



11134 - WFPC2 Tidal Tail Survey: Probing Star Cluster Formation on the Edge

Cycle: 16, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) NGC520	WFPC2	1	17-Jan-2008 21:50:47.0	yes
02	(2) NGC2444	WFPC2	2	17-Jan-2008 21:50:52.0	yes
03	(3) NGC2992	WFPC2	1	17-Jan-2008 21:50:55.0	yes
04	(4) NGC2993	WFPC2	1	17-Jan-2008 21:50:58.0	yes

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
05	(5) NGC2535	WFPC2	2	17-Jan-2008 21:51:01.0	yes
06	(6) NGC1614	WFPC2	2	17-Jan-2008 21:51:05.0	yes
07	(7) NGC4747	WFPC2	1	17-Jan-2008 21:51:09.0	yes
08	(8) AM1054-325	WFPC2	2	17-Jan-2008 21:51:12.0	yes
09	(9) NGC2782-P1	WFPC2	1	17-Jan-2008 21:51:14.0	yes
10	(10) NGC2782-P2	WFPC2	1	17-Jan-2008 21:51:16.0	yes
11	(11) NGC6872-P1	WFPC2	2	17-Jan-2008 21:51:19.0	yes
12	(12) NGC6872-P2	WFPC2	2	17-Jan-2008 21:51:23.0	yes
13	(13) MCG-03-13-063	WFPC2	1	17-Jan-2008 21:51:25.0	yes
14	(14) NGC1487-P1	WFPC2	1	17-Jan-2008 21:51:28.0	yes
15	(15) NGC1487-P2	WFPC2	1	17-Jan-2008 21:51:30.0	yes

21 Total Orbits Used

ABSTRACT

The spectacular HST images of the interiors of merging galaxies such as the Antennae and NGC 7252 have revealed rich and diverse populations of star clusters created over the course of the interaction. Intriguingly, our WFPC2 study of tidal tails in these and other interacting pairs has shown that star cluster birth in the tails does not follow a similarly straightforward evolution. In fact, cluster formation in these relatively sparse environments is not guaranteed -- only one of six tails in our initial study showed evidence for a significant population of young star clusters. The tail environment thus offers the opportunity to probe star cluster formation on the edge of the physical parameter space (e.g., of stellar and gas mass, density, and pressure) that permits it to occur.

We propose to significantly extend our pilot sample of optically bright, gas-rich tidal tails by a factor of 4 in number to include a more diverse population of tails, encompassing major and minor mergers, gas-rich and gas-poor tails, as well as early, late, and merged interaction stages. With 21

orbits of HST WFPC2 imaging in the F606W and F814W filters, we can identify, roughly age-date, and measure sizes of star clusters to determine what physical parameters affect star cluster formation. WFPC2 imaging has been used effectively in our initial study of four mergers, and it will be possible in this program to reach similar limits of $M_V \sim -8.5$ for each of 16 more tails. With the much larger sample we expect to isolate which factors, such as merger stage, HI content, and merger mass ratio, drive the formation of star clusters.

OBSERVING DESCRIPTION

WFPC2/VI Images: We are targeting optical and HI tidal tails in a wide variety of interacting systems to search for and study star clusters that may have formed in these environments. Based on experience from a previous WFPC2 imaging program on merging galaxies (GO-7466) and the ETC, we find we can reach a limiting magnitude of $M_V \sim -8.5$ in a single orbit (both V and I images taken) for those of our target galaxies with $v < 3500$ km/s. For the more distant systems in our sample (up to $v \sim 5500$ km/s), we will need 2 full orbits of VI data to reach this same limit (down to $S/N=10$ for point sources). The predicted CTE losses for our targets should be minimal for the wide filters we are using. In order to adequately remove cosmic rays from the data (necessary since we are studying star clusters which will be largely unresolved objects at the distance of our target galaxies), we will be using multiple exposures. For the single orbit data, we will be taking 2 F606W (500s each) and 2 F814W (500s+400s) images. However, these images will not be dithered, in order to do as clean a job removing cosmic rays. For the targets that require 2 orbits (one orbit each in F606W and F814W) in order to reach our desired photometric limits, we have adopted the pattern advocated in recent WFPC2 documents - a total of 2 pairs of images per filter, with each image pair dithered 2.5 WF pixels in X and Y, in order to assist with removal of both cosmic-rays and hot pixels. For most of the 2-orbit visits, we have asked for 500s+500s, and 500s+400s pairs per filter, but have filled the orbit as much as possible. Four of our target galaxies require 2 separate pointings to adequately cover the tidal tails, and the rest need only a single WFPC2 pointing. For the 12 separate galaxies that we are studying, we have been assigned 21 orbits.

Our field selections are based on a combination of the optical tails and (where available) the densest regions of HI, where star clusters should be forming. Control fields are readily available in the archive (eg. HDF-S, HDF-N), which can be used for statistical subtraction of unresolved background galaxies.

ADDITIONAL COMMENTS

Note that in all of our observations, we have placed constraints on the roll angles of the telescope. We are surveying many specific area of tidal tails, and have maximized the regions of scientific interest with the field of view of WFPC2. In some cases, very bright stars near the target galaxies require careful orientations to avoid appearing on the WF chips (in 1 case, we had little choice but to place a star in the photometrically-less-deep PC chip). Similarly, we have tried to ensure that the regions of interest fall on either WF2 and/or WF3, in case of any problems with WF4.

However, we have used the APT to choose appropriate ranges of roll angles for each Visit, and all are schedulable. In cases where the chosen roll angles are not inclusive enough, we could make minor modifications in the WFPC2 pointing location to accomodate roll angles that would be easier to schedule.

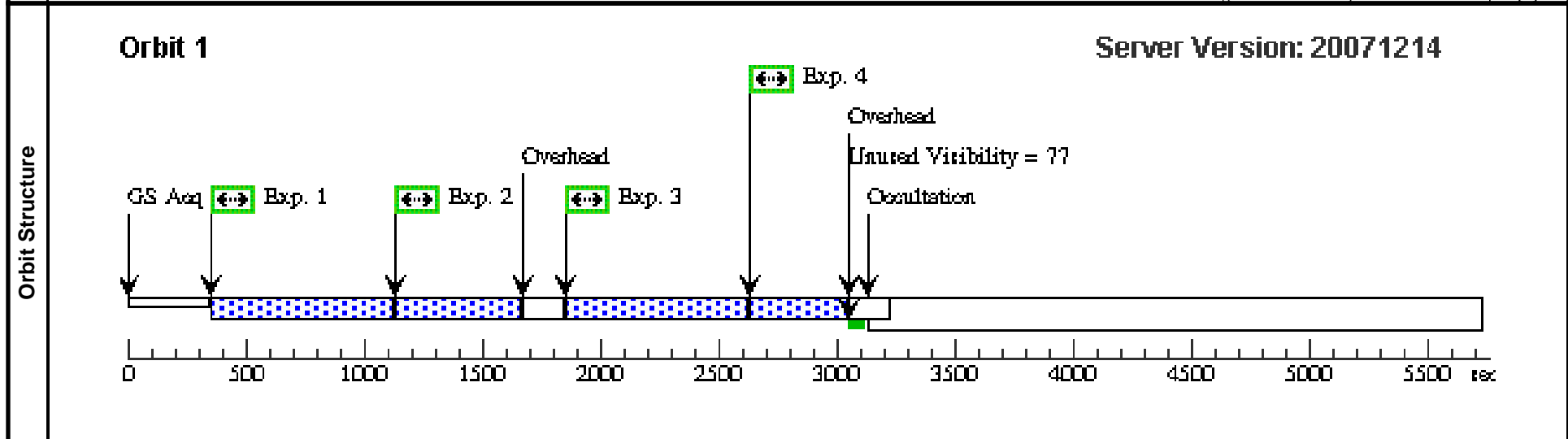
Proposal 11134 - Visit 01 - WFPC2 Tidal Tail Survey: Probing Star Cluster Formation on the Edge

Fri Jan 18 02:51:33 GMT 2008

Visit	Proposal 11134, Visit 01, implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFPC2				
	Special Requirements: PCS MODE FINE; ORIENT 288.0D TO 303.0 D				
<i>Comments: VI images of NGC 520</i>					

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	NGC520	RA: 01 24 25.7901 (21.1074588d) Dec: +03 53 10.00 (3.88611d) Equinox: J2000		V=12.4	Reference Frame: ICRS

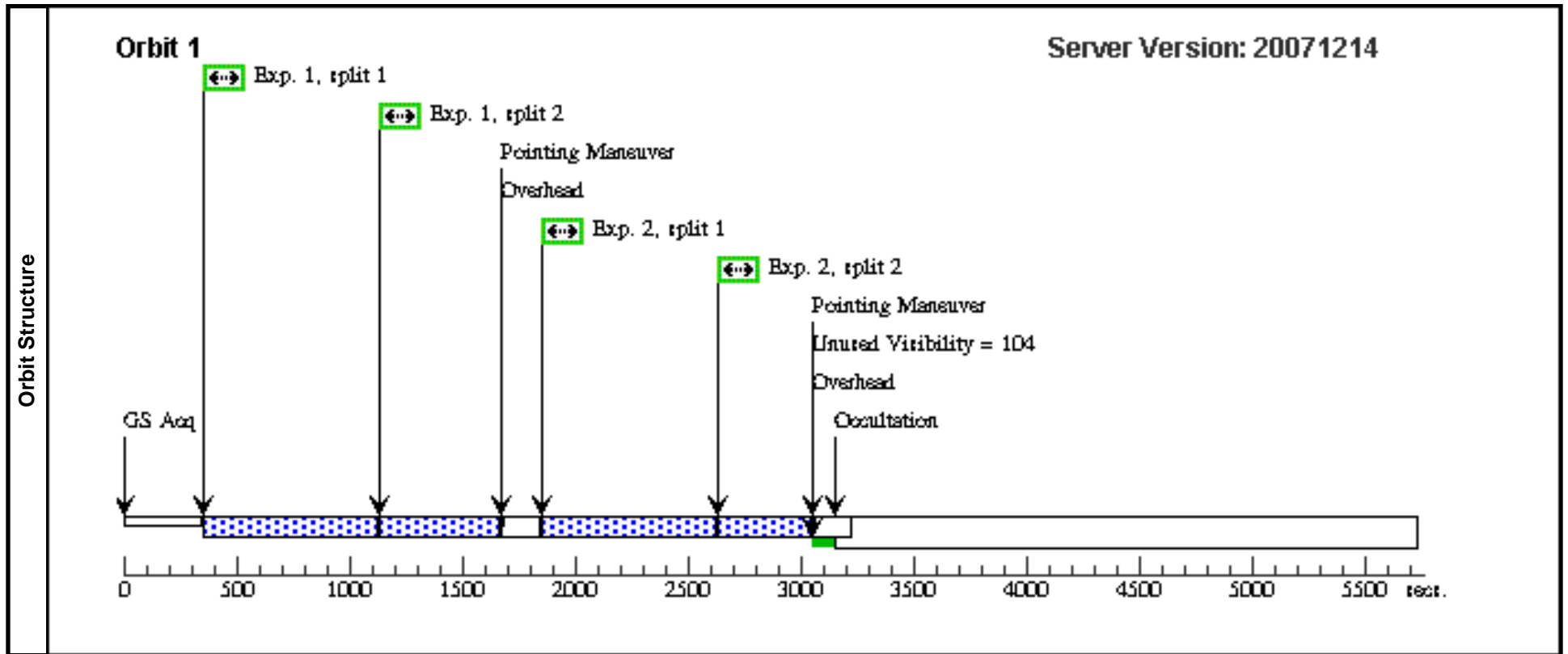
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Req.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	NGC 520 - V1 image	(1) NGC520	WFPC2, IMAGE, WF3	F606W				500.0 Secs [=>500.0 Secs]	[1]
	2	NGC 520 V2 image	(1) NGC520	WFPC2, IMAGE, WF3	F606W				500.0 Secs [=>500.0 Secs]	[1]
	3	NGC 520 - I1 image	(1) NGC520	WFPC2, IMAGE, WF3	F814W				500.0 Secs [=>500.0 Secs]	[1]
	4	NGC 520 - I2 image	(1) NGC520	WFPC2, IMAGE, WF3	F814W				400.0 Secs [=>400.0 Secs]	[1]

