



# 14595 - Correlating proper motion kinematics with stellar properties in a very young protocluster

Cycle: 24, Proposal Category: GO

(Availability Mode: SUPPORTED)

## INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
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## VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) BYF73A	WFC3/IR	1	29-Jul-2016 13:48:42.0	yes
02	(2) BYF73B	WFC3/IR	1	29-Jul-2016 13:48:44.0	yes
03	(3) BYF73C	WFC3/IR	1	29-Jul-2016 13:48:45.0	yes
04	(4) BYF73D	WFC3/IR	1	29-Jul-2016 13:48:47.0	yes
05	(5) BYF73E	WFC3/IR	1	29-Jul-2016 13:48:48.0	yes
06	(6) BYF73F	WFC3/IR	1	29-Jul-2016 13:48:49.0	yes
07	(7) BYF73G	WFC3/IR	1	29-Jul-2016 13:48:50.0	yes
08	(8) BYF73H	WFC3/IR	1	29-Jul-2016 13:48:52.0	yes
09	(9) BYF73I	WFC3/IR	1	29-Jul-2016 13:48:53.0	yes

9 Total Orbits Used

## **ABSTRACT**

We recently obtained the first epoch of a multi-cycle HST program (GO13742) aimed at the study of massive star cluster formation through proper motion-based analysis of kinematics. This program targeted the young, gas-dominated, still-forming protocluster G286 with WFC3/IR J, H and narrow band F167N, reaching down to the H-burning limit at  $A_V=20$ , and well into the substellar regime for the less-embedded parts of the system. With the second epoch (cycle 24) we will derive proper motions, kinematic subclustering, runaway objects and determine the overall expansion/contraction of the system.

Here we propose to complement these observations with additional photometric bands, which will allow us to derive the stellar parameters of the low-mass members. We plan to use the H2O Teff band at 1.4micron, with a continuum at 1.3micron, to disentangle Teff and  $A_V$  for all low-mass young stars down to the H-burning limit at  $A_V=20$ , matching our previous data. This will enable us to construct the HRD, assign ages, look for spatial age gradients, and compare kinematic properties with age. Specifically, the identification of systematic variations in the proper motions with age will enable us to trace the initial morphology of the system at its formation, and determine the kinematic association of older stars with younger. Last, we plan to obtain accurate fluxes in Paschen beta, whose excess is indicative of accretion (allowing us to measure  $\dot{M}$ ) and is an independent indicator of membership.

Accretion properties, with ages, masses, and dynamics will enable a comprehensive picture of this young, massive protocluster in formation, testing theories of massive star cluster formation.

## **OBSERVING DESCRIPTION**

This is a manually defined 3x3 mosaic with WFC3/IR

Each tile/visit covers one orbit.

For each tile 3 exposures are taken in F128N and F130N, and 2 in F139M, all dithered.

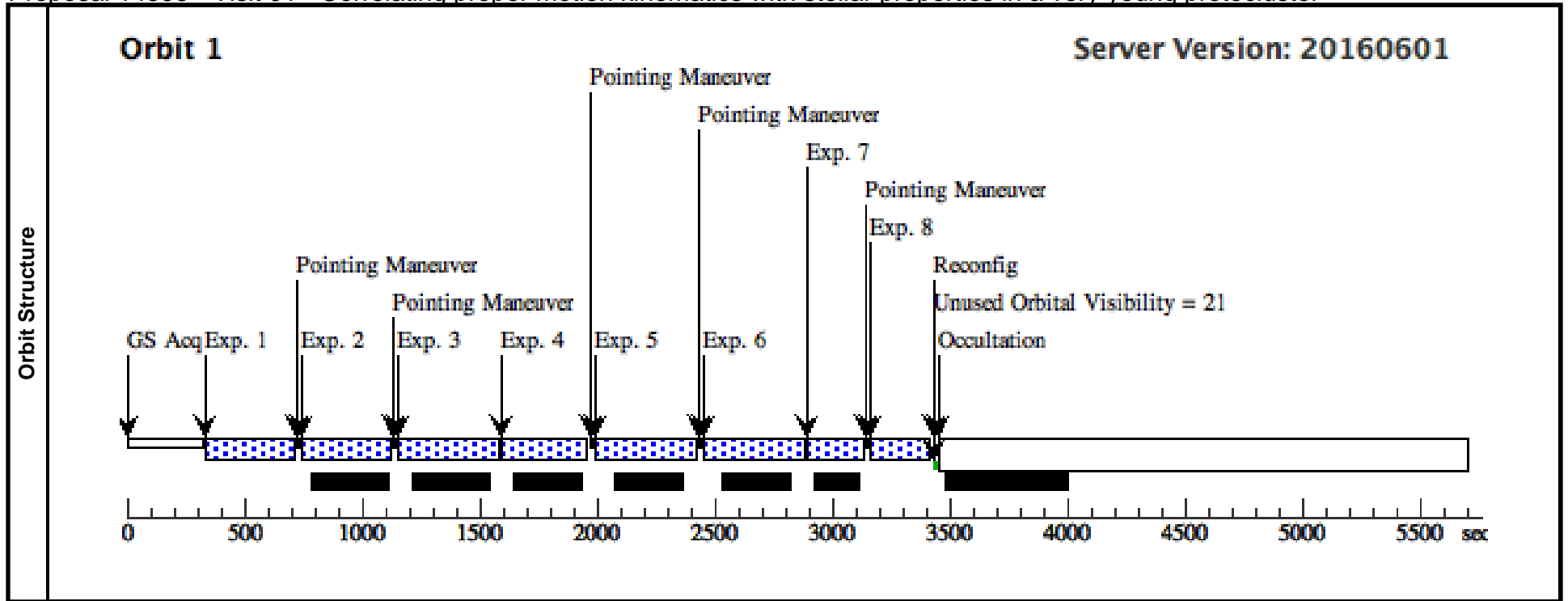
We impose two small ranges of orient angles (with 180 rotation between them), so that the final coverage will closely match that of the 3x3 mosaic of our previous program GO13742. This is needed since the data of both programs will have to be analyzed together.

