14680 - Kinematics of a Massive Star Cluster in Formation

Cycle: 24, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

Name	*Institution*	*E-Mail*
Prof. Jonathan Charles Tan (PI) (Contact)	**University of Florida**	**jt@astro.ufl.edu**
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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) BYF73A	WFC3/IR	2	29-Jul-2016 14:40:24.0	yes
02	(2) BYF73B	WFC3/IR	2	29-Jul-2016 14:40:28.0	yes
03	(3) BYF73C	WFC3/IR	2	29-Jul-2016 14:40:32.0	yes
04	(4) BYF73D	WFC3/IR	2	29-Jul-2016 14:40:36.0	yes
05	(5) BYF73E	WFC3/IR	2	29-Jul-2016 14:40:39.0	yes
06	(6) BYF73F	WFC3/IR	2	29-Jul-2016 14:40:42.0	yes
07	(7) BYF73G	WFC3/IR	2	29-Jul-2016 14:40:45.0	yes
08	(8) BYF73H	WFC3/IR	2	29-Jul-2016 14:40:49.0	yes
09	(9) BYF73I	WFC3/IR	2	29-Jul-2016 14:40:52.0	yes

18 Total Orbits Used

ABSTRACT

We propose to measure the proper motion stellar kinematics of a massive (~10^4Msun), forming proto-star-cluster to test basic theoretical models of formation. This will be the first time such a measurement has been performed. It requires HST-WFC3/IR and is beyond the practical capabilities of ground-based adaptive optics (AO) observations. In contrast to previously-studied massive, young (<10 Myr-old), already-formed clusters, such as NGC3603, Westerlund 1 or the Arches, our target protocluster, G286.21+0.17 (hereafter G286), is still gas-dominated and undergoing active star formation. It has been carefully selected from a complete survey of ~300 dense molecular gas clumps in a 120 sq. deg. region of the Galactic plane. The cluster is also relatively nearby (~2.5 kpc), but not too close that it would span a prohibitively large angular area or suffer from significant saturation problems. Such massive systems are rare and indeed we are unaware of any equivalent, early-stage (i.e., gas dominated) cluster that is closer. Given the depth of its gravitational potential based on its mass and size, the expected proper motions of many independent sub-clusters of stars are detectable at the ~5 sigma level over a 2-year baseline and global contraction of the cluster can be seen if it is happening even at just ~10% of the free-fall rate.

OBSERVING DESCRIPTION

This program is the second epoch of our previous multi-cycle program (ID 13742)
The observations are a mosaic of 3x3 tiles/visits.
Each visit spans two orbits. ~70% of the observing time is in WFC3/IR F167N for the science goal of measuring stellar proper motions. The remaining is in F160W and F110W, for variability studies.
The observational layout is identical as in our previous epoch of observations.

In order to reduce the astrometric error, we imposed the same Orient Angle as in our previous epoch. This is 215 deg for 8 tiles, and 305 for one tile that had to repeated.

Visibility windows for these orient angle are at the beginning and end of the cycle. We have manually imposed a temporal constraint in the phase II to force scheduling the observations at the end of the cycle, as this would improve our proper motion precision due to larger time baseline. Please contact us if this had to be a problem.

Visit

Proposal 14680, Visit 01

Fri Jul 29 18:40:54 GMT 2016

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: ORIENT 215D TO 215 D; AFTER 01-MAR-2017

Fixed Targets

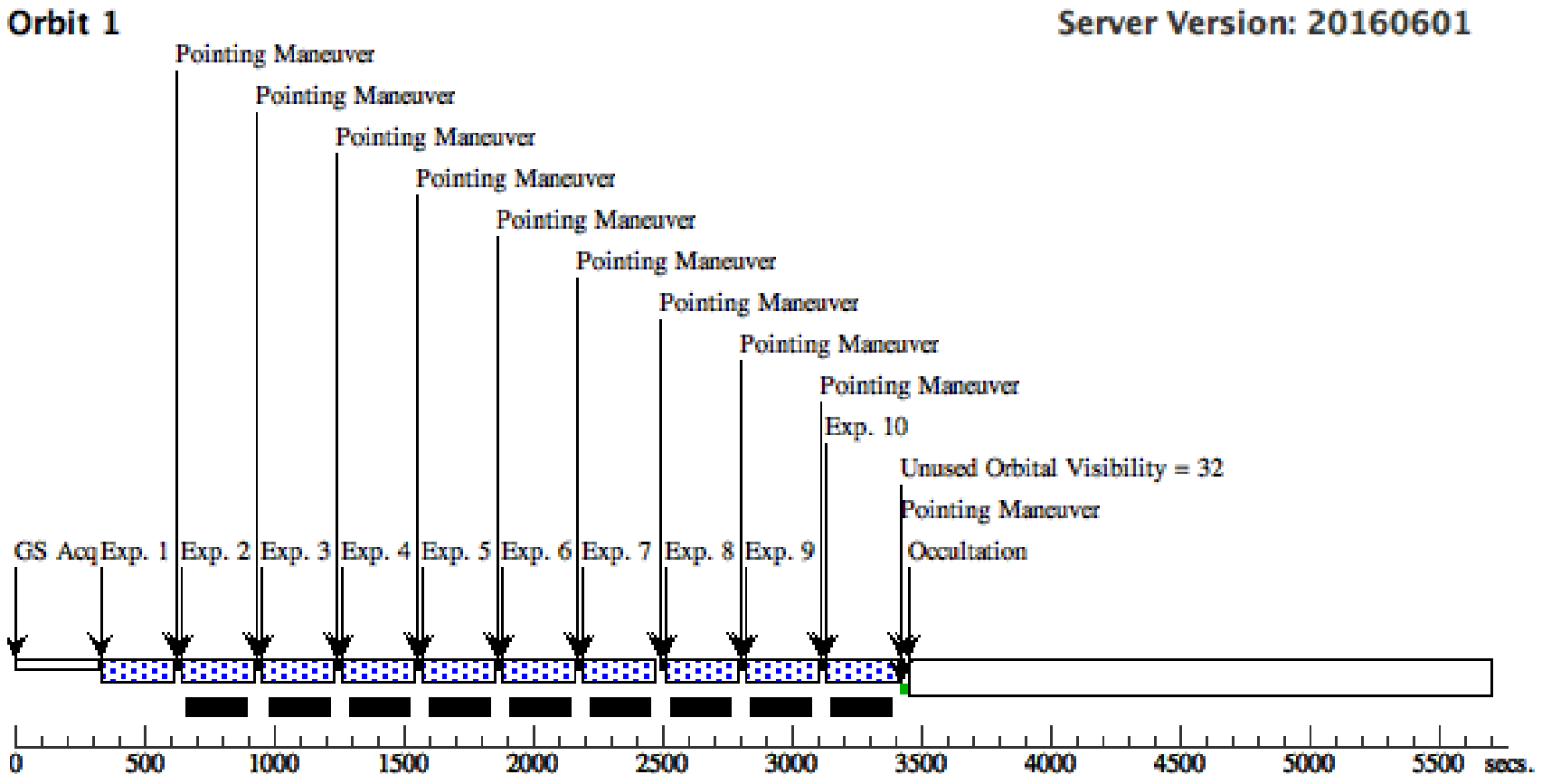
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	BYF73A	RA: 10 38 20.3223 (159.5846762d) Dec: -58 17 30.72 (-58.29187d) Equinox: J2000		V=9.0+/-0.5	Reference Frame: ICRS

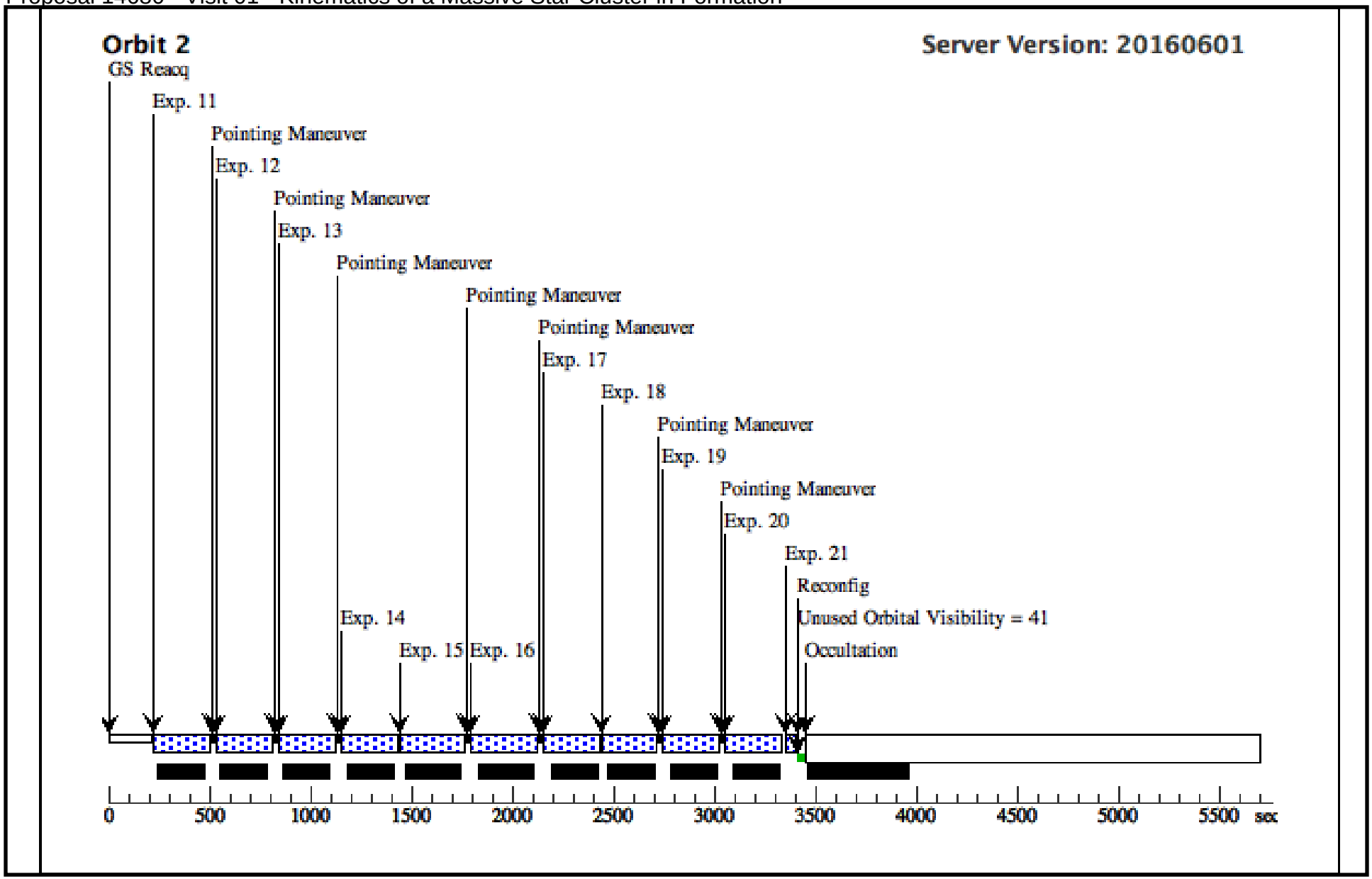
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F167N exp1	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0,0		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
2	F167N exp2	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.158082,0.201825		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
3	F167N exp3	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.203250,0.484400		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
4	F167N exp4	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.474250,0.242200		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
5	F167N exp5	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.632338,-0.0807374		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
6	F167N exp6	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.779125,-0.635775		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
7	F167N exp7	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -1.21950,-1.02935		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
8	F167N exp8	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.0225879 ,-0.565137		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
9	F167N exp9	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.338750,-0.423850		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
10	F167N exp10	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.542000 ,-0.242200		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
11	F167N exp11	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.914625,0.454125		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
12	F167N exp12	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.508125 ,0.756875		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
13	F167N exp13	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.03882, 0.928425		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
14	F167N exp14	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.25337 ,1.12018		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
15	F160W exp1	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=11; SAMP-SEQ=STEP50	POS TARG 1.25337 ,1.12018		299.232481 Secs (299.232 Secs)	
								[==>]	***[2]***
16	F160W exp2	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=11; SAMP-SEQ=STEP50	POS TARG 0.937253,0.837649		299.232481 Secs (299.232 Secs)	
								[==>]	***[2]***

	17	F160W exp3 (1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.62113,0.555122	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	18	F110W exp1 (1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.62113,0.555122	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	19	F110W exp2 (1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.93725,0.837649	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	20	F110W exp3 (1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.25337,1.12018	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	21	F110W exp short (1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=15; SAMP-SEQ=RAPID	POS TARG 1.25337,1.12018	43.984365 Secs (43.984 Secs) *[==>]*	 ***[2]***

Orbit Structure




Orbit 2
Server Version: 20160601
GS Reacq
Exp. 11
Pointing Maneuver
Exp. 12
Pointing Maneuver
Exp. 13
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Exp. 17
Exp. 18
Pointing Maneuver
Exp. 19
Pointing Maneuver
Exp. 20
Exp. 21
Reconfig
Unused Orbital Visibility = 41
Occultation
Exp. 14
Exp. 15
Exp. 16
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14680, Visit 02 Fri Jul 29 18:40:55 GMT 2016

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: ORIENT 215D TO 215 D; AFTER 01-MAR-2017

Fixed Targets

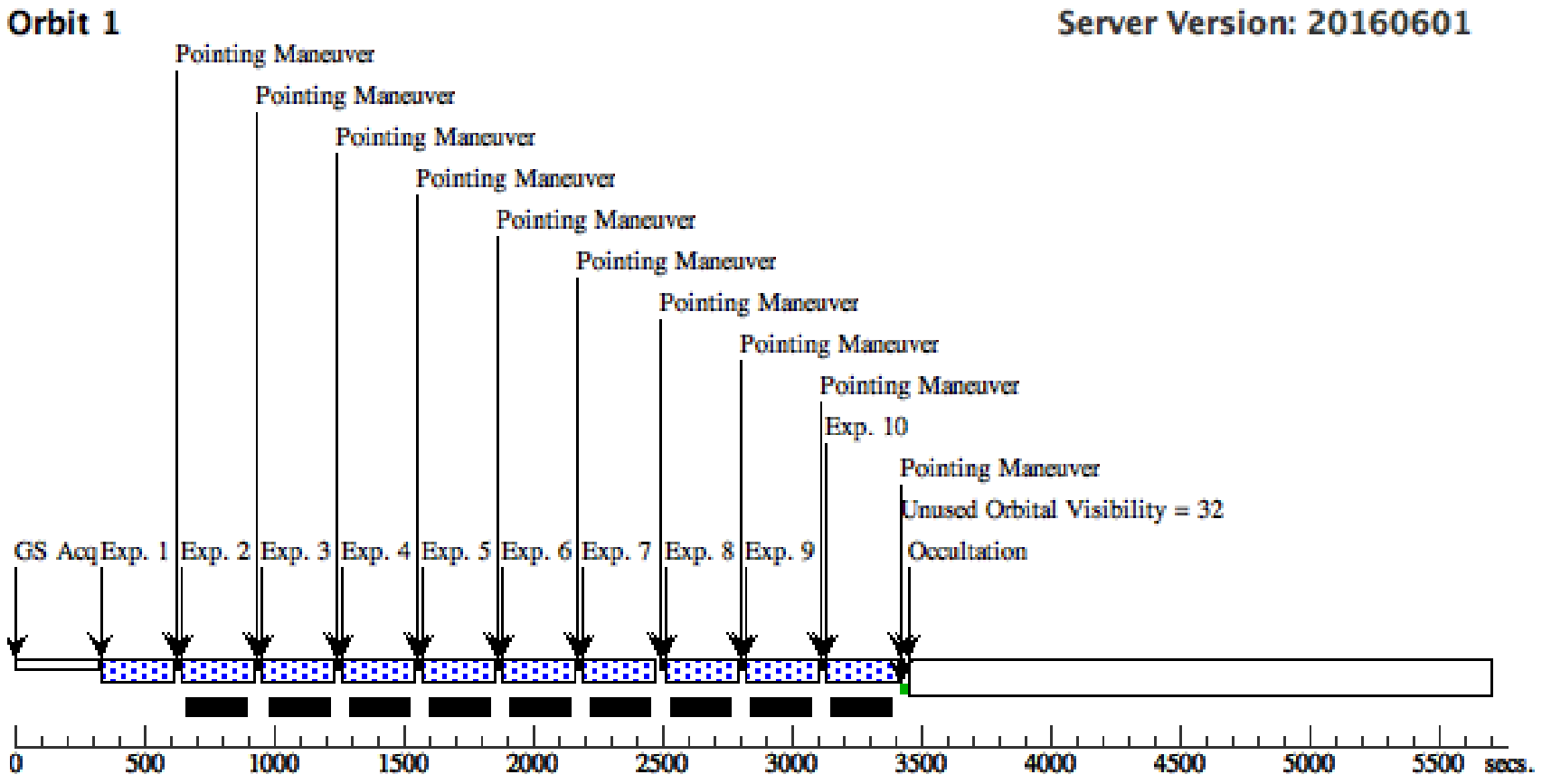
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	BYF73B	RA: 10 38 33.1267 (159.6380279d) Dec: -58 17 30.72 (-58.29187d) Equinox: J2000		V=9.0+/-0.5	Reference Frame: ICRS

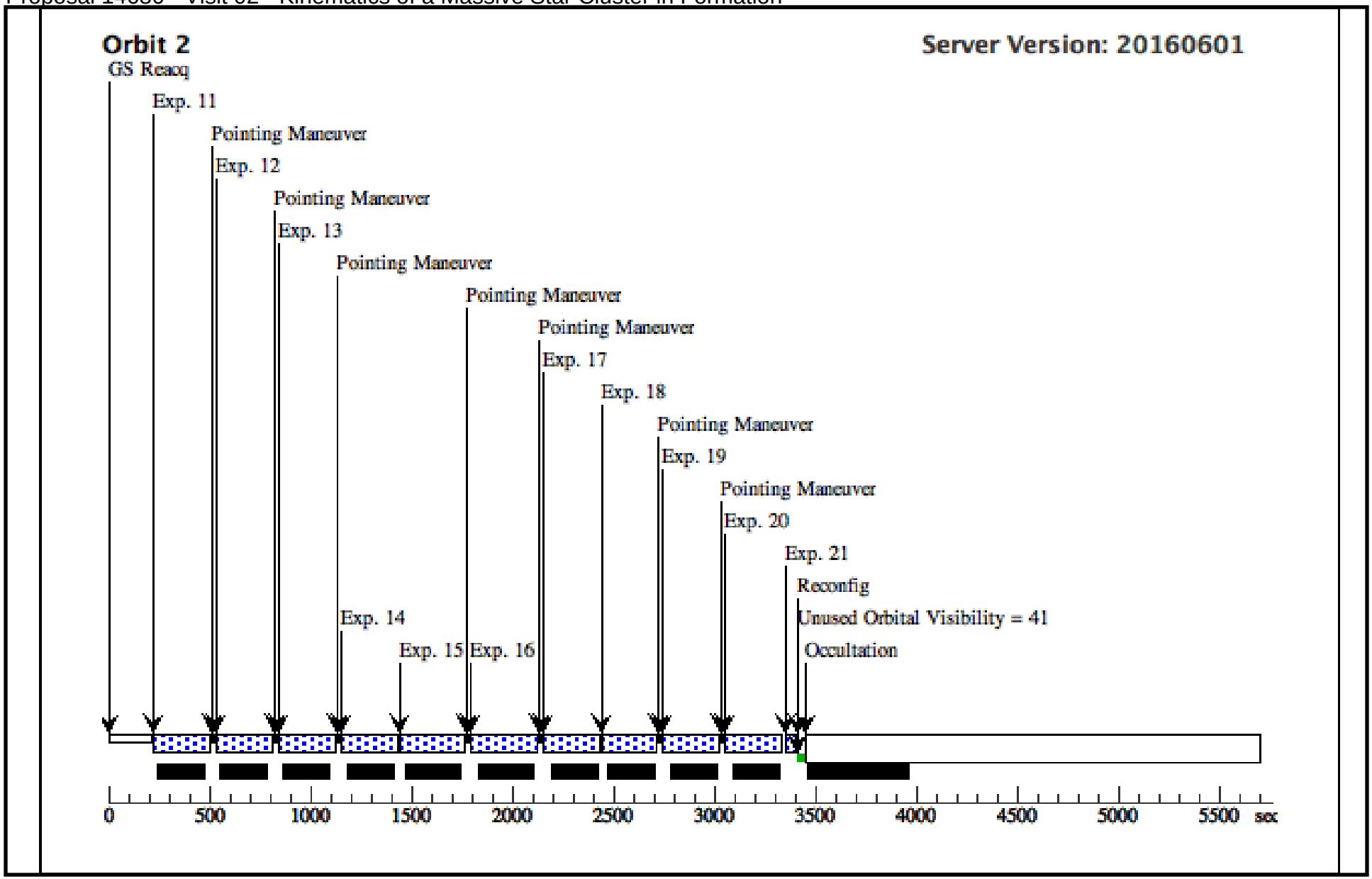
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F167N exp1	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0,0		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
2	F167N exp2	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.158082,0.201825		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
3	F167N exp3	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.203250,0.484400		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
4	F167N exp4	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.474250,0.242200		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
5	F167N exp5	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.632338,-0.0807374		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
6	F167N exp6	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.779125,-0.635775		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
7	F167N exp7	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -1.21950,-1.02935		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
8	F167N exp8	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.0225879 ,-0.565137		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
9	F167N exp9	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.338750,-0.423850		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
10	F167N exp10	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.542000 ,-0.242200		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
11	F167N exp11	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.914625,0.454125		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
12	F167N exp12	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.508125 ,0.756875		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
13	F167N exp13	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.03882, 0.928425		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
14	F167N exp14	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.25337 ,1.12018		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
15	F160W exp1	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=11; SAMP-SEQ=STEP50	POS TARG 1.25337 ,1.12018		299.232481 Secs (299.232 Secs)	
								[==>]	***[2]***
16	F160W exp2	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=11; SAMP-SEQ=STEP50	POS TARG 0.937253,0.837649		299.232481 Secs (299.232 Secs)	
								[==>]	***[2]***

	17	F160W exp3 (2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.62113,0.555122	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	18	F110W exp1 (2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.62113,0.555122	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	19	F110W exp2 (2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.93725,0.837649	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	20	F110W exp3 (2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.25337,1.12018	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	21	F110W exp short (2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=15; SAMP-SEQ=RAPID	POS TARG 1.25337,1.12018	43.984365 Secs (43.984 Secs) *[==>]*	 ***[2]***

Orbit Structure




Orbit 2
Server Version: 20160601
GS Reacq
Exp. 11
Pointing Maneuver
Exp. 12
Pointing Maneuver
Exp. 13
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Exp. 17
Exp. 18
Pointing Maneuver
Exp. 19
Pointing Maneuver
Exp. 20
Exp. 21
Reconfig
Unused Orbital Visibility = 41
Occultation
Exp. 14
Exp. 15
Exp. 16
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14680, Visit 03 Fri Jul 29 18:40:55 GMT 2016

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: ORIENT 305D TO 305 D; AFTER 01-MAR-2017

Fixed Targets

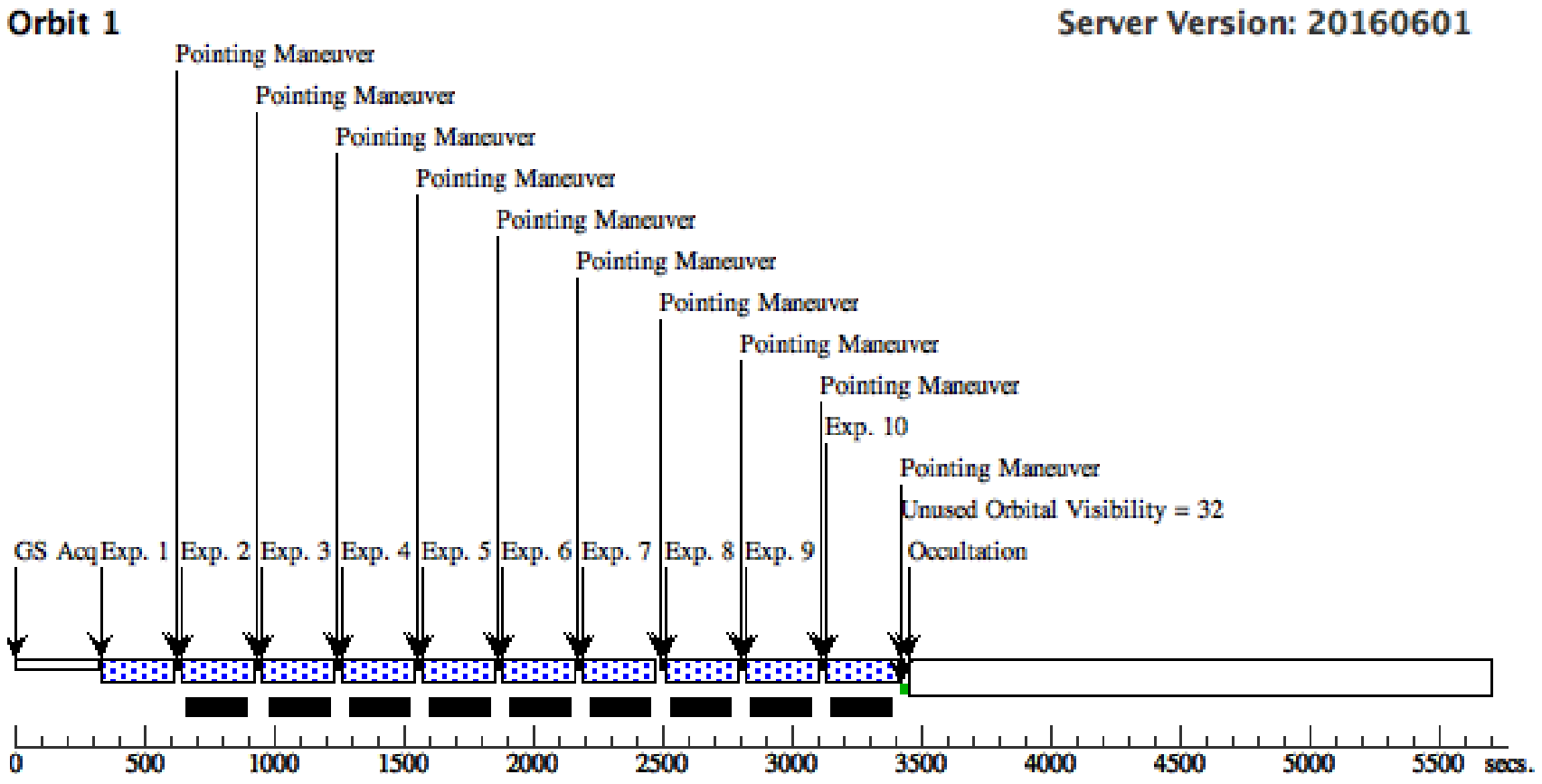
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	BYF73C	RA: 10 38 45.9311 (159.6913796d) Dec: -58 17 30.72 (-58.29187d) Equinox: J2000		V=9.0+/-0.5	Reference Frame: ICRS

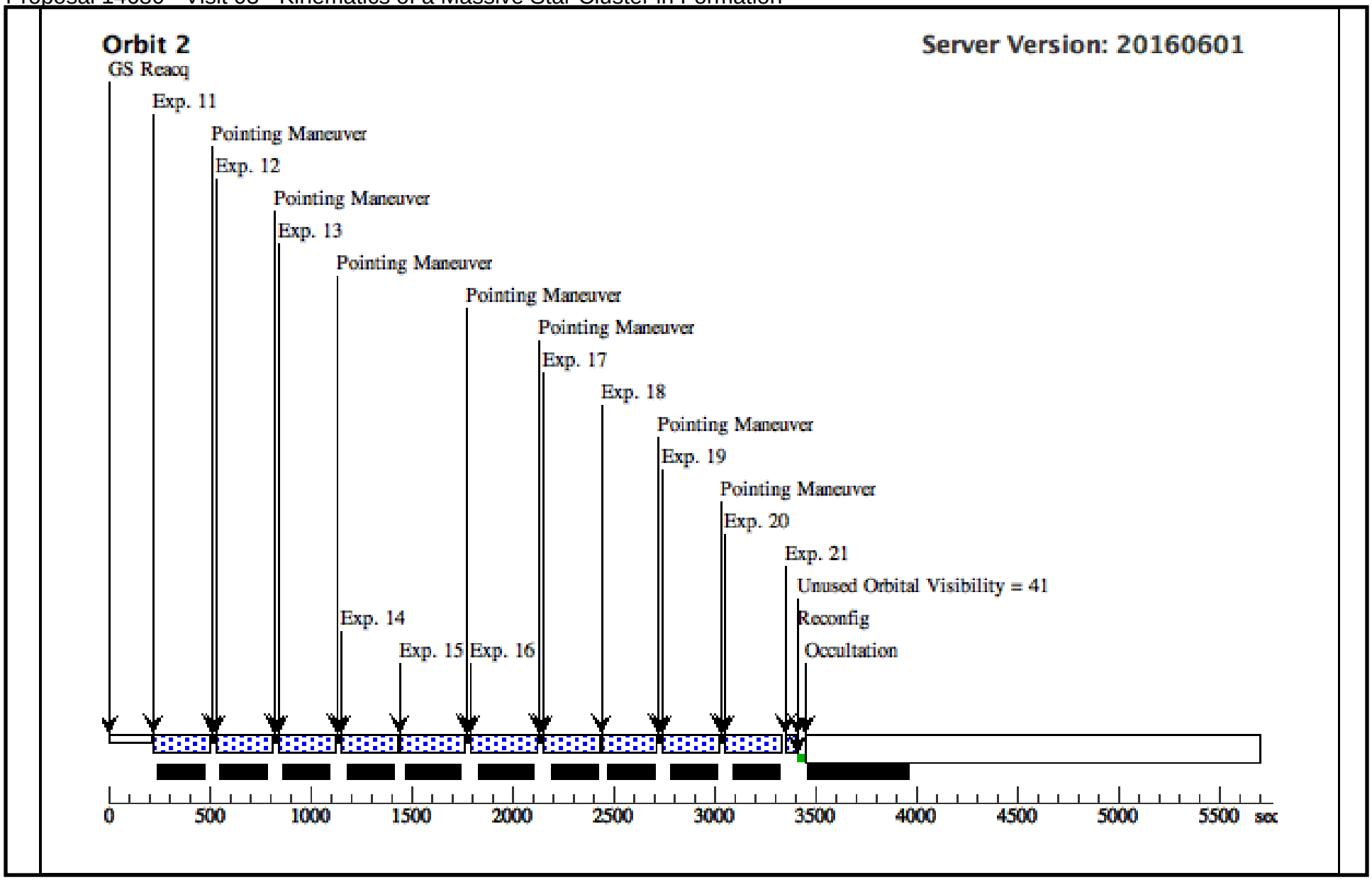
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F167N exp1	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0,0		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
2	F167N exp2	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.158082,0.201825		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
3	F167N exp3	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.203250,0.484400		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
4	F167N exp4	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.474250,0.242200		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
5	F167N exp5	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.632338,-0.0807374		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
6	F167N exp6	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.779125,-0.635775		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
7	F167N exp7	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -1.21950,-1.02935		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
8	F167N exp8	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.0225879 ,-0.565137		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
9	F167N exp9	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.338750,-0.423850		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
10	F167N exp10	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.542000 ,-0.242200		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
11	F167N exp11	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.914625,0.454125		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
12	F167N exp12	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.508125 ,0.756875		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
13	F167N exp13	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.03882, 0.928425		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
14	F167N exp14	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.25337 ,1.12018		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
15	F160W exp1	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=11; SAMP-SEQ=STEP50	POS TARG 1.25337 ,1.12018		299.232481 Secs (299.232 Secs)	
								[==>]	***[2]***
16	F160W exp2	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=11; SAMP-SEQ=STEP50	POS TARG 0.937253,0.837649		299.232481 Secs (299.232 Secs)	
								[==>]	***[2]***

	17	F160W exp3 (3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.62113,0.555122	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	18	F110W exp1 (3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.62113,0.555122	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	19	F110W exp2 (3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.93725,0.837649	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	20	F110W exp3 (3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.25337,1.12018	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	21	F110W exp short (3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=15; SAMP-SEQ=RAPID	POS TARG 1.25337,1.12018	43.984365 Secs (43.984 Secs) *[==>]*	 ***[2]***

Orbit Structure




Orbit 2
Server Version: 20160601
GS Reacq
Exp. 11
Pointing Maneuver
Exp. 12
Pointing Maneuver
Exp. 13
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Exp. 17
Exp. 18
Pointing Maneuver
Exp. 19
Pointing Maneuver
Exp. 20
Exp. 21
Unused Orbital Visibility = 41
Reconfig
Occultation
Exp. 14
Exp. 15
Exp. 16
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14680, Visit 04 Fri Jul 29 18:40:55 GMT 2016

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: ORIENT 215D TO 215 D; AFTER 01-MAR-2017

Fixed Targets

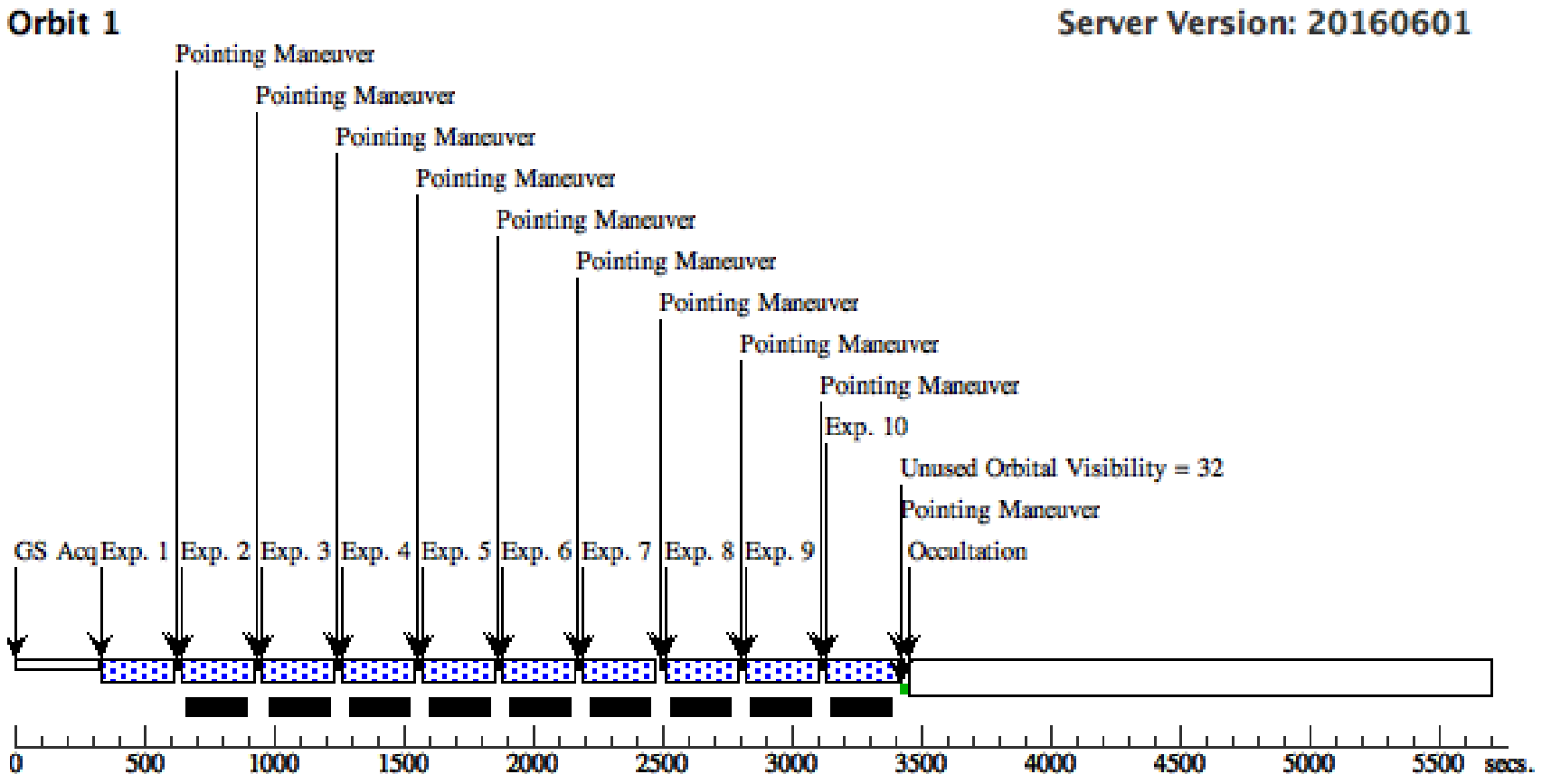
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	BYF73D	RA: 10 38 20.3223 (159.5846762d) Dec: -58 19 22.24 (-58.32284d) Equinox: J2000		V=9.0+/-0.5	Reference Frame: ICRS

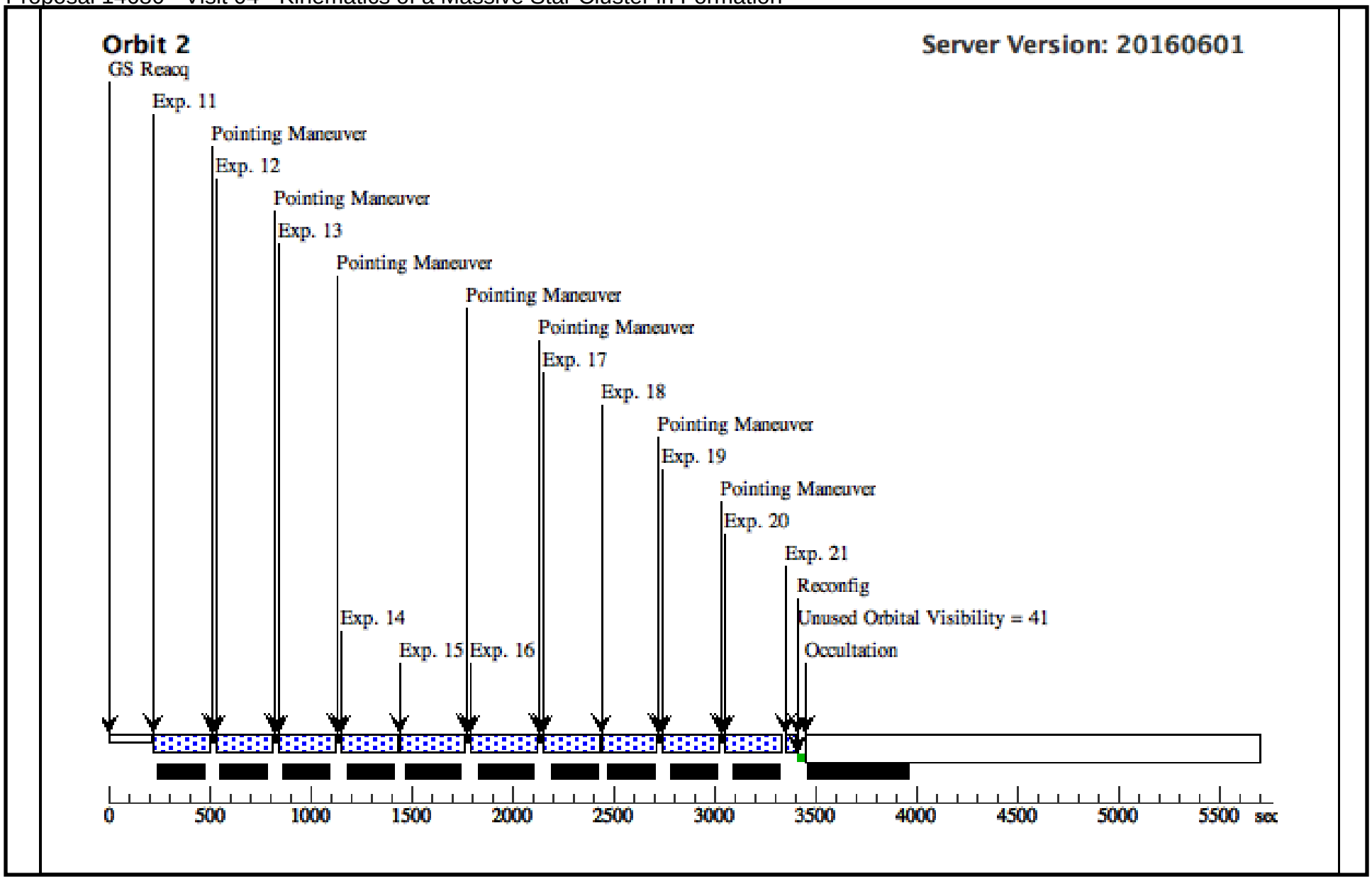
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F167N exp1	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0,0		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
2	F167N exp2	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.158082,0.201825		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
3	F167N exp3	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.203250,0.484400		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
4	F167N exp4	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.474250,0.242200		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
5	F167N exp5	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.632338,-0.0807374		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
6	F167N exp6	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.779125,-0.635775		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
7	F167N exp7	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -1.21950,-1.02935		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
8	F167N exp8	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.0225879 ,-0.565137		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
9	F167N exp9	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.338750,-0.423850		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
10	F167N exp10	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.542000 ,-0.242200		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
11	F167N exp11	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.914625,0.454125		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
12	F167N exp12	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.508125 ,0.756875		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
13	F167N exp13	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.03882, 0.928425		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
14	F167N exp14	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.25337 ,1.12018		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
15	F160W exp1	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=11; SAMP-SEQ=STEP50	POS TARG 1.25337 ,1.12018		299.232481 Secs (299.232 Secs)	
								[==>]	***[2]***
16	F160W exp2	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=11; SAMP-SEQ=STEP50	POS TARG 0.937253,0.837649		299.232481 Secs (299.232 Secs)	
								[==>]	***[2]***

	17	F160W exp3 (4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.62113,0.555122	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	18	F110W exp1 (4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.62113,0.555122	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	19	F110W exp2 (4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.93725,0.837649	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	20	F110W exp3 (4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.25337,1.12018	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	21	F110W exp short (4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=15; SAMP-SEQ=RAPID	POS TARG 1.25337,1.12018	43.984365 Secs (43.984 Secs) *[==>]*	 ***[2]***

Orbit Structure




Orbit 2
Server Version: 20160601
GS Reacq
Exp. 11
Pointing Maneuver
Exp. 12
Pointing Maneuver
Exp. 13
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Exp. 17
Exp. 18
Pointing Maneuver
Exp. 19
Pointing Maneuver
Exp. 20
Exp. 21
Reconfig
Unused Orbital Visibility = 41
Occultation
Exp. 14
Exp. 15
Exp. 16
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14680, Visit 05 Fri Jul 29 18:40:55 GMT 2016

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: ORIENT 215D TO 215 D; AFTER 01-MAR-2017

Fixed Targets

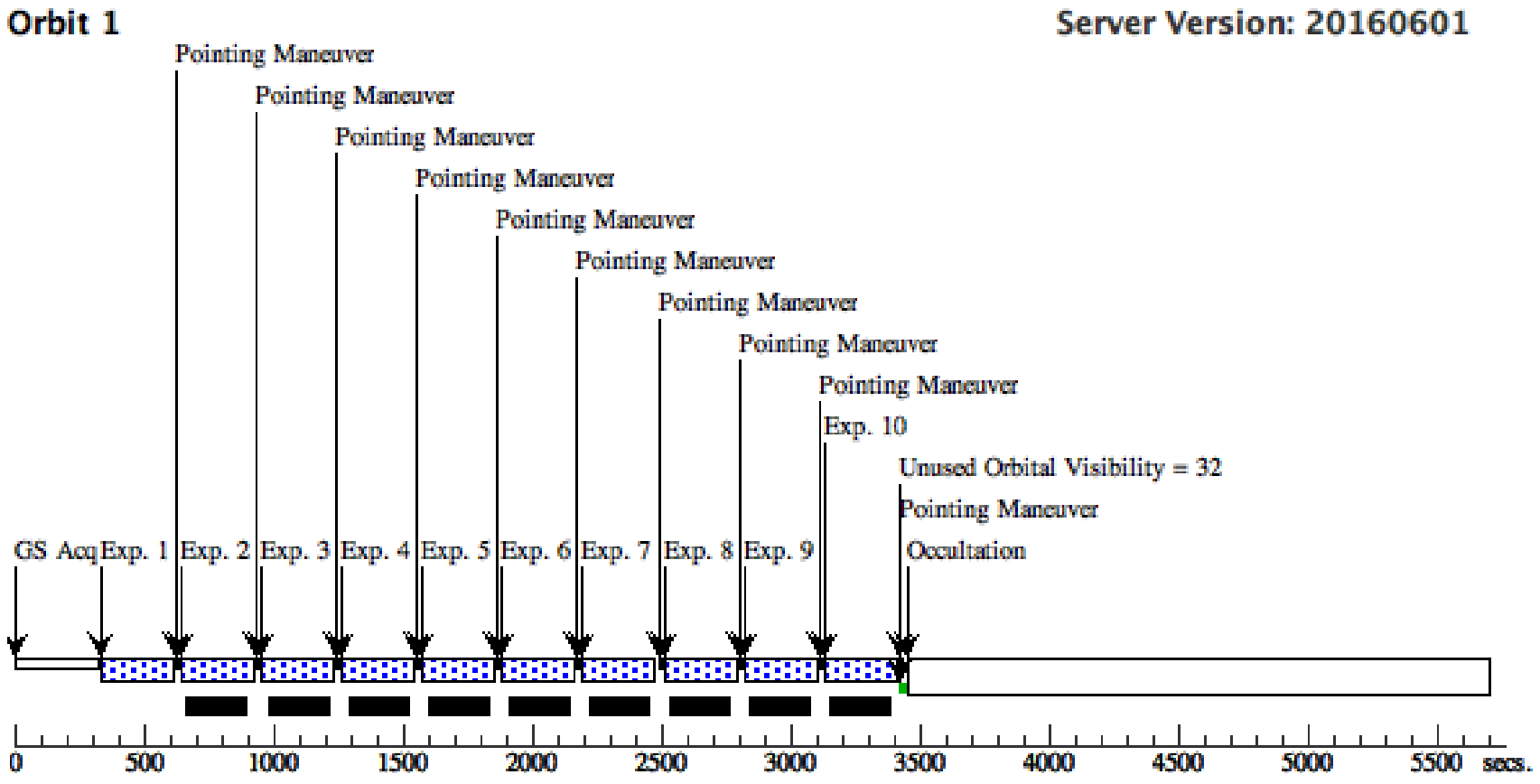
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	BYF73E	RA: 10 38 33.1267 (159.6380279d) Dec: -58 19 22.24 (-58.32284d) Equinox: J2000		V=9.0+/-0.5	Reference Frame: ICRS

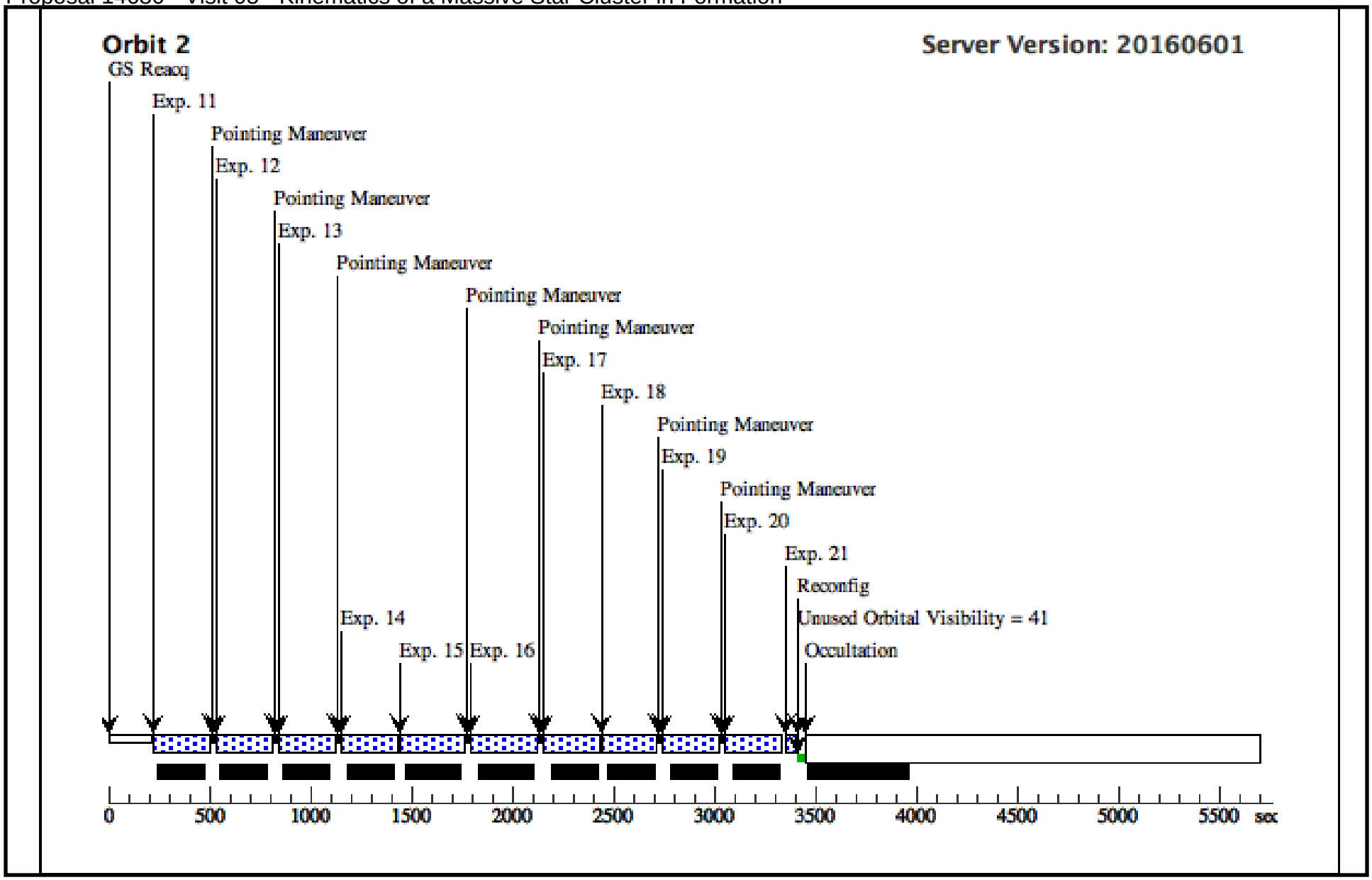
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F167N exp1	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0,0		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
2	F167N exp2	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.158082,0.201825		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
3	F167N exp3	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.203250,0.484400		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
4	F167N exp4	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.474250,0.242200		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
5	F167N exp5	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.632338,-0.0807374		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
6	F167N exp6	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.779125,-0.635775		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
7	F167N exp7	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -1.21950,-1.02935		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
8	F167N exp8	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.0225879 ,-0.565137		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
9	F167N exp9	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.338750,-0.423850		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
10	F167N exp10	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.542000 ,-0.242200		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
11	F167N exp11	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.914625,0.454125		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
12	F167N exp12	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.508125 ,0.756875		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
13	F167N exp13	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.03882, 0.928425		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
14	F167N exp14	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.25337 ,1.12018		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
15	F160W exp1	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=11; SAMP-SEQ=STEP50	POS TARG 1.25337 ,1.12018		299.232481 Secs (299.232 Secs)	
								[==>]	***[2]***
16	F160W exp2	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=11; SAMP-SEQ=STEP50	POS TARG 0.937253,0.837649		299.232481 Secs (299.232 Secs)	
								[==>]	***[2]***

	17	F160W exp3	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.62113,0.555122	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	18	F110W exp1	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.62113,0.555122	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	19	F110W exp2	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.93725,0.837649	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	20	F110W exp3	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.25337,1.12018	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	21	F110W exp short	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=15; SAMP-SEQ=RAPID	POS TARG 1.25337,1.12018	43.984365 Secs (43.984 Secs) *[==>]*	 ***[2]***

Orbit Structure




Orbit 2
Server Version: 20160601
GS Reacq
Exp. 11
Pointing Maneuver
Exp. 12
Pointing Maneuver
Exp. 13
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Exp. 17
Exp. 18
Pointing Maneuver
Exp. 19
Pointing Maneuver
Exp. 20
Exp. 21
Reconfig
Unused Orbital Visibility = 41
Occultation
Exp. 14
Exp. 15
Exp. 16
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14680, Visit 06 Fri Jul 29 18:40:55 GMT 2016

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: ORIENT 215D TO 215 D; AFTER 01-MAR-2017

Fixed Targets

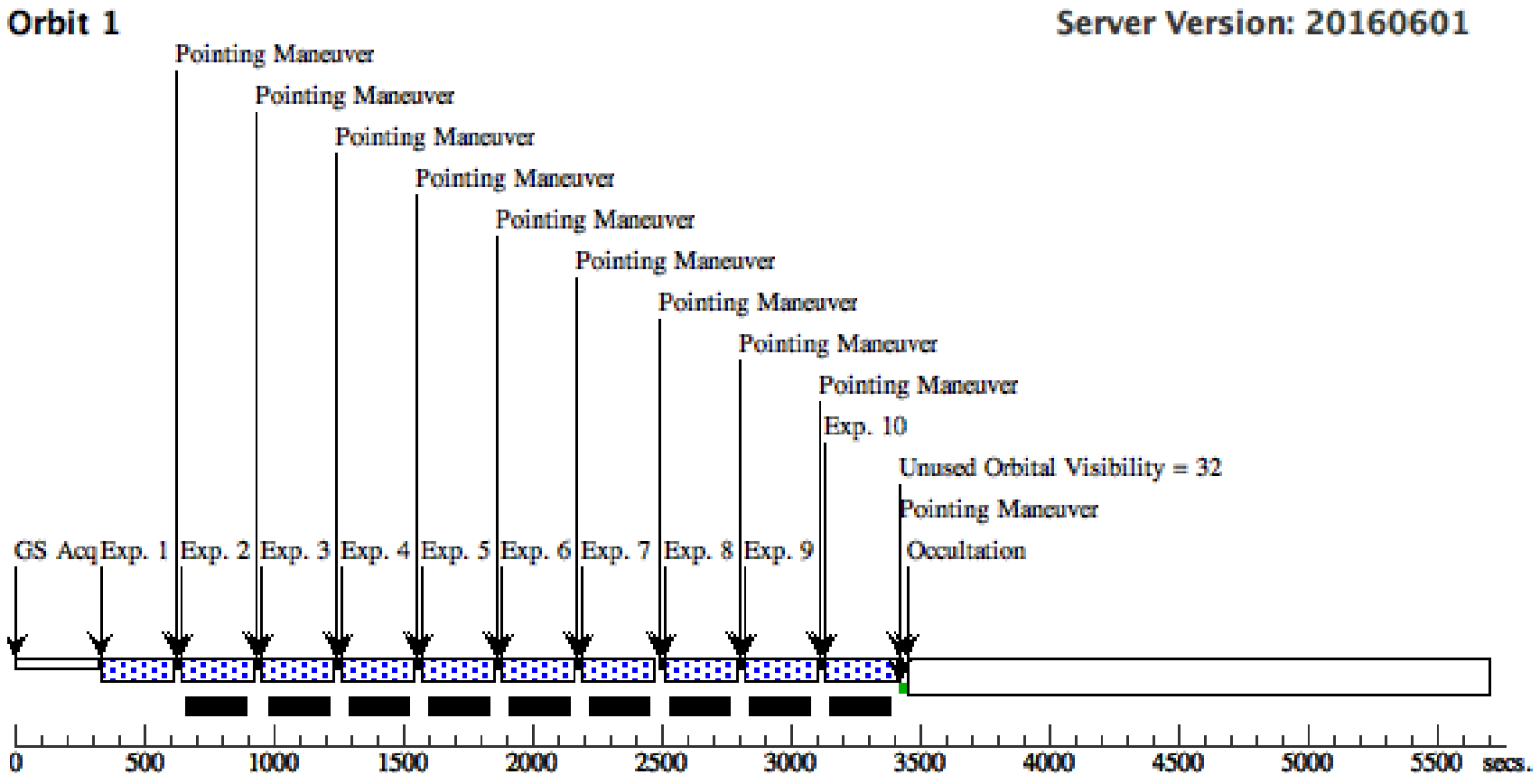
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	BYF73F	RA: 10 38 45.9311 (159.6913796d) Dec: -58 19 22.24 (-58.32284d) Equinox: J2000		V=9.0+/-0.5	Reference Frame: ICRS

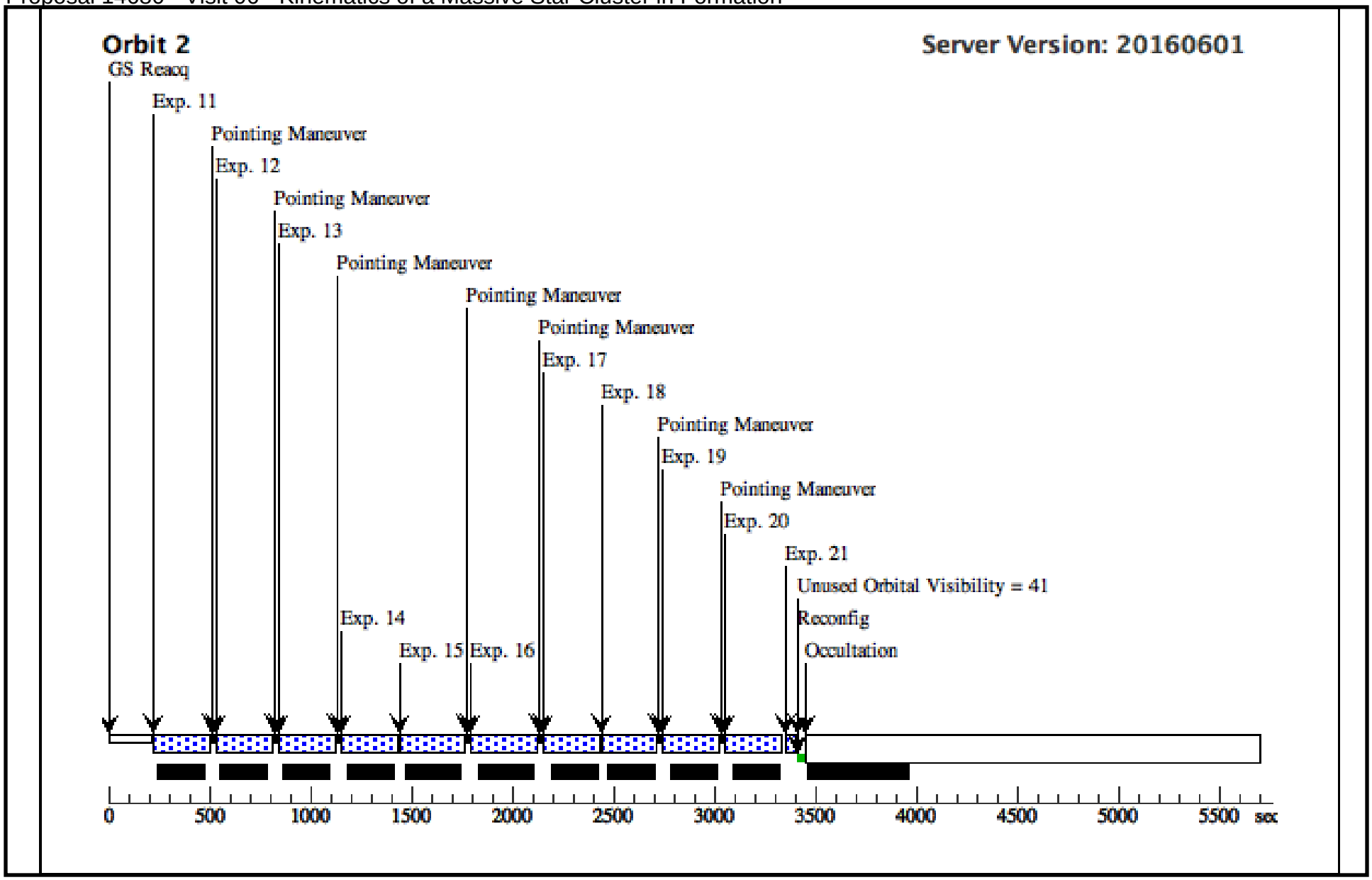
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F167N exp1	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0,0		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
2	F167N exp2	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.158082,0.201825		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
3	F167N exp3	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.203250,0.484400		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
4	F167N exp4	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.474250,0.242200		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
5	F167N exp5	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.632338,-0.0807374		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
6	F167N exp6	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.779125,-0.635775		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
7	F167N exp7	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -1.21950,-1.02935		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
8	F167N exp8	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.0225879 ,-0.565137		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
9	F167N exp9	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.338750,-0.423850		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
10	F167N exp10	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.542000 ,-0.242200		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
11	F167N exp11	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.914625,0.454125		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
12	F167N exp12	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.508125 ,0.756875		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
13	F167N exp13	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.03882, 0.928425		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
14	F167N exp14	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.25337 ,1.12018		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
15	F160W exp1	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=11; SAMP-SEQ=STEP50	POS TARG 1.25337 ,1.12018		299.232481 Secs (299.232 Secs)	
								[==>]	***[2]***
16	F160W exp2	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=11; SAMP-SEQ=STEP50	POS TARG 0.937253,0.837649		299.232481 Secs (299.232 Secs)	
								[==>]	***[2]***

	17	F160W exp3 (6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.62113,0.555122	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	18	F110W exp1 (6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.62113,0.555122	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	19	F110W exp2 (6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.93725,0.837649	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	20	F110W exp3 (6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.25337,1.12018	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	21	F110W exp short (6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=15; SAMP-SEQ=RAPID	POS TARG 1.25337,1.12018	43.984365 Secs (43.984 Secs) *[==>]*	 ***[2]***

Orbit Structure




Orbit 2
Server Version: 20160601
GS Reacq
Exp. 11
Pointing Maneuver
Exp. 12
Pointing Maneuver
Exp. 13
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Exp. 17
Exp. 18
Pointing Maneuver
Exp. 19
Pointing Maneuver
Exp. 20
Exp. 21
Unused Orbital Visibility = 41
Reconfig
Occultation
Exp. 14
Exp. 15
Exp. 16
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14680, Visit 07 Fri Jul 29 18:40:55 GMT 2016

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: ORIENT 215D TO 215 D; AFTER 01-MAR-2017

Fixed Targets

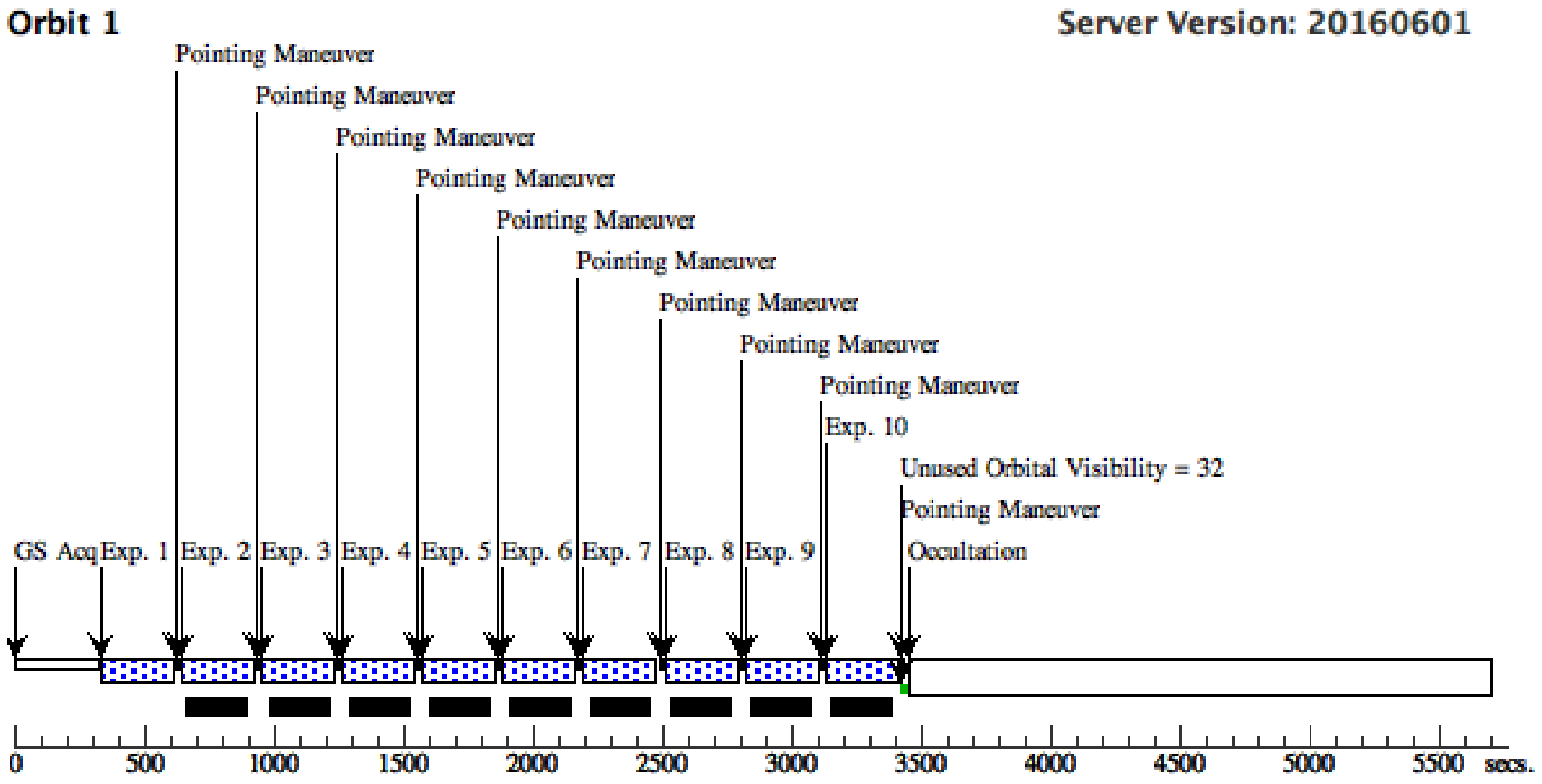
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	BYF73G	RA: 10 38 20.3223 (159.5846762d) Dec: -58 21 13.76 (-58.35382d) Equinox: J2000		V=9.0+/-0.5	Reference Frame: ICRS

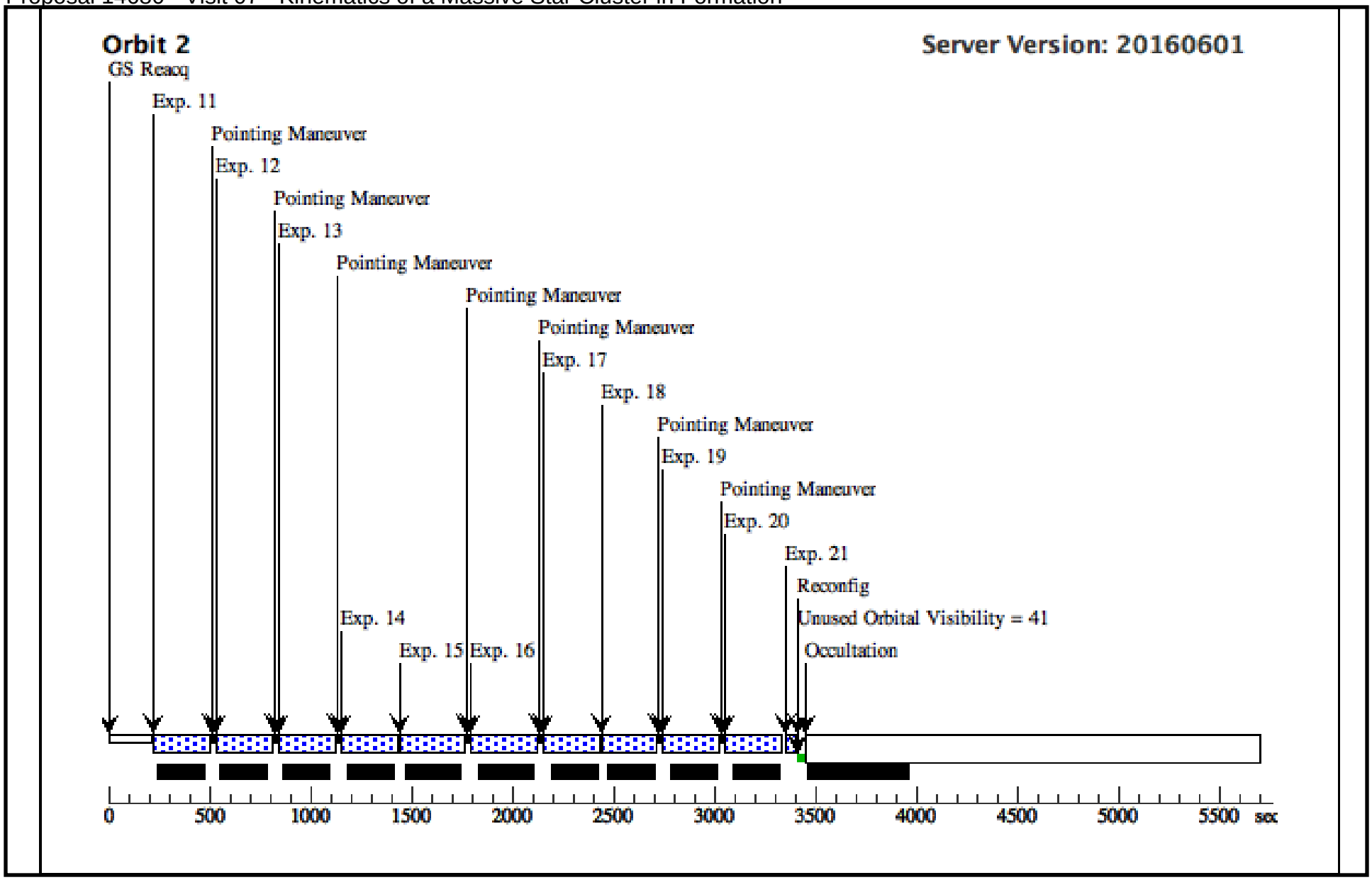
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F167N exp1	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0,0		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
2	F167N exp2	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.158082,0.201825		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
3	F167N exp3	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.203250,0.484400		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
4	F167N exp4	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.474250,0.242200		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
5	F167N exp5	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.632338,-0.0807374		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
6	F167N exp6	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.779125,-0.635775		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
7	F167N exp7	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -1.21950,-1.02935		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
8	F167N exp8	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.0225879 ,-0.565137		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
9	F167N exp9	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.338750,-0.423850		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
10	F167N exp10	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.542000 ,-0.242200		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
11	F167N exp11	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.914625,0.454125		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
12	F167N exp12	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.508125 ,0.756875		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
13	F167N exp13	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.03882, 0.928425		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
14	F167N exp14	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.25337 ,1.12018		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
15	F160W exp1	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=11; SAMP-SEQ=STEP50	POS TARG 1.25337 ,1.12018		299.232481 Secs (299.232 Secs)	
								[==>]	***[2]***
16	F160W exp2	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=11; SAMP-SEQ=STEP50	POS TARG 0.937253,0.837649		299.232481 Secs (299.232 Secs)	
								[==>]	***[2]***

	17	F160W exp3 (7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.62113,0.555122	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	18	F110W exp1 (7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.62113,0.555122	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	19	F110W exp2 (7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.93725,0.837649	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	20	F110W exp3 (7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.25337,1.12018	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	21	F110W exp short (7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=15; SAMP-SEQ=RAPID	POS TARG 1.25337,1.12018	43.984365 Secs (43.984 Secs) *[==>]*	 ***[2]***

Orbit Structure




Orbit 2
Server Version: 20160601
GS Reacq
Exp. 11
Pointing Maneuver
Exp. 12
Pointing Maneuver
Exp. 13
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Exp. 17
Exp. 18
Pointing Maneuver
Exp. 19
Pointing Maneuver
Exp. 20
Exp. 21
Reconfig
Unused Orbital Visibility = 41
Occultation
Exp. 14
Exp. 15
Exp. 16
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14680, Visit 08 Fri Jul 29 18:40:55 GMT 2016

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: ORIENT 215D TO 215 D; AFTER 01-MAR-2017

Fixed Targets

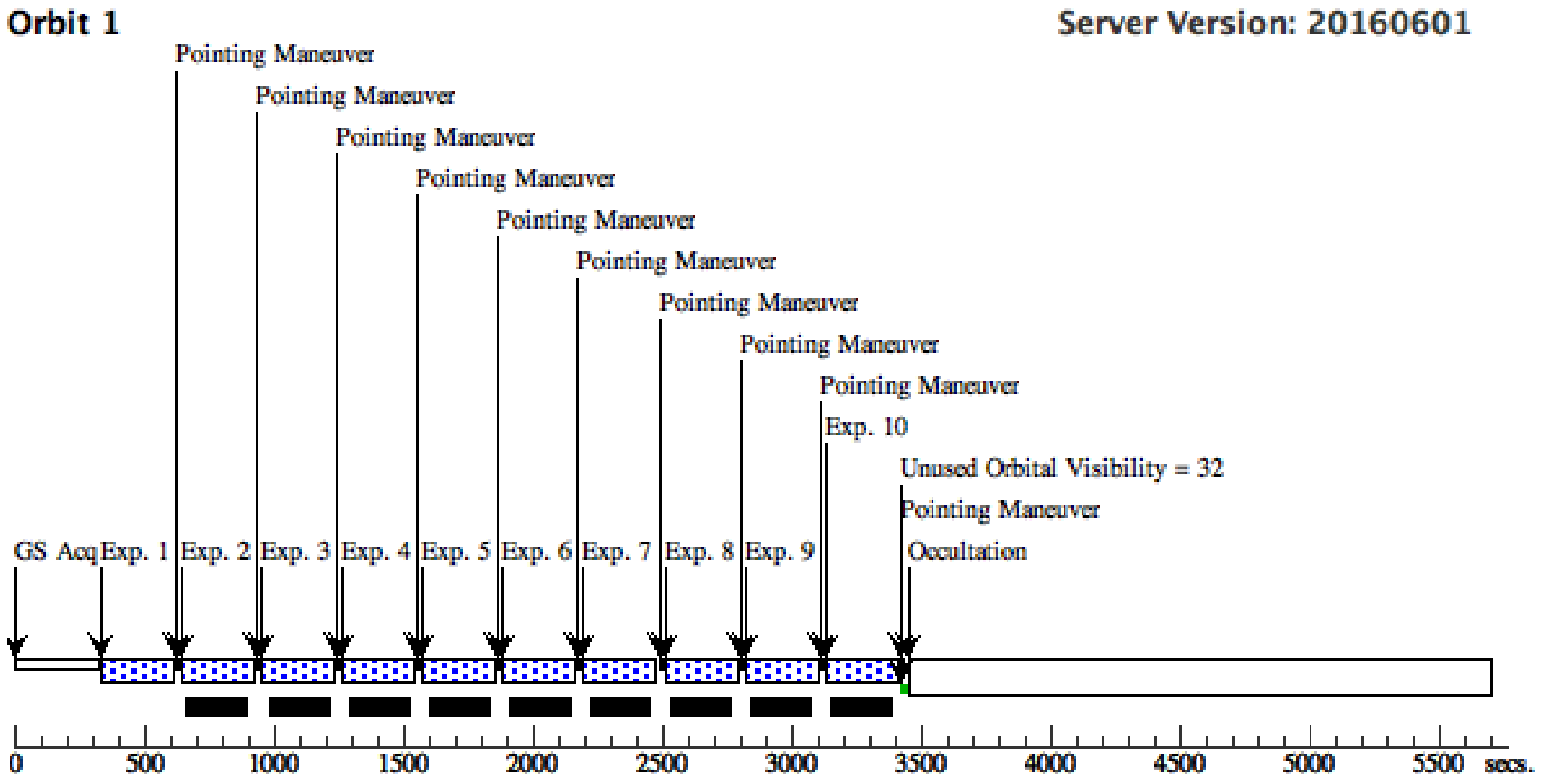
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	BYF73H	RA: 10 38 33.1267 (159.6380279d) Dec: -58 21 13.76 (-58.35382d) Equinox: J2000		V=9.0+/-0.5	Reference Frame: ICRS

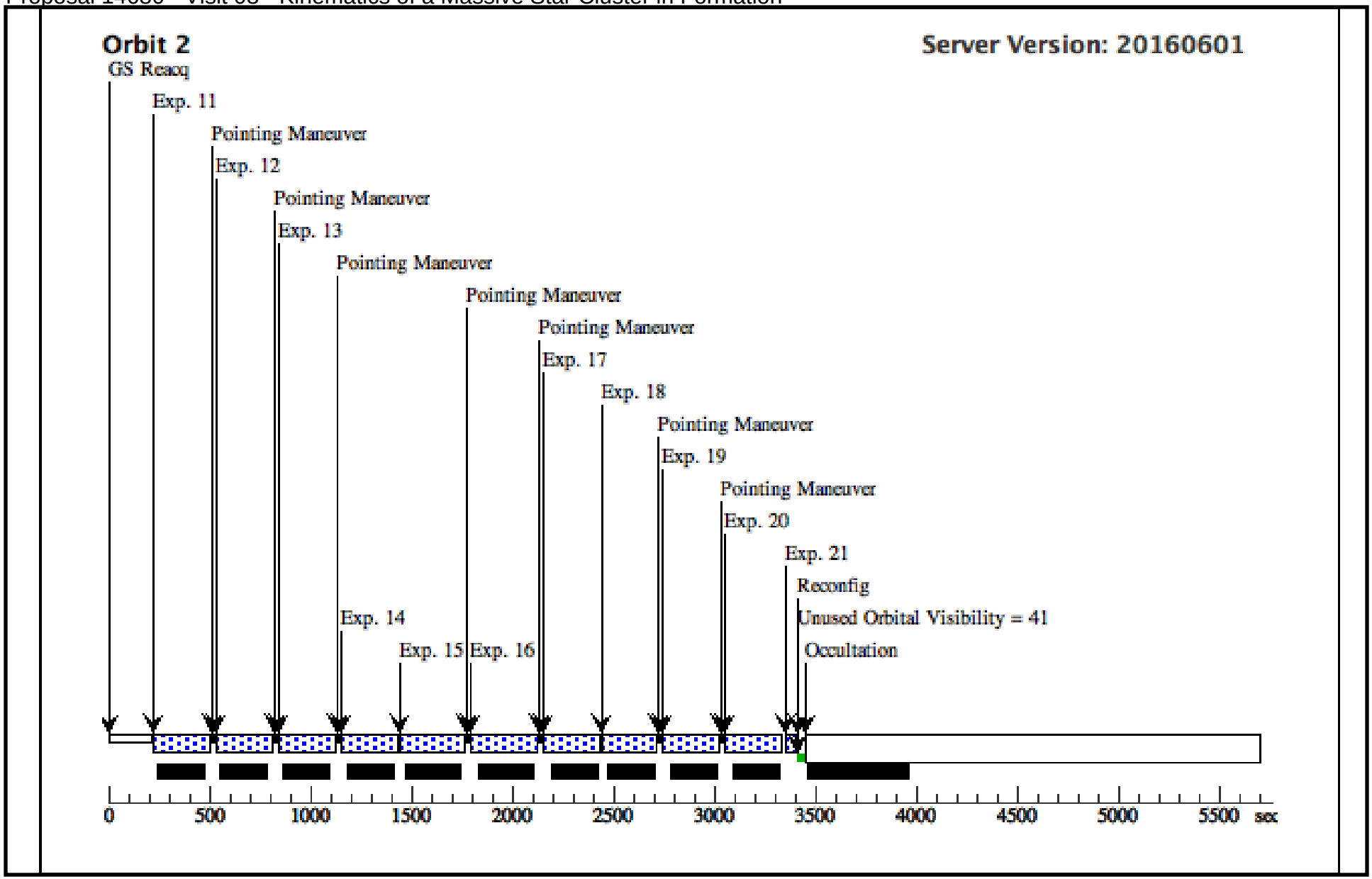
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F167N exp1	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0,0		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
2	F167N exp2	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.158082,0.201825		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
3	F167N exp3	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.203250,0.484400		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
4	F167N exp4	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.474250,0.242200		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
5	F167N exp5	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.632338,-0.0807374		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
6	F167N exp6	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.779125,-0.635775		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
7	F167N exp7	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -1.21950,-1.02935		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
8	F167N exp8	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.0225879 ,-0.565137		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
9	F167N exp9	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.338750,-0.423850		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
10	F167N exp10	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.542000 ,-0.242200		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
11	F167N exp11	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.914625,0.454125		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
12	F167N exp12	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.508125 ,0.756875		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
13	F167N exp13	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.03882, 0.928425		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
14	F167N exp14	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.25337 ,1.12018		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
15	F160W exp1	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=11; SAMP-SEQ=STEP50	POS TARG 1.25337 ,1.12018		299.232481 Secs (299.232 Secs)	
								[==>]	***[2]***
16	F160W exp2	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=11; SAMP-SEQ=STEP50	POS TARG 0.937253,0.837649		299.232481 Secs (299.232 Secs)	
								[==>]	***[2]***

	17	F160W exp3	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.62113,0.555122	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	18	F110W exp1	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.62113,0.555122	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	19	F110W exp2	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.93725,0.837649	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	20	F110W exp3	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.25337,1.12018	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	21	F110W exp short	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=15; SAMP-SEQ=RAPID	POS TARG 1.25337,1.12018	43.984365 Secs (43.984 Secs) *[==>]*	 ***[2]***

Orbit Structure




Orbit 2
Server Version: 20160601
GS Reacq
Exp. 11
Pointing Maneuver
Exp. 12
Pointing Maneuver
Exp. 13
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Exp. 17
Exp. 18
Pointing Maneuver
Exp. 19
Pointing Maneuver
Exp. 20
Exp. 21
Reconfig
Unused Orbital Visibility = 41
Occultation
Exp. 14
Exp. 15
Exp. 16
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14680, Visit 09 Fri Jul 29 18:40:55 GMT 2016

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: ORIENT 215D TO 215 D; AFTER 01-MAR-2017

Fixed Targets

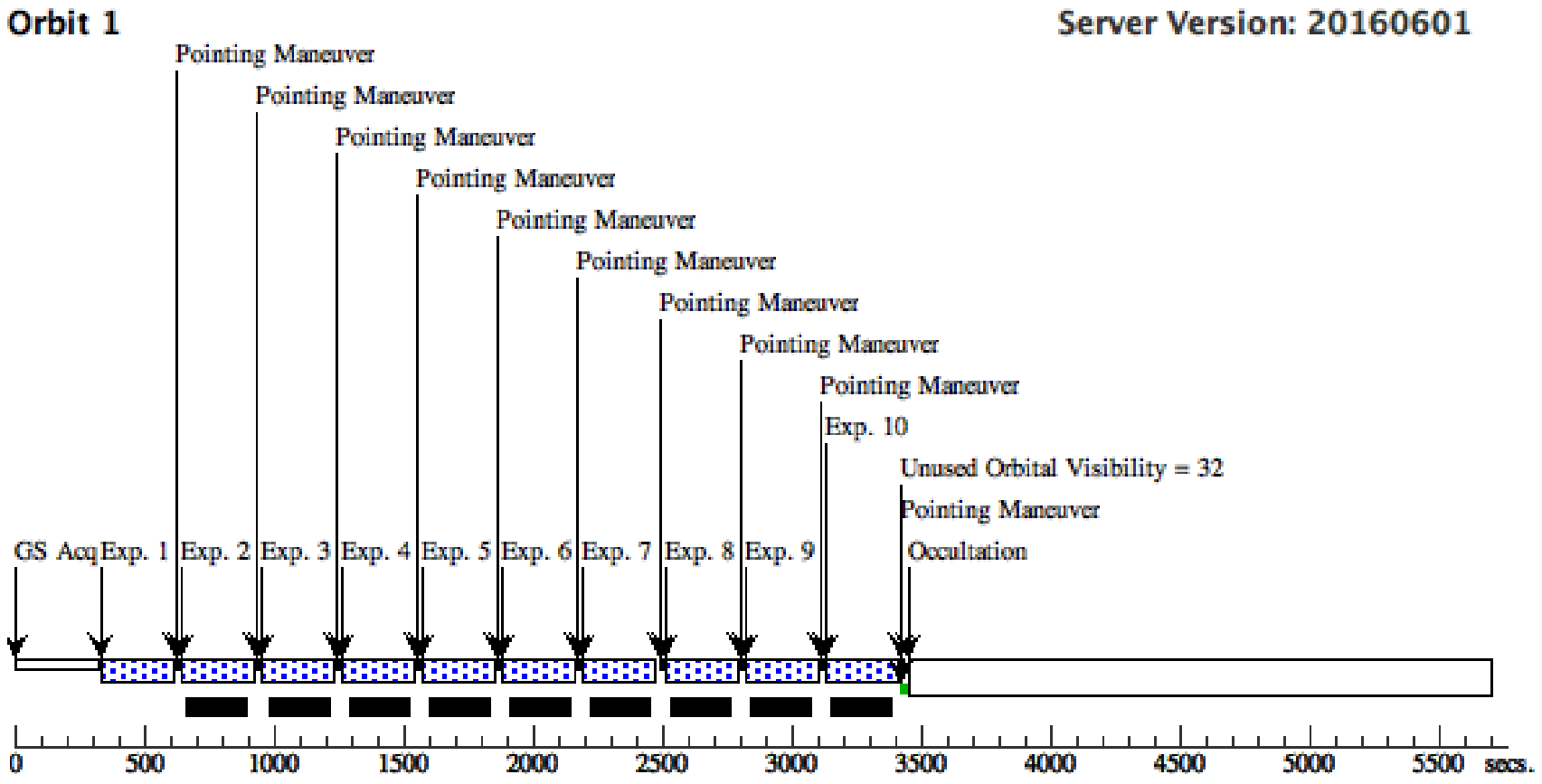
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(9)	BYF73I	RA: 10 38 45.9311 (159.6913796d) Dec: -58 21 13.76 (-58.35382d) Equinox: J2000		V=9.0+/-0.5	Reference Frame: ICRS

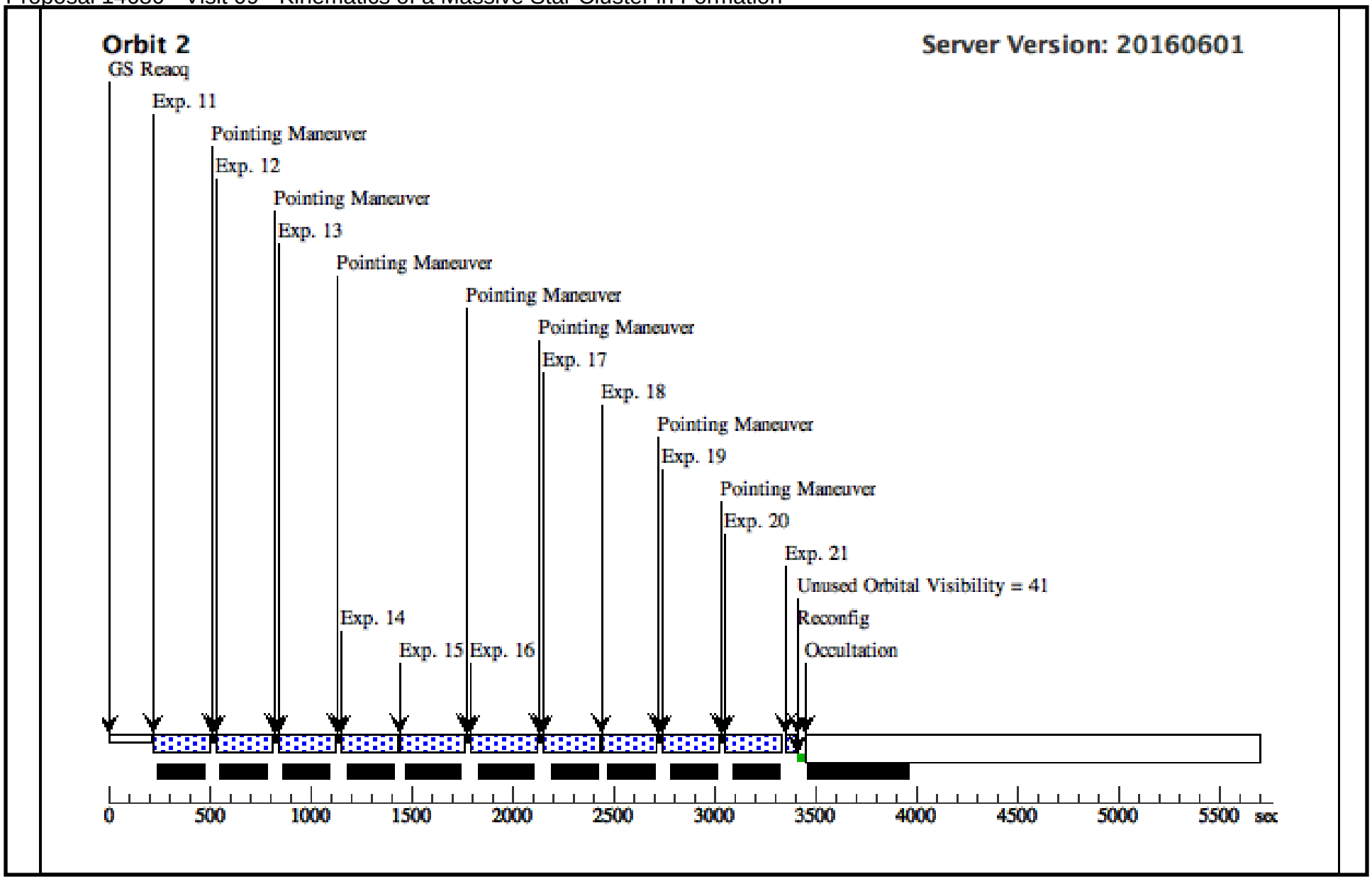
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F167N exp1	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0,0		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
2	F167N exp2	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.158082,0.201825		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
3	F167N exp3	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.203250,0.484400		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
4	F167N exp4	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.474250,0.242200		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
5	F167N exp5	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.632338,-0.0807374		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
6	F167N exp6	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.779125,-0.635775		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
7	F167N exp7	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -1.21950,-1.02935		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
8	F167N exp8	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG -0.0225879 ,-0.565137		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
9	F167N exp9	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.338750,-0.423850		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
10	F167N exp10	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.542000 ,-0.242200		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
11	F167N exp11	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.914625,0.454125		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
12	F167N exp12	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.508125 ,0.756875		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
13	F167N exp13	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.03882, 0.928425		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
14	F167N exp14	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F167N	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.25337 ,1.12018		249.23203 Secs (249.232 Secs)	
								[==>]	***[2]***
15	F160W exp1	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=11; SAMP-SEQ=STEP50	POS TARG 1.25337 ,1.12018		299.232481 Secs (299.232 Secs)	
								[==>]	***[2]***
16	F160W exp2	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=11; SAMP-SEQ=STEP50	POS TARG 0.937253,0.837649		299.232481 Secs (299.232 Secs)	
								[==>]	***[2]***

	17	F160W exp3 (9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.62113,0.555122	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	18	F110W exp1 (9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.62113,0.555122	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	19	F110W exp2 (9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 0.93725,0.837649	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	20	F110W exp3 (9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP50	POS TARG 1.25337,1.12018	249.23203 Secs (249.232 Secs) *[==>]*	 ***[2]***
	21	F110W exp short (9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=15; SAMP-SEQ=RAPID	POS TARG 1.25337,1.12018	43.984365 Secs (43.984 Secs) *[==>]*	 ***[2]***

Orbit Structure




Orbit 2
Server Version: 20160601
GS Reacq
Exp. 11
Pointing Maneuver
Exp. 12
Pointing Maneuver
Exp. 13
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Exp. 17
Exp. 18
Pointing Maneuver
Exp. 19
Pointing Maneuver
Exp. 20
Exp. 21
Unused Orbital Visibility = 41
Reconfig
Occultation
Exp. 14
Exp. 15
Exp. 16
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec