



13804 - Important Nearby Galaxies without Accurate Distances

Cycle: 22, 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) M-74 ANY	ACS/WFC WFC3/UVIS	2	07-Mar-2015 21:00:43.0	yes
02	(2) NGC-1291 ANY	ACS/WFC WFC3/UVIS	2	07-Mar-2015 21:00:45.0	yes
03	(3) NGC-4559 ANY	ACS/WFC WFC3/UVIS	2	07-Mar-2015 21:00:47.0	yes
04	(4) M-104 ANY	ACS/WFC WFC3/UVIS	2	07-Mar-2015 21:00:48.0	yes
05	(5) NGC-4625 ANY	ACS/WFC WFC3/UVIS	2	07-Mar-2015 21:00:50.0	yes
06	(7) M-51 ANY	ACS/WFC WFC3/UVIS	2	07-Mar-2015 21:00:52.0	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>
07	(8) NGC-5398 ANY	ACS/WFC WFC3/UVIS	2	07-Mar-2015 21:00:53.0	yes

14 Total Orbits Used

ABSTRACT

The Spitzer Infrared Nearby Galaxies Survey (SINGS) and its offspring programs (e.g., THINGS, HERACLES, KINGFISH) have resulted in a fundamental change in our view of star formation and the ISM in galaxies, and together they represent the most complete multi-wavelength data set yet assembled for a large sample of nearby galaxies. These great investments of observing time have been dedicated to the goal of understanding the interstellar medium, the star formation process, and, more generally, galactic evolution at the present epoch. Nearby galaxies provide the basis for which we interpret the distant universe, and the SINGS sample represents the best studied nearby galaxies.

Accurate distances are fundamental to interpreting observations of galaxies. Surprisingly, many of the SINGS spiral galaxies have numerous distance estimates resulting in confusion. We can rectify this situation for 8 of the SINGS spiral galaxies within 10 Mpc at a very low cost through measurements of the tip of the red giant branch. The proposed observations will provide an accuracy of better than 0.1 in distance modulus. Our sample includes such well known galaxies as M51 (the Whirlpool), M63 (the Sunflower), M104 (the Sombrero), and M74 (the archetypal grand design spiral).

We are also proposing coordinated parallel WFC3 UV observations of the central regions of the galaxies, rich with high-mass UV-bright stars. As a secondary science goal we will compare the resolved UV stellar populations with integrated UV emission measurements used in calibrating star formation rates. Our observations will complement the growing HST UV atlas of high resolution images of nearby galaxies.

OBSERVING DESCRIPTION

The primary goal of this proposal is to measure the distances to 8 SINGS spiral galaxies within 10 Mpc using the tip of the red giant branch method. One of the galaxies has archival data; new observations will be obtained for the other seven systems. The secondary goal of this proposal is to compare the resolved UV stellar populations from coordinated parallel UV WFC 3 observations of the high surface brightness regions of the galaxies with integrated UV emission measurements. Orbit allocation = 14 orbits (2 orbits per galaxy).

Proposal 13804 (STScI Edit Number: 1, Created: Saturday, March 7, 2015 9:00:55 PM EST) - Overview

All primary visits include 2-orbits with the ACS/WFC. The first orbit of each visit is split between the F606W filter and the F814W filter. The second orbit of each visit is also split between the F606W filter and the F814W filter with a small 2 pixel offset in pointing. The small pointing offset is implemented using the POS-TARG equivalent of $X=0.099$ and $Y=0.107$ specified in the ACS manual as the 2-point hot pixel dither pattern number 10. We have selected this dither pattern to maximize rejection of hot pixels and cosmic rays. We do not intend to cover the chip gap with our dither pattern.

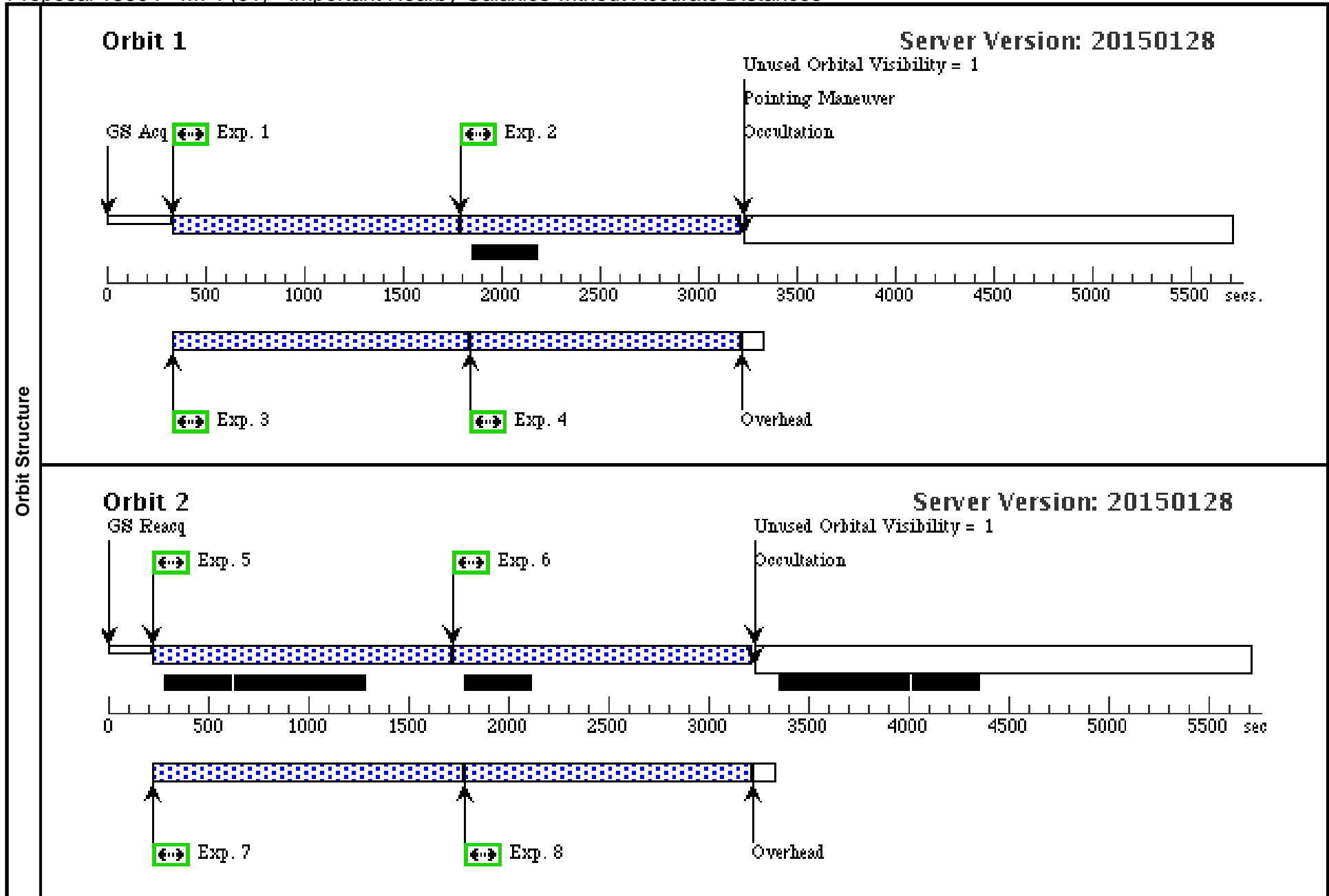
The coordinated parallel observations are to be obtained with the WFC3 UVIS camera. The first filter in each orbit is the F336W filter; the second filter in each orbit is the F275W.

The visits are requested within specific orientation ranges. The ranges have been chosen to optimize the placement of the coordinated parallels on UV-bright star forming regions, without compromising the placement of the ACS instrument needed to achieve our primary science goal.

Proposal 13804 - M74 (01) - Important Nearby Galaxies without Accurate Distances

Sun Mar 08 02:00:55 GMT 2015

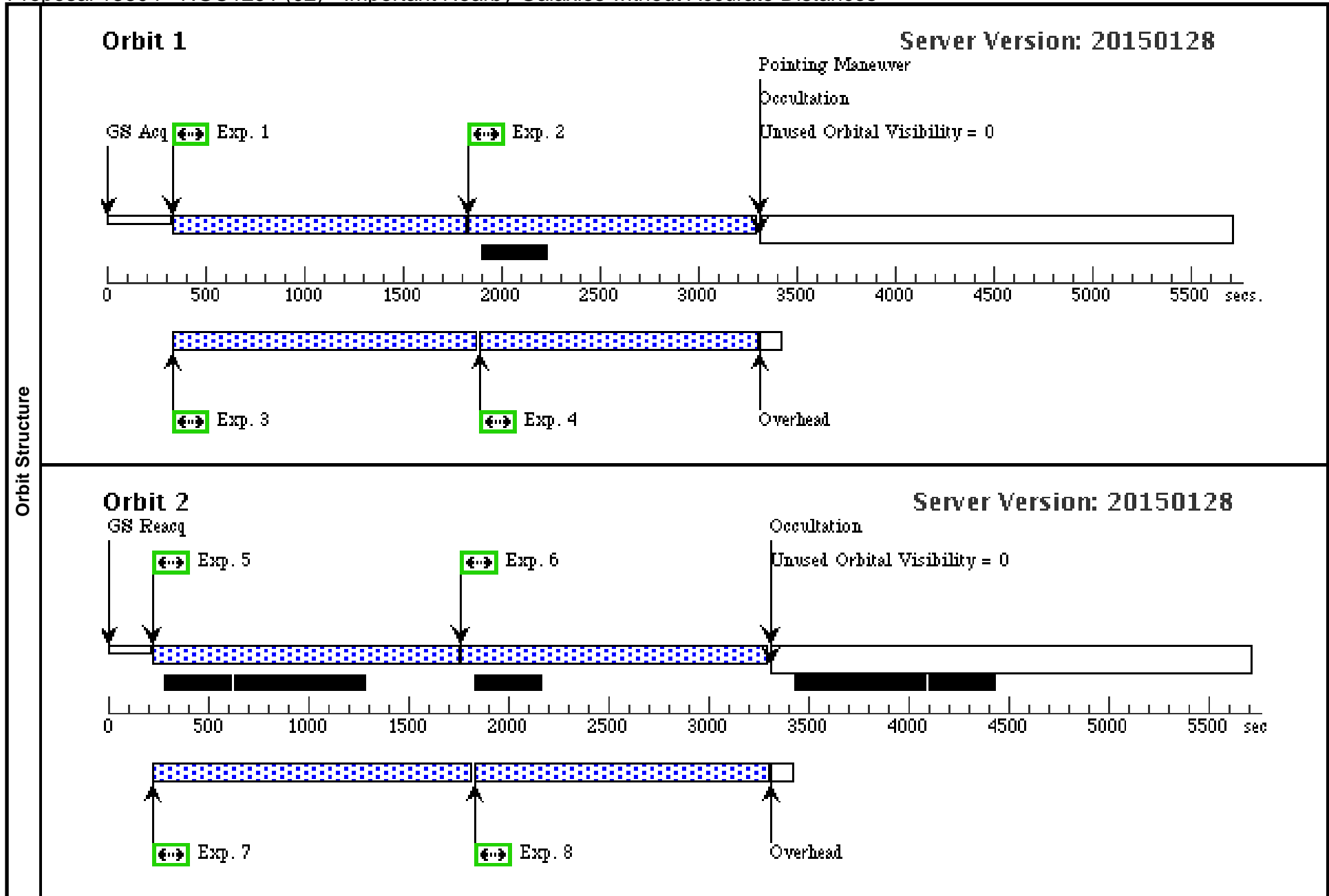
Visit	Proposal 13804, M74 (01), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 75D TO 100 D									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	M-74	RA: 01 36 32.9292 (24.1372050d) Dec: +15 48 54.64 (15.81518d) Equinox: J2000		V=9.39	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F606W-POS 1	(1) M-74	ACS/WFC, ACCUM, WFCENTER	F606W			Prime + Parallel Group 1-4 in M74 (01)	1200 Secs (1242 Secs) [==>1242.0 Secs]	[1]
	2	F814W-POS 1	(1) M-74	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-4 in M74 (01)	1200 Secs (1242 Secs) [==>1242.0 Secs]	[1]
	3	F336W-POS 1	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=12.0		Prime + Parallel Group 1-4 in M74 (01)	1200 Secs (1347 Secs) [==>1347.0 Secs]	[1]
	4	F275W-POS 1	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=12.0		Prime + Parallel Group 1-4 in M74 (01)	1200 Secs (1347 Secs) [==>1347.0 Secs]	[1]
	5	F606W-POS 2	(1) M-74	ACS/WFC, ACCUM, WFCENTER	F606W		POS TARG 0.099,0.107	Prime + Parallel Group 5-8 in M74 (01)	1200 Secs (1311 Secs) [==>1311.0 Secs]	[2]
	6	F814W-POS 2	(1) M-74	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.099,0.107	Prime + Parallel Group 5-8 in M74 (01)	1200 Secs (1311 Secs) [==>1311.0 Secs]	[2]
	7	F336W-POS 2	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=12.0		Prime + Parallel Group 5-8 in M74 (01)	1200 Secs (1407 Secs) [==>1407.0 Secs]	[2]
	8	F275W-POS 2	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=12.0		Prime + Parallel Group 5-8 in M74 (01)	1200 Secs (1407 Secs) [==>1407.0 Secs]	[2]



Proposal 13804 - NGC1291 (02) - Important Nearby Galaxies without Accurate Distances

Sun Mar 08 02:00:55 GMT 2015

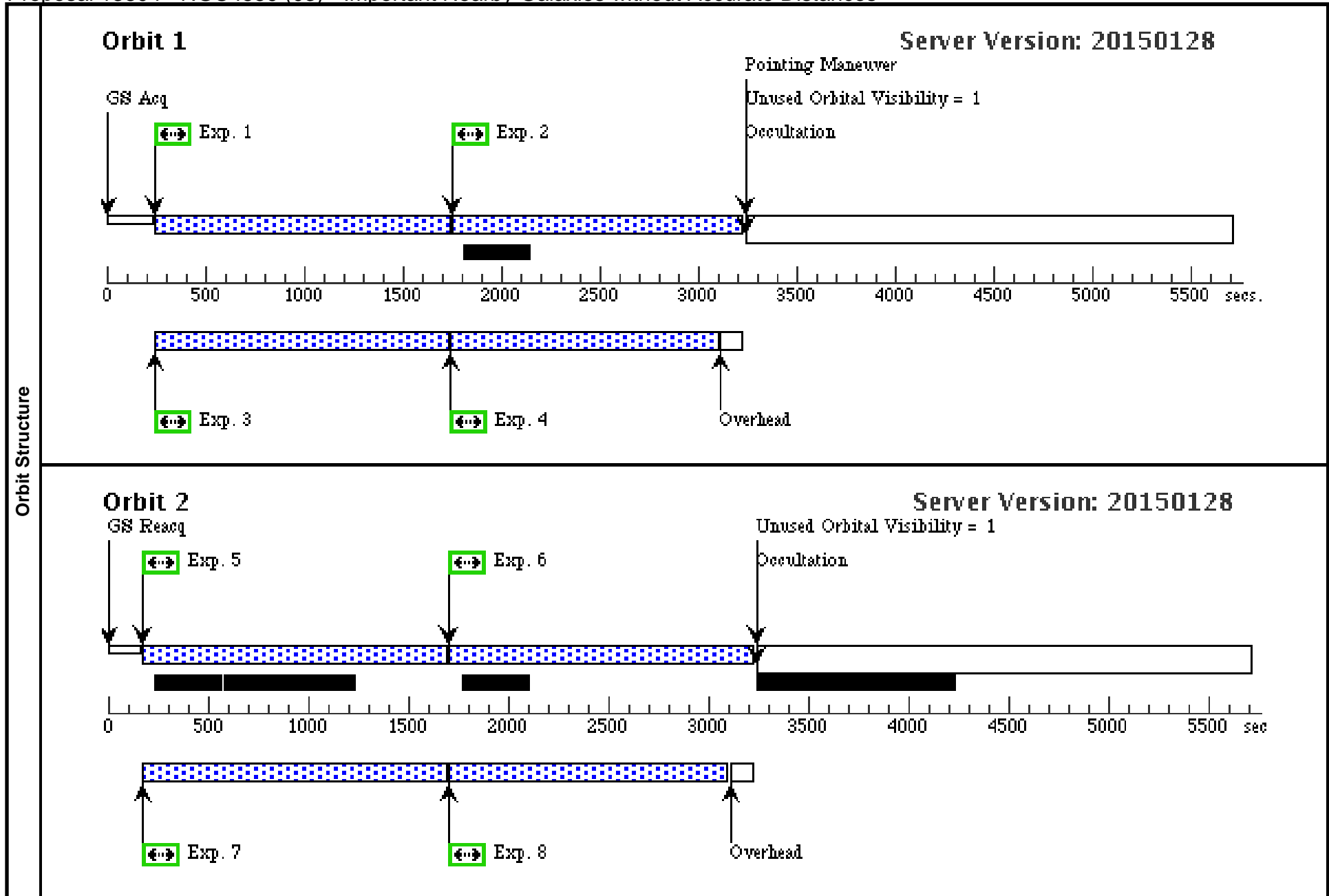
Visit	Proposal 13804, NGC1291 (02), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 265D TO 330 D									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(2)	NGC-1291	RA: 03 17 23.1707 (49.3465446d) Dec: -41 08 44.42 (-41.14567d) Equinox: J2000		V=8.46	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F606W-POS 1	(2) NGC-1291	ACS/WFC, ACCUM, WFCENTER	F606W			Prime + Parallel Group 1-4 in NGC1291 (02)	1200 Secs (1285 Secs) [==>1285.0 Secs]	[1]
	2	F814W-POS 1	(2) NGC-1291	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-4 in NGC1291 (02)	1200 Secs (1285 Secs) [==>1285.0 Secs]	[1]
	3	F336W-POS 1	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=12.0		Prime + Parallel Group 1-4 in NGC1291 (02)	1200 Secs (1390 Secs) [==>1390.0 Secs]	[1]
	4	F275W-POS 1	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=12.0		Prime + Parallel Group 1-4 in NGC1291 (02)	1200 Secs (1390 Secs) [==>1390.0 Secs]	[1]
	5	F606W-POS 2	(2) NGC-1291	ACS/WFC, ACCUM, WFCENTER	F606W		POS TARG 0.099,0.107	Prime + Parallel Group 5-8 in NGC1291 (02)	1200 Secs (1354 Secs) [==>1354.0 Secs]	[2]
	6	F814W-POS 2	(2) NGC-1291	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.099,0.107	Prime + Parallel Group 5-8 in NGC1291 (02)	1200 Secs (1354 Secs) [==>1354.0 Secs]	[2]
	7	F336W-POS 2	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=12.0		Prime + Parallel Group 5-8 in NGC1291 (02)	1200 Secs (1450 Secs) [==>1450.0 Secs]	[2]
	8	F275W-POS 2	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=12.0		Prime + Parallel Group 5-8 in NGC1291 (02)	1200 Secs (1450 Secs) [==>1450.0 Secs]	[2]



Proposal 13804 - NGC4559 (03) - Important Nearby Galaxies without Accurate Distances

Sun Mar 08 02:00:56 GMT 2015

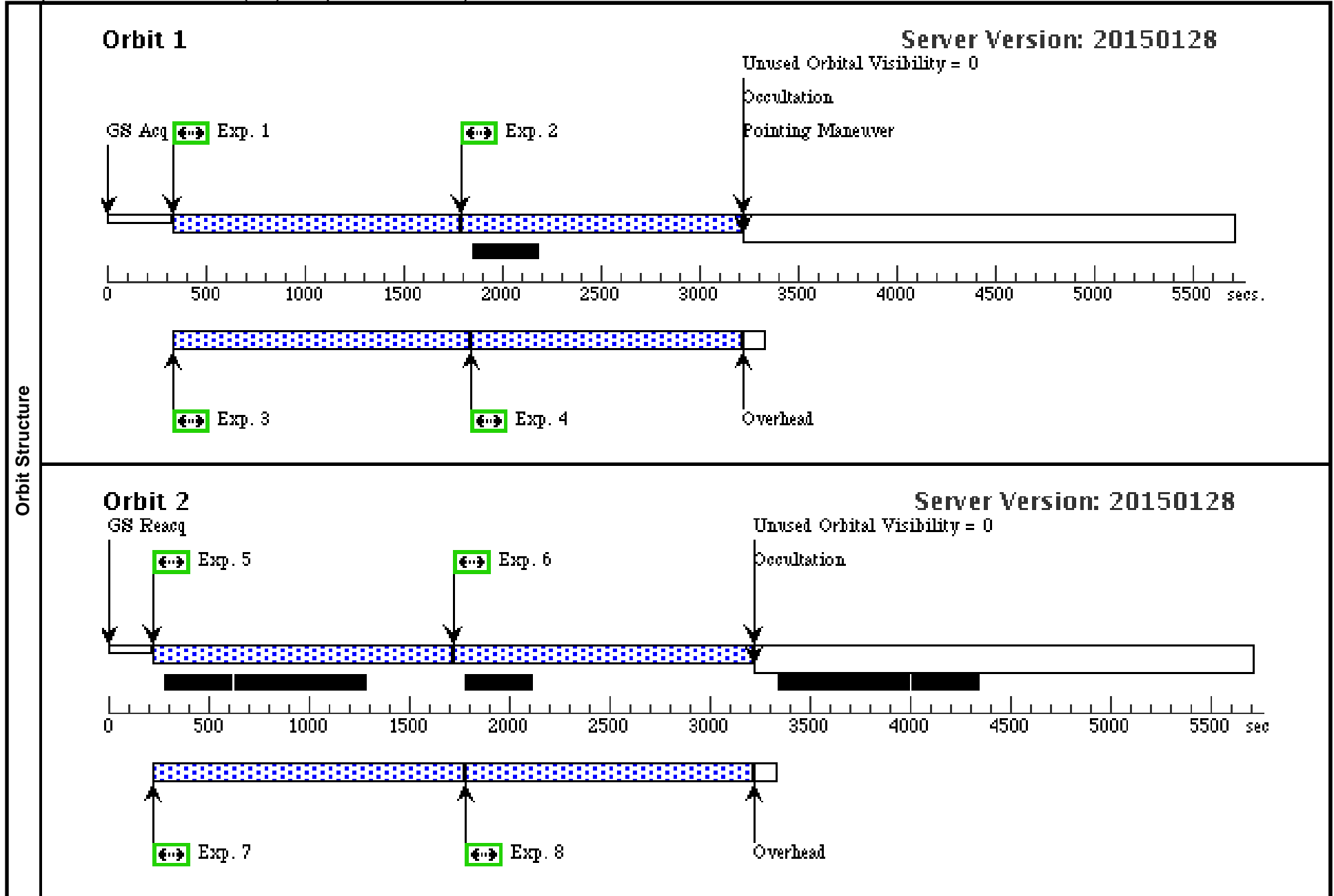
Visit	Proposal 13804, NGC4559 (03), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 90D TO 110 D									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(3)	NGC-4559	RA: 12 35 51.6644 (188.9652683d) Dec: +27 59 52.06 (27.99779d) Equinox: J2000		V=10.01	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F606W-POS 1	(3) NGC-4559	ACS/WFC, ACCUM, WFCENTER	F606W		GS ACQ SCENARI O SINGLE	Prime + Parallel Group 1-4 in NGC4559 (03)	1200 Secs (1293 Secs) [==>1293.0 Secs]	[1]
	2	F814W-POS 1	(3) NGC-4559	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-4 in NGC4559 (03)	1200 Secs (1293 Secs) [==>1293.0 Secs]	[1]
	3	F336W-POS 1	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=12.0		Prime + Parallel Group 1-4 in NGC4559 (03)	1200 Secs (1337 Secs) [==>1337.0 Secs]	[1]
	4	F275W-POS 1	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=12.0		Prime + Parallel Group 1-4 in NGC4559 (03)	1200 Secs (1337 Secs) [==>1337.0 Secs]	[1]
	5	F606W-POS 2	(3) NGC-4559	ACS/WFC, ACCUM, WFCENTER	F606W		POS TARG 0.099,0.107	Prime + Parallel Group 5-8 in NGC4559 (03)	1200 Secs (1339 Secs) [==>1339.0 Secs]	[2]
	6	F814W-POS 2	(3) NGC-4559	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.099,0.107	Prime + Parallel Group 5-8 in NGC4559 (03)	1200 Secs (1339 Secs) [==>1339.0 Secs]	[2]
	7	F336W-POS 2	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=12.0		Prime + Parallel Group 5-8 in NGC4559 (03)	1200 Secs (1374 Secs) [==>1374.0 Secs]	[2]
	8	F275W-POS 2	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=12.0		Prime + Parallel Group 5-8 in NGC4559 (03)	1200 Secs (1374 Secs) [==>1374.0 Secs]	[2]



Proposal 13804 - M104 (04) - Important Nearby Galaxies without Accurate Distances

Sun Mar 08 02:00:56 GMT 2015

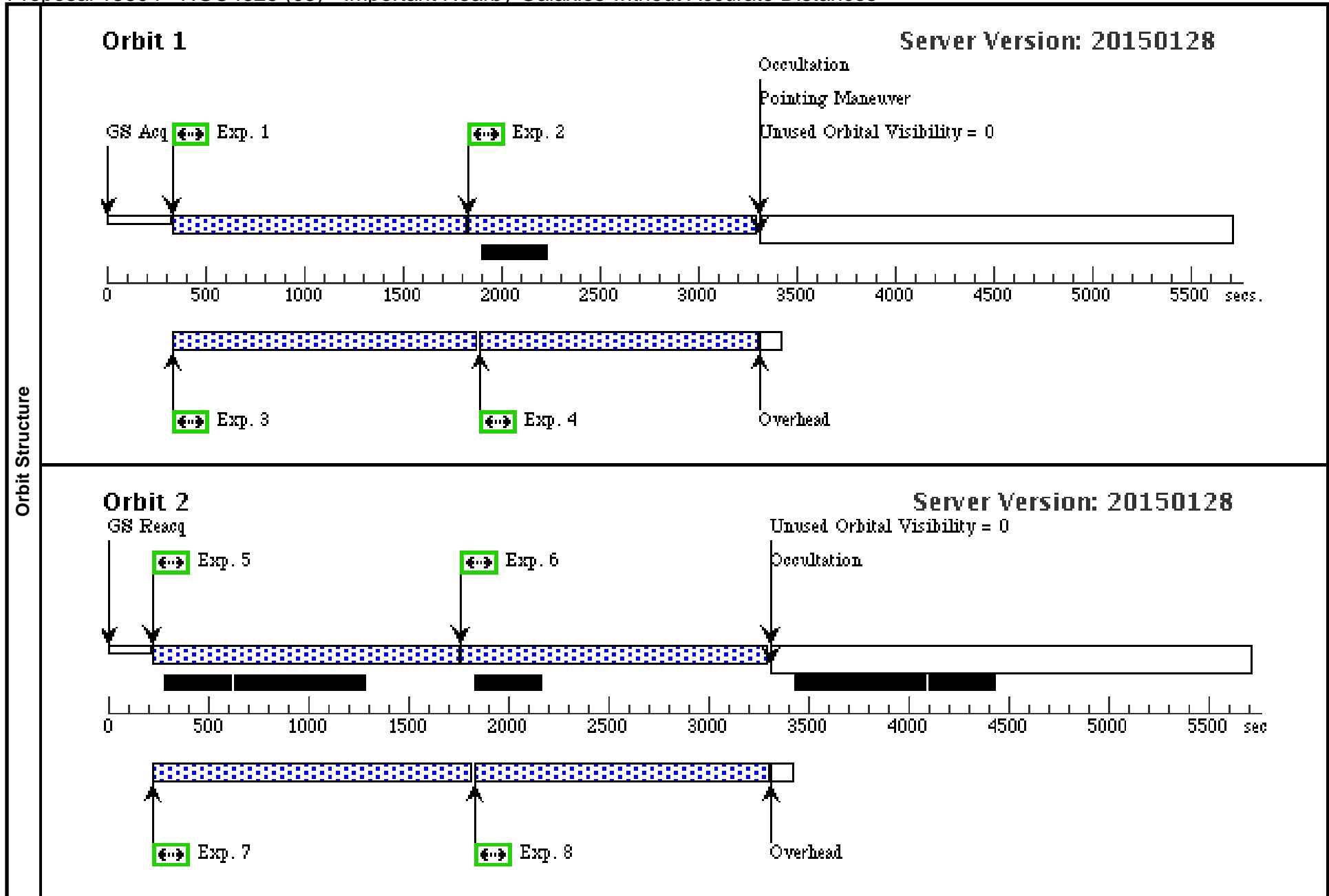
Visit	Proposal 13804, M104 (04), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 72D TO 80 D									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(4)	M-104	RA: 12 39 47.2698 (189.9469575d) Dec: -11 36 3.80 (-11.60106d) Equinox: J2000		V=8.0	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F606W-POS 1	(4) M-104	ACS/WFC, ACCUM, WFCENTER	F606W			Prime + Parallel Group 1-4 in M104 (04)	1200 Secs (1240 Secs) [==>1240.0 Secs]	[1]
	2	F814W-POS 1	(4) M-104	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-4 in M104 (04)	1200 Secs (1240 Secs) [==>1240.0 Secs]	[1]
	3	F336W-POS 1	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=12.0		Prime + Parallel Group 1-4 in M104 (04)	1200 Secs (1345 Secs) [==>1345.0 Secs]	[1]
	4	F275W-POS 1	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=12.0		Prime + Parallel Group 1-4 in M104 (04)	1200 Secs (1345 Secs) [==>1345.0 Secs]	[1]
	5	F606W-POS 2	(4) M-104	ACS/WFC, ACCUM, WFCENTER	F606W		POS TARG 0.099,0.107	Prime + Parallel Group 5-8 in M104 (04)	1200 Secs (1309 Secs) [==>1309.0 Secs]	[2]
	6	F814W-POS 2	(4) M-104	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.099,0.107	Prime + Parallel Group 5-8 in M104 (04)	1200 Secs (1309 Secs) [==>1309.0 Secs]	[2]
	7	F336W-POS 2	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=12.0		Prime + Parallel Group 5-8 in M104 (04)	1200 Secs (1405 Secs) [==>1405.0 Secs]	[2]
	8	F275W-POS 2	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=12.0		Prime + Parallel Group 5-8 in M104 (04)	1200 Secs (1405 Secs) [==>1405.0 Secs]	[2]



Proposal 13804 - NGC4625 (05) - Important Nearby Galaxies without Accurate Distances

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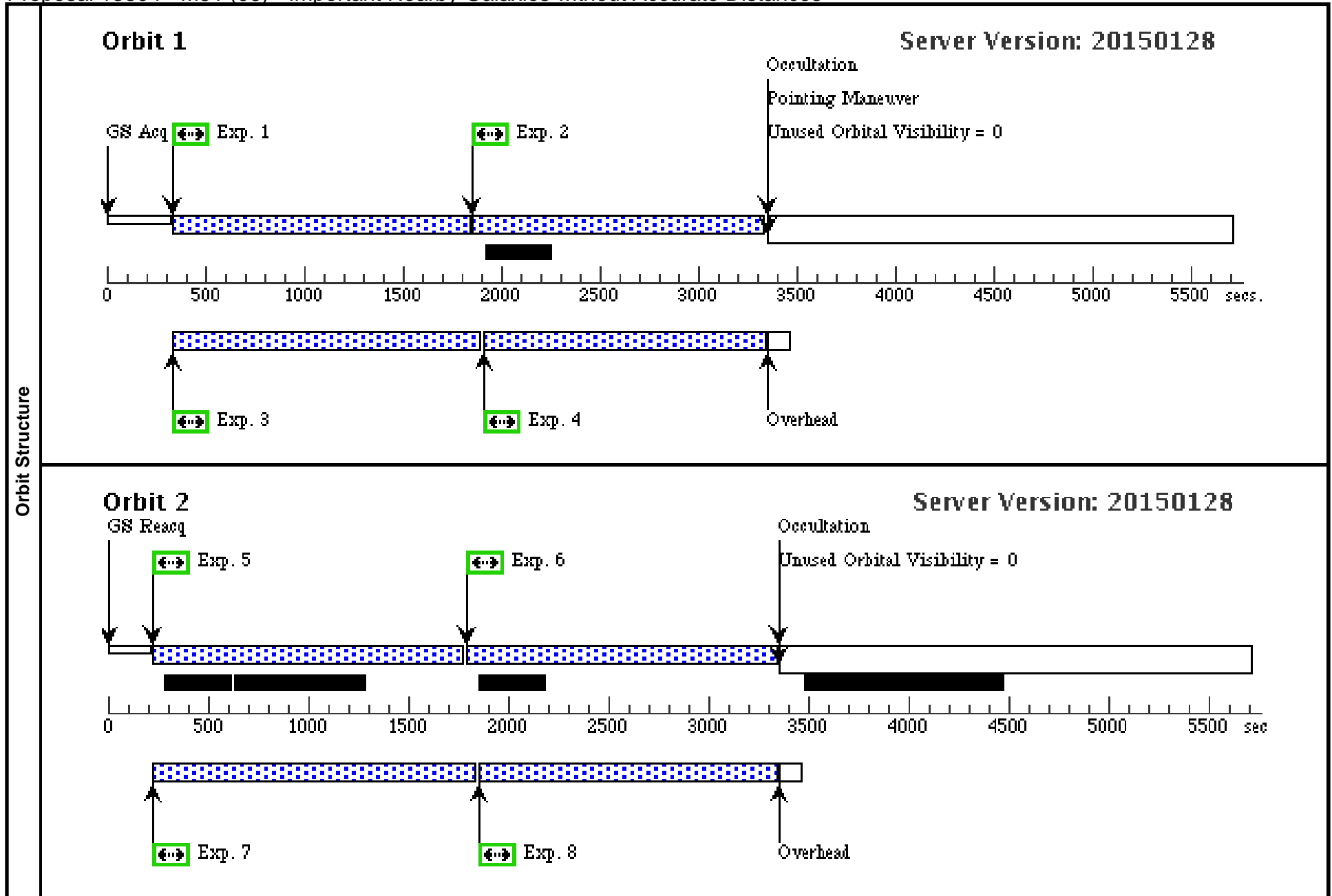
Visit	Proposal 13804, NGC4625 (05), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 157.5D TO 175 D									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(5)	NGC-4625	RA: 12 41 55.8478 (190.4826992d) Dec: +41 15 49.95 (41.26388d) Equinox: J2000		V=12.35	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F606W-POS 1	(5) NGC-4625	ACS/WFC, ACCUM, WFCENTER	F606W			Prime + Parallel Group 1-4 in NGC4625 (05)	1200 Secs (1285 Secs) [==>1285.0 Secs]	[1]
	2	F814W-POS 1	(5) NGC-4625	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-4 in NGC4625 (05)	1200 Secs (1285 Secs) [==>1285.0 Secs]	[1]
	3	F336W-POS 1	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=12.0		Prime + Parallel Group 1-4 in NGC4625 (05)	1200 Secs (1390 Secs) [==>1390.0 Secs]	[1]
	4	F275W-POS 1	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=12.0		Prime + Parallel Group 1-4 in NGC4625 (05)	1200 Secs (1390 Secs) [==>1390.0 Secs]	[1]
	5	F606W-POS 2	(5) NGC-4625	ACS/WFC, ACCUM, WFCENTER	F606W		POS TARG 0.099,0.107	Prime + Parallel Group 5-8 in NGC4625 (05)	1200 Secs (1354 Secs) [==>1354.0 Secs]	[2]
	6	F814W-POS 2	(5) NGC-4625	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.099,0.107	Prime + Parallel Group 5-8 in NGC4625 (05)	1200 Secs (1354 Secs) [==>1354.0 Secs]	[2]
	7	F336W-POS 2	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=12.0		Prime + Parallel Group 5-8 in NGC4625 (05)	1200 Secs (1450 Secs) [==>1450.0 Secs]	[2]
	8	F275W-POS 2	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=12.0		Prime + Parallel Group 5-8 in NGC4625 (05)	1200 Secs (1450 Secs) [==>1450.0 Secs]	[2]



Proposal 13804 - M51 (06) - Important Nearby Galaxies without Accurate Distances

Sun Mar 08 02:00:56 GMT 2015

Visit	Proposal 13804, M51 (06), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 338D TO 354 D									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(7)	M-51	RA: 13 29 35.6240 (202.3984333d) Dec: +47 09 34.87 (47.15969d) Equinox: J2000		V=8.36	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F606W-POS 1	(7) M-51	ACS/WFC, ACCUM, WFCENTER	F606W		GS ACQ SCENARI O BASE1B3	Prime + Parallel Group 1-4 in M51 (06)	1200 Secs (1306 Secs) [=>1306.0 Secs]	[1]
	2	F814W-POS 1	(7) M-51	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-4 in M51 (06)	1200 Secs (1306 Secs) [=>1306.0 Secs]	[1]
	3	F336W-POS 1	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=12.0		Prime + Parallel Group 1-4 in M51 (06)	1200 Secs (1411 Secs) [=>1411.0 Secs]	[1]
	4	F275W-POS 1	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=12.0		Prime + Parallel Group 1-4 in M51 (06)	1200 Secs (1411 Secs) [=>1411.0 Secs]	[1]
	5	F606W-POS 2	(7) M-51	ACS/WFC, ACCUM, WFCENTER	F606W		POS TARG 0.099,0.107	Prime + Parallel Group 5-8 in M51 (06)	1200 Secs (1375 Secs) [=>1375.0 Secs]	[2]
	6	F814W-POS 2	(7) M-51	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.099,0.107	Prime + Parallel Group 5-8 in M51 (06)	1200 Secs (1375 Secs) [=>1375.0 Secs]	[2]
	7	F336W-POS 2	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=12.0		Prime + Parallel Group 5-8 in M51 (06)	1200 Secs (1471 Secs) [=>1471.0 Secs]	[2]
	8	F275W-POS 2	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=12.0		Prime + Parallel Group 5-8 in M51 (06)	1200 Secs (1471 Secs) [=>1471.0 Secs]	[2]



Proposal 13804 - NGC5398 (07) - Important Nearby Galaxies without Accurate Distances

Sun Mar 08 02:00:56 GMT 2015

Visit	Proposal 13804, NGC5398 (07), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 251D TO 276 D; ORIENT 75D TO 99 D; ORIENT 300D TO 321 D; ORIENT 122D TO 190 D									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(8)	NGC-5398	RA: 14 01 26.0881 (210.3587004d) Dec: -33 03 55.38 (-33.06538d) Equinox: J2000		V=12.39	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F606W-POS 1	(8) NGC-5398	ACS/WFC, ACCUM, WFCENTER	F606W			Prime + Parallel Group 1-4 in NGC5398 (07)	1200 Secs (1255 Secs) [==>1255.0 Secs]	[1]
	2	F814W-POS 1	(8) NGC-5398	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-4 in NGC5398 (07)	1200 Secs (1255 Secs) [==>1255.0 Secs]	[1]
	3	F336W-POS 1	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=12.0		Prime + Parallel Group 1-4 in NGC5398 (07)	1200 Secs (1360 Secs) [==>1360.0 Secs]	[1]
	4	F275W-POS 1	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=12.0		Prime + Parallel Group 1-4 in NGC5398 (07)	1200 Secs (1360 Secs) [==>1360.0 Secs]	[1]
	5	F606W-POS 2	(8) NGC-5398	ACS/WFC, ACCUM, WFCENTER	F606W		POS TARG 0.099,0.107	Prime + Parallel Group 5-8 in NGC5398 (07)	1200 Secs (1324 Secs) [==>1324.0 Secs]	[2]
	6	F814W-POS 2	(8) NGC-5398	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.099,0.107	Prime + Parallel Group 5-8 in NGC5398 (07)	1200 Secs (1324 Secs) [==>1324.0 Secs]	[2]
	7	F336W-POS 2	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=12.0		Prime + Parallel Group 5-8 in NGC5398 (07)	1200 Secs (1420 Secs) [==>1420.0 Secs]	[2]
	8	F275W-POS 2	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=12.0		Prime + Parallel Group 5-8 in NGC5398 (07)	1200 Secs (1420 Secs) [==>1420.0 Secs]	[2]

