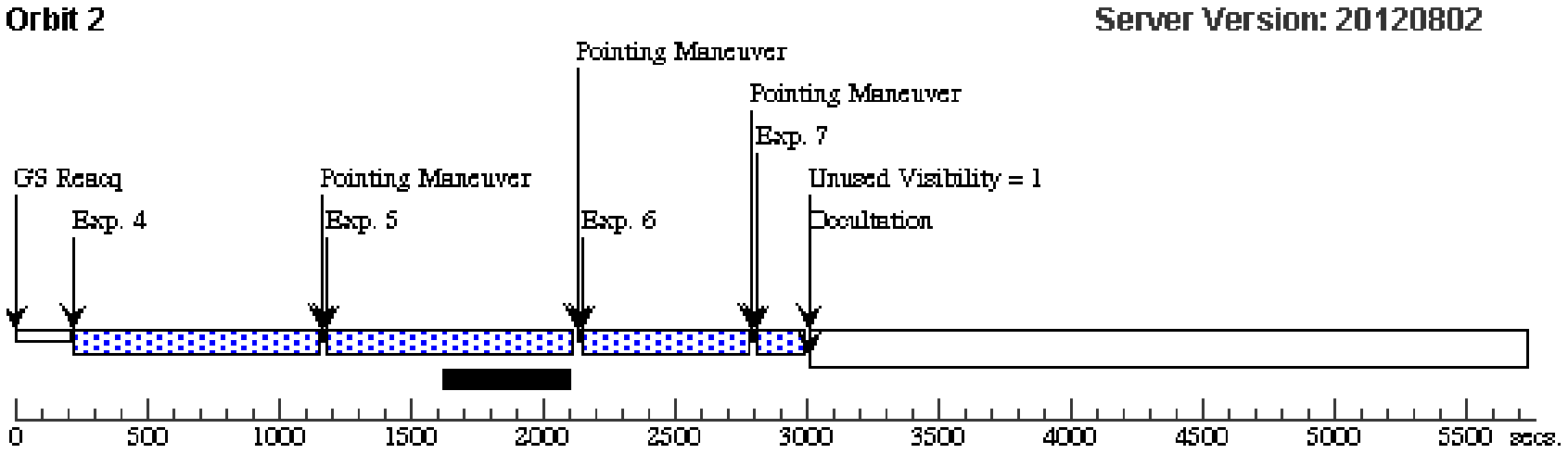
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	Direct F105W-1.1a	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	F105W	NSAMP=6; SAMP-SEQ=SPARS25	GS ACQ SCENARIO BASE1B3	Sequence 1-3 Non-Int in IRC0222A: Grism Visit 1 (5 orbits) (13)	*[==>]*	***[1]***
2	Grism G102 W-1.1	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 0,0	Sequence 1-3 Non-Int in IRC0222A: Grism Visit 1 (5 orbits) (13)	*[==>]*	***[1]***
3	Grism G102 W-1.2	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG +1.355, +0.424	Sequence 1-3 Non-Int in IRC0222A: Grism Visit 1 (5 orbits) (13)	*[==>]*	***[1]***
4	Grism G102 W-1.3	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=10; SAMP-SEQ=SPARS100	POS TARG +0.881, +1.212	Sequence 4-7 Non-Int in IRC0222A: Grism Visit 1 (5 orbits) (13)	*[==>]*	***[2]***
5	Grism G102 W-1.4	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=10; SAMP-SEQ=SPARS100	POS TARG -0.474,+0.788	Sequence 4-7 Non-Int in IRC0222A: Grism Visit 1 (5 orbits) (13)	*[==>]*	***[2]***
6	Grism G102 W-1.5	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=7; SAMP-SEQ=SPARS100	POS TARG 0,0	Sequence 4-7 Non-Int in IRC0222A: Grism Visit 1 (5 orbits) (13)	*[==>]*	***[2]***
7	Direct F105W-1.2	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	F105W	NSAMP=7; SAMP-SEQ=SPARS25	POS TARG 1.355,+0.424	Sequence 4-7 Non-Int in IRC0222A: Grism Visit 1 (5 orbits) (13)	*[==>]*	***[2]***
8	Grism G102 W-1.6	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=7; SAMP-SEQ=SPARS100	POS TARG +1.355, +0.424	Sequence 8-11 Non-Int in IRC0222A: Grism Visit 1 (5 orbits) (13)	*[==>]*	***[3]***
9	Grism G102 W-1.7	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=10; SAMP-SEQ=SPARS100	POS TARG +0.881, +1.212	Sequence 8-11 Non-Int in IRC0222A: Grism Visit 1 (5 orbits) (13)	*[==>]*	***[3]***
10	Grism G102 W-1.8	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=10; SAMP-SEQ=SPARS100	POS TARG -0.474,+0.788	Sequence 8-11 Non-Int in IRC0222A: Grism Visit 1 (5 orbits) (13)	*[==>]*	***[3]***
11	Direct F105W-1.3	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	F105W	NSAMP=7; SAMP-SEQ=SPARS25	POS TARG +0.881, +1.212	Sequence 8-11 Non-Int in IRC0222A: Grism Visit 1 (5 orbits) (13)	*[==>]*	***[3]***
12	Grism G102 W-1.9	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG +0.881, +1.212	Sequence 12-14 Non-Int in IRC0222A: Grism Visit 1 (5 orbits) (13)	*[==>]*	***[4]***
13	Grism G102 W-1.10	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -0.474,+0.788	Sequence 12-14 Non-Int in IRC0222A: Grism Visit 1 (5 orbits) (13)	*[==>]*	***[4]***
14	Direct F105W-1.4	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	F105W	NSAMP=11; SAMP-SEQ=SPARS25	POS TARG -0.474,+0.788	Sequence 12-14 Non-Int in IRC0222A: Grism Visit 1 (5 orbits) (13)	*[==>]*	***[4]***

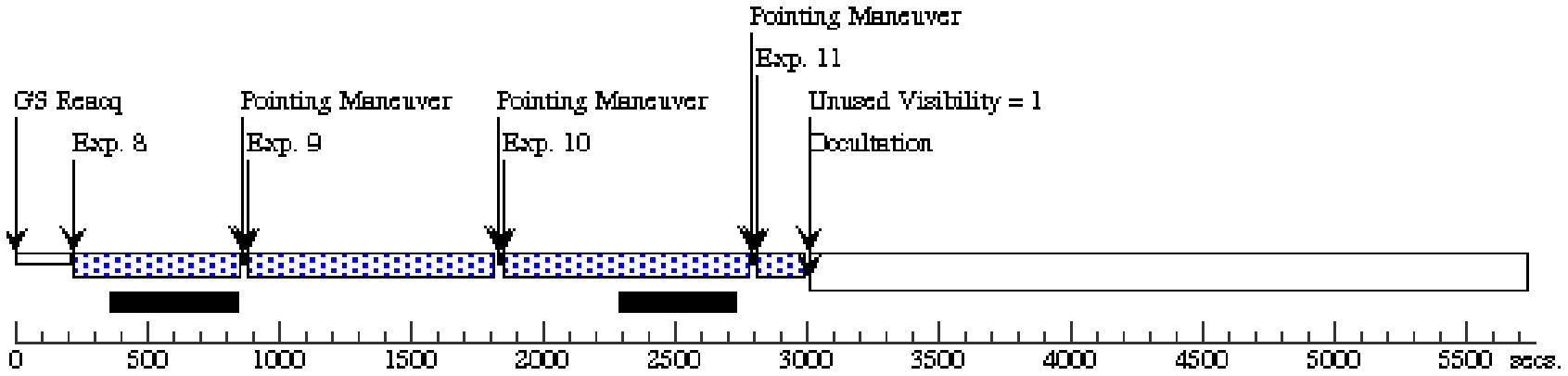
	15	Grism G102 W-1.11	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 0,null	Sequence 15-17 Non-Int in IRC0222A: Grism Visit 1 (5 orbits) (13)	*[==>]*	***[5]***
	16	Grism G102 W-1.12	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG +1.355, +0.424	Sequence 15-17 Non-Int in IRC0222A: Grism Visit 1 (5 orbits) (13)	*[==>]*	***[5]***
	17	Direct F105 W-1.1b	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	F105W	NSAMP=9; SAMP-SEQ=SPARS25		Sequence 15-17 Non-Int in IRC0222A: Grism Visit 1 (5 orbits) (13)	*[==>]*	***[5]***

Orbit Structure

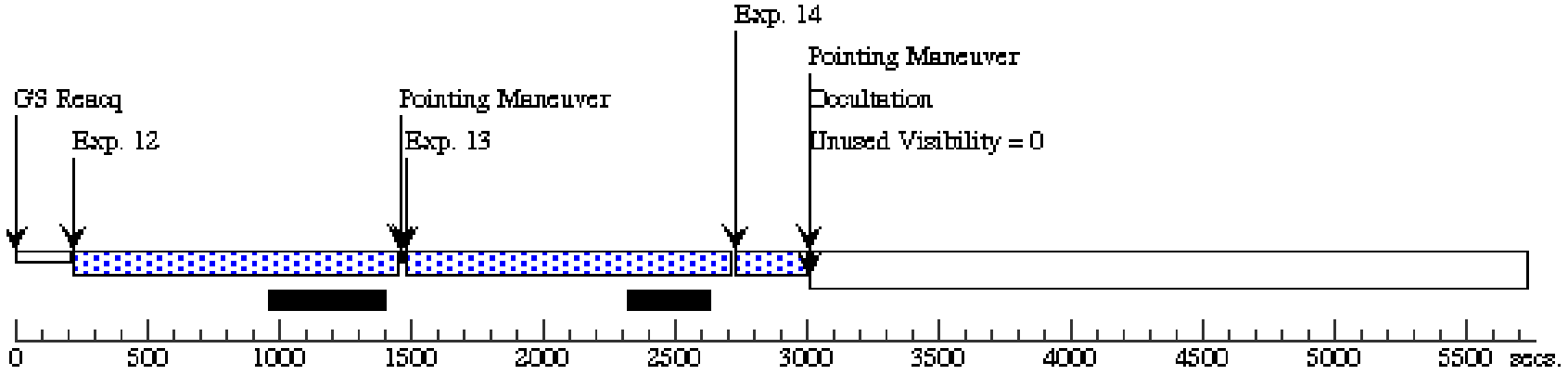


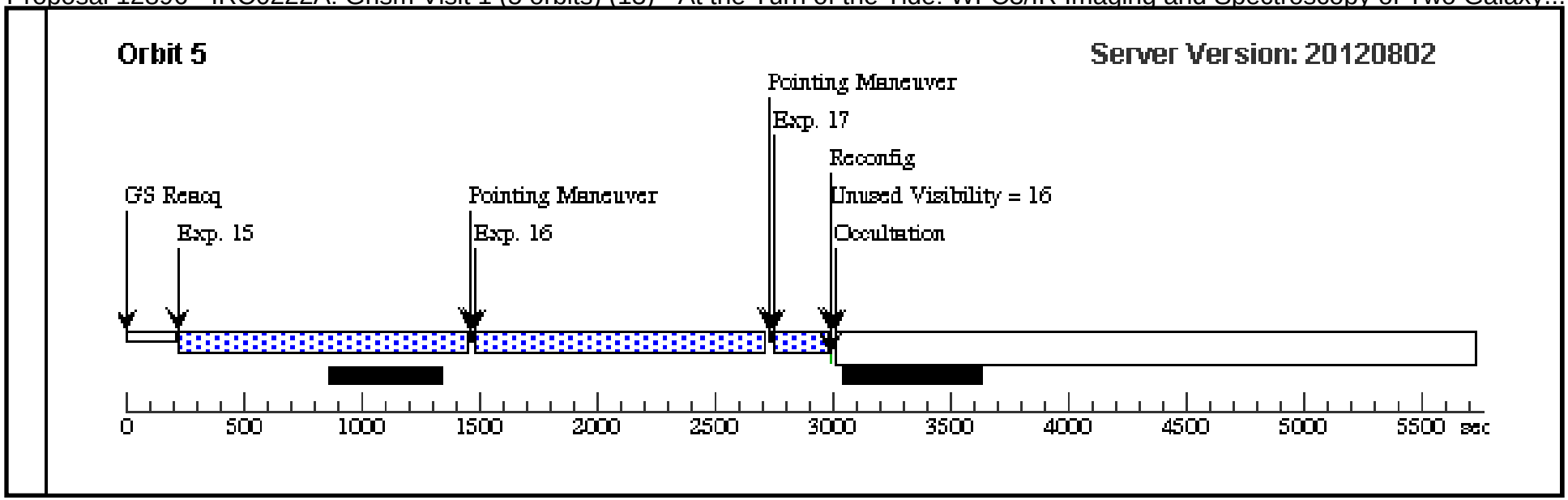


Orbit 3 **Server Version: 20120802**



Orbit 4 **Server Version: 20120802**




Orbit 5
Server Version: 20120802
Pointing Maneuver
Exp. 17
Reconfig
Unused Visibility = 16
Occultation
GS Reacq
Exp. 15
Pointing Maneuver
Exp. 16
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12896, IRC0222A: Grism Visit 2 (5 orbits) (09), implementation Thu Aug 16 01:17:50 GMT 2012

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: SCHED 100%; ORIENT 86D TO 86 D

Comments: Direct imaging of high redshift galaxy cluster using F105W, then multiple exposures using Grism 102W. Second visit of 2 where each visit contains 5 orbits. The visits are separated by ORIENT of ~10 degrees to minimize overlapping spectra.

Fixed Targets

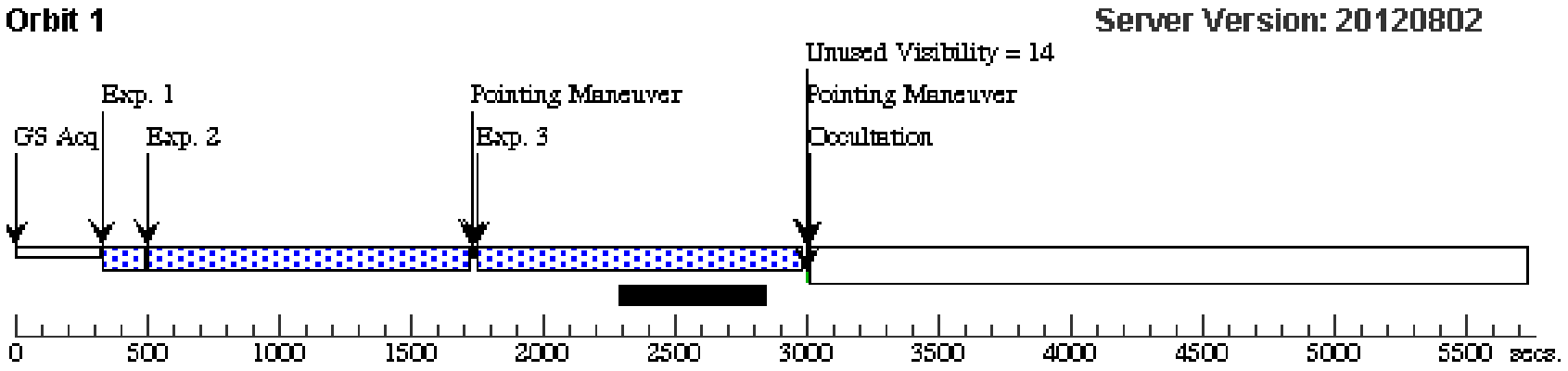
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	IRC0222A	RA: 02 22 3.5000 (35.5145833d) Dec: -04 12 6.00 (-4.20167d) Equinox: J2000		V=25.0 redshift=1.6	Reference Frame: ICRS

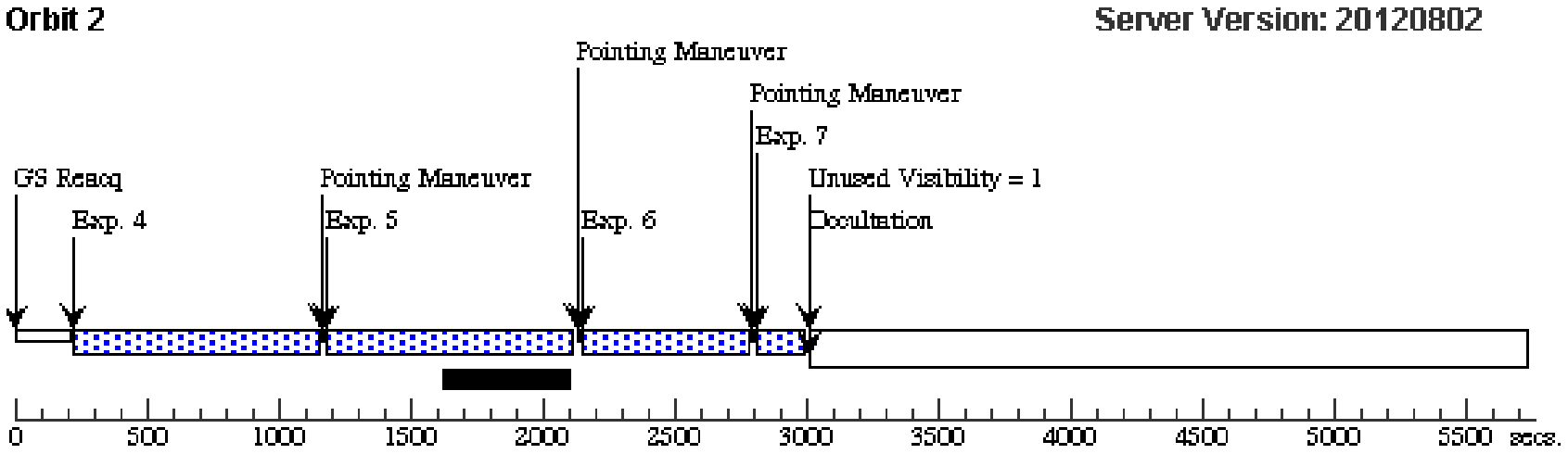
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	Direct F105W-2.1a	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	F105W	NSAMP=6; SAMP-SEQ=SPARS25		Sequence 1-3 Non-Int in IRC0222A: Grism Visit 2 (5 orbits) (09)	*[==>]*	***[1]***
2	Grism G102 W-2.1	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 0,0	Sequence 1-3 Non-Int in IRC0222A: Grism Visit 2 (5 orbits) (09)	*[==>]*	***[1]***
3	Grism G102 W-2.2	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG +1.355, +0.424	Sequence 1-3 Non-Int in IRC0222A: Grism Visit 2 (5 orbits) (09)	*[==>]*	***[1]***
4	Grism G102 W-2.3	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=10; SAMP-SEQ=SPARS100	POS TARG +0.881, +1.212	Sequence 4-7 Non-Int in IRC0222A: Grism Visit 2 (5 orbits) (09)	*[==>]*	***[2]***
5	Grism G102 W-2.4	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=10; SAMP-SEQ=SPARS100	POS TARG -0.474,+0.788	Sequence 4-7 Non-Int in IRC0222A: Grism Visit 2 (5 orbits) (09)	*[==>]*	***[2]***
6	Grism G102 W-2.5	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=7; SAMP-SEQ=SPARS100	POS TARG 0,0	Sequence 4-7 Non-Int in IRC0222A: Grism Visit 2 (5 orbits) (09)	*[==>]*	***[2]***
7	Direct F105W-2.2	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	F105W	NSAMP=7; SAMP-SEQ=SPARS25	POS TARG 1.355,+0.424	Sequence 4-7 Non-Int in IRC0222A: Grism Visit 2 (5 orbits) (09)	*[==>]*	***[2]***
8	Grism G102 W-2.6	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=7; SAMP-SEQ=SPARS100	POS TARG +1.355, +0.424	Sequence 8-11 Non-Int in IRC0222A: Grism Visit 2 (5 orbits) (09)	*[==>]*	***[3]***
9	Grism G102 W-2.7	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=10; SAMP-SEQ=SPARS100	POS TARG +0.881, +1.212	Sequence 8-11 Non-Int in IRC0222A: Grism Visit 2 (5 orbits) (09)	*[==>]*	***[3]***
10	Grism G102 W-2.8	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=10; SAMP-SEQ=SPARS100	POS TARG -0.474,+0.788	Sequence 8-11 Non-Int in IRC0222A: Grism Visit 2 (5 orbits) (09)	*[==>]*	***[3]***
11	Direct F105W-2.3	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	F105W	NSAMP=7; SAMP-SEQ=SPARS25	POS TARG +0.881, +1.212	Sequence 8-11 Non-Int in IRC0222A: Grism Visit 2 (5 orbits) (09)	*[==>]*	***[3]***
12	Grism G102 W-2.9	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG +0.881, +1.212	Sequence 12-14 Non-Int in IRC0222A: Grism Visit 2 (5 orbits) (09)	*[==>]*	***[4]***
13	Grism G102 W-2.10	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -0.474,+0.788	Sequence 12-14 Non-Int in IRC0222A: Grism Visit 2 (5 orbits) (09)	*[==>]*	***[4]***
14	Direct F105W-2.4	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	F105W	NSAMP=11; SAMP-SEQ=SPARS25	POS TARG -0.474,+0.788	Sequence 12-14 Non-Int in IRC0222A: Grism Visit 2 (5 orbits) (09)	*[==>]*	***[4]***