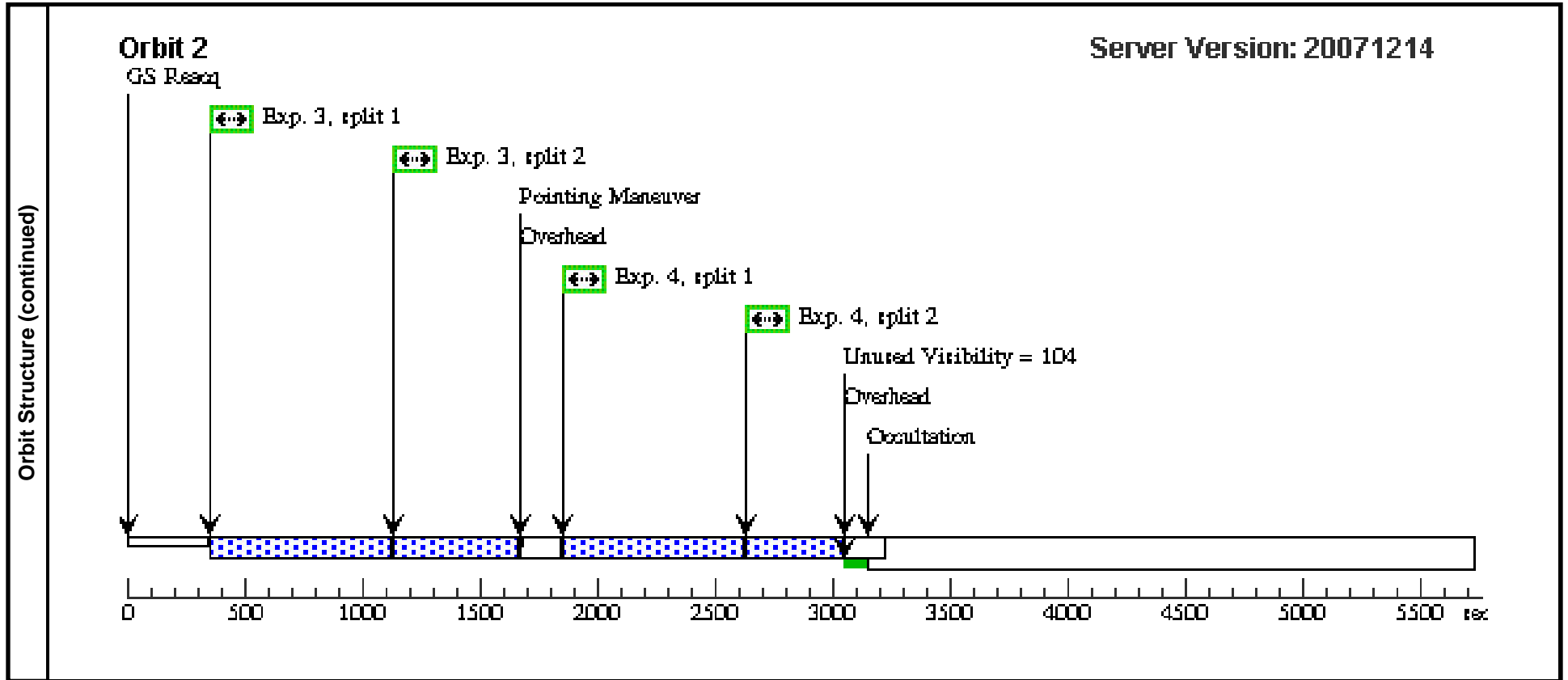


Proposal 11134 - Visit 02 - WFPC2 Tidal Tail Survey: Probing Star Cluster Formation on the Edge

Fri Jan 18 02:51:34 GMT 2008

Visit	Proposal 11134, Visit 02, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: PCS MODE FINE; ORIENT 280.0D TO 300.0 D Comments: VI images of NGC 2444									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(2)	NGC2444	RA: 07 46 54.6919 (116.7278829d) Dec: +39 03 42.14 (39.06171d) Equinox: J2000		V=14.2	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	NGC2444 - V images (pos 1)	(2) NGC2444	WFPC2, IMAGE, WF3	F606W					1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]
	2	NGC2444 - V images (pos 2)	(2) NGC2444	WFPC2, IMAGE, WF3	F606W	CR-SPLIT=0.5556	POS TARG 0.25,0.25		901.0 Secs [=>500.0 Secs (Split 1)] [=>400.0 Secs (Split 2)]	[1]
	Comments: 2nd pointing, 2.5 WF pixel offset in X and Y									
	3	NGC2444 - I images (pos 1)	(2) NGC2444	WFPC2, IMAGE, WF3	F814W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[2]
	4	NGC2444 - I images (pos 2)	(2) NGC2444	WFPC2, IMAGE, WF3	F814W	CR-SPLIT=0.5556	POS TARG 0.25,0.25		901.0 Secs [=>500.0 Secs (Split 1)] [=>400.0 Secs (Split 2)]	[2]
	Comments: 2nd pointing, 2.5 WF pixel offset in X and Y									





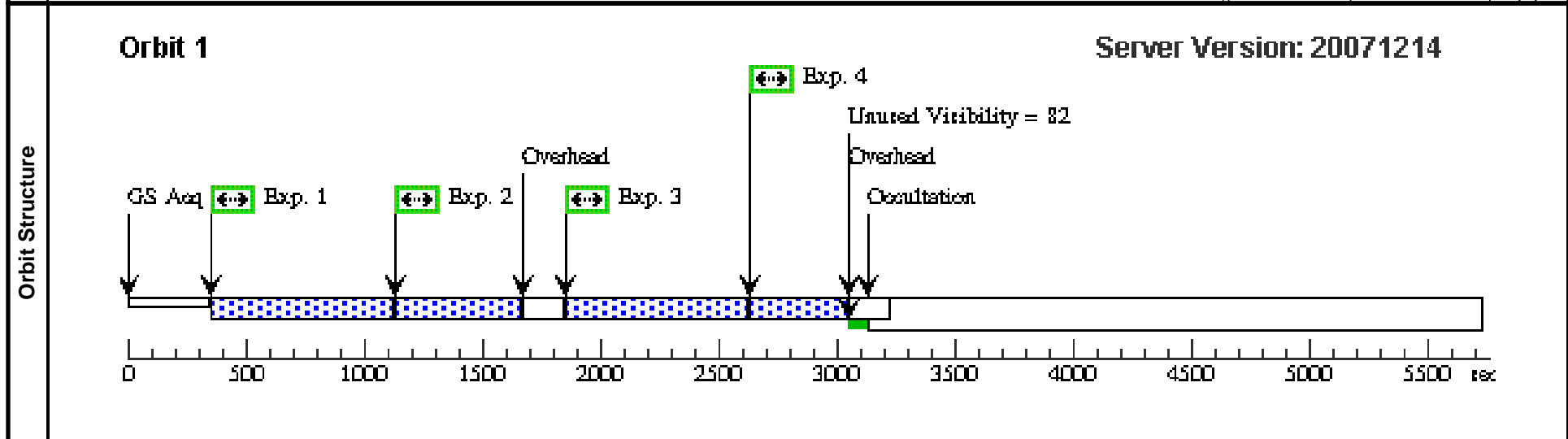
Proposal 11134 - Visit 03 - WFPC2 Tidal Tail Survey: Probing Star Cluster Formation on the Edge

Fri Jan 18 02:51:35 GMT 2008

Visit	Proposal 11134, Visit 03, implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFPC2				
	Special Requirements: PCS MODE FINE; ORIENT 325.0D TO 345.0 D				
<i>Comments: VI images of NGC 2992/3</i>					

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(3)	NGC2992	RA: 09 45 43.0415 (146.4293396d) Dec: -14 18 30.19 (-14.30839d) Equinox: J2000		V=13	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Req.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	NGC 2992 - V1 image	(3) NGC2992	WFPC2, IMAGE, WF3	F606W				500.0 Secs [=>500.0 Secs]	[1]
	2	NGC 2992 - V2 image	(3) NGC2992	WFPC2, IMAGE, WF3	F606W				500.0 Secs [=>500.0 Secs]	[1]
	3	NGC 2992 - I1 image	(3) NGC2992	WFPC2, IMAGE, WF3	F814W				500.0 Secs [=>500.0 Secs]	[1]
	4	NGC 2992 - I2 image	(3) NGC2992	WFPC2, IMAGE, WF3	F814W				400.0 Secs [=>400.0 Secs]	[1]



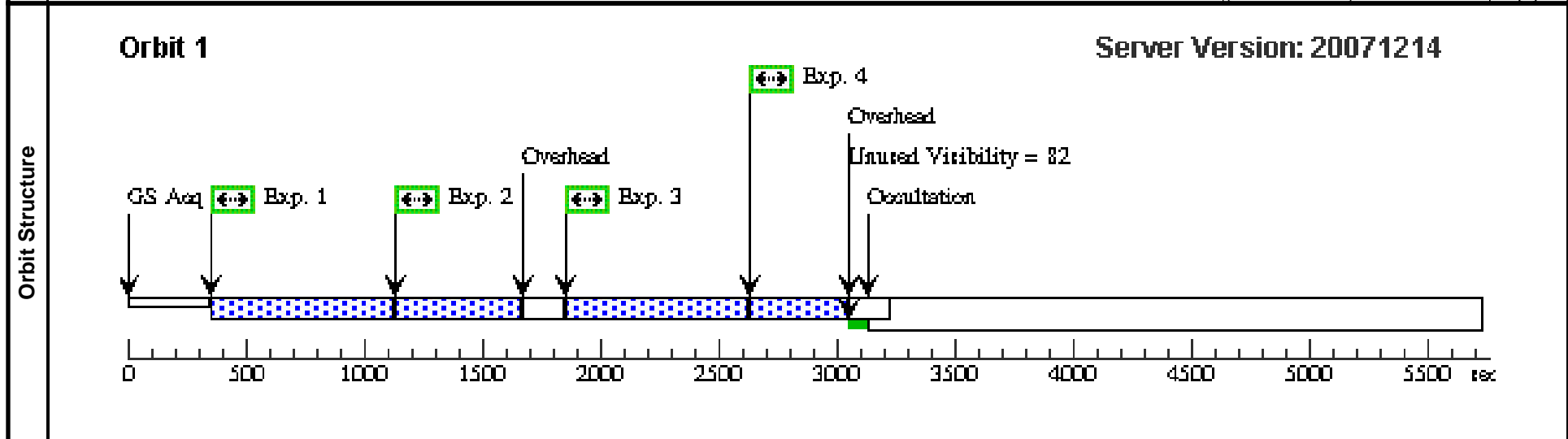
Proposal 11134 - Visit 04 - WFPC2 Tidal Tail Survey: Probing Star Cluster Formation on the Edge

Fri Jan 18 02:51:35 GMT 2008

Visit	Proposal 11134, Visit 04, implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFPC2				
	Special Requirements: PCS MODE FINE; ORIENT 290.0D TO 305.0 D				
<i>Comments: VI images of NGC 2992/3</i>					

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(4)	NGC2993	RA: 09 45 55.8518 (146.4827158d) Dec: -14 23 36.80 (-14.39356d) Equinox: J2000		V=13	Reference Frame: ICRS

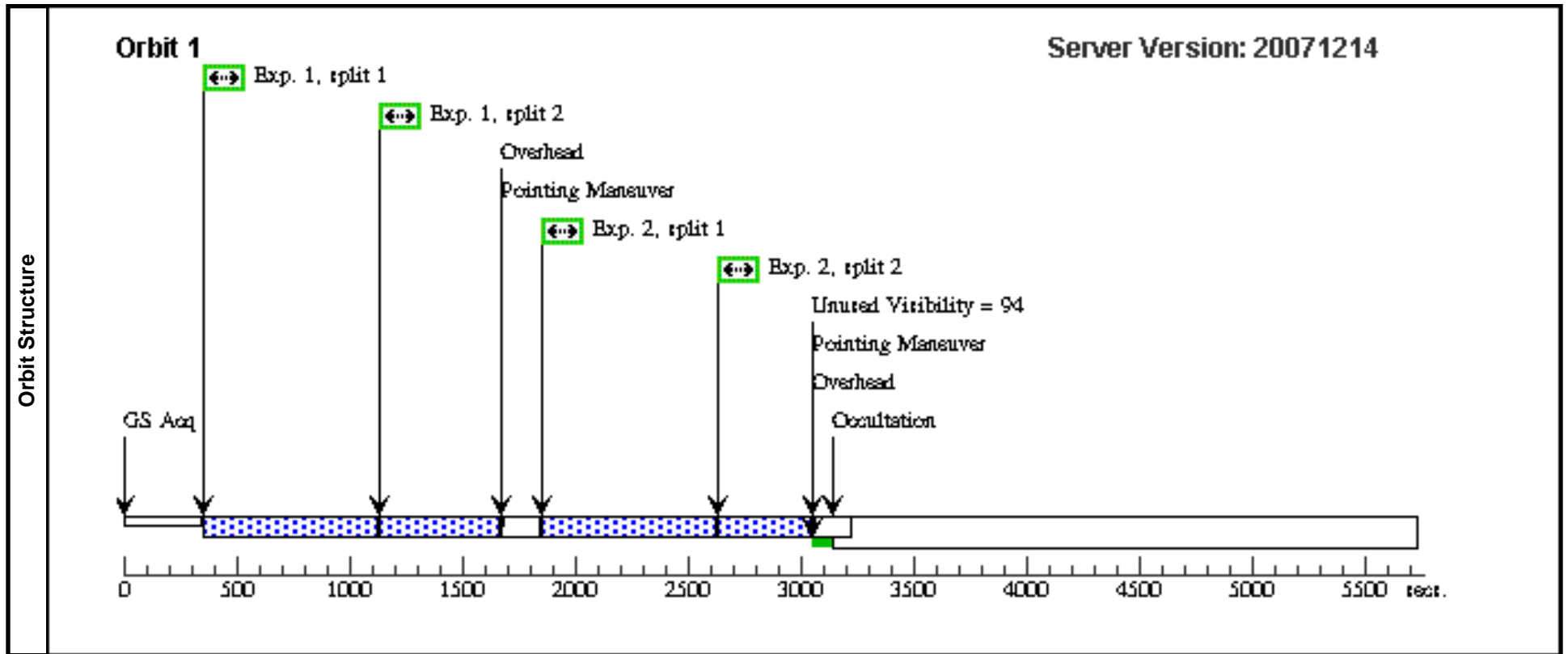
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Req.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	NGC 2993 - V1 image	(4) NGC2993	WFPC2, IMAGE, WF3	F606W				500.0 Secs [=>500.0 Secs]	[1]
	2	NGC 2993 - V2 image	(4) NGC2993	WFPC2, IMAGE, WF3	F606W				500.0 Secs [=>500.0 Secs]	[1]
	3	NGC 2993 - I1 image	(4) NGC2993	WFPC2, IMAGE, WF3	F814W				500.0 Secs [=>500.0 Secs]	[1]
	4	NGC 2993 - I2 image	(4) NGC2993	WFPC2, IMAGE, WF3	F814W				400.0 Secs [=>400.0 Secs]	[1]

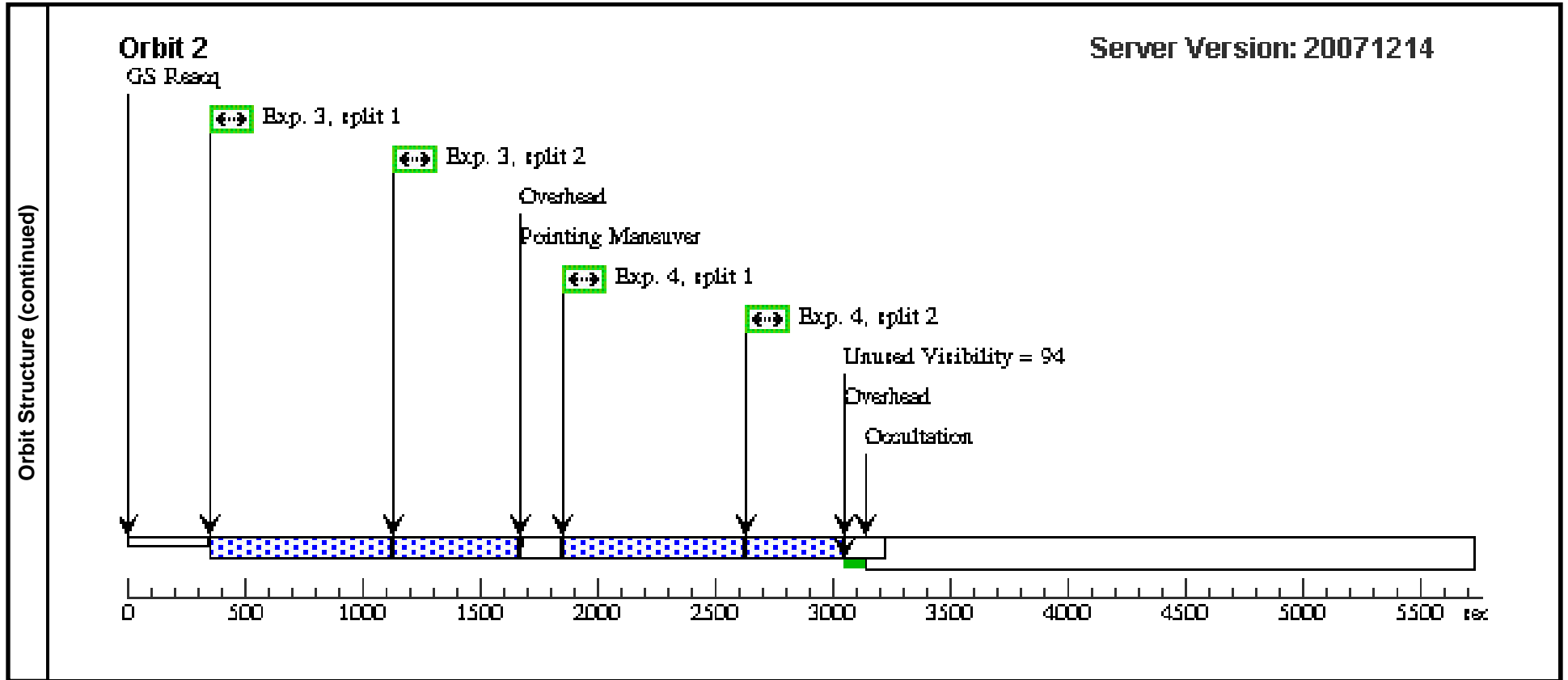


Proposal 11134 - Visit 05 - WFPC2 Tidal Tail Survey: Probing Star Cluster Formation on the Edge

Fri Jan 18 02:51:35 GMT 2008

Visit	Proposal 11134, Visit 05, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: PCS MODE FINE; ORIENT 250.0D TO 265.0 D Comments: VI images of NGC 2535									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(5)	NGC2535	RA: 08 11 12.7782 (122.8032425d) Dec: +25 13 33.52 (25.22598d) Equinox: J2000		V=13.3	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	NGC2535 - V images (pos 1)	(5) NGC2535	WFPC2, IMAGE, WF3	F606W					1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]
	2	NGC2535- V images (pos 2)	(5) NGC2535	WFPC2, IMAGE, WF3	F606W	CR-SPLIT=0.5556	POS TARG 0.25,0.25		901.0 Secs [=>500.0 Secs (Split 1)] [=>400.0 Secs (Split 2)]	[1]
	Comments: 2nd pointing, 2.5 WF pixel offset in X and Y									
	3	NGC2535- I images (pos 1)	(5) NGC2535	WFPC2, IMAGE, WF3	F814W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[2]
	4	NGC2535 - I images (pos 2)	(5) NGC2535	WFPC2, IMAGE, WF3	F814W	CR-SPLIT=0.5556	POS TARG 0.25,0.25		901.0 Secs [=>500.0 Secs (Split 1)] [=>400.0 Secs (Split 2)]	[2]
	Comments: 2nd pointing, 2.5 WF pixel offset in X and Y									

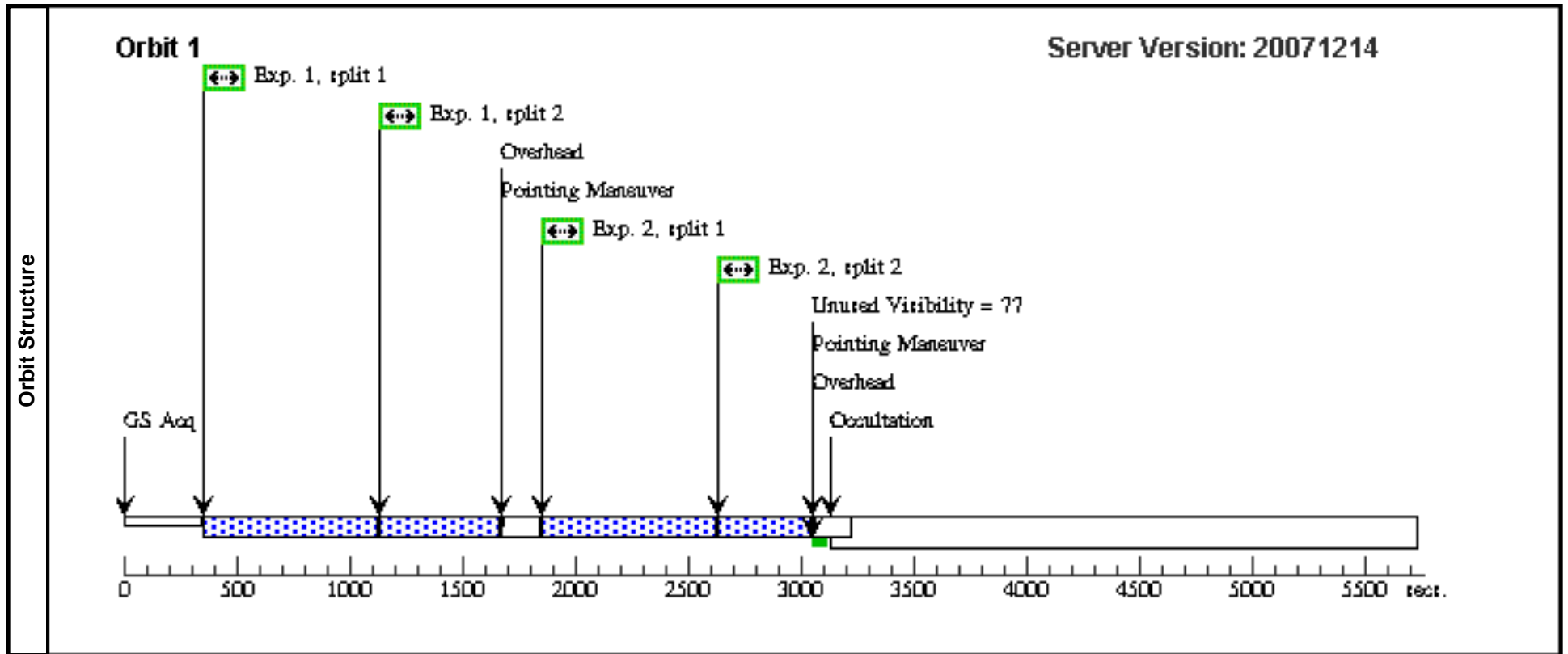


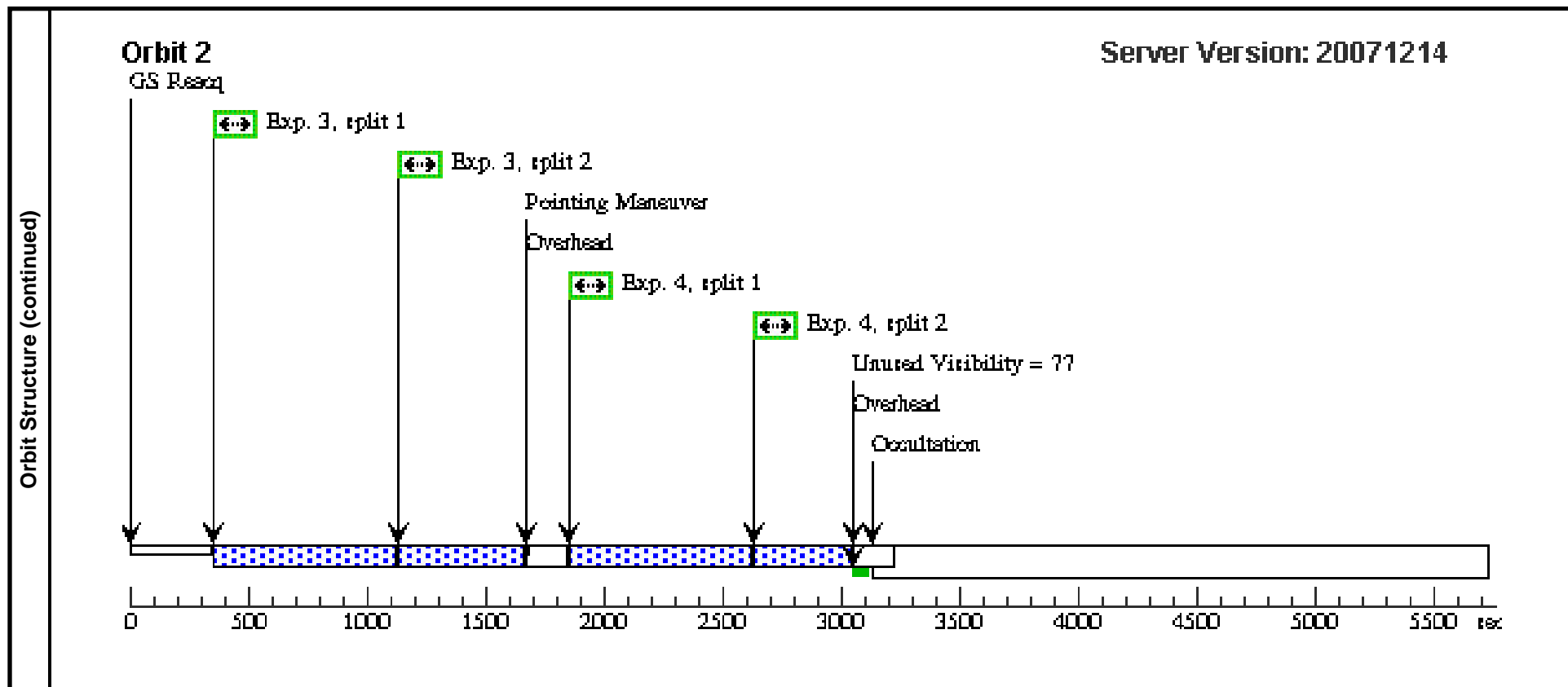


Proposal 11134 - Visit 06 - WFPC2 Tidal Tail Survey: Probing Star Cluster Formation on the Edge

Fri Jan 18 02:51:36 GMT 2008

Visit	Proposal 11134, Visit 06, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: PCS MODE FINE; ORIENT 340.0D TO 360.0 D Comments: VI images of NGC 1614									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(6)	NGC1614	RA: 04 33 58.6146 (68.4942275d) Dec: -08 35 35.79 (-8.59328d) Equinox: J2000		V=15	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	NGC1614 - V images (pos 1)	(6) NGC1614	WFPC2, IMAGE, WF3	F606W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
	2	NGC1614- V images (pos 2)	(6) NGC1614	WFPC2, IMAGE, WF3	F606W	CR-SPLIT=0.5556	POS TARG 0.25,0.25		901.0 Secs [=>500.0 Secs (Split 1)] [=>400.0 Secs (Split 2)]	[1]
	Comments: 2nd pointing, 2.5 WF pixel offset in X and Y									
	3	NGC1614- I images (pos 1)	(6) NGC1614	WFPC2, IMAGE, WF3	F814W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[2]
	4	NGC1614 - I images (pos 2)	(6) NGC1614	WFPC2, IMAGE, WF3	F814W	CR-SPLIT=0.5556	POS TARG 0.25,0.25		901.0 Secs [=>500.0 Secs (Split 1)] [=>400.0 Secs (Split 2)]	[2]
	Comments: 2nd pointing, 2.5 WF pixel offset in X and Y									





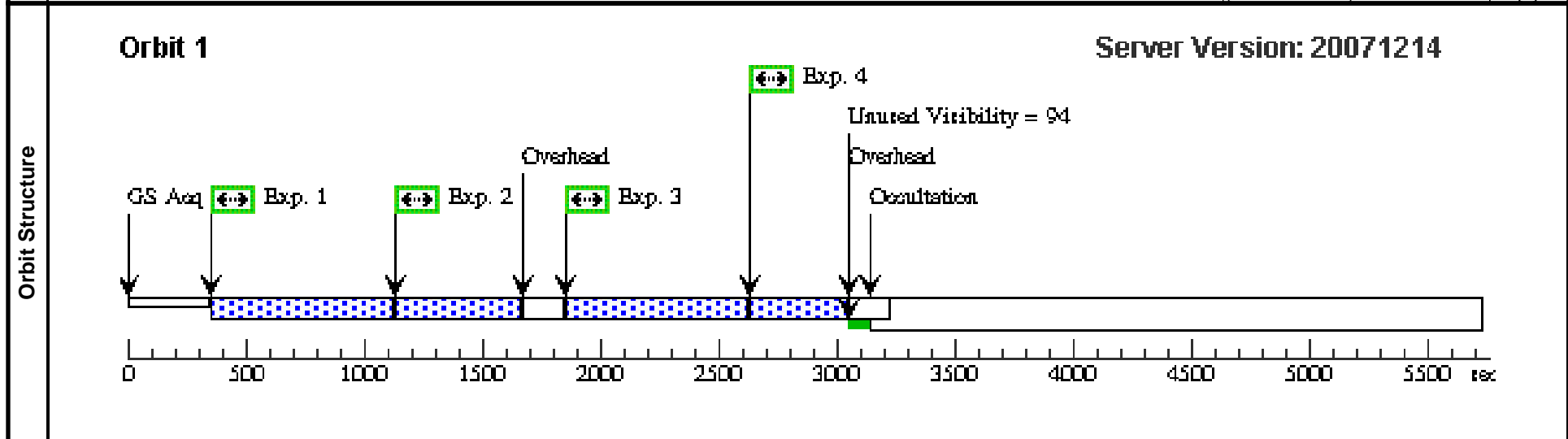
Proposal 11134 - Visit 07 - WFPC2 Tidal Tail Survey: Probing Star Cluster Formation on the Edge

Fri Jan 18 02:51:37 GMT 2008

Visit	Proposal 11134, Visit 07, implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFPC2				
	Special Requirements: PCS MODE FINE; ORIENT 255.0D TO 275.0 D				
<i>Comments: VI images of NGC 4747</i>					

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(7)	NGC4747	RA: 12 51 59.5195 (192.9979979d) Dec: +25 49 32.04 (25.82557d) Equinox: J2000		V=13	Reference Frame: ICRS

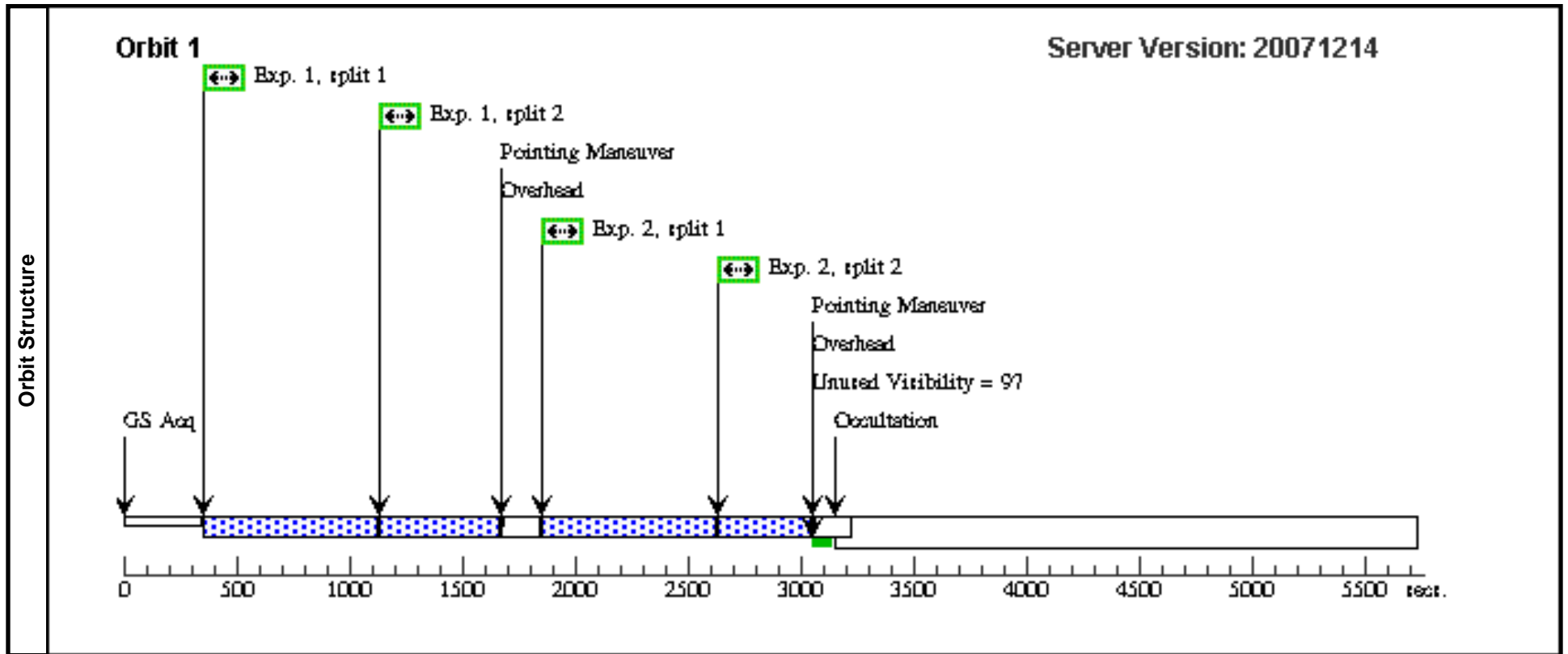
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Req.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	NGC 4747 - (7) NGC4747 V1 image	(7) NGC4747	WFPC2, IMAGE, WF3	F606W				500.0 Secs [=>500.0 Secs]	[1]
	2	NGC 4747 - (7) NGC4747 V2 image	(7) NGC4747	WFPC2, IMAGE, WF3	F606W				500.0 Secs [=>500.0 Secs]	[1]
	3	NGC 4747 - (7) NGC4747 I1 image	(7) NGC4747	WFPC2, IMAGE, WF3	F814W				500.0 Secs [=>500.0 Secs]	[1]
	4	NGC 4747 - (7) NGC4747 I2 image	(7) NGC4747	WFPC2, IMAGE, WF3	F814W				400.0 Secs [=>400.0 Secs]	[1]

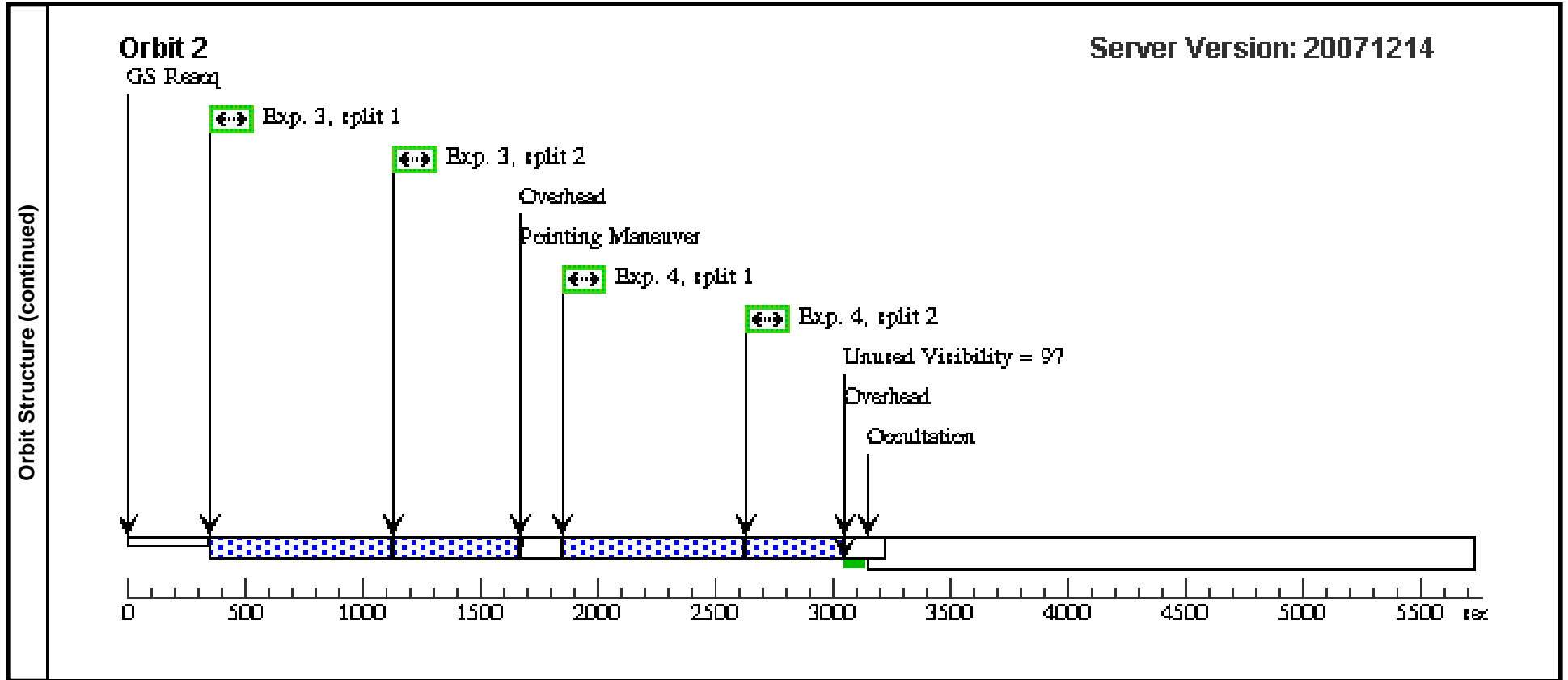


Proposal 11134 - Visit 08 - WFPC2 Tidal Tail Survey: Probing Star Cluster Formation on the Edge

Fri Jan 18 02:51:37 GMT 2008

Visit	Proposal 11134, Visit 08, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: PCS MODE FINE; ORIENT 5.0D TO 25.0 D Comments: VI images of AM 1054-325 <i>restricted roll angle range designed so that target galaxies fall on WF2/3.</i>										
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(8)	AM1054-325	RA: 10 56 58.4553 (164.2435638d) Dec: -33 09 45.69 (-33.16269d) Equinox: J2000		V=14.6	Reference Frame: ICRS					
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	AM1054-32 5 - V images (pos 1)	(8) AM1054-325	WFPC2, IMAGE, WF3	F606W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]	
	2	AM1054-32 5- V images (pos 2)	(8) AM1054-325	WFPC2, IMAGE, WF3	F606W	CR-SPLIT=0.5556	POS TARG 0.25,0.2 5		901.0 Secs [=>500.0 Secs (Split 1)] [=>400.0 Secs (Split 2)]	[1]	
	<i>Comments: 2nd pointing, 2.5 WF pixel offset in X and Y</i>										
	3	AM1054-32 5 - I images (pos 1)	(8) AM1054-325	WFPC2, IMAGE, WF3	F814W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[2]	
4	AM1054-32 5 - I images (pos 2)	(8) AM1054-325	WFPC2, IMAGE, WF3	F814W	CR-SPLIT=0.5556	POS TARG 0.25,0.2 5		901.0 Secs [=>500.0 Secs (Split 1)] [=>400.0 Secs (Split 2)]	[2]		
<i>Comments: 2nd pointing, 2.5 WF pixel offset in X and Y</i>											





Proposal 11134 - Visit 09 - WFPC2 Tidal Tail Survey: Probing Star Cluster Formation on the Edge

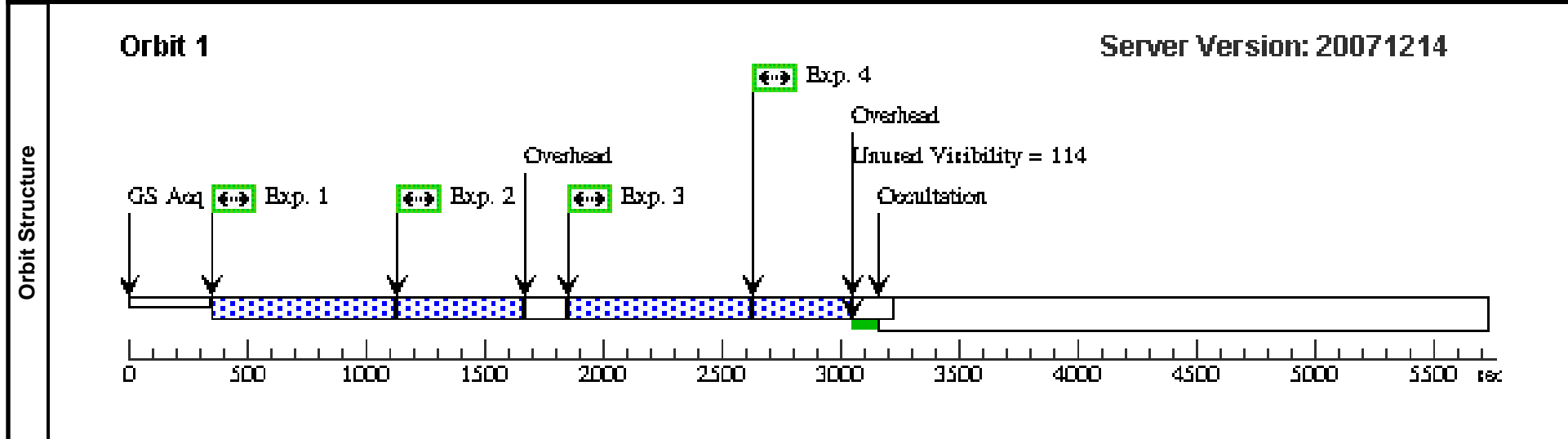
Fri Jan 18 02:51:37 GMT 2008

Visit	Proposal 11134, Visit 09, implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFPC2				
	Special Requirements: PCS MODE FINE; ORIENT 300.0D TO 310.0 D				

Comments: VI images of NGC 2782 - pointing 1 (E side)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(9)	NGC2782-P1	RA: 09 14 12.8490 (138.5535375d) Dec: +40 06 42.14 (40.11171d) Equinox: J2000		V=12.3	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	NGC 2782-P1 - V1 image	(9) NGC2782-P1	WFPC2, IMAGE, WF3	F606W				500.0 Secs [==>]	[1]
	2	NGC 2782-P1 - V2 image	(9) NGC2782-P1	WFPC2, IMAGE, WF3	F606W				500.0 Secs [==>]	[1]
	3	NGC 2782-P1 - I1 image	(9) NGC2782-P1	WFPC2, IMAGE, WF3	F814W				500.0 Secs [==>]	[1]
	4	NGC 2782-P1 - I2 image	(9) NGC2782-P1	WFPC2, IMAGE, WF3	F814W				400.0 Secs [==>]	[1]



Proposal 11134 - Visit 10 - WFPC2 Tidal Tail Survey: Probing Star Cluster Formation on the Edge

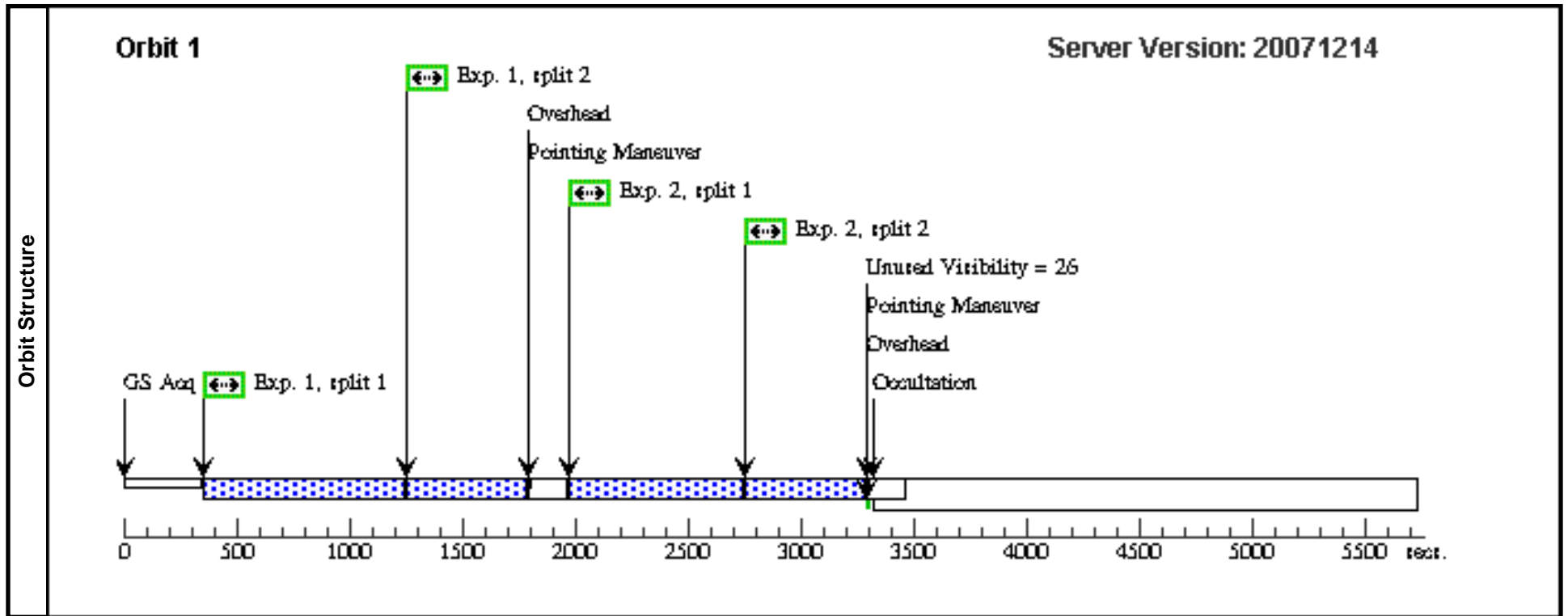
Fri Jan 18 02:51:38 GMT 2008

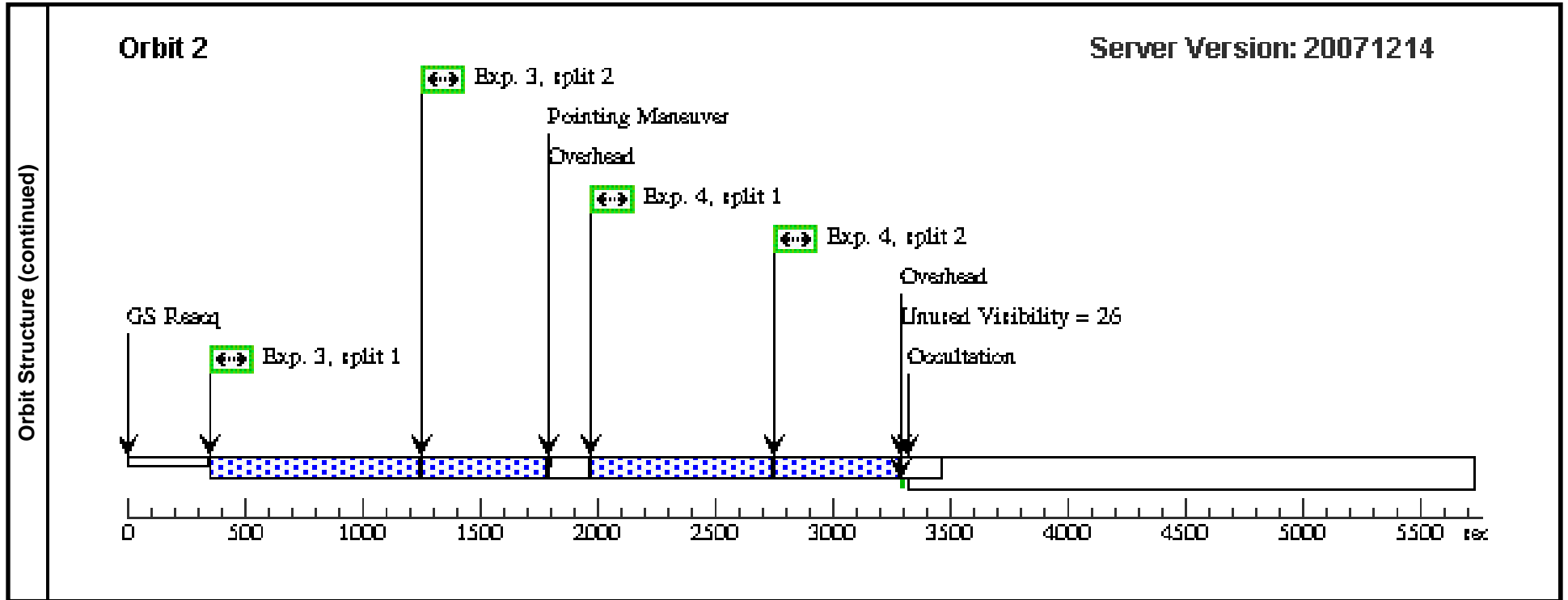
Visit	Proposal 11134, Visit 10, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: PCS MODE FINE; ORIENT 280.0D TO 300.0 D <i>Comments: VI images of NGC 2782 - pointing 2 (NW side)</i>									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(10)	NGC2782-P2	RA: 09 13 54.1303 (138.4755429d) Dec: +40 08 8.69 (40.13575d) Equinox: J2000		V=12.3	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	NGC 2782-P2 - V1 image	(10) NGC2782-P2	WFPC2, IMAGE, WF3	F606W				500.0 Secs [==>]	[1]
	2	NGC 2782-P2 - V2 image	(10) NGC2782-P2	WFPC2, IMAGE, WF3	F606W				500.0 Secs [==>]	[1]
	3	NGC 2782-P2 - I1 image	(10) NGC2782-P2	WFPC2, IMAGE, WF3	F814W				500.0 Secs [==>]	[1]
	4	NGC 2782-P2 - I2 image	(10) NGC2782-P2	WFPC2, IMAGE, WF3	F814W				400.0 Secs [==>]	[1]
Orbit Structure	<p>Orbit 1 Server Version: 20071214</p> <p>Timeline labels: GS Acq, Exp. 1, Exp. 2, Overhead, Exp. 3, Overhead, Exp. 4, Unused Visibility = 114, Overhead, Occultation.</p> <p>X-axis: 0, 500, 1000, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000, 5500 sec</p>									

Proposal 11134 - Visit 11 - WFPC2 Tidal Tail Survey: Probing Star Cluster Formation on the Edge

Fri Jan 18 02:51:38 GMT 2008

Visit	Proposal 11134, Visit 11, implementation Diagnostic Status: Warning Scientific Instruments: WFPC2 Special Requirements: PCS MODE FINE; ORIENT 210.0D TO 230.0 D <i>Comments: VI images of NGC 6872 - pointing 1 (end of E tail) restricted roll angle range due to presence of very bright star near WF2/PC chips. different roll angles may require slight change in field location</i>																																																																														
	Diagnosics (Visit 11) Warning (OP): EXPOSURE TIME DECREASED FOR WFPC (Visit 11) Warning (OP): EXPOSURE TIME DECREASED FOR WFPC (Visit 11) Warning (OP): EXPOSURE TIME DECREASED FOR WFPC (Visit 11) Warning (OP): EXPOSURE TIME DECREASED FOR WFPC																																																																														
Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(11)</td> <td>NGC6872-P1</td> <td>RA: 20 17 36.7295 (304.4030396d) Dec: -70 44 39.89 (-70.74441d) Equinox: J2000</td> <td></td> <td>V=12.69</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(11)	NGC6872-P1	RA: 20 17 36.7295 (304.4030396d) Dec: -70 44 39.89 (-70.74441d) Equinox: J2000		V=12.69	Reference Frame: ICRS																																																									
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																																																																									
(11)	NGC6872-P1	RA: 20 17 36.7295 (304.4030396d) Dec: -70 44 39.89 (-70.74441d) Equinox: J2000		V=12.69	Reference Frame: ICRS																																																																										
<table border="1"> <thead> <tr> <th>#</th> <th>Label</th> <th>Target</th> <th>Config,Mode,Aperture</th> <th>Spectral Els.</th> <th>Opt. Params.</th> <th>Special Reqs.</th> <th>Groups</th> <th>Exp. Time/[Actual Dur.]</th> <th>Orbit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>NGC6872-P 1 - V images (pos 1)</td> <td>(11) NGC6872-P1</td> <td>WFPC2, IMAGE, WF3</td> <td>F606W</td> <td>CR-SPLIT=0.54545</td> <td></td> <td></td> <td>1101.0 Secs [==>(Split 1)] [==>(Split 2)]</td> <td>[1]</td> </tr> <tr> <td>2</td> <td>NGC6872-P 1 - V images (pos 2)</td> <td>(11) NGC6872-P1</td> <td>WFPC2, IMAGE, WF3</td> <td>F606W</td> <td></td> <td>POS TARG 0.25,0.2 5</td> <td></td> <td>1000.0 Secs [==>(Split 1)] [==>(Split 2)]</td> <td>[1]</td> </tr> <tr> <td colspan="10"><i>Comments: 2nd pointing, 2.5 WF pixel offset in X and Y</i></td> </tr> <tr> <td>3</td> <td>NGC6872-P 1 - I images (pos 1)</td> <td>(11) NGC6872-P1</td> <td>WFPC2, IMAGE, WF3</td> <td>F814W</td> <td>CR-SPLIT=0.54545</td> <td></td> <td></td> <td>1101.0 Secs [==>(Split 1)] [==>(Split 2)]</td> <td>[2]</td> </tr> <tr> <td>4</td> <td>NGC6872-P 1 - I images (pos 2)</td> <td>(11) NGC6872-P1</td> <td>WFPC2, IMAGE, WF3</td> <td>F814W</td> <td></td> <td>POS TARG 0.25,0.2 5</td> <td></td> <td>1000.0 Secs [==>(Split 1)] [==>(Split 2)]</td> <td>[2]</td> </tr> <tr> <td colspan="10"><i>Comments: 2nd pointing, 2.5 WF pixel offset in X and Y</i></td> </tr> </tbody> </table>										#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	1	NGC6872-P 1 - V images (pos 1)	(11) NGC6872-P1	WFPC2, IMAGE, WF3	F606W	CR-SPLIT=0.54545			1101.0 Secs [==>(Split 1)] [==>(Split 2)]	[1]	2	NGC6872-P 1 - V images (pos 2)	(11) NGC6872-P1	WFPC2, IMAGE, WF3	F606W		POS TARG 0.25,0.2 5		1000.0 Secs [==>(Split 1)] [==>(Split 2)]	[1]	<i>Comments: 2nd pointing, 2.5 WF pixel offset in X and Y</i>										3	NGC6872-P 1 - I images (pos 1)	(11) NGC6872-P1	WFPC2, IMAGE, WF3	F814W	CR-SPLIT=0.54545			1101.0 Secs [==>(Split 1)] [==>(Split 2)]	[2]	4	NGC6872-P 1 - I images (pos 2)	(11) NGC6872-P1	WFPC2, IMAGE, WF3	F814W		POS TARG 0.25,0.2 5		1000.0 Secs [==>(Split 1)] [==>(Split 2)]	[2]	<i>Comments: 2nd pointing, 2.5 WF pixel offset in X and Y</i>									
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit																																																																						
1	NGC6872-P 1 - V images (pos 1)	(11) NGC6872-P1	WFPC2, IMAGE, WF3	F606W	CR-SPLIT=0.54545			1101.0 Secs [==>(Split 1)] [==>(Split 2)]	[1]																																																																						
2	NGC6872-P 1 - V images (pos 2)	(11) NGC6872-P1	WFPC2, IMAGE, WF3	F606W		POS TARG 0.25,0.2 5		1000.0 Secs [==>(Split 1)] [==>(Split 2)]	[1]																																																																						
<i>Comments: 2nd pointing, 2.5 WF pixel offset in X and Y</i>																																																																															
3	NGC6872-P 1 - I images (pos 1)	(11) NGC6872-P1	WFPC2, IMAGE, WF3	F814W	CR-SPLIT=0.54545			1101.0 Secs [==>(Split 1)] [==>(Split 2)]	[2]																																																																						
4	NGC6872-P 1 - I images (pos 2)	(11) NGC6872-P1	WFPC2, IMAGE, WF3	F814W		POS TARG 0.25,0.2 5		1000.0 Secs [==>(Split 1)] [==>(Split 2)]	[2]																																																																						
<i>Comments: 2nd pointing, 2.5 WF pixel offset in X and Y</i>																																																																															

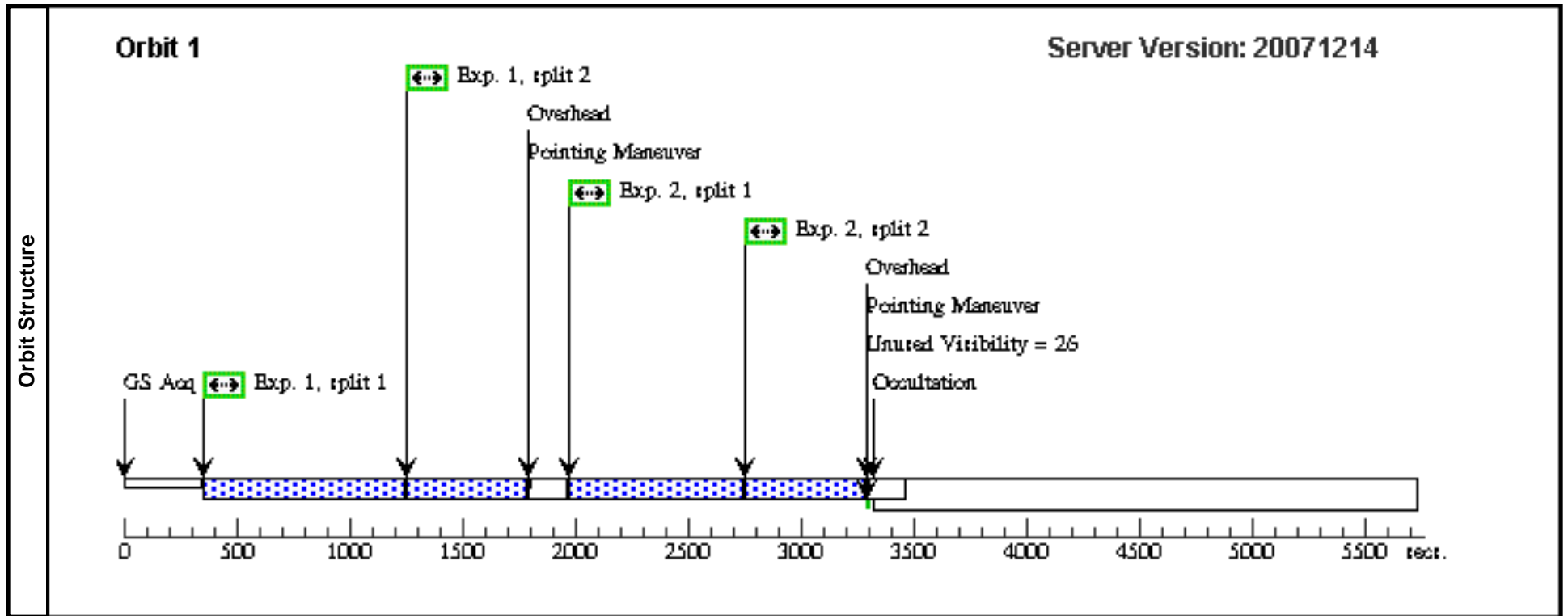


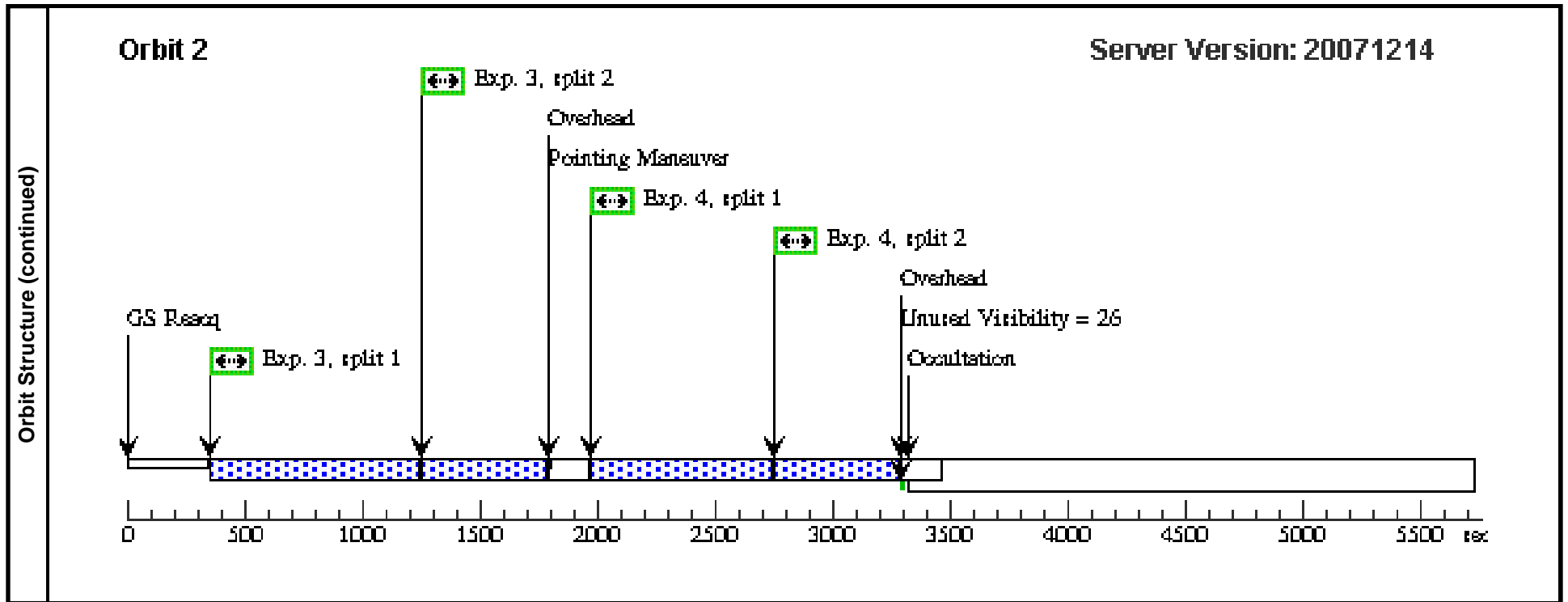


Proposal 11134 - Visit 12 - WFPC2 Tidal Tail Survey: Probing Star Cluster Formation on the Edge

Fri Jan 18 02:51:38 GMT 2008

Visit	Proposal 11134, Visit 12, implementation Diagnostic Status: Warning Scientific Instruments: WFPC2 Special Requirements: PCS MODE FINE; ORIENT 305.0D TO 315.0 D <i>Comments: VI images of NGC 6872 - pointing 2 (E tail + galaxy) restricted roll angle range due to presence of very bright star near WF2/PC chips. different roll angles may require slight change in field location</i>										
	Diagnosics (Visit 12) Warning (OP): EXPOSURE TIME DECREASED FOR WFPC (Visit 12) Warning (OP): EXPOSURE TIME DECREASED FOR WFPC (Visit 12) Warning (OP): EXPOSURE TIME DECREASED FOR WFPC (Visit 12) Warning (OP): EXPOSURE TIME DECREASED FOR WFPC										
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(12)	NGC6872-P2	RA: 20 17 9.2883 (304.2887013d) Dec: -70 45 50.83 (-70.76412d) Equinox: J2000				V=12.69	Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time[Actual Dur.]	Orbit	
	1	NGC6872-P 2 - V images (pos 1)	(12) NGC6872-P2	WFPC2, IMAGE, WF3	F606W	CR-SPLIT=0.54545			1101.0 Secs [==>(Split 1)] [==>(Split 2)]	[1]	
	2	NGC6872-P 2- V images (pos 2)	(12) NGC6872-P2	WFPC2, IMAGE, WF3	F606W		POS TARG 0.25,0.2 5		1000.0 Secs [==>(Split 1)] [==>(Split 2)]	[1]	
	<i>Comments: 2nd pointing, 2.5 WF pixel offset in X and Y</i>										
	3	NGC6872-P 2 - I images (pos 1)	(12) NGC6872-P2	WFPC2, IMAGE, WF3	F814W	CR-SPLIT=0.54545				1101.0 Secs [==>(Split 1)] [==>(Split 2)]	[2]
	4	NGC6872-P 2 - I images (pos 2)	(12) NGC6872-P2	WFPC2, IMAGE, WF3	F814W		POS TARG 0.25,0.2 5			1000.0 Secs [==>(Split 1)] [==>(Split 2)]	[2]
<i>Comments: 2nd pointing, 2.5 WF pixel offset in X and Y</i>											





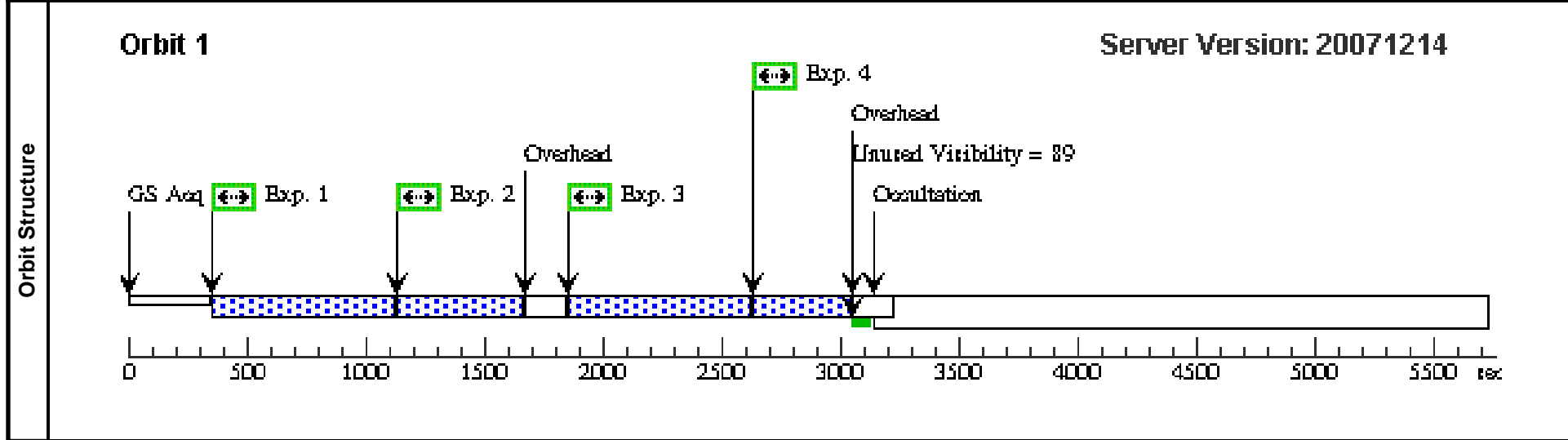
Proposal 11134 - Visit 13 - WFPC2 Tidal Tail Survey: Probing Star Cluster Formation on the Edge

Fri Jan 18 02:51:39 GMT 2008

Visit	Proposal 11134, Visit 13, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: PCS MODE FINE; ORIENT 355.0D TO 5.0 D Comments: VI images of MCG-03-13-063 <i>restricted range of roll angles due to presence of very bright star. Other roll angles can be considered with a slight change in field location</i>				

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(13)	MCG-03-13-063	RA: 05 04 28.7373 (76.1197388d) Dec: -16 35 45.07 (-16.59585d) Equinox: J2000		V=14.5	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
		1	MCG-03-13-063 - V1 im 3 age	(13) MCG-03-13-06	WFPC2, IMAGE, WF3	F606W				500.0 Secs [==>]
	2	MCG-03-13-063 - V2 im 3 age	(13) MCG-03-13-06	WFPC2, IMAGE, WF3	F606W				500.0 Secs [==>]	[1]
	3	MCG-03-13-063 - I1 im 3 age	(13) MCG-03-13-06	WFPC2, IMAGE, WF3	F814W				500.0 Secs [==>]	[1]
	4	MCG-03-13-063 - I2 im 3 age	(13) MCG-03-13-06	WFPC2, IMAGE, WF3	F814W				400.0 Secs [==>]	[1]



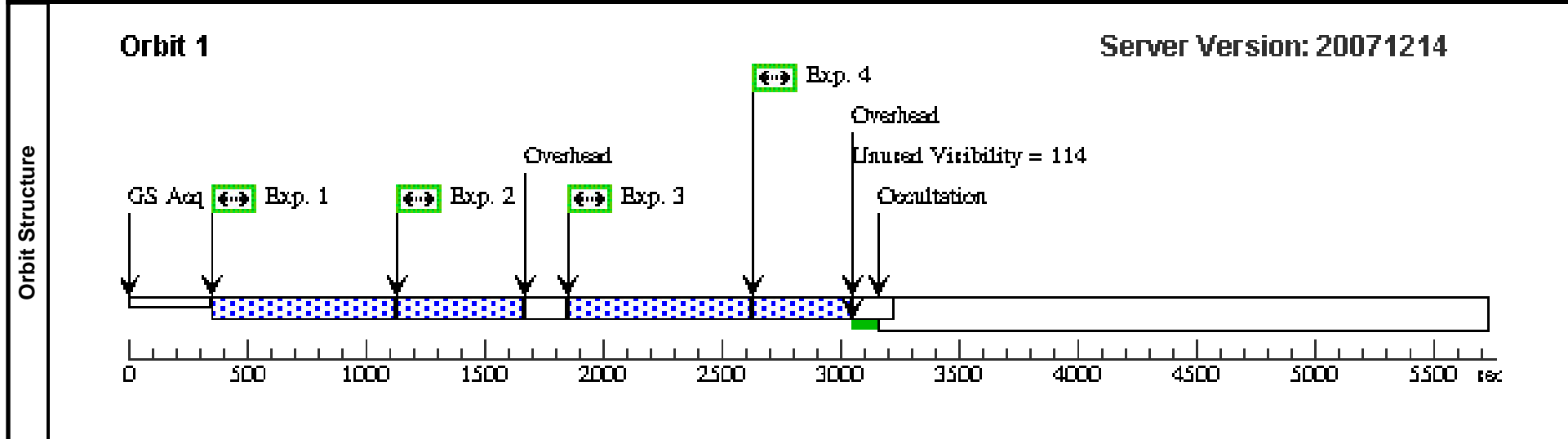
Proposal 11134 - Visit 14 - WFPC2 Tidal Tail Survey: Probing Star Cluster Formation on the Edge

Fri Jan 18 02:51:39 GMT 2008

Visit	Proposal 11134, Visit 14, implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFPC2				
	Special Requirements: PCS MODE FINE; ORIENT 265.0D TO 273.0 D				
<i>Comments: VI images of NGC 1487 - position 1 (NE tail) roll angles dictated by position of bright star in PC chip (unavoidable), rather than on the WF chips</i>					

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(14)	NGC1487-P1	RA: 03 55 54.1748 (58.9757283d) Dec: -42 20 48.11 (-42.34670d) Equinox: J2000		V=11.9	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	NGC1487-P 1 - V1 image	(14) NGC1487-P1	WFPC2, IMAGE, WF3	F606W				500.0 Secs [==>]	[1]
	2	NGC1487-P 1 - V2 image	(14) NGC1487-P1	WFPC2, IMAGE, WF3	F606W				500.0 Secs [==>]	[1]
	3	NGC1487-P 1 - I1 image	(14) NGC1487-P1	WFPC2, IMAGE, WF3	F814W				500.0 Secs [==>]	[1]
	4	NGC1487-P 1 - I2 image	(14) NGC1487-P1	WFPC2, IMAGE, WF3	F814W				400.0 Secs [==>]	[1]



Proposal 11134 - Visit 15 - WFPC2 Tidal Tail Survey: Probing Star Cluster Formation on the Edge

Fri Jan 18 02:51:39 GMT 2008

Visit	Proposal 11134, Visit 15, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: PCS MODE FINE; ORIENT 290.0D TO 300.0 D <i>Comments: VI images of NGC 1487 - position 2 (SW tail) roll angles dictated by position of bright star nearby</i>									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(15)	NGC1487-P2	RA: 03 55 35.6878 (58.8986992d) Dec: -42 22 59.54 (-42.38321d) Equinox: J2000		V=11.9	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	NGC1487-P 2 - V1 image	(15) NGC1487-P2	WFPC2, IMAGE, WF3	F606W				500.0 Secs [==>]	[1]
	2	NGC1487-P 2 - V2 image	(15) NGC1487-P2	WFPC2, IMAGE, WF3	F606W				500.0 Secs [==>]	[1]
	3	NGC1487-P 2 - I1 image	(15) NGC1487-P2	WFPC2, IMAGE, WF3	F814W				500.0 Secs [==>]	[1]
	4	NGC1487-P 2 - I2 image	(15) NGC1487-P2	WFPC2, IMAGE, WF3	F814W				400.0 Secs [==>]	[1]
Orbit Structure	<p>Orbit 1 Server Version: 20071214</p> <p>GS Acq Exp. 1 Exp. 2 Overhead Exp. 3 Overhead Exp. 4 Overhead Unured Visibility = 114 Occultation</p> <p>0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 sec</p>									