Visit 3 is rotated 90 degrees, as it ended up being reobserved in program GO13742 after with its original orientation no guide star could be used by the telescope.

Proposal 14595 - Visit 01 - Correlating proper motion kinematics with stellar properties in a very young protocluster

Fri Jul 29 17:48:54 GMT 2016

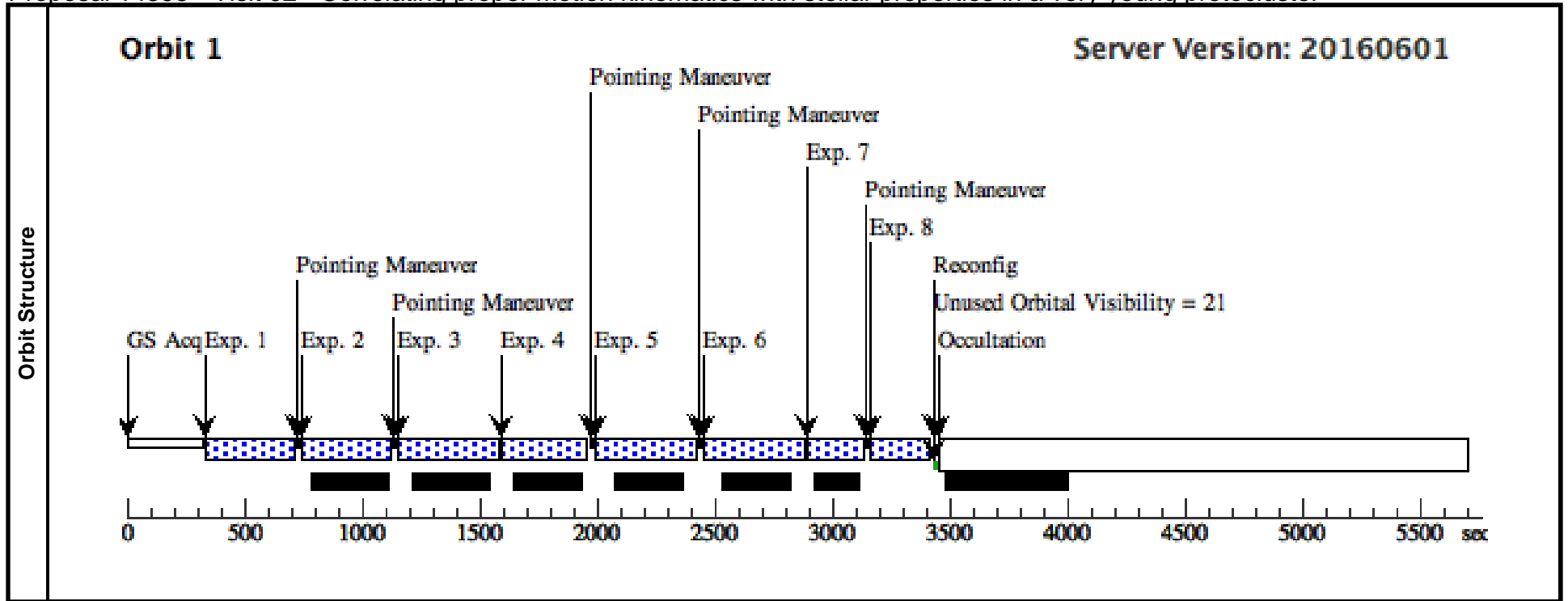
Visit		<b>Proposal 14595, Visit 01</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: ORIENT 210D TO 220 D; ORIENT 30D TO 40 D								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
		(1)	BYF73A	RA: 10 38 20.3223 (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	F128N a	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG 0,0		349.232932 Secs (349.233 Secs) [==>]	[1]
	2	F128N b	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG -0.3161 21,-0.282526		349.232932 Secs (349.233 Secs) [==>]	[1]
	3	F128N c	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG -0.6322 43,-0.565053		399.233383 Secs (399.233 Secs) [==>]	[1]
	4	F130N a	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG -0.6322 43,-0.565053		349.232932 Secs (349.233 Secs) [==>]	[1]
	5	F130N b	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG -0.3161 21,-0.282526		399.233383 Secs (399.233 Secs) [==>]	[1]
	6	F130N c	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG 0,0		399.233383 Secs (399.233 Secs) [==>]	[1]
	7	F139M a	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F139M	NSAMP=13; SAMP-SEQ=STEP2 5			224.233831 Secs (224.234 Secs) [==>]	[1]
8	F139M b	(1) BYF73A	WFC3/IR, MULTIACCUM, IR-FIX	F139M	NSAMP=13; SAMP-SEQ=STEP2 5	POS TARG -0.4742 50,-0.423850		224.233831 Secs (224.234 Secs) [==>]	[1]	



Proposal 14595 - Visit 02 - Correlating proper motion kinematics with stellar properties in a very young protocluster

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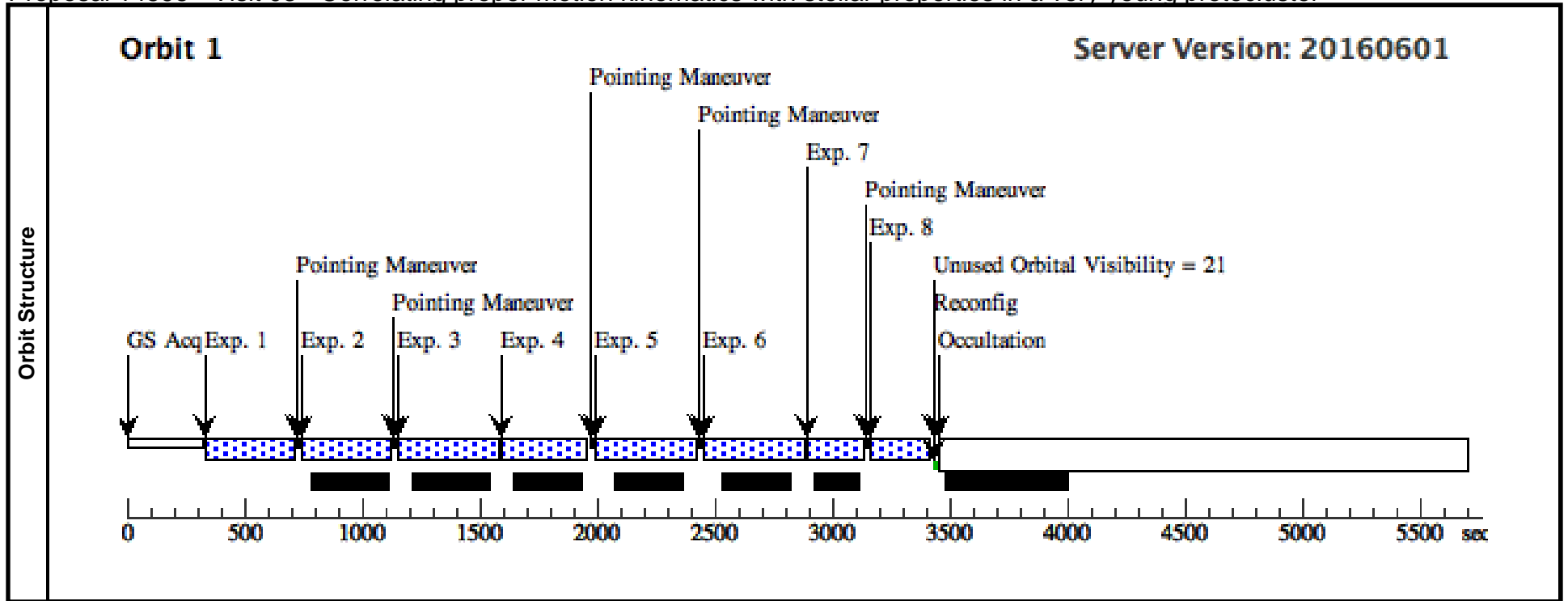
Visit	<b>Proposal 14595, Visit 02</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: ORIENT 210D TO 220 D; ORIENT 30D TO 40 D									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(2)	BYF73B	RA: 10 38 33.1267 (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	F128N a	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG 0,0		349.232932 Secs (349.233 Secs) [==>]	[1]
	2	F128N b	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG -0.3161 21,-0.282526		349.232932 Secs (349.233 Secs) [==>]	[1]
	3	F128N c	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG -0.6322 43,-0.565053		399.233383 Secs (399.233 Secs) [==>]	[1]
	4	F130N a	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG -0.6322 43,-0.565053		349.232932 Secs (349.233 Secs) [==>]	[1]
	5	F130N b	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG -0.3161 21,-0.282526		399.233383 Secs (399.233 Secs) [==>]	[1]
	6	F130N c	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG 0,0		399.233383 Secs (399.233 Secs) [==>]	[1]
	7	F139M a	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F139M	NSAMP=13; SAMP-SEQ=STEP2 5			224.233831 Secs (224.234 Secs) [==>]	[1]
8	F139M b	(2) BYF73B	WFC3/IR, MULTIACCUM, IR-FIX	F139M	NSAMP=13; SAMP-SEQ=STEP2 5	POS TARG -0.4742 50,-0.423850		224.233831 Secs (224.234 Secs) [==>]	[1]	



Proposal 14595 - Visit 03 - Correlating proper motion kinematics with stellar properties in a very young protocluster

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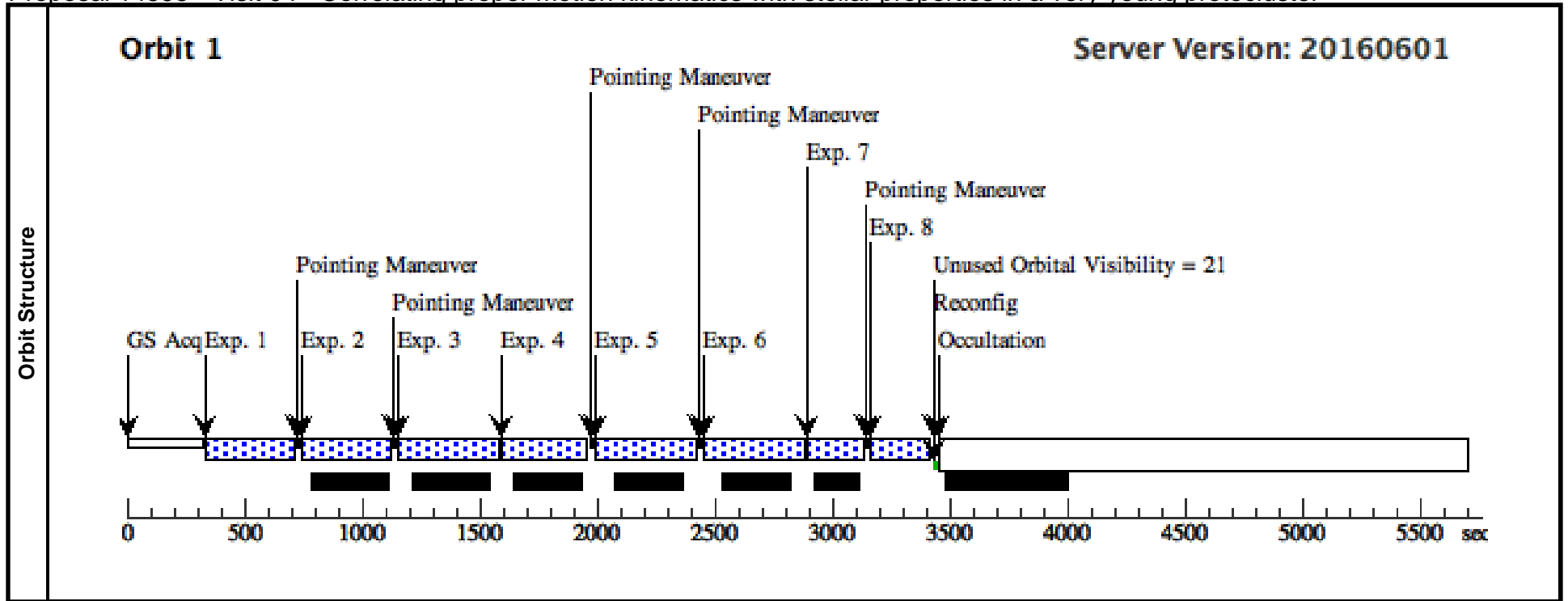
Visit	Proposal 14595, Visit 03 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: ORIENT 300D TO 310 D; ORIENT 120D TO 130 D									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(3)	BYF73C	RA: 10 38 45.9311 (159.6913796d) 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	F128N a	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG 0,0		349.232932 Secs (349.233 Secs) [==>]	[1]
	2	F128N b	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG -0.3161 21,-0.282526		349.232932 Secs (349.233 Secs) [==>]	[1]
	3	F128N c	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG -0.6322 43,-0.565053		399.233383 Secs (399.233 Secs) [==>]	[1]
	4	F130N a	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG -0.6322 43,-0.565053		349.232932 Secs (349.233 Secs) [==>]	[1]
	5	F130N b	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG -0.3161 21,-0.282526		399.233383 Secs (399.233 Secs) [==>]	[1]
	6	F130N c	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG 0,0		399.233383 Secs (399.233 Secs) [==>]	[1]
	7	F139M a	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F139M	NSAMP=13; SAMP-SEQ=STEP2 5			224.233831 Secs (224.234 Secs) [==>]	[1]
8	F139M b	(3) BYF73C	WFC3/IR, MULTIACCUM, IR-FIX	F139M	NSAMP=13; SAMP-SEQ=STEP2 5	POS TARG -0.4742 50,-0.423850		224.233831 Secs (224.234 Secs) [==>]	[1]	



Proposal 14595 - Visit 04 - Correlating proper motion kinematics with stellar properties in a very young protocluster

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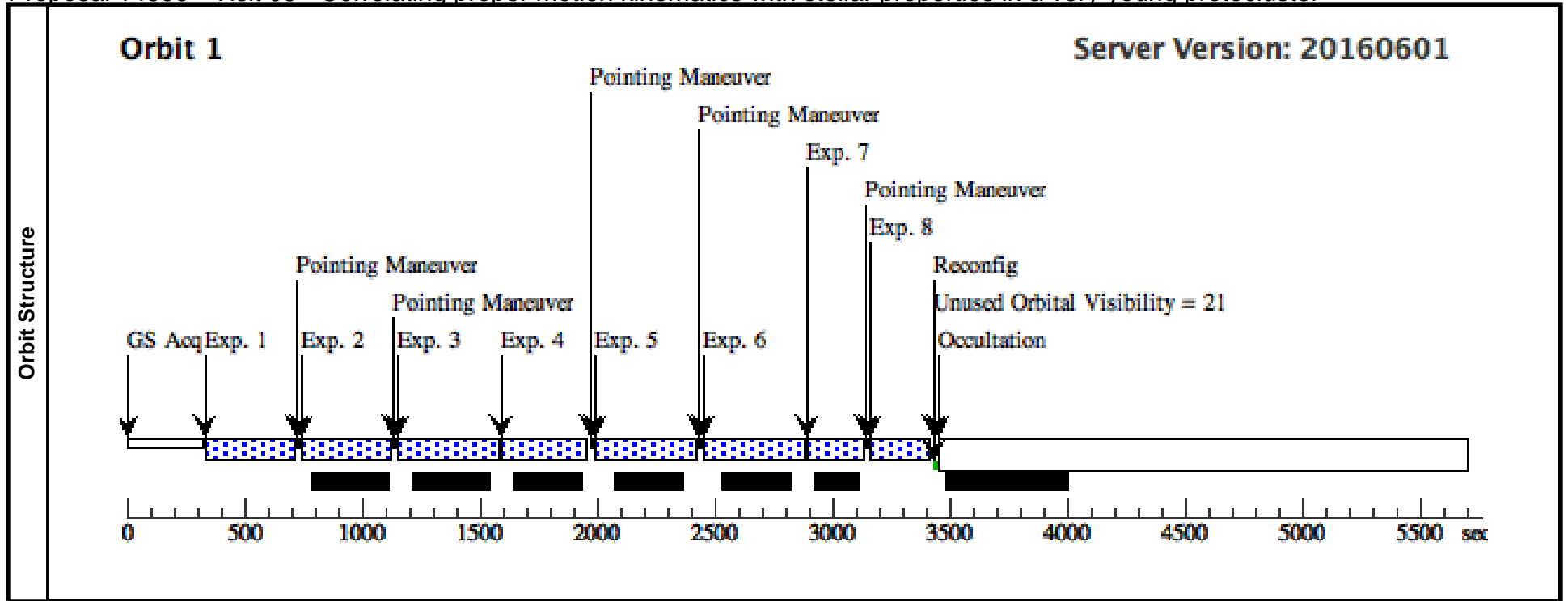
Visit		<b>Proposal 14595, Visit 04</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: ORIENT 210D TO 220 D; ORIENT 30D TO 40 D								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
		(4)	BYF73D	RA: 10 38 20.3223 (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	F128N a	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG 0,0		349.232932 Secs (349.233 Secs) [==>]	[1]
	2	F128N b	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG -0.3161 21,-0.282526		349.232932 Secs (349.233 Secs) [==>]	[1]
	3	F128N c	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG -0.6322 43,-0.565053		399.233383 Secs (399.233 Secs) [==>]	[1]
	4	F130N a	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG -0.6322 43,-0.565053		349.232932 Secs (349.233 Secs) [==>]	[1]
	5	F130N b	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG -0.3161 21,-0.282526		399.233383 Secs (399.233 Secs) [==>]	[1]
	6	F130N c	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG 0,0		399.233383 Secs (399.233 Secs) [==>]	[1]
	7	F139M a	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F139M	NSAMP=13; SAMP-SEQ=STEP2 5			224.233831 Secs (224.234 Secs) [==>]	[1]
8	F139M b	(4) BYF73D	WFC3/IR, MULTIACCUM, IR-FIX	F139M	NSAMP=13; SAMP-SEQ=STEP2 5	POS TARG -0.4742 50,-0.423850		224.233831 Secs (224.234 Secs) [==>]	[1]	



Proposal 14595 - Visit 05 - Correlating proper motion kinematics with stellar properties in a very young protocluster

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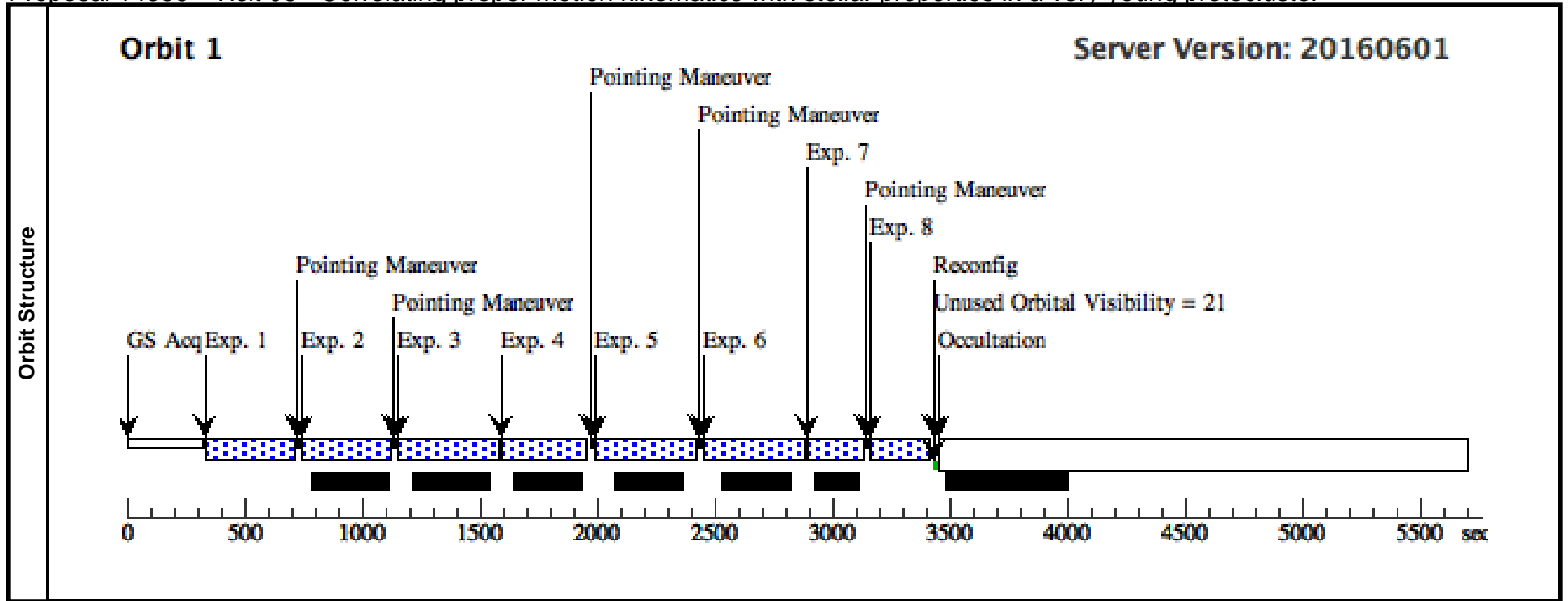
Visit	Proposal 14595, Visit 05 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: ORIENT 210D TO 220 D; ORIENT 30D TO 40 D									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(5)	BYF73E	RA: 10 38 33.1267 (159.6380279d) 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	F128N a	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG 0,0		349.232932 Secs (349.233 Secs) [==>]	[1]
	2	F128N b	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG -0.3161 21,-0.282526		349.232932 Secs (349.233 Secs) [==>]	[1]
	3	F128N c	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG -0.6322 43,-0.565053		399.233383 Secs (399.233 Secs) [==>]	[1]
	4	F130N a	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG -0.6322 43,-0.565053		349.232932 Secs (349.233 Secs) [==>]	[1]
	5	F130N b	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG -0.3161 21,-0.282526		399.233383 Secs (399.233 Secs) [==>]	[1]
	6	F130N c	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG 0,0		399.233383 Secs (399.233 Secs) [==>]	[1]
	7	F139M a	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F139M	NSAMP=13; SAMP-SEQ=STEP2 5			224.233831 Secs (224.234 Secs) [==>]	[1]
8	F139M b	(5) BYF73E	WFC3/IR, MULTIACCUM, IR-FIX	F139M	NSAMP=13; SAMP-SEQ=STEP2 5	POS TARG -0.4742 50,-0.423850		224.233831 Secs (224.234 Secs) [==>]	[1]	



Proposal 14595 - Visit 06 - Correlating proper motion kinematics with stellar properties in a very young protocluster

Fri Jul 29 17:48:55 GMT 2016

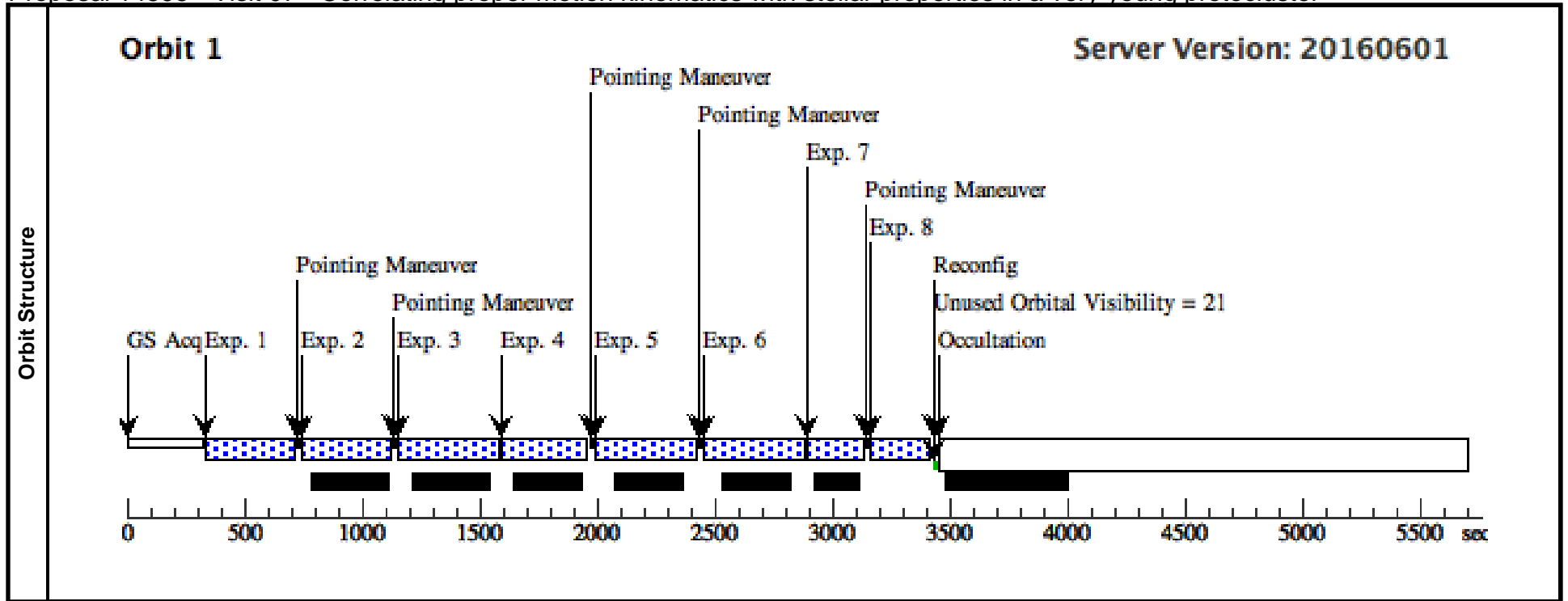
Visit	Proposal 14595, Visit 06 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: ORIENT 210D TO 220 D; ORIENT 30D TO 40 D									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(6)	BYF73F	RA: 10 38 45.9311 (159.6913796d) 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	F128N a	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG 0,0		349.232932 Secs (349.233 Secs) [==>]	[1]
	2	F128N b	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG -0.3161 21,-0.282526		349.232932 Secs (349.233 Secs) [==>]	[1]
	3	F128N c	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG -0.6322 43,-0.565053		399.233383 Secs (399.233 Secs) [==>]	[1]
	4	F130N a	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG -0.6322 43,-0.565053		349.232932 Secs (349.233 Secs) [==>]	[1]
	5	F130N b	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG -0.3161 21,-0.282526		399.233383 Secs (399.233 Secs) [==>]	[1]
	6	F130N c	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG 0,0		399.233383 Secs (399.233 Secs) [==>]	[1]
	7	F139M a	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F139M	NSAMP=13; SAMP-SEQ=STEP2 5			224.233831 Secs (224.234 Secs) [==>]	[1]
8	F139M b	(6) BYF73F	WFC3/IR, MULTIACCUM, IR-FIX	F139M	NSAMP=13; SAMP-SEQ=STEP2 5	POS TARG -0.4742 50,-0.423850		224.233831 Secs (224.234 Secs) [==>]	[1]	



Proposal 14595 - Visit 07 - Correlating proper motion kinematics with stellar properties in a very young protocluster

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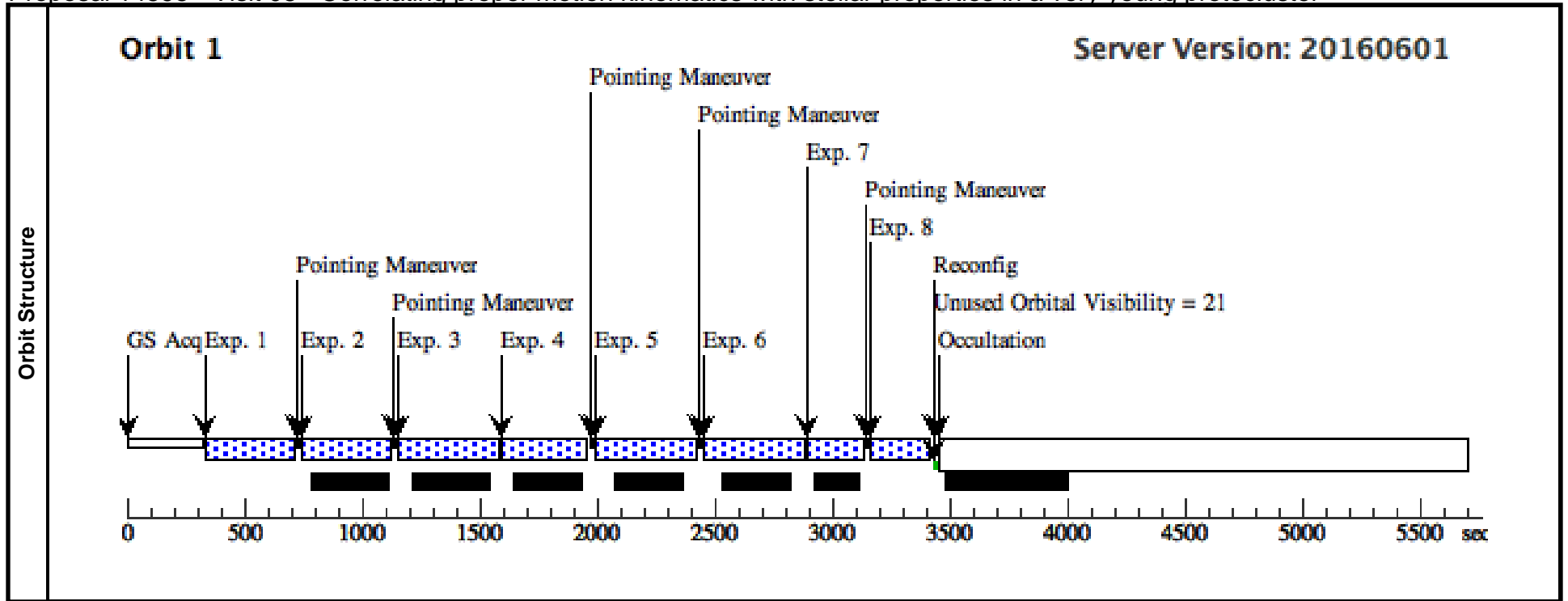
Visit		Proposal 14595, Visit 07 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: ORIENT 210D TO 220 D; ORIENT 30D TO 40 D								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
		(7)	BYF73G	RA: 10 38 20.3223 (159.5846762d) 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	F128N a	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG 0,0		349.232932 Secs (349.233 Secs) [==>]	[1]
	2	F128N b	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG -0.3161 21,-0.282526		349.232932 Secs (349.233 Secs) [==>]	[1]
	3	F128N c	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG -0.6322 43,-0.565053		399.233383 Secs (399.233 Secs) [==>]	[1]
	4	F130N a	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG -0.6322 43,-0.565053		349.232932 Secs (349.233 Secs) [==>]	[1]
	5	F130N b	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG -0.3161 21,-0.282526		399.233383 Secs (399.233 Secs) [==>]	[1]
	6	F130N c	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG 0,0		399.233383 Secs (399.233 Secs) [==>]	[1]
	7	F139M a	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F139M	NSAMP=13; SAMP-SEQ=STEP2 5			224.233831 Secs (224.234 Secs) [==>]	[1]
8	F139M b	(7) BYF73G	WFC3/IR, MULTIACCUM, IR-FIX	F139M	NSAMP=13; SAMP-SEQ=STEP2 5	POS TARG -0.4742 50,-0.423850		224.233831 Secs (224.234 Secs) [==>]	[1]	



Proposal 14595 - Visit 08 - Correlating proper motion kinematics with stellar properties in a very young protocluster

Fri Jul 29 17:48:55 GMT 2016

Visit	<b>Proposal 14595, Visit 08</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: ORIENT 210D TO 220 D; ORIENT 30D TO 40 D									
	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	F128N a	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG 0,0		349.232932 Secs (349.233 Secs) [==>]	[1]
	2	F128N b	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG -0.3161 21,-0.282526		349.232932 Secs (349.233 Secs) [==>]	[1]
	3	F128N c	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG -0.6322 43,-0.565053		399.233383 Secs (399.233 Secs) [==>]	[1]
	4	F130N a	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG -0.6322 43,-0.565053		349.232932 Secs (349.233 Secs) [==>]	[1]
	5	F130N b	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG -0.3161 21,-0.282526		399.233383 Secs (399.233 Secs) [==>]	[1]
	6	F130N c	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG 0,0		399.233383 Secs (399.233 Secs) [==>]	[1]
	7	F139M a	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F139M	NSAMP=13; SAMP-SEQ=STEP2 5			224.233831 Secs (224.234 Secs) [==>]	[1]
8	F139M b	(8) BYF73H	WFC3/IR, MULTIACCUM, IR-FIX	F139M	NSAMP=13; SAMP-SEQ=STEP2 5	POS TARG -0.4742 50,-0.423850		224.233831 Secs (224.234 Secs) [==>]	[1]	



Proposal 14595 - Visit 09 - Correlating proper motion kinematics with stellar properties in a very young protocluster

Fri Jul 29 17:48:55 GMT 2016

Visit	Proposal 14595, Visit 09 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: ORIENT 210D TO 220 D; ORIENT 30D TO 40 D										
	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	F128N a	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG 0,0		349.232932 Secs (349.233 Secs) [==>]	[1]	
	2	F128N b	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG -0.3161 21,-0.282526		349.232932 Secs (349.233 Secs) [==>]	[1]	
	3	F128N c	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F128N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG -0.6322 43,-0.565053		399.233383 Secs (399.233 Secs) [==>]	[1]	
	4	F130N a	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=12; SAMP-SEQ=STEP5 0	POS TARG -0.6322 43,-0.565053		349.232932 Secs (349.233 Secs) [==>]	[1]	
	5	F130N b	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG -0.3161 21,-0.282526		399.233383 Secs (399.233 Secs) [==>]	[1]	
	6	F130N c	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F130N	NSAMP=13; SAMP-SEQ=STEP5 0	POS TARG 0,0		399.233383 Secs (399.233 Secs) [==>]	[1]	
	7	F139M a	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F139M	NSAMP=13; SAMP-SEQ=STEP2 5			224.233831 Secs (224.234 Secs) [==>]	[1]	
	8	F139M b	(9) BYF73I	WFC3/IR, MULTIACCUM, IR-FIX	F139M	NSAMP=13; SAMP-SEQ=STEP2 5	POS TARG -0.4742 50,-0.423850		224.233831 Secs (224.234 Secs) [==>]	[1]	