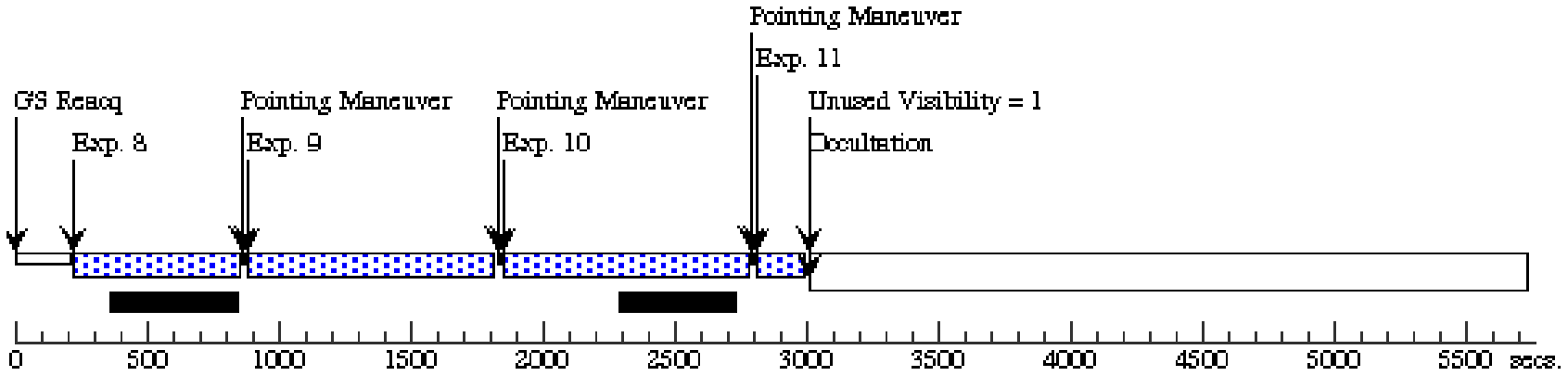
	15	Grism G102 W-2.11	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 0,null	Sequence 15-17 Non-Int in IRC0222A: Grism Visit 2 (5 orbits) (09)	*[==>]*	***[5]***
	16	Grism G102 W-2.12	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG +1.355, +0.424	Sequence 15-17 Non-Int in IRC0222A: Grism Visit 2 (5 orbits) (09)	*[==>]*	***[5]***
	17	Direct F105 W-2.1b	(1) IRC0222A	WFC3/IR, MULTIACCUM, GRISM1024	F105W	NSAMP=9; SAMP-SEQ=SPARS25		Sequence 15-17 Non-Int in IRC0222A: Grism Visit 2 (5 orbits) (09)	*[==>]*	***[5]***

Orbit Structure

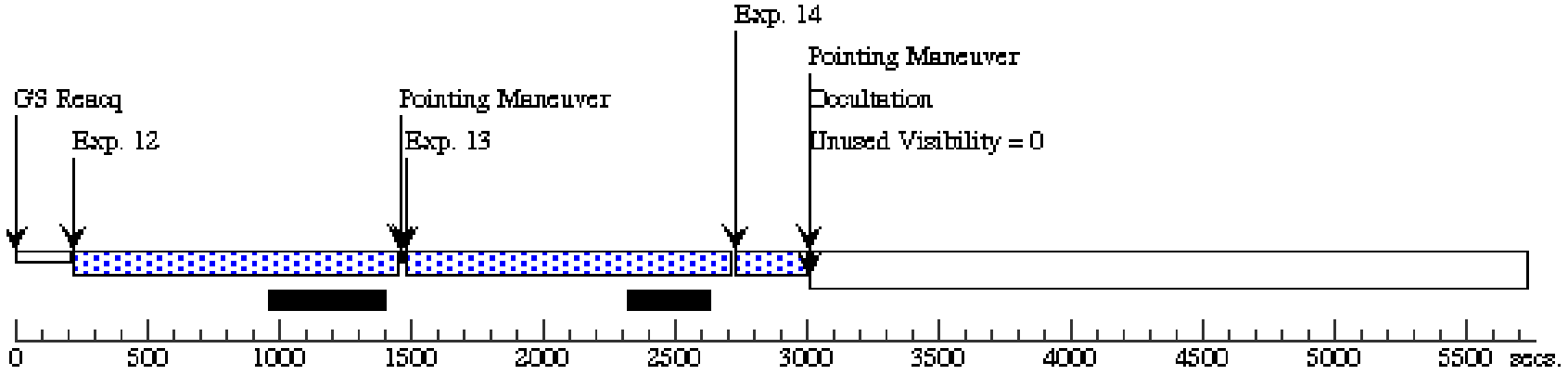


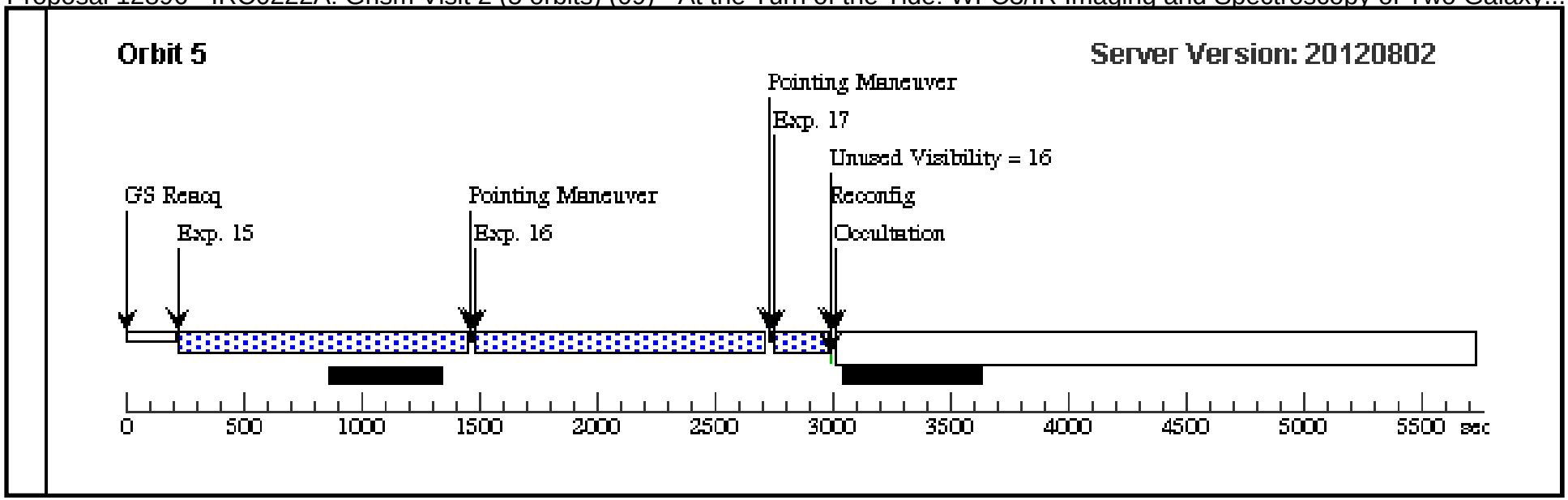


Orbit 3 **Server Version: 20120802**



Orbit 4 **Server Version: 20120802**




Orbit 5
Server Version: 20120802
Pointing Maneuver
Exp. 17
Unused Visibility = 16
GS Reacq
Exp. 15
Pointing Maneuver
Exp. 16
Reconfig
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12896, IRC0222A F105W Imaging (1 orbit) (03), implementation Thu Aug 16 01:17:55 GMT 2012

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: SCHED 100%; ORIENT 76D TO 86 D

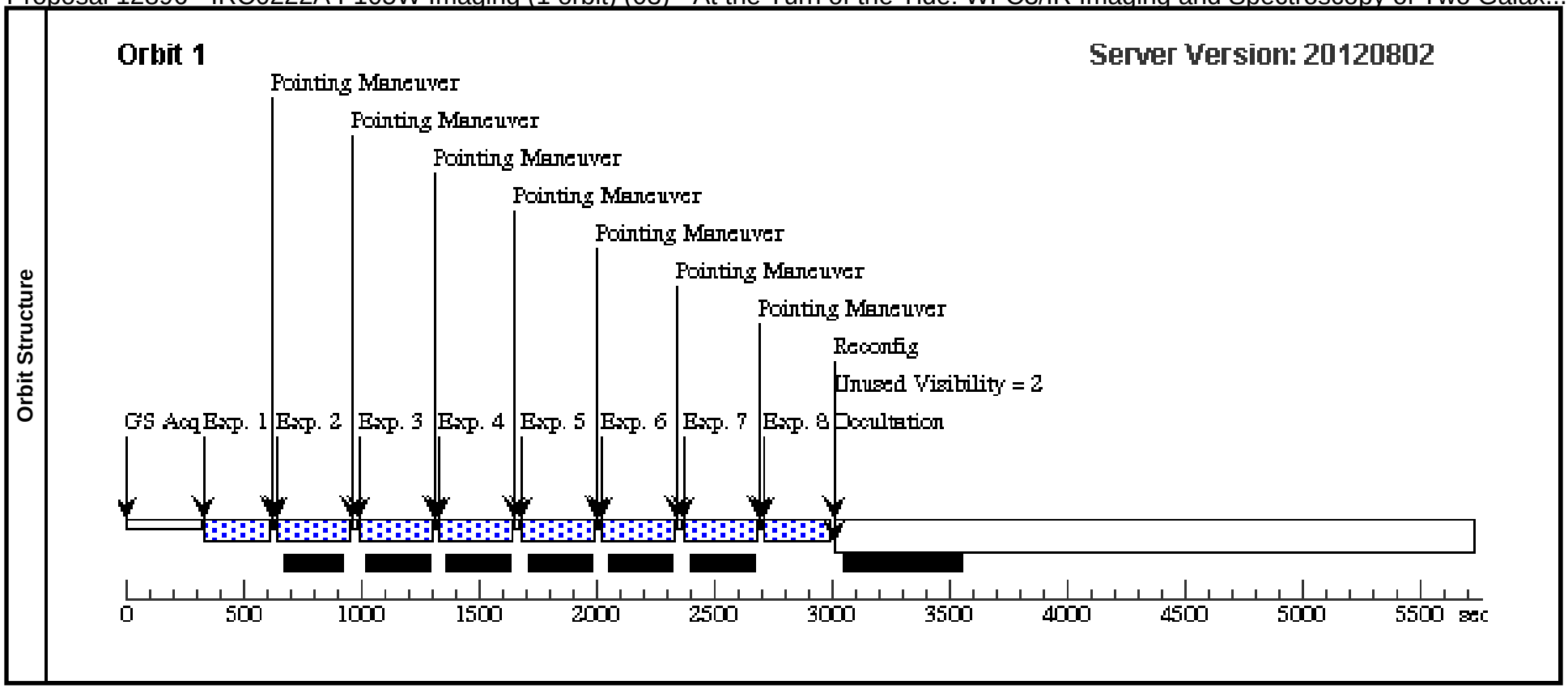
Comments: Imaging of high redshift cluster in 3 orbits split between F105W (1 orbit), F125W (2/3 orbit), and F160W (4/3 orbit)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	IRC0222A	RA: 02 22 3.5000 (35.5145833d) Dec: -04 12 6.00 (-4.20167d) Equinox: J2000		V=25.0 redshift=1.6	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	F105W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR	F105W	NSAMP=11; SAMP-SEQ=SPARS25	POS TARG 0,0	Sequence 1-4 Non-Int in IRC0222A F105W Imaging (1 orbit) (03)	*[==>]*	***[1]***
2	F105W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR	F105W	NSAMP=12; SAMP-SEQ=SPARS25	POS TARG -0.3387, +0.1816	Sequence 1-4 Non-Int in IRC0222A F105W Imaging (1 orbit) (03)	*[==>]*	***[1]***
3	F105W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR	F105W	NSAMP=12; SAMP-SEQ=SPARS25	POS TARG -6.666,+6.0187	Sequence 1-4 Non-Int in IRC0222A F105W Imaging (1 orbit) (03)	*[==>]*	***[1]***
4	F105W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR	F105W	NSAMP=12; SAMP-SEQ=SPARS25	POS TARG -7.0054, +6.2003	Sequence 1-4 Non-Int in IRC0222A F105W Imaging (1 orbit) (03)	*[==>]*	***[1]***
5	F105W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR	F105W	NSAMP=12; SAMP-SEQ=SPARS25	POS TARG 0,0	Sequence 5-8 Non-Int in IRC0222A F105W Imaging (1 orbit) (03)	*[==>]*	***[1]***
6	F105W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR	F105W	NSAMP=12; SAMP-SEQ=SPARS25	POS TARG -0.3387, +0.1816	Sequence 5-8 Non-Int in IRC0222A F105W Imaging (1 orbit) (03)	*[==>]*	***[1]***
7	F105W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR	F105W	NSAMP=12; SAMP-SEQ=SPARS25	POS TARG -6.666,+6.0187	Sequence 5-8 Non-Int in IRC0222A F105W Imaging (1 orbit) (03)	*[==>]*	***[1]***
8	F105W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR	F105W	NSAMP=11; SAMP-SEQ=SPARS25	POS TARG -7.0054, +6.2003	Sequence 5-8 Non-Int in IRC0222A F105W Imaging (1 orbit) (03)	*[==>]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20120802
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Reconfig
Unused Visibility = 2
GS Acq
Exp. 1
Exp. 2
Exp. 3
Exp. 4
Exp. 5
Exp. 6
Exp. 7
Exp. 8
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12896, IRC0222A F125W & F160W Imaging (2 orbits) (04), implementation Thu Aug 16 01:17:56 GMT 2012

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: SCHED 100%; ORIENT 76D TO 86 D

Comments: Imaging of high redshift cluster in 3 orbits split between F105W (1 orbit), F125W (2/3 orbit), and F160W (4/3 orbit)

Fixed Targets

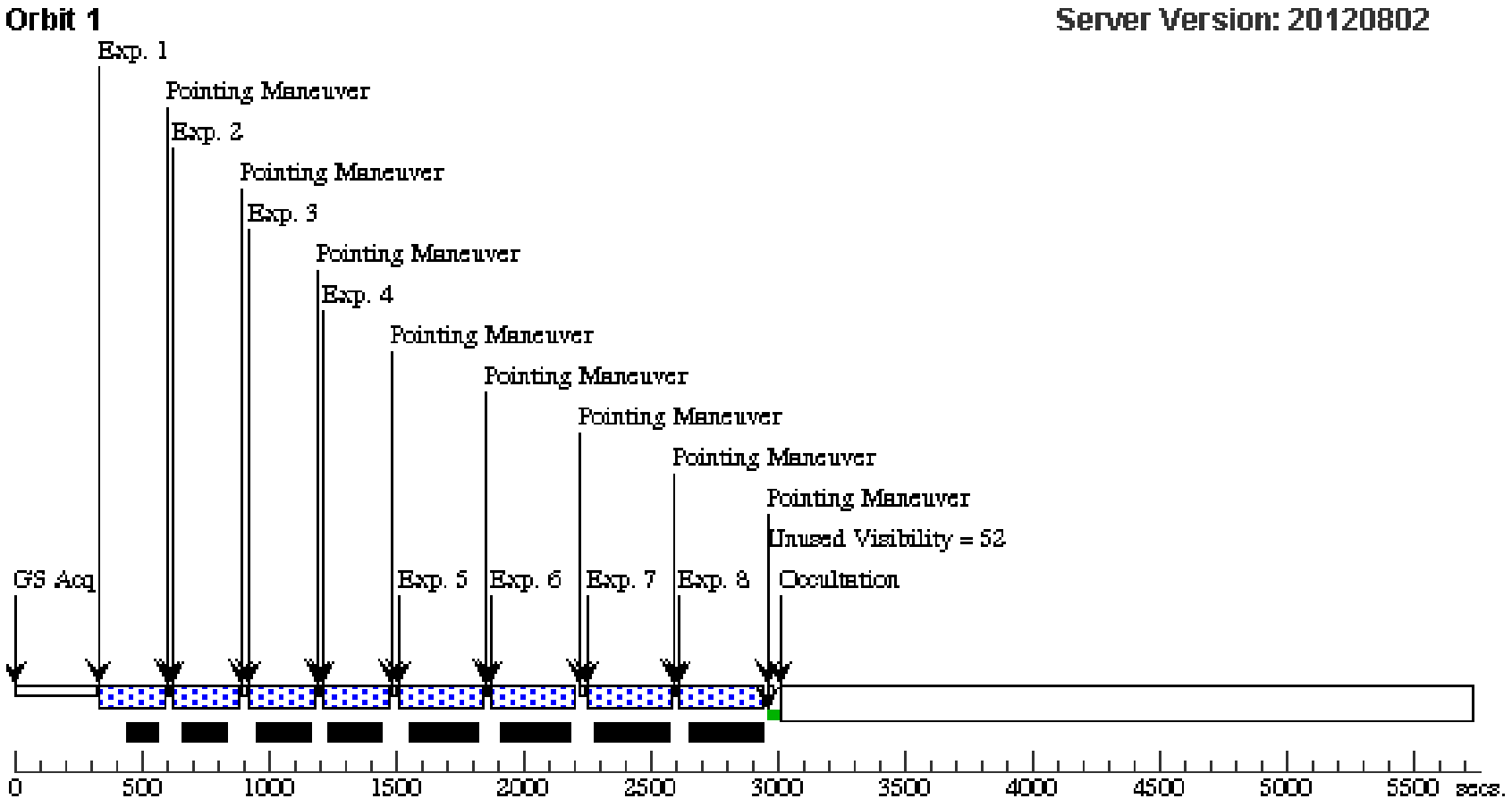
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	IRC0222A	RA: 02 22 3.5000 (35.5145833d) Dec: -04 12 6.00 (-4.20167d) Equinox: J2000		V=25.0 redshift=1.6	Reference Frame: ICRS

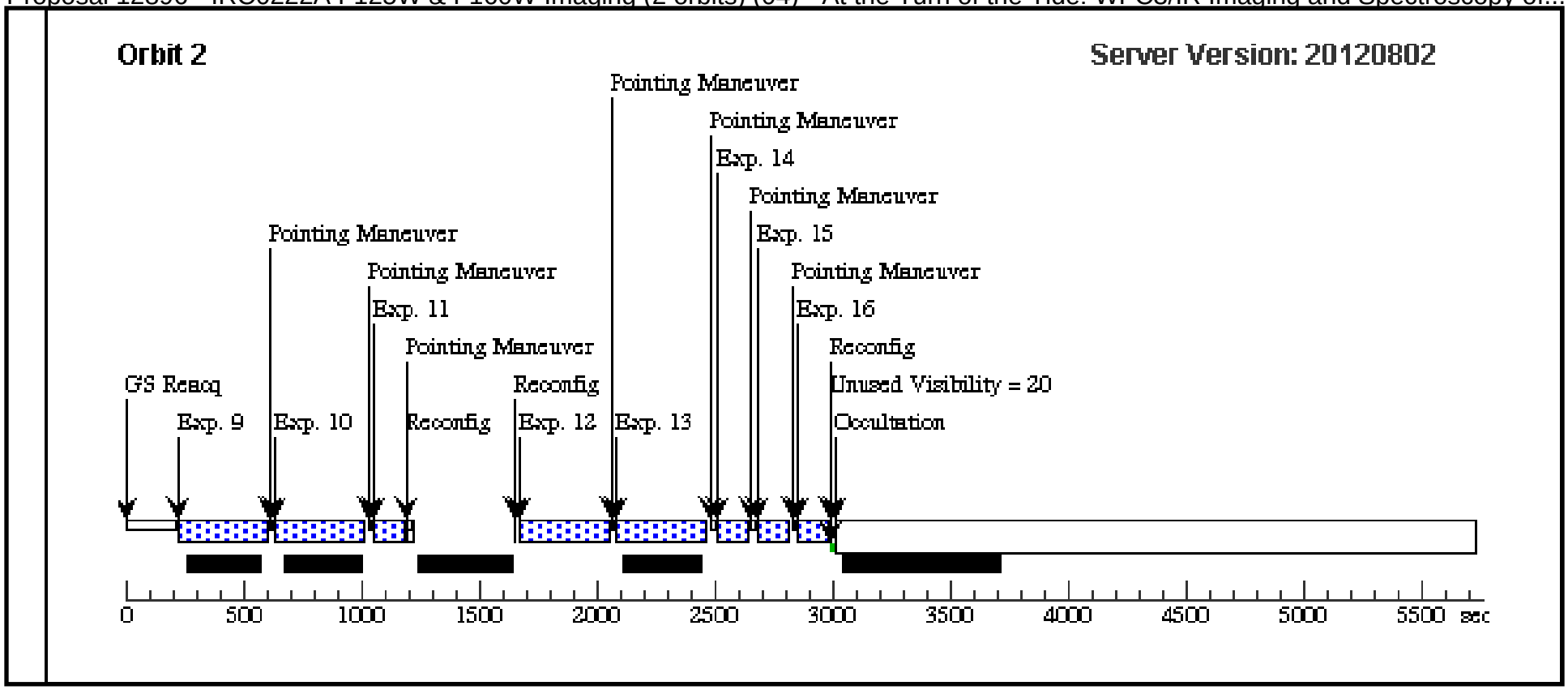
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	F125W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=10; SAMP-SEQ=SPARS25	POS TARG 0,0	Sequence 1-8 Non-Int in IRC0222A F125W & F160W Imaging (2 orbits) (04)	*[==>]*	***[1]***
2	F125W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=10; SAMP-SEQ=SPARS25	POS TARG -0.3387, +0.1816	Sequence 1-8 Non-Int in IRC0222A F125W & F160W Imaging (2 orbits) (04)	*[==>]*	***[1]***
3	F125W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=10; SAMP-SEQ=SPARS25	POS TARG -6.6666, +6.0187	Sequence 1-8 Non-Int in IRC0222A F125W & F160W Imaging (2 orbits) (04)	*[==>]*	***[1]***
4	F125W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=10; SAMP-SEQ=SPARS25	POS TARG -7.0054, +6.2003	Sequence 1-8 Non-Int in IRC0222A F125W & F160W Imaging (2 orbits) (04)	*[==>]*	***[1]***
5	F160W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=13; SAMP-SEQ=SPARS25	POS TARG 0,0	Sequence 1-8 Non-Int in IRC0222A F125W & F160W Imaging (2 orbits) (04)	*[==>]*	***[1]***
6	F160W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=13; SAMP-SEQ=SPARS25	POS TARG -0.3387, +0.1816	Sequence 1-8 Non-Int in IRC0222A F125W & F160W Imaging (2 orbits) (04)	*[==>]*	***[1]***
7	F160W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=13; SAMP-SEQ=SPARS25	POS TARG -6.6666, +6.0187	Sequence 1-8 Non-Int in IRC0222A F125W & F160W Imaging (2 orbits) (04)	*[==>]*	***[1]***
8	F160W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=13; SAMP-SEQ=SPARS25	POS TARG -7.0054, +6.2003	Sequence 1-8 Non-Int in IRC0222A F125W & F160W Imaging (2 orbits) (04)	*[==>]*	***[1]***
9	F160W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPARS25	POS TARG 0,0	Sequence 9-16 Non-Int in IRC0222A F125W & F160W Imaging (2 orbits) (04)	*[==>]*	***[2]***
10	F160W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPARS25	POS TARG -0.3387, +0.1816	Sequence 9-16 Non-Int in IRC0222A F125W & F160W Imaging (2 orbits) (04)	*[==>]*	***[2]***
11	F125W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=5; SAMP-SEQ=SPARS25	POS TARG 0,0	Sequence 9-16 Non-Int in IRC0222A F125W & F160W Imaging (2 orbits) (04)	*[==>]*	***[2]***
12	F160W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPARS25	POS TARG -6.6666, +6.0187	Sequence 9-16 Non-Int in IRC0222A F125W & F160W Imaging (2 orbits) (04)	*[==>]*	***[2]***
13	F160W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPARS25	POS TARG -7.0054, +6.2003	Sequence 9-16 Non-Int in IRC0222A F125W & F160W Imaging (2 orbits) (04)	*[==>]*	***[2]***
14	F125W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=5; SAMP-SEQ=SPARS25	POS TARG -0.3387, +0.1816	Sequence 9-16 Non-Int in IRC0222A F125W & F160W Imaging (2 orbits) (04)	*[==>]*	***[2]***

	15	F125W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=5; SAMP-SEQ=SPARS25	POS TARG -6.6666, +6.0187	Sequence 9-16 Non-Int in IRC0222A F125W & F160W Imaging (2 orbits) (04)	*[==>]*	***[2]***
	16	F125W	(1) IRC0222A	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=5; SAMP-SEQ=SPARS25	POS TARG -7.0054, +6.2003	Sequence 9-16 Non-Int in IRC0222A F125W & F160W Imaging (2 orbits) (04)	*[==>]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20120802
Pointing Maneuver
Pointing Maneuver
Exp. 14
Pointing Maneuver
Exp. 15
Pointing Maneuver
Exp. 16
Reconfig
Unused Visibility = 20
Occultation
Pointing Maneuver
Pointing Maneuver
Exp. 11
Pointing Maneuver
Reconfig
Exp. 12
Exp. 13
GS Reacq
Exp. 9
Exp. 10
Reconfig
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12896, IRC0222B: Grism Visit 1 (4 orbits) (05), implementation Thu Aug 16 01:17:58 GMT 2012

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: SCHED 100%; ORIENT 64D TO 64 D

Comments: Direct imaging of high redshift galaxy cluster using F140W, then multiple exposures using Grism 141. First visit of 2 where each visit contains 4 orbits. The visits are separated by ORIENT of ~10 degrees to minimize overlapping spectra.

Fixed Targets

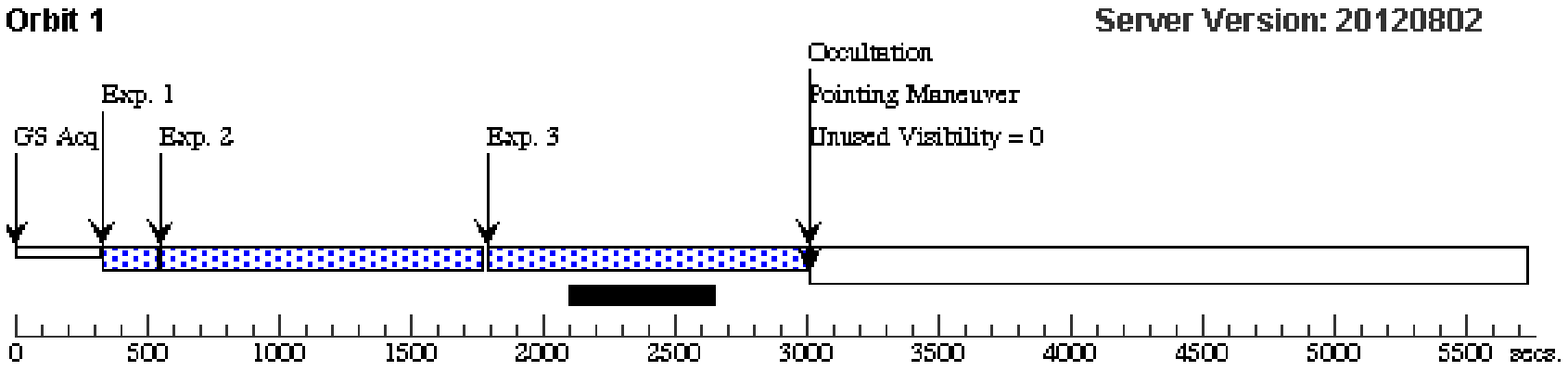
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	IRC0222B	RA: 02 22 17.3000 (35.5720833d)		V=25	Reference Frame: ICRS
		Dec: -04 21 45.00 (-4.36250d)		redshift=1.95	
		Equinox: J2000			

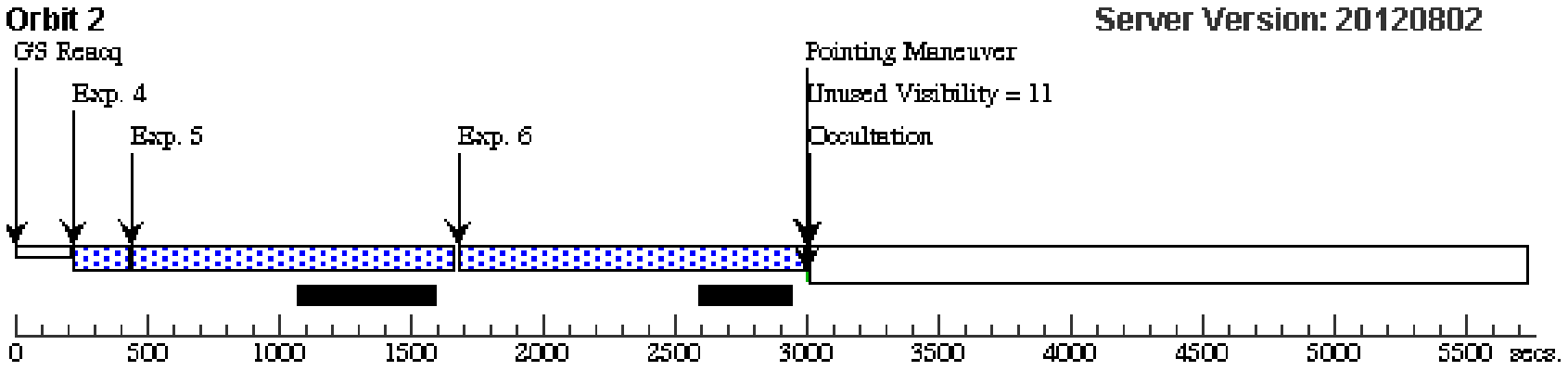
Comments: Potentially bright star ~1.3 arcmin to Southwest

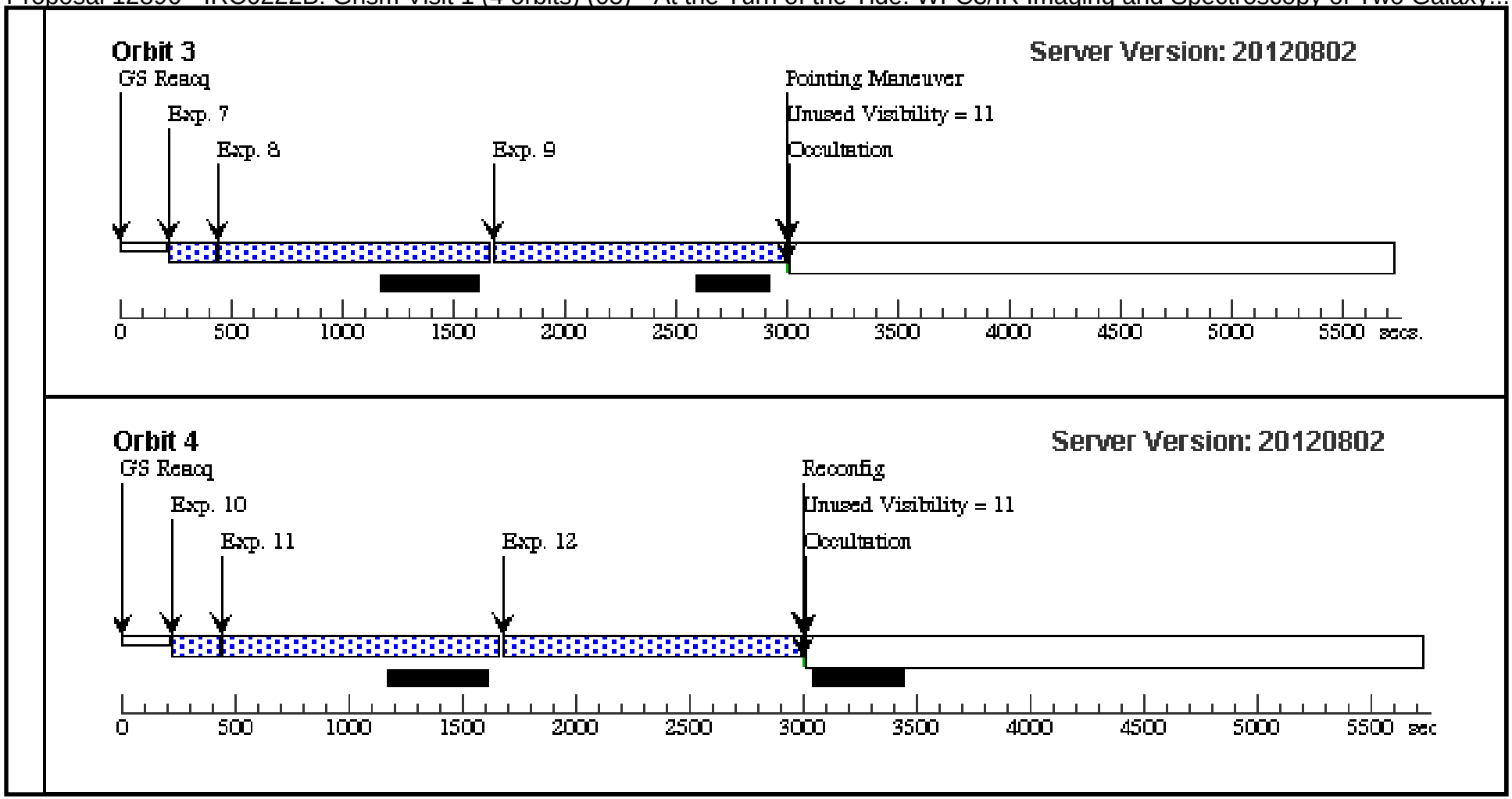
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	Direct F140W-1.1	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	F140W	NSAMP=8; SAMP-SEQ=SPARS25	POS TARG 0,null; GS ACQ SCENARIO BASE1B3	Sequence 1-3 Non-Int in IRC0222B: Grism Visit 1 (4 orbits) (05)	*[==>]*	***[1]***
2	Grism G141W-1.1	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 0,0	Sequence 1-3 Non-Int in IRC0222B: Grism Visit 1 (4 orbits) (05)	*[==>]*	***[1]***
3	Grism G141W-1.2	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 0,0	Sequence 1-3 Non-Int in IRC0222B: Grism Visit 1 (4 orbits) (05)	*[==>]*	***[1]***
4	Direct F140W-1.2	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	F140W	NSAMP=8; SAMP-SEQ=SPARS25	POS TARG +1.355, +0.424	Sequence 4-6 Non-Int in IRC0222B: Grism Visit 1 (4 orbits) (05)	*[==>]*	***[2]***
5	Grism G141W-1.3	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG +1.355, +0.424	Sequence 4-6 Non-Int in IRC0222B: Grism Visit 1 (4 orbits) (05)	*[==>]*	***[2]***
6	Grism G141W-1.4	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG +1.355, +0.424	Sequence 4-6 Non-Int in IRC0222B: Grism Visit 1 (4 orbits) (05)	*[==>]*	***[2]***
7	Direct F140W-1.3	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	F140W	NSAMP=8; SAMP-SEQ=SPARS25	POS TARG +0.881, +1.212	Sequence 7-9 Non-Int in IRC0222B: Grism Visit 1 (4 orbits) (05)	*[==>]*	***[3]***
8	Grism G141W-1.5	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG +0.881, +1.212	Sequence 7-9 Non-Int in IRC0222B: Grism Visit 1 (4 orbits) (05)	*[==>]*	***[3]***
9	Grism G141W-1.6	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG +0.881, 1.212	Sequence 7-9 Non-Int in IRC0222B: Grism Visit 1 (4 orbits) (05)	*[==>]*	***[3]***
10	Direct F140W-1.4	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	F140W	NSAMP=8; SAMP-SEQ=SPARS25	POS TARG -0.474,+0.788	Sequence 10-12 Non-Int in IRC0222B: Grism Visit 1 (4 orbits) (05)	*[==>]*	***[4]***
11	Grism G141W-1.7	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -0.474,+0.788	Sequence 10-12 Non-Int in IRC0222B: Grism Visit 1 (4 orbits) (05)	*[==>]*	***[4]***
12	Grism G141W-1.8	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG -0.474,+0.788	Sequence 10-12 Non-Int in IRC0222B: Grism Visit 1 (4 orbits) (05)	*[==>]*	***[4]***

Orbit Structure






Orbit 3
Server Version: 20120802
GS Reacq
Exp. 7
Exp. 8
Exp. 9
Pointing Maneuver
Unused Visibility = 11
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 4
Server Version: 20120802
GS Reacq
Exp. 10
Exp. 11
Exp. 12
Reconfig
Unused Visibility = 11
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12896, IRC0222B: Grism Visit 2 (4 orbits) (10), implementation Thu Aug 16 01:18:02 GMT 2012

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: SCHED 100%; ORIENT 74D TO 74 D

Comments: Direct imaging of high redshift galaxy cluster using F140W, then multiple exposures using Grism 141. Second visit of 2 where each visit contains 4 orbits. The visits are separated by ORIENT of ~10 degrees to minimize overlapping spectra.

Fixed Targets

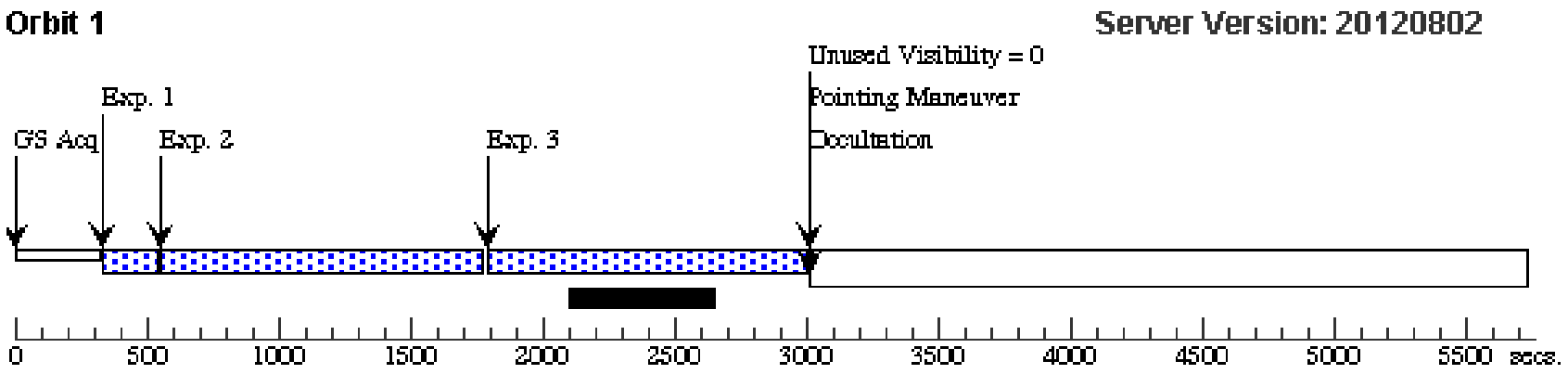
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	IRC0222B	RA: 02 22 17.3000 (35.5720833d)		V=25	Reference Frame: ICRS
		Dec: -04 21 45.00 (-4.36250d)		redshift=1.95	
		Equinox: J2000			

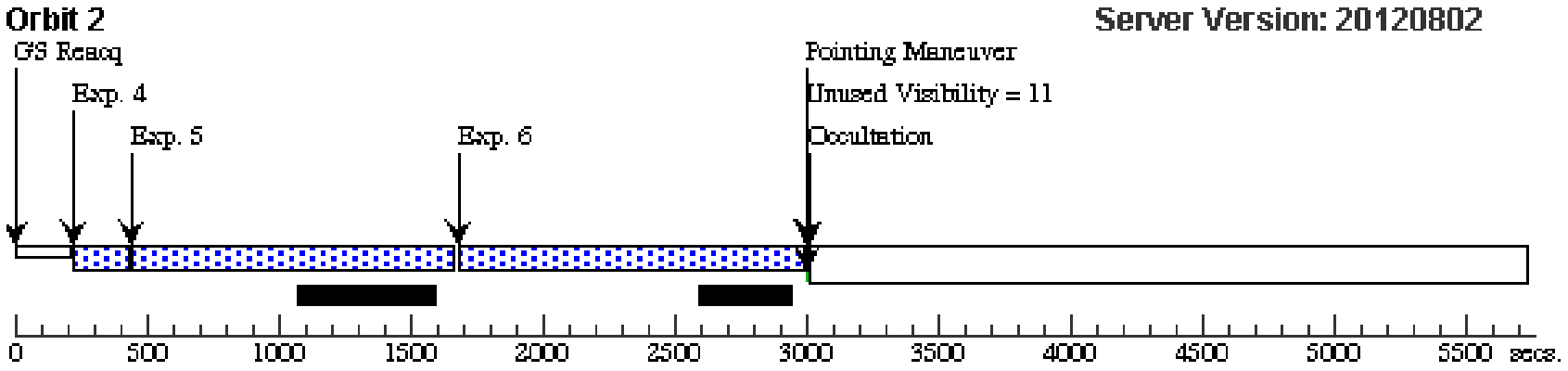
Comments: Potentially bright star ~1.3 arcmin to Southwest

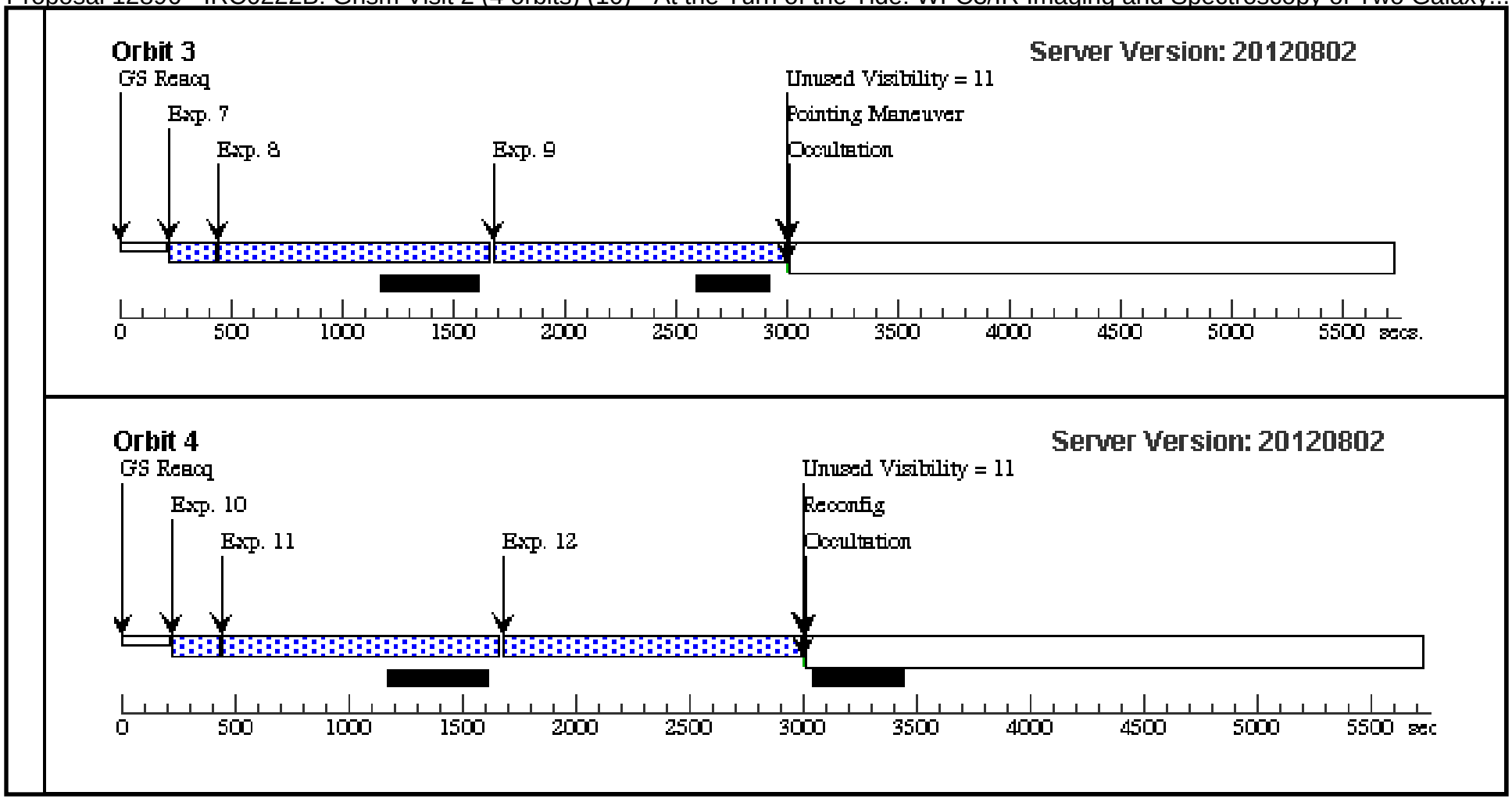
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	Direct F140W-2.2	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	F140W	NSAMP=8; SAMP-SEQ=SPARS25	POS TARG +1.355, +0.424; GS ACQ SCENARIO BASE1B3	Sequence 1-3 Non-Int in IRC0222B: Grism Visit 2 (4 orbits) (10)	*[==>]*	***[1]***
2	Grism G141W-2.3	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG +1.355, +0.424	Sequence 1-3 Non-Int in IRC0222B: Grism Visit 2 (4 orbits) (10)	*[==>]*	***[1]***
3	Grism G141W-2.4	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG +1.355, +0.424	Sequence 1-3 Non-Int in IRC0222B: Grism Visit 2 (4 orbits) (10)	*[==>]*	***[1]***
4	Direct F140W-2.1	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	F140W	NSAMP=8; SAMP-SEQ=SPARS25	POS TARG 0,null	Sequence 4-6 Non-Int in IRC0222B: Grism Visit 2 (4 orbits) (10)	*[==>]*	***[2]***
5	Grism G141W-2.1	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 0,0	Sequence 4-6 Non-Int in IRC0222B: Grism Visit 2 (4 orbits) (10)	*[==>]*	***[2]***
6	Grism G141W-2.2	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 0,0	Sequence 4-6 Non-Int in IRC0222B: Grism Visit 2 (4 orbits) (10)	*[==>]*	***[2]***
7	Direct F140W-2.3	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	F140W	NSAMP=8; SAMP-SEQ=SPARS25	POS TARG +0.881, +1.212	Sequence 7-9 Non-Int in IRC0222B: Grism Visit 2 (4 orbits) (10)	*[==>]*	***[3]***
8	Grism G141W-2.5	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG +0.881, +1.212	Sequence 7-9 Non-Int in IRC0222B: Grism Visit 2 (4 orbits) (10)	*[==>]*	***[3]***
9	Grism G141W-2.6	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG +0.881, 1.212	Sequence 7-9 Non-Int in IRC0222B: Grism Visit 2 (4 orbits) (10)	*[==>]*	***[3]***
10	Direct F140W-2.4	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	F140W	NSAMP=8; SAMP-SEQ=SPARS25	POS TARG -0.474,+0.788	Sequence 10-12 Non-Int in IRC0222B: Grism Visit 2 (4 orbits) (10)	*[==>]*	***[4]***
11	Grism G141W-2.7	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -0.474,+0.788	Sequence 10-12 Non-Int in IRC0222B: Grism Visit 2 (4 orbits) (10)	*[==>]*	***[4]***
12	Grism G141W-2.8	(2) IRC0222B	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG -0.474,+0.788	Sequence 10-12 Non-Int in IRC0222B: Grism Visit 2 (4 orbits) (10)	*[==>]*	***[4]***

Orbit Structure






Orbit 3
Server Version: 20120802
GS Reacq
Exp. 7
Exp. 8
Exp. 9
Unused Visibility = 11
Pointing Maneuver
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 4
Server Version: 20120802
GS Reacq
Exp. 10
Exp. 11
Exp. 12
Unused Visibility = 11
Reconfig
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12896, IRC0222B F105W Imaging (1 orbit) (11), implementation Thu Aug 16 01:18:05 GMT 2012

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: SCHED 100%; ORIENT 64D TO 74 D

Comments: Imaging of high redshift cluster in 3 orbits split between F105W (1 orbit), F125W (2/3 orbit), and F160W (4/3 orbit)

Fixed Targets

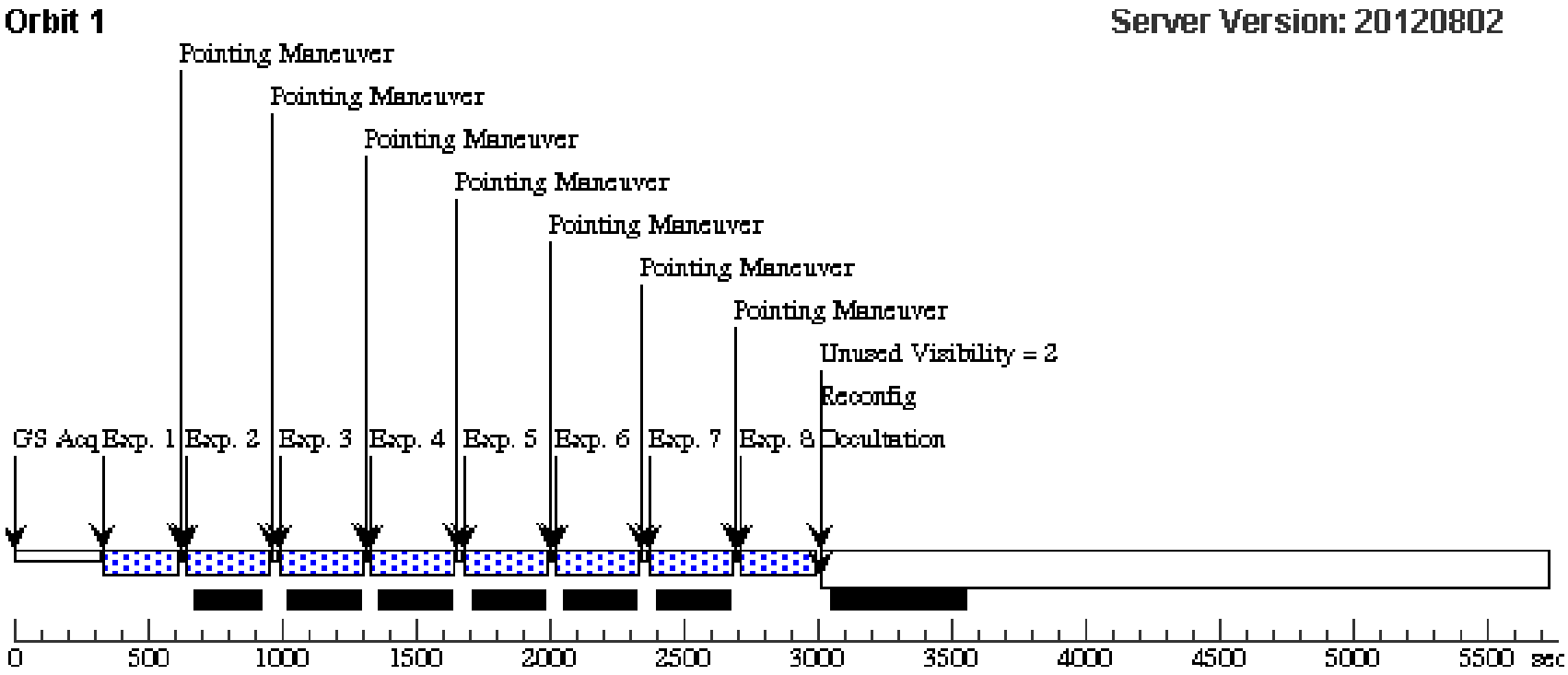
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	IRC0222B	RA: 02 22 17.3000 (35.5720833d) Dec: -04 21 45.00 (-4.36250d) Equinox: J2000		V=25 redshift=1.95	Reference Frame: ICRS

Comments: Potentially bright star ~1.3 arcmin to Southwest

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	F105W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR	F105W	NSAMP=11; SAMP-SEQ=SPARS25	POS TARG 0,0; GS ACQ SCENARIO BASE1B3	Sequence 1-4 Non-Int in IRC0222B F105W Imaging (1 orbit) (11)	*[==>]*	***[1]***
2	F105W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR	F105W	NSAMP=12; SAMP-SEQ=SPARS25	POS TARG -0.3387, +0.1816	Sequence 1-4 Non-Int in IRC0222B F105W Imaging (1 orbit) (11)	*[==>]*	***[1]***
3	F105W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR	F105W	NSAMP=12; SAMP-SEQ=SPARS25	POS TARG -6.666,+6.0187	Sequence 1-4 Non-Int in IRC0222B F105W Imaging (1 orbit) (11)	*[==>]*	***[1]***
4	F105W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR	F105W	NSAMP=12; SAMP-SEQ=SPARS25	POS TARG -7.0054, +6.2003	Sequence 1-4 Non-Int in IRC0222B F105W Imaging (1 orbit) (11)	*[==>]*	***[1]***
5	F105W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR	F105W	NSAMP=12; SAMP-SEQ=SPARS25	POS TARG 0,0	Sequence 5-8 Non-Int in IRC0222B F105W Imaging (1 orbit) (11)	*[==>]*	***[1]***
6	F105W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR	F105W	NSAMP=12; SAMP-SEQ=SPARS25	POS TARG -0.3387, +0.1816	Sequence 5-8 Non-Int in IRC0222B F105W Imaging (1 orbit) (11)	*[==>]*	***[1]***
7	F105W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR	F105W	NSAMP=12; SAMP-SEQ=SPARS25	POS TARG -6.666,+6.0187	Sequence 5-8 Non-Int in IRC0222B F105W Imaging (1 orbit) (11)	*[==>]*	***[1]***
8	F105W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR	F105W	NSAMP=11; SAMP-SEQ=SPARS25	POS TARG -7.0054, +6.2003	Sequence 5-8 Non-Int in IRC0222B F105W Imaging (1 orbit) (11)	*[==>]*	***[1]***

Orbit Structure



Visit

Proposal 12896, IRC0222B F125W & F160W Imaging (2 orbits) (12), implementation Thu Aug 16 01:18:06 GMT 2012

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: SCHED 100%; ORIENT 64D TO 74 D

Comments: Imaging of high redshift cluster in 3 orbits split between F105W (1 orbit), F125W (2/3 orbit), and F160W (4/3 orbit)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	IRC0222B	RA: 02 22 17.3000 (35.5720833d) Dec: -04 21 45.00 (-4.36250d) Equinox: J2000		V=25 redshift=1.95	Reference Frame: ICRS

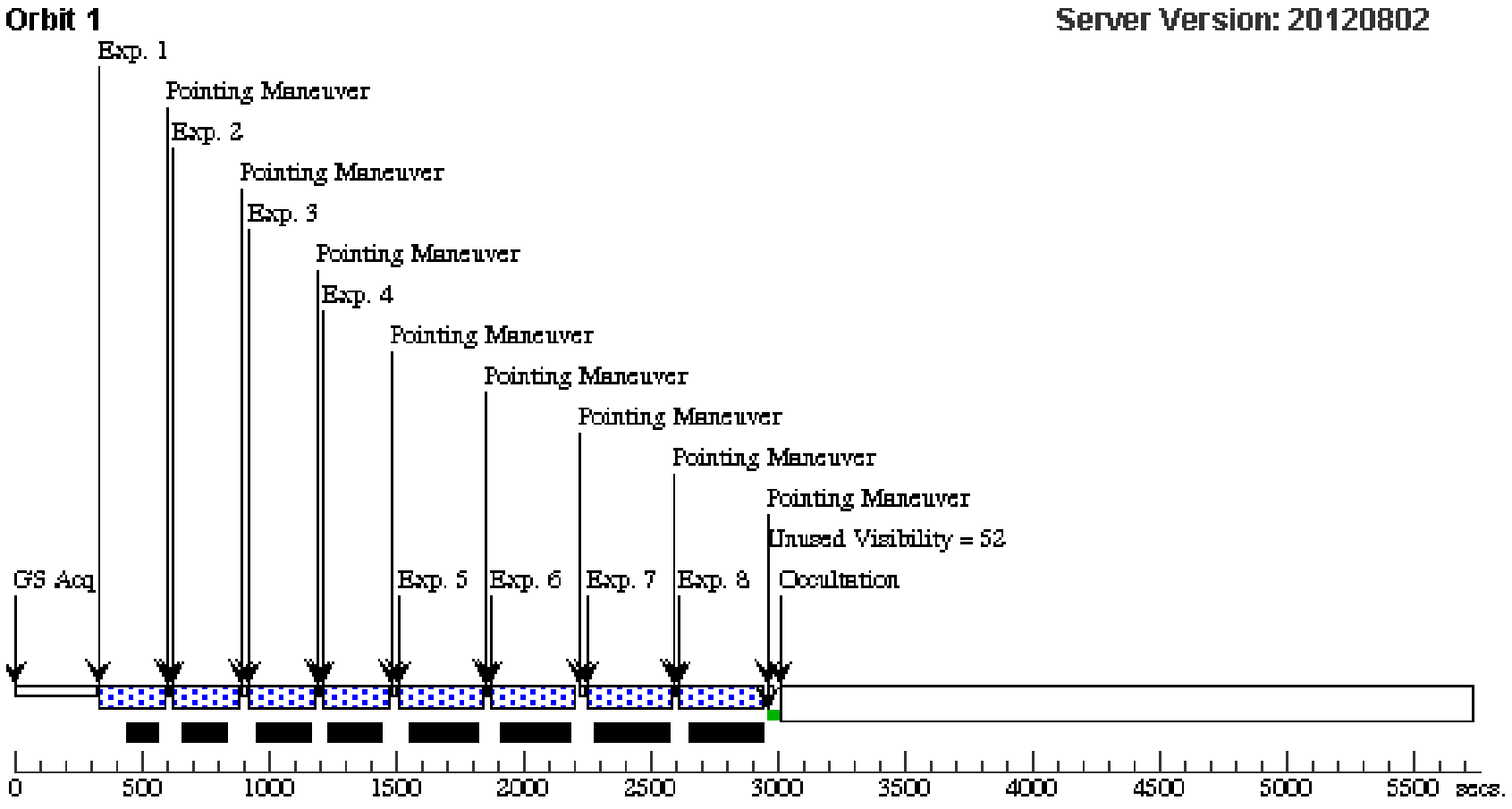
Comments: Potentially bright star ~1.3 arcmin to Southwest

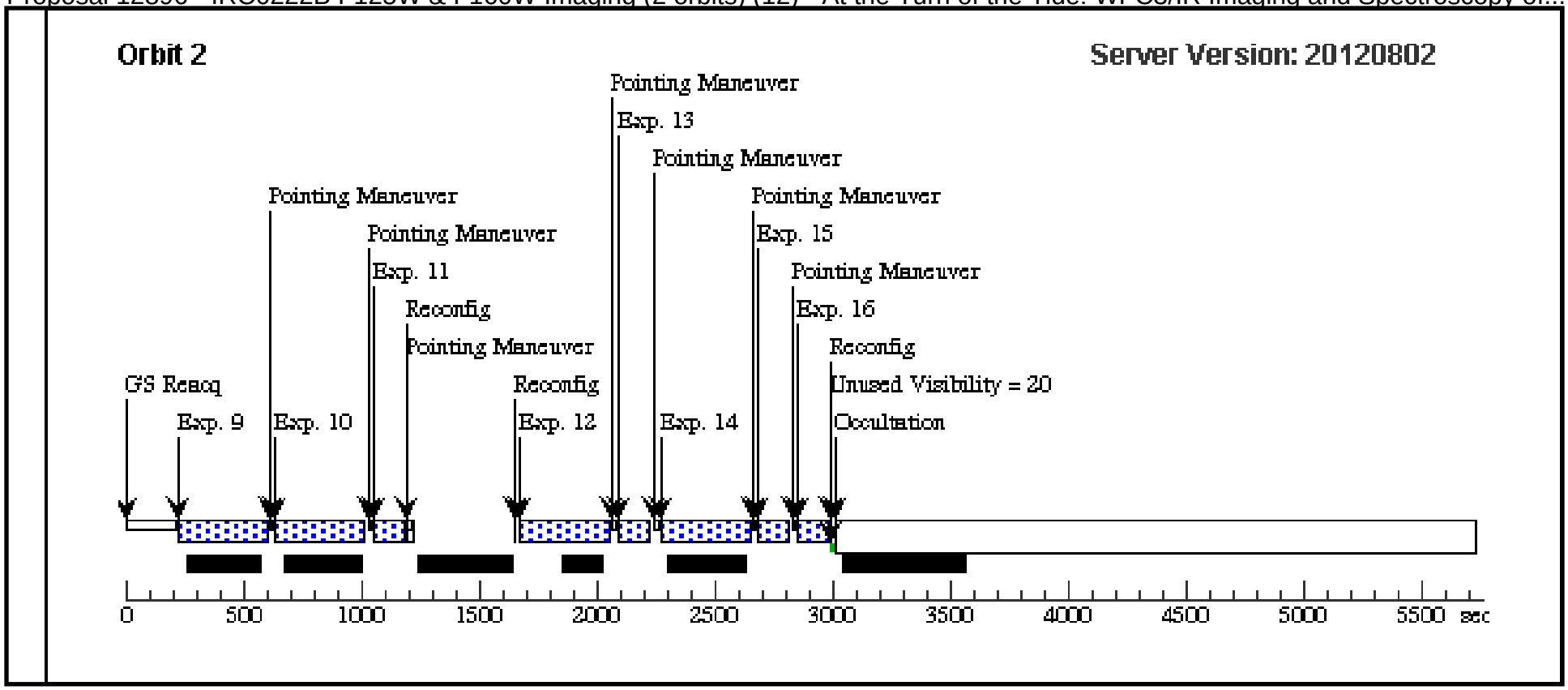
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	F125W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=10; SAMP-SEQ=SPARS25	POS TARG 0,0; GS ACQ SCENARIO BASE1B3	Sequence 1-8 Non-Int in IRC0222B F125W & F160W Imaging (2 orbits) (12)	*[==>]*	***[1]***
2	F125W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=10; SAMP-SEQ=SPARS25	POS TARG -0.3387, +0.1816	Sequence 1-8 Non-Int in IRC0222B F125W & F160W Imaging (2 orbits) (12)	*[==>]*	***[1]***
3	F125W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=10; SAMP-SEQ=SPARS25	POS TARG -6.6666, +6.0187	Sequence 1-8 Non-Int in IRC0222B F125W & F160W Imaging (2 orbits) (12)	*[==>]*	***[1]***
4	F125W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=10; SAMP-SEQ=SPARS25	POS TARG -7.0054, +6.2003	Sequence 1-8 Non-Int in IRC0222B F125W & F160W Imaging (2 orbits) (12)	*[==>]*	***[1]***
5	F160W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=13; SAMP-SEQ=SPARS25	POS TARG 0,0	Sequence 1-8 Non-Int in IRC0222B F125W & F160W Imaging (2 orbits) (12)	*[==>]*	***[1]***
6	F160W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=13; SAMP-SEQ=SPARS25	POS TARG -0.3387, +0.1816	Sequence 1-8 Non-Int in IRC0222B F125W & F160W Imaging (2 orbits) (12)	*[==>]*	***[1]***
7	F160W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=13; SAMP-SEQ=SPARS25	POS TARG -6.6666, +6.0187	Sequence 1-8 Non-Int in IRC0222B F125W & F160W Imaging (2 orbits) (12)	*[==>]*	***[1]***
8	F160W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=13; SAMP-SEQ=SPARS25	POS TARG -7.0054, +6.2003	Sequence 1-8 Non-Int in IRC0222B F125W & F160W Imaging (2 orbits) (12)	*[==>]*	***[1]***
9	F160W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPARS25	POS TARG 0,0	Sequence 9-16 Non-Int in IRC0222B F125W & F160W Imaging (2 orbits) (12)	*[==>]*	***[2]***
10	F160W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPARS25	POS TARG -0.3387, +0.1816	Sequence 9-16 Non-Int in IRC0222B F125W & F160W Imaging (2 orbits) (12)	*[==>]*	***[2]***
11	F125W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=5; SAMP-SEQ=SPARS25	POS TARG 0,0	Sequence 9-16 Non-Int in IRC0222B F125W & F160W Imaging (2 orbits) (12)	*[==>]*	***[2]***
12	F160W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPARS25	POS TARG -6.6666, +6.0187	Sequence 9-16 Non-Int in IRC0222B F125W & F160W Imaging (2 orbits) (12)	*[==>]*	***[2]***
13	F125W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=5; SAMP-SEQ=SPARS25	POS TARG -0.3387, +0.1816	Sequence 9-16 Non-Int in IRC0222B F125W & F160W Imaging (2 orbits) (12)	*[==>]*	***[2]***
14	F160W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPARS25	POS TARG -7.0054, +6.2003	Sequence 9-16 Non-Int in IRC0222B F125W & F160W Imaging (2 orbits) (12)	*[==>]*	***[2]***

	15	F125W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=5; SAMP-SEQ=SPARS25	POS TARG -6.6666, +6.0187	Sequence 9-16 Non-Int in IRC0222B F125W & F160W Imaging (2 orbits) (12)	*[==>]*	***[2]***
	16	F125W	(2) IRC0222B	WFC3/IR, MULTIACCUM, IR-FIX	F125W	NSAMP=5; SAMP-SEQ=SPARS25	POS TARG -7.0054, +6.2003	Sequence 9-16 Non-Int in IRC0222B F125W & F160W Imaging (2 orbits) (12)	*[==>]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20120802
Pointing Maneuver
Exp. 13
Pointing Maneuver
Pointing Maneuver
Exp. 15
Pointing Maneuver
Exp. 16
Reconfig
Unused Visibility = 20
Occultation
Pointing Maneuver
Exp. 11
Reconfig
Pointing Maneuver
GS Reacq
Exp. 9
Exp. 10
Reconfig
Exp. 12
Exp. 14
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec