



12163 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

Cycle: 18, 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>
1A	(1) M-33	WFC3/IR WFC3/UVIS	1	09-Jul-2010 22:05:33.0	yes
1B	(1) M-33	WFC3/IR WFC3/UVIS	1	09-Jul-2010 22:05:48.0	yes
2A	(2) IC-342	WFC3/IR WFC3/UVIS	1	09-Jul-2010 22:06:00.0	yes
2B	(2) IC-342	WFC3/IR WFC3/UVIS	1	09-Jul-2010 22:06:14.0	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>
03	(3) NGC-247	WFC3/IR WFC3/UVIS	2	09-Jul-2010 22:06:31.0	yes
04	(4) NGC-300	WFC3/IR WFC3/UVIS	2	09-Jul-2010 22:06:44.0	yes
05	(5) NGC-2403	WFC3/IR WFC3/UVIS	2	09-Jul-2010 22:07:00.0	yes
06	(6) NGC-2976	WFC3/IR WFC3/UVIS	2	09-Jul-2010 22:07:13.0	yes
07	(7) NGC-3621	WFC3/IR WFC3/UVIS	2	09-Jul-2010 22:07:27.0	yes
08	(8) NGC-4244	WFC3/IR WFC3/UVIS	2	09-Jul-2010 22:07:42.0	yes
09	(9) NGC-4395	WFC3/IR WFC3/UVIS	2	09-Jul-2010 22:07:57.0	yes
10	(10) NGC-7793	WFC3/IR WFC3/UVIS	2	09-Jul-2010 22:08:10.0	yes

20 Total Orbits Used

ABSTRACT

HST surveys have shown that nuclear star clusters are nearly ubiquitous in late-type, bulgeless disk galaxies. In early-type galaxies, the central black hole mass correlates with the bulge mass and velocity dispersion, but the relationship between black hole mass and host galaxy properties in bulgeless galaxies is not yet understood. Some nuclear clusters (such as the one in M33) do not contain a central massive black hole at all, while other late-type galaxies (such as NGC 4395) are known to contain accretion-powered active nuclei within their nuclear clusters, indicating that a central black hole is present. But, the overall "occupation fraction" of black holes within nuclear clusters is largely unconstrained. Measurement of the structure, dynamics, and stellar content of nuclear star clusters is an important pathway toward understanding the demographics of low-mass black holes in late-type galaxies.

We propose to obtain multi-filter WFC3 UV, optical, and near-IR images of 10 of the nearest and brightest nuclear clusters in late-type spiral

galaxies. We will use the new WFC3 data to measure the cluster radial profiles, to search for color gradients, and in combination with ground-based spectroscopy and stellar population modeling, to determine the stellar masses of the clusters. Since nuclear clusters are known to contain stellar populations with a wide range of ages, the broad wavelength coverage of our data will provide new leverage to constrain the star formation history of the clusters. We will carry out dynamical modeling for the clusters, using the cluster structural parameters and stellar M/L ratios measured from the WFC3 data and kinematics measured from ground-based, adaptive-optics assisted integral-field spectroscopy (already obtained or approved for 8 of the 10 targets). This will yield tight new constraints on the masses of intermediate-mass black holes (IMBH) within the clusters, and may result in the first dynamical detections of IMBHs in the nuclei of late-type spirals.

OBSERVING DESCRIPTION

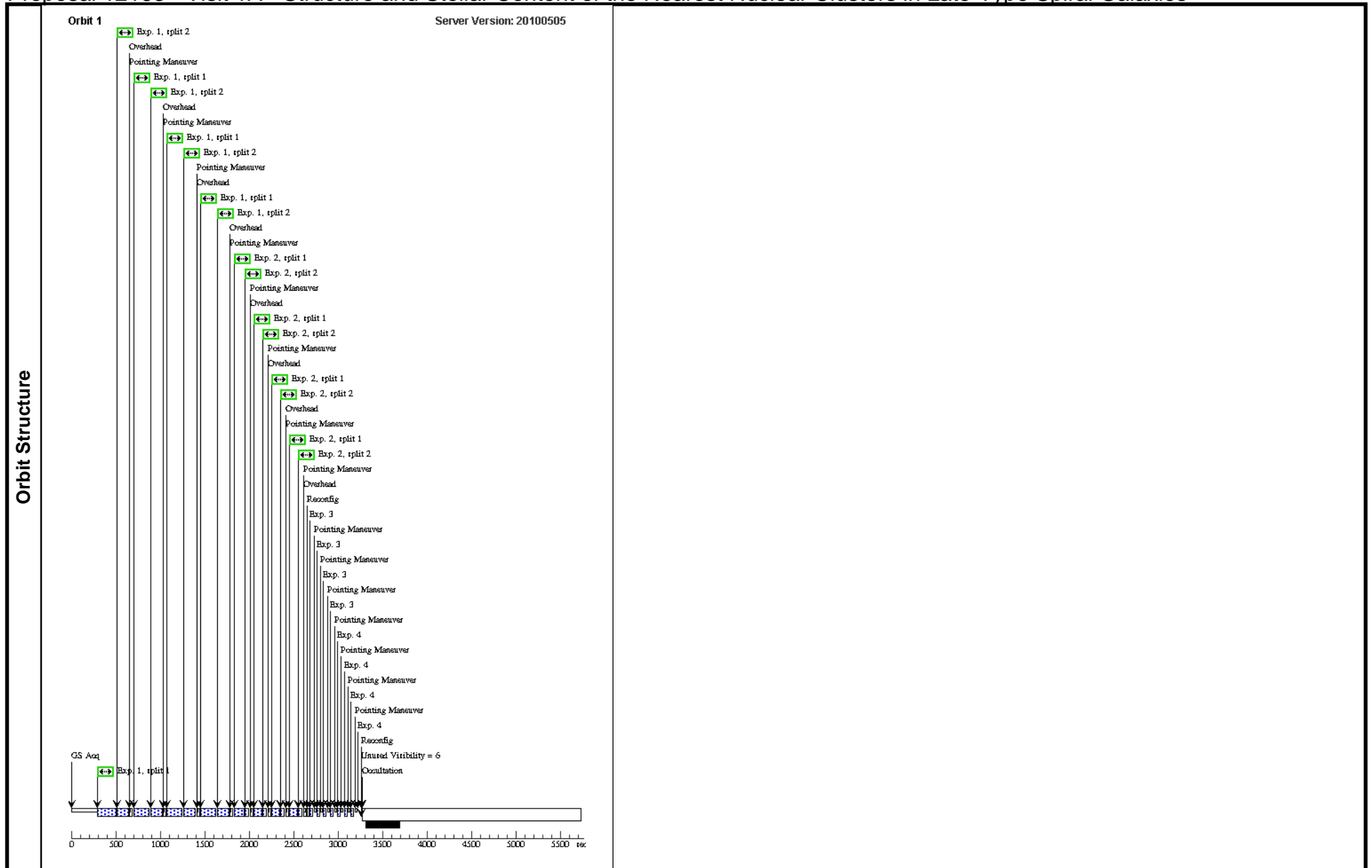
The goal of this program is to obtain 7-band imaging of 10 bright, nearby nuclear clusters in spiral galaxies. The 7 filters span UV to near-IR wavelengths with WFC3. In order to accommodate a large number of exposures per orbit, we will use the M512C subarray for UVIS exposures and the IRSUB512 subarray for the IR exposures. For each target, we will obtain 2 orbits of imaging. A standard 4-point dither pattern will be used for all observations. For most of the targets, the IR exposures will be done using STEP25 sampling, but for the brightest 2 targets we will use RAPID sampling in order to reduce the risk of saturation and image persistence. The dither sizes for the IR exposures are set to larger steps than the default in order to minimize image persistence problems. For most of the targets, the observations can be done in 1 single visit containing 2 orbits. However, for the brightest targets (where a large number of short exposures are required), the observations need to be split into 2 separate visits because this is apparently the only way to force a buffer dump to occur at the end of the first orbit. For the targets that require 2 separate visits (M33 and IC 342), we require the same spacecraft orientation for both visits; ideally the 2nd visit would occur immediately after the first visit for these targets.

Visit	Proposal 12163, Visit 1A Diagnostic Status: Warning Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)					
	(Exposure 4 (Pattern 2, Exps 4-4) special requirements) Warning (Form): Be very careful mixing POS TARG and Center_Pattern = Yes					
Diagnosics						
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures	
		(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false	(1), (2)	
(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=14.3 Line Spacing=9.125	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true	(3), (4)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	M-33	RA: 01 33 50.9000 (23.4620833d) Dec: +30 39 37.00 (30.66028d) Equinox: J2000		V=5.72	Reference Frame: ICRS
<i>Comments: Position from NED, checked for consistency with 2MASS image.</i>						

Proposal 12163 (STScI Edit Number: 0, Created: Friday, July 9, 2010 9:08:16 PM EST) - Overview

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	(1) M-33	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F275W	CR-SPLIT=2		Pattern 1, Exps 1-1 (1)	260 Secs [=>(Pattern 1, Split 1)] [=>(Pattern 1, Split 2)] [=>(Pattern 2, Split 1)] [=>(Pattern 2, Split 2)] [=>(Pattern 3, Split 1)] [=>(Pattern 3, Split 2)] [=>(Pattern 4, Split 1)] [=>(Pattern 4, Split 2)]	[1]
	2	(1) M-33	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F438W	CR-SPLIT=2		Pattern 1, Exps 2-2 (1)	84 Secs [=>(Pattern 1, Split 1)] [=>(Pattern 1, Split 2)] [=>(Pattern 2, Split 1)] [=>(Pattern 2, Split 2)] [=>(Pattern 3, Split 1)] [=>(Pattern 3, Split 2)] [=>(Pattern 4, Split 1)] [=>(Pattern 4, Split 2)]	[1]
	3	(1) M-33	WFC3/IR, MULTIACCUM, IRSUB512	F127M	SAMP-SEQ=RAPID ; NSAMP=6		Pattern 2, Exps 3-3 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	4	(1) M-33	WFC3/IR, MULTIACCUM, IRSUB512	F127M	SAMP-SEQ=RAPID POS TARG -5,-5 ; NSAMP=6		Pattern 2, Exps 4-4 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]

Proposal 12163 - Visit 1A - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies



Proposal 12163 - Visit 1A - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

Sat Jul 10 02:08:18 GMT 2010

Visit	Proposal 12163, Visit 1B Diagnostic Status: Warning Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: SAME ORIENT AS 1A					
	(Exposure 5 (Pattern 2, Exps 5-5) special requirements) Warning (Form): Be very careful mixing POS TARG and Center_Pattern = Yes					
Diagnosics						
Patterns	#	Primary Pattern	Secondary Pattern	Exposures		
	(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1), (2), (3)	
(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=14.3 Line Spacing=9.125	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true		(4), (5)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	M-33	RA: 01 33 50.9000 (23.4620833d) Dec: +30 39 37.00 (30.66028d) Equinox: J2000		V=5.72	Reference Frame: ICRS
<i>Comments: Position from NED, checked for consistency with 2MASS image.</i>						

Proposal 12163 - Visit 1A - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	(1) M-33	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F547M	CR-SPLIT=NO		Pattern 1, Exps 1-1 (1)	90 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	2	(1) M-33	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F336W	CR-SPLIT=2		Pattern 1, Exps 2-2 (1)	110 Secs [=>(Pattern 1, Split 1)] [=>(Pattern 1, Split 2)] [=>(Pattern 2, Split 1)] [=>(Pattern 2, Split 2)] [=>(Pattern 3, Split 1)] [=>(Pattern 3, Split 2)] [=>(Pattern 4, Split 1)] [=>(Pattern 4, Split 2)]	[1]
	3	(1) M-33	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F814W	CR-SPLIT=2		Pattern 1, Exps 3-3 (1)	80 Secs [=>(Pattern 1, Split 1)] [=>(Pattern 1, Split 2)] [=>(Pattern 2, Split 1)] [=>(Pattern 2, Split 2)] [=>(Pattern 3, Split 1)] [=>(Pattern 3, Split 2)] [=>(Pattern 4, Split 1)] [=>(Pattern 4, Split 2)]	[1]
	4	(1) M-33	WFC3/IR, MULTIACCUM, IRSUB512	F153M	SAMP-SEQ=RAPID ; NSAMP=6		Pattern 2, Exps 4-4 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	5	(1) M-33	WFC3/IR, MULTIACCUM, IRSUB512	F153M	SAMP-SEQ=RAPID POS TARG -5,-5 ; NSAMP=6		Pattern 2, Exps 5-5 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]

Proposal 12163 - Visit 1B - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

Sat Jul 10 02:08:19 GMT 2010

Visit	Proposal 12163, Visit 2A Diagnostic Status: Warning Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)					
	(Exposure 4 (Pattern 2, Exps 4-4) special requirements) Warning (Form): Be very careful mixing POS TARG and Center_Pattern = Yes					
Diagnosics						
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures	
		(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false	(1), (2)	
(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=14.3 Line Spacing=9.125	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true	(3), (4)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(2)	IC-342	RA: 03 46 48.5600 (56.7023333d) Dec: +68 05 46.20 (68.09617d) Equinox: J2000		V=(?) B = 9.10	Reference Frame: ICRS
<i>Comments: Position of the nucleus measured from a WFPC2 image and confirmed with a NICMOS image, and consistent with position listed in NED.</i>						

Proposal 12163 - Visit 1B - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	(2) IC-342	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F438W	CR-SPLIT=3		Pattern 1, Exps 1-1 (1)	105 Secs [=>(Pattern 1, Split 1)] [=>(Pattern 1, Split 2)] [=>(Pattern 1, Split 3)] [=>(Pattern 2, Split 1)] [=>(Pattern 2, Split 2)] [=>(Pattern 2, Split 3)] [=>(Pattern 3, Split 1)] [=>(Pattern 3, Split 2)] [=>(Pattern 3, Split 3)] [=>(Pattern 4, Split 1)] [=>(Pattern 4, Split 2)] [=>(Pattern 4, Split 3)]	[1]
	2	(2) IC-342	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F275W	CR-SPLIT=2		Pattern 1, Exps 2-2 (1)	262 Secs [=>(Pattern 1, Split 1)] [=>(Pattern 1, Split 2)] [=>(Pattern 2, Split 1)] [=>(Pattern 2, Split 2)] [=>(Pattern 3, Split 1)] [=>(Pattern 3, Split 2)] [=>(Pattern 4, Split 1)] [=>(Pattern 4, Split 2)]	[1]
	3	(2) IC-342	WFC3/IR, MULTIACCUM, IRSUB512	F127M	SAMP-SEQ=RAPID ; NSAMP=6		Pattern 2, Exps 3-3 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	4	(2) IC-342	WFC3/IR, MULTIACCUM, IRSUB512	F127M	SAMP-SEQ=RAPID POS TARG -5,-5 ; NSAMP=6		Pattern 2, Exps 4-4 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]

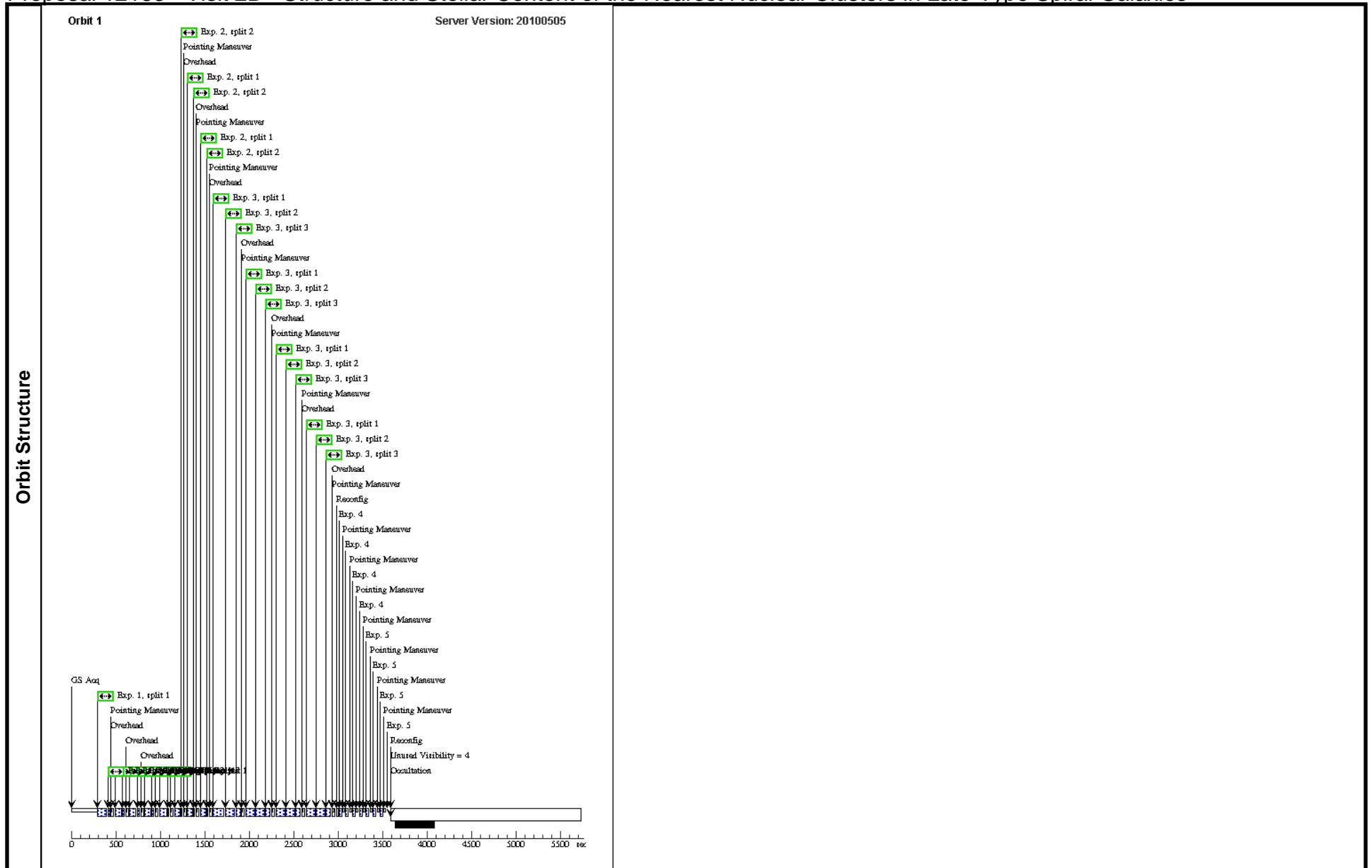
Proposal 12163 - Visit 2A - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

Sat Jul 10 02:08:20 GMT 2010

Visit	Proposal 12163, Visit 2B Diagnostic Status: Warning Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: SAME ORIENT AS 2A					
	(Exposure 5 (Pattern 2, Exps 5-5) special requirements) Warning (Form): Be very careful mixing POS TARG and Center_Pattern = Yes					
Diagnosics						
Patterns	#	Primary Pattern	Secondary Pattern	Exposures		
	(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1), (2), (3)	
(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=14.3 Line Spacing=9.125	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true		(4), (5)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(2)	IC-342	RA: 03 46 48.5600 (56.7023333d) Dec: +68 05 46.20 (68.09617d) Equinox: J2000		V=(?) B = 9.10	Reference Frame: ICRS
<i>Comments: Position of the nucleus measured from a WFPC2 image and confirmed with a NICMOS image, and consistent with position listed in NED.</i>						

Proposal 12163 - Visit 2A - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	(2) IC-342	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F547M	CR-SPLIT=2		Pattern 1, Exps 1-1 (1)	50 Secs [=>(Pattern 1, Split 1)] [=>(Pattern 1, Split 2)] [=>(Pattern 2, Split 1)] [=>(Pattern 2, Split 2)] [=>(Pattern 3, Split 1)] [=>(Pattern 3, Split 2)] [=>(Pattern 4, Split 1)] [=>(Pattern 4, Split 2)]	[1]
	2	(2) IC-342	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F814W	CR-SPLIT=2		Pattern 1, Exps 2-2 (1)	30 Secs [=>(Pattern 1, Split 1)] [=>(Pattern 1, Split 2)] [=>(Pattern 2, Split 1)] [=>(Pattern 2, Split 2)] [=>(Pattern 3, Split 1)] [=>(Pattern 3, Split 2)] [=>(Pattern 4, Split 1)] [=>(Pattern 4, Split 2)]	[1]
	3	(2) IC-342	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F336W	CR-SPLIT=3		Pattern 1, Exps 3-3 (1)	165 Secs [=>(Pattern 1, Split 1)] [=>(Pattern 1, Split 2)] [=>(Pattern 1, Split 3)] [=>(Pattern 2, Split 1)] [=>(Pattern 2, Split 2)] [=>(Pattern 2, Split 3)] [=>(Pattern 3, Split 1)] [=>(Pattern 3, Split 2)] [=>(Pattern 3, Split 3)] [=>(Pattern 4, Split 1)] [=>(Pattern 4, Split 2)] [=>(Pattern 4, Split 3)]	[1]
	4	(2) IC-342	WFC3/IR, MULTIACCUM, IRSUB512	F153M	SAMP-SEQ=RAPID ; NSAMP=6		Pattern 2, Exps 4-4 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	5	(2) IC-342	WFC3/IR, MULTIACCUM, IRSUB512	F153M	SAMP-SEQ=RAPID POS TARG -5,-5 ; NSAMP=6		Pattern 2, Exps 5-5 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]



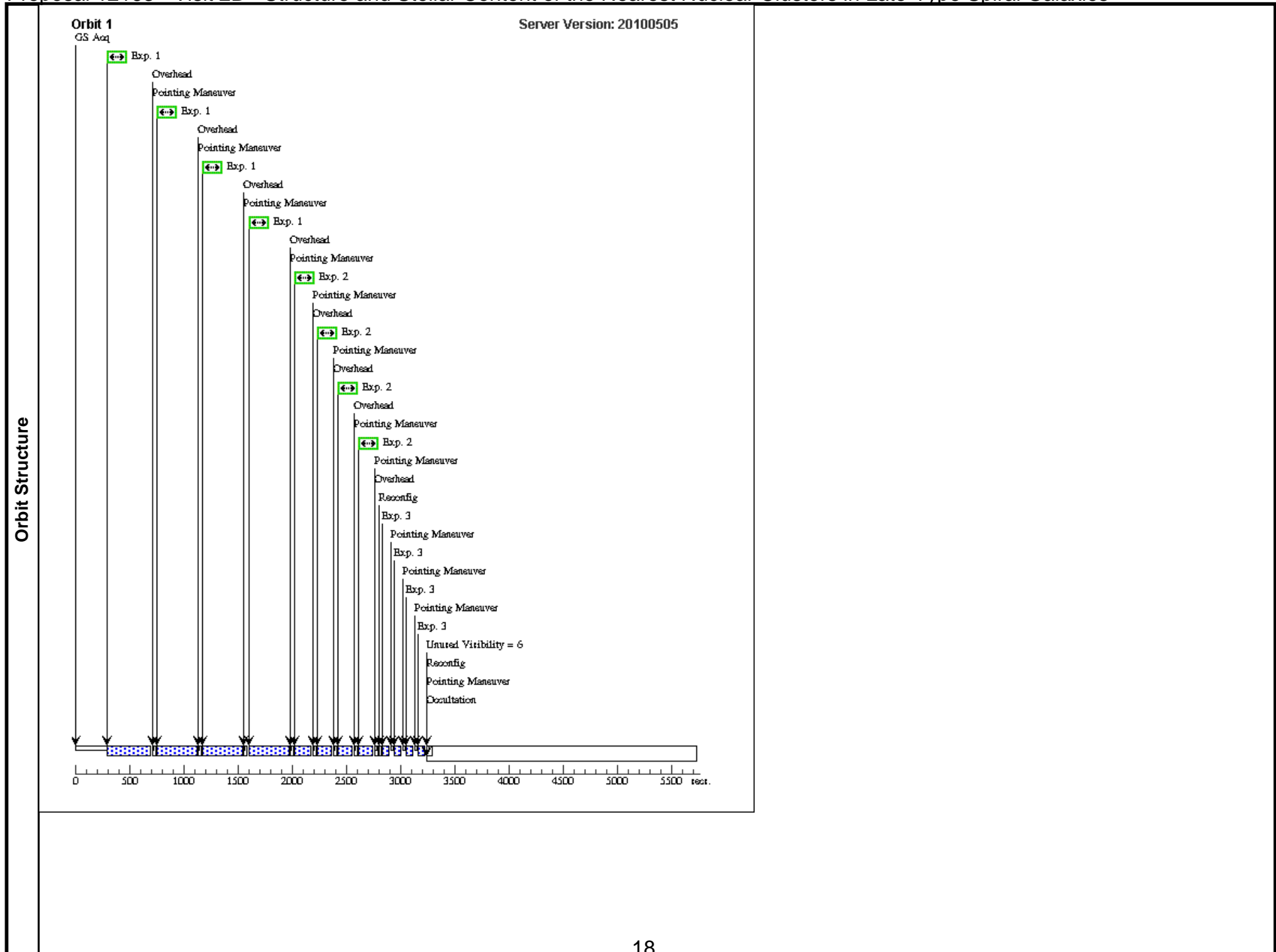
Proposal 12163 - Visit 2B - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

Sat Jul 10 02:08:21 GMT 2010

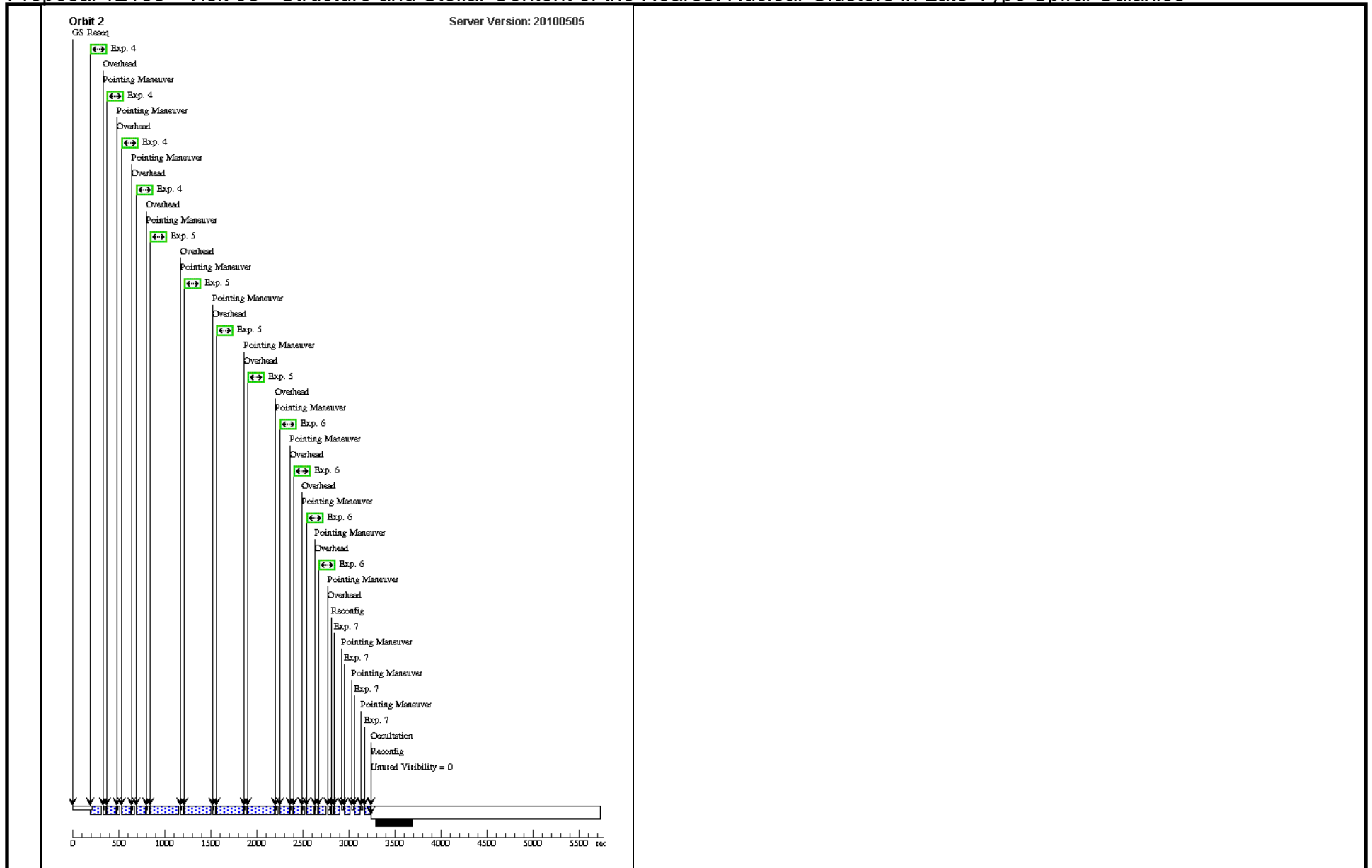
Visit	Proposal 12163, Visit 03 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)					
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures	
(1)		Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1), (2), (4), (5), (6)	
(2)		Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=14.3 Line Spacing=9.125	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true		(3), (7)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(3)	NGC-247	RA: 00 47 8.5540 (11.7856417d) Dec: -20 45 37.44 (-20.76040d) Equinox: J2000		V=9.11	Reference Frame: ICRS
<i>Comments: Position from SIMBAD, confirmed with 2MASS image and ground-based images.</i> <i>NOTE: An archival WFPC2 image seems to give a significantly different position, so the coordinates in the WFPC2 archival image seem to be way off.</i>						

Proposal 12163 - Visit 2B - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	(3) NGC-247	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F275W	CR-SPLIT=NO		Pattern 1, Exps 1-1 (1)	370 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	(3) NGC-247	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F438W	CR-SPLIT=NO		Pattern 1, Exps 2-2 (1)	132 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3	(3) NGC-247	WFC3/IR, MULTIACCUM, IRSUB512	F127M	SAMP-SEQ=STEP2 5; NSAMP=6		Pattern 2, Exps 3-3 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	4	(3) NGC-247	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F547M	CR-SPLIT=NO		Pattern 1, Exps 4-4 (1)	100 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]
	5	(3) NGC-247	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F336W	CR-SPLIT=NO		Pattern 1, Exps 5-5 (1)	290 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]
	6	(3) NGC-247	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F814W	CR-SPLIT=NO		Pattern 1, Exps 6-6 (1)	78 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]
	7	(3) NGC-247	WFC3/IR, MULTIACCUM, IRSUB512	F153M	SAMP-SEQ=STEP2 5; NSAMP=6		Pattern 2, Exps 7-7 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]



Proposal 12163 - Visit 03 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies



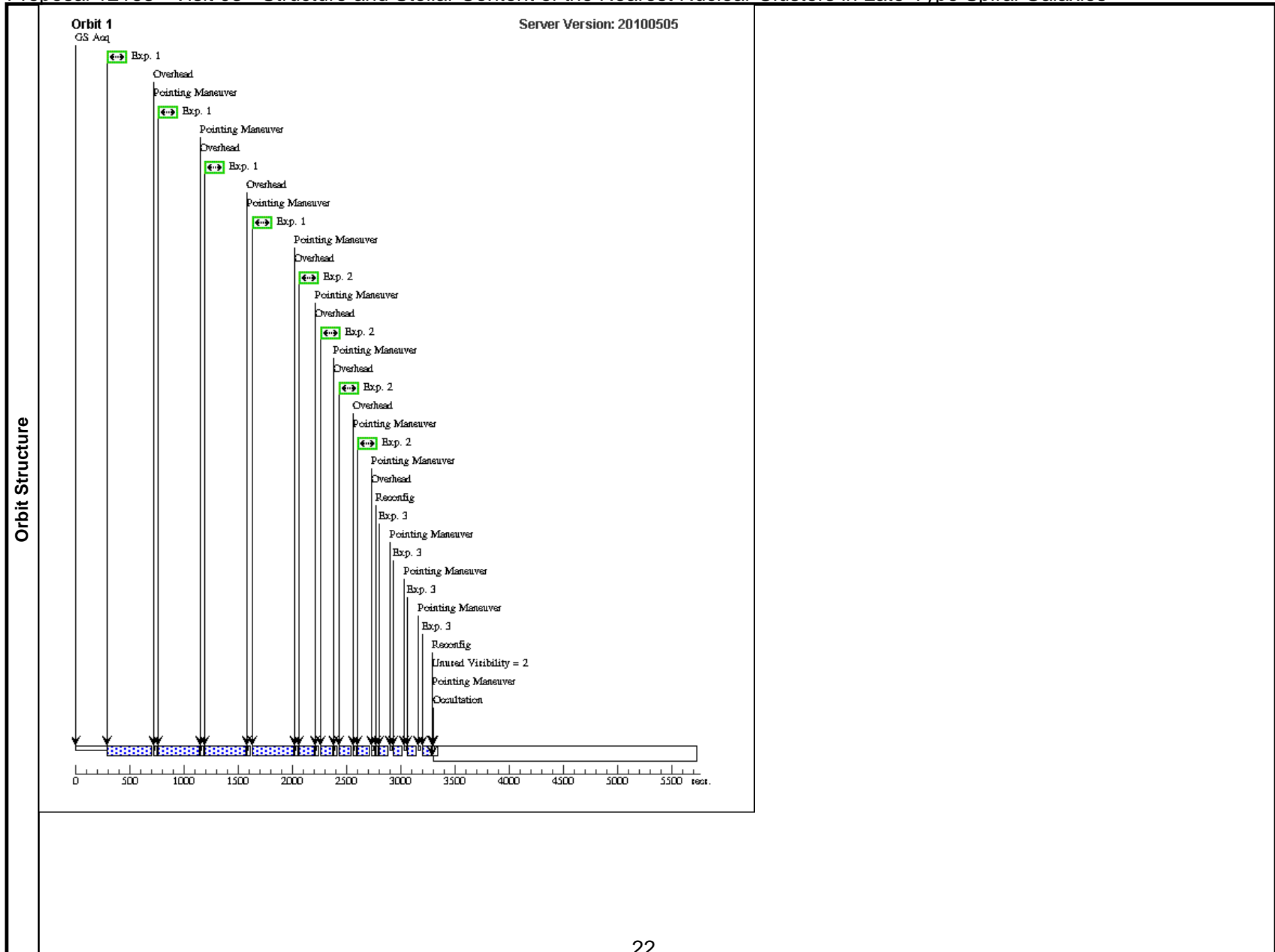
Proposal 12163 - Visit 03 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

Sat Jul 10 02:08:22 GMT 2010

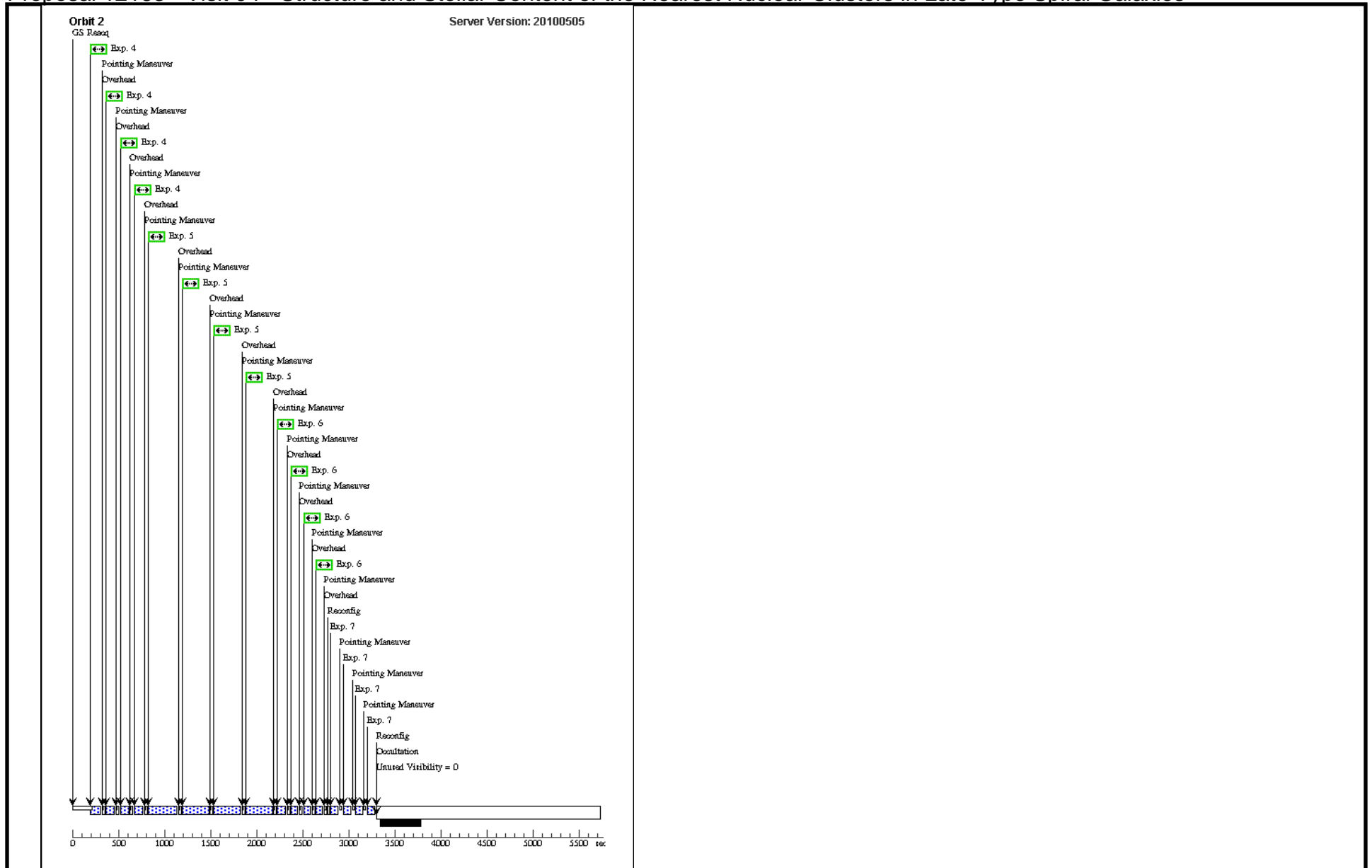
Visit	Proposal 12163, Visit 04 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)					
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures	
		(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1), (2), (4), (5), (6)
	(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=14.3 Line Spacing=9.125	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true		(3), (7)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(4)	NGC-300	RA: 00 54 53.4790 (13.7228292d) Dec: -37 41 3.77 (-37.68438d) Equinox: J2000		V=8.13	Reference Frame: ICRS
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Position of nucleus confirmed from ACS and 2MASS images.</i>						

Proposal 12163 - Visit 03 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	(4) NGC-300	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F275W	CR-SPLIT=NO		Pattern 1, Exps 1-1 (1)	380 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	2	(4) NGC-300	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F438W	CR-SPLIT=NO		Pattern 1, Exps 2-2 (1)	114 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	3	(4) NGC-300	WFC3/IR, MULTIACCUM, IRSUB512	F127M	SAMP-SEQ=STEP2 5; NSAMP=7		Pattern 2, Exps 3-3 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	4	(4) NGC-300	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F547M	CR-SPLIT=NO		Pattern 1, Exps 4-4 (1)	94 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]
	5	(4) NGC-300	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F336W	CR-SPLIT=NO		Pattern 1, Exps 5-5 (1)	290 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]
	6	(4) NGC-300	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F814W	CR-SPLIT=NO		Pattern 1, Exps 6-6 (1)	75 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]
	7	(4) NGC-300	WFC3/IR, MULTIACCUM, IRSUB512	F153M	SAMP-SEQ=STEP2 5; NSAMP=7		Pattern 2, Exps 7-7 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]



Proposal 12163 - Visit 04 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies



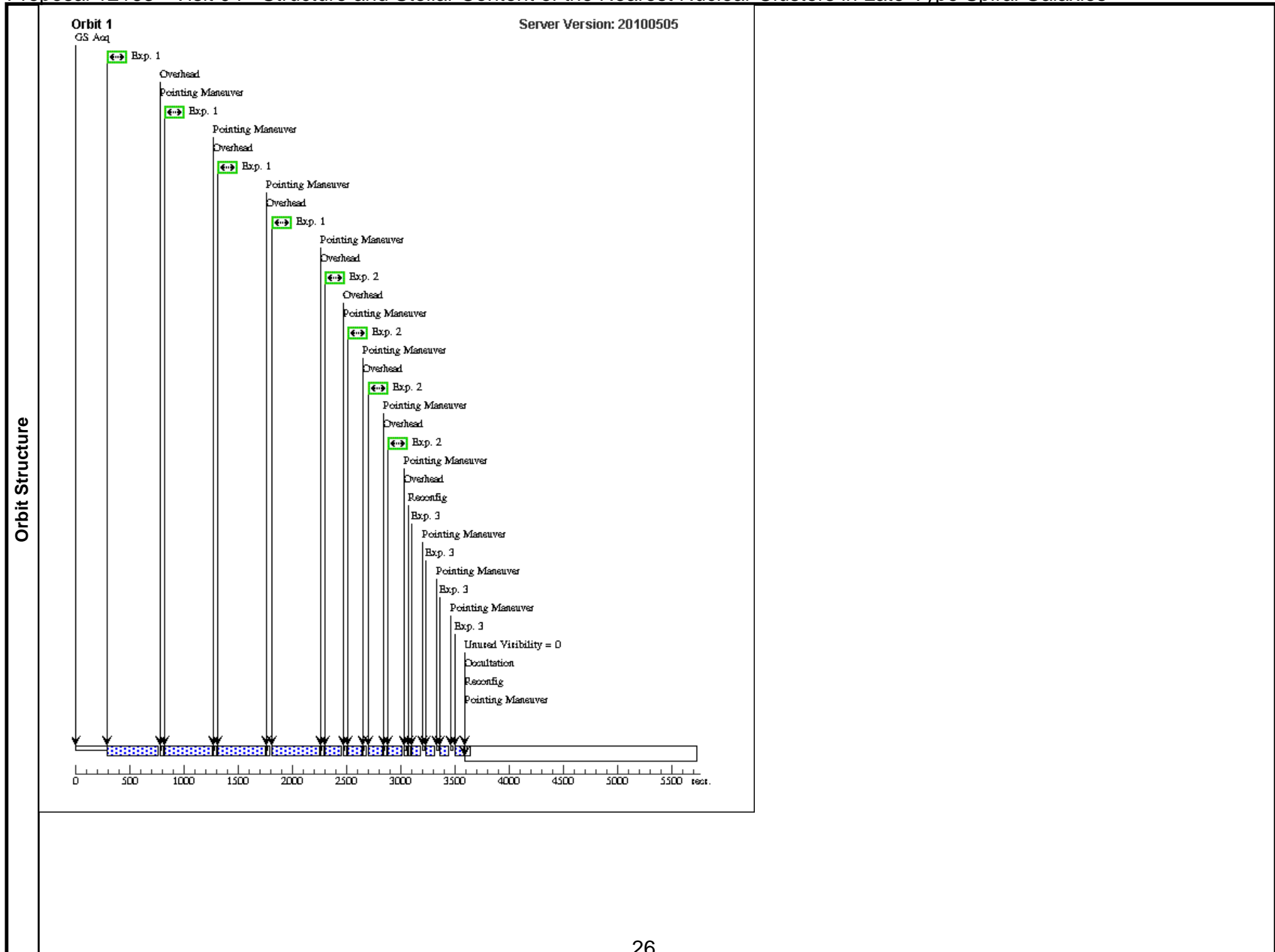
Proposal 12163 - Visit 04 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

Sat Jul 10 02:08:23 GMT 2010

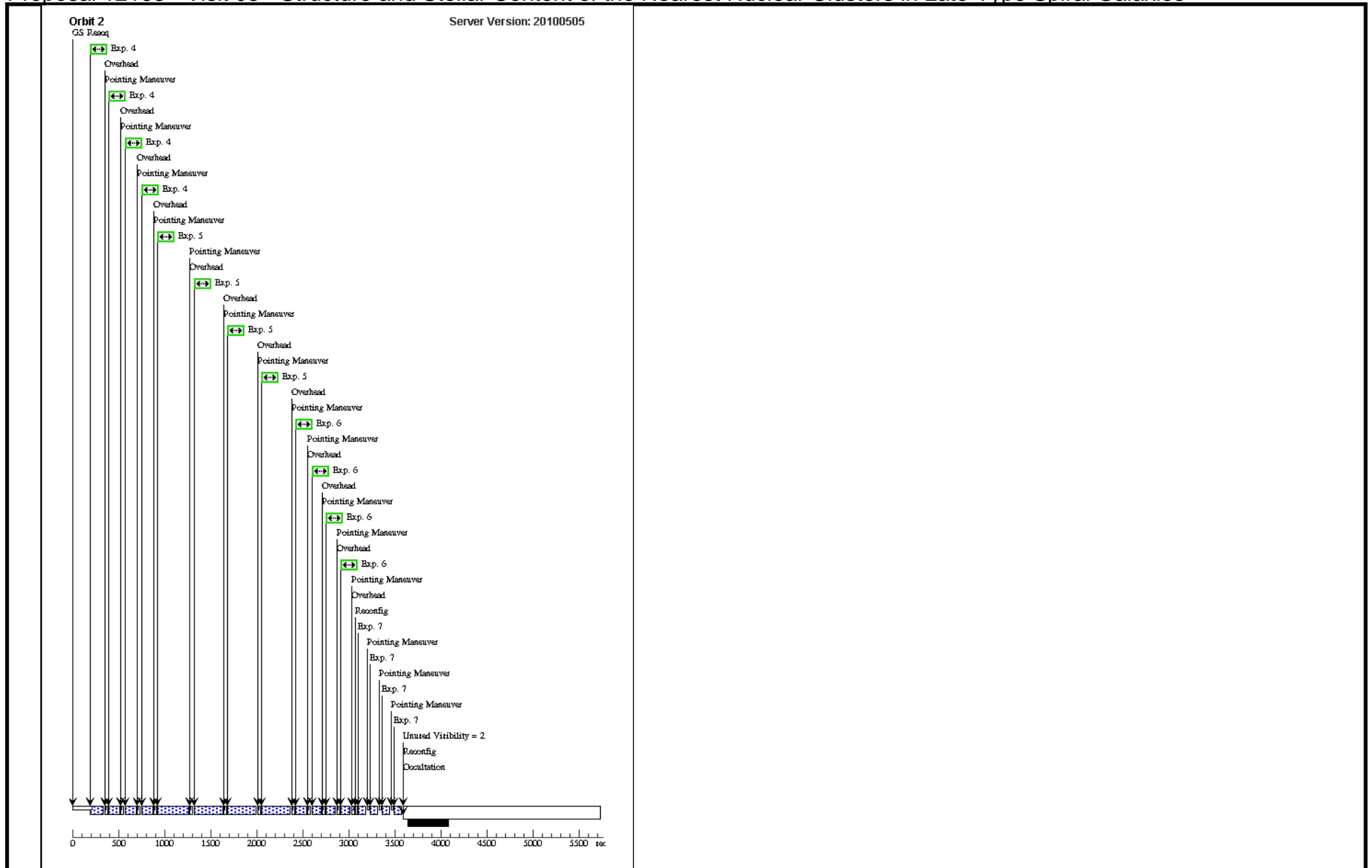
Visit	Proposal 12163, Visit 05 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)					
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures	
		(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1), (2), (4), (5), (6)
	(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=14.3 Line Spacing=9.125	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true		(3), (7)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(5)	NGC-2403	RA: 07 36 50.0260 (114.2084417d) Dec: +65 36 3.78 (65.60105d) Equinox: J2000		V=8.46	Reference Frame: ICRS
<i>Comments: Coordinates of nuclear cluster measured from 2MASS. Note: nuclear cluster is slightly offset from galaxy isophotal center.</i>						

Proposal 12163 - Visit 04 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	(5) NGC-2403	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F275W	CR-SPLIT=NO		Pattern 1, Exps 1-1 (1)	440 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	2	(5) NGC-2403	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F438W	CR-SPLIT=NO		Pattern 1, Exps 2-2 (1)	129 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	3	(5) NGC-2403	WFC3/IR, MULTIACCUM, IRSUB512	F127M	SAMP-SEQ=STEP2 5; NSAMP=7		Pattern 2, Exps 3-3 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	4	(5) NGC-2403	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F547M	CR-SPLIT=NO		Pattern 1, Exps 4-4 (1)	120 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]
	5	(5) NGC-2403	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F336W	CR-SPLIT=NO		Pattern 1, Exps 5-5 (1)	313 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]
	6	(5) NGC-2403	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F814W	CR-SPLIT=NO		Pattern 1, Exps 6-6 (1)	100 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]
	7	(5) NGC-2403	WFC3/IR, MULTIACCUM, IRSUB512	F153M	SAMP-SEQ=STEP2 5; NSAMP=7		Pattern 2, Exps 7-7 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]



Proposal 12163 - Visit 05 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies



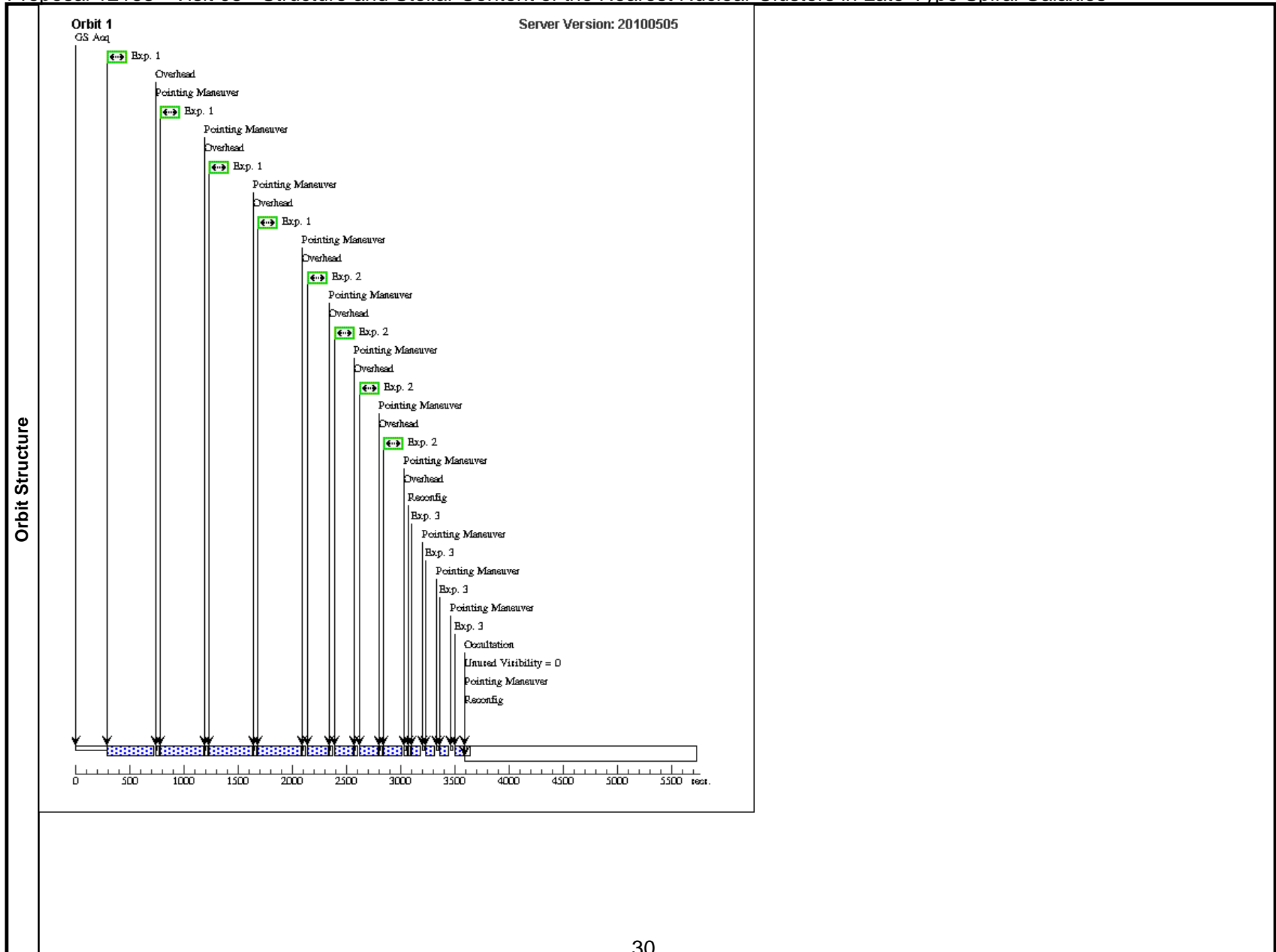
Proposal 12163 - Visit 05 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

Sat Jul 10 02:08:24 GMT 2010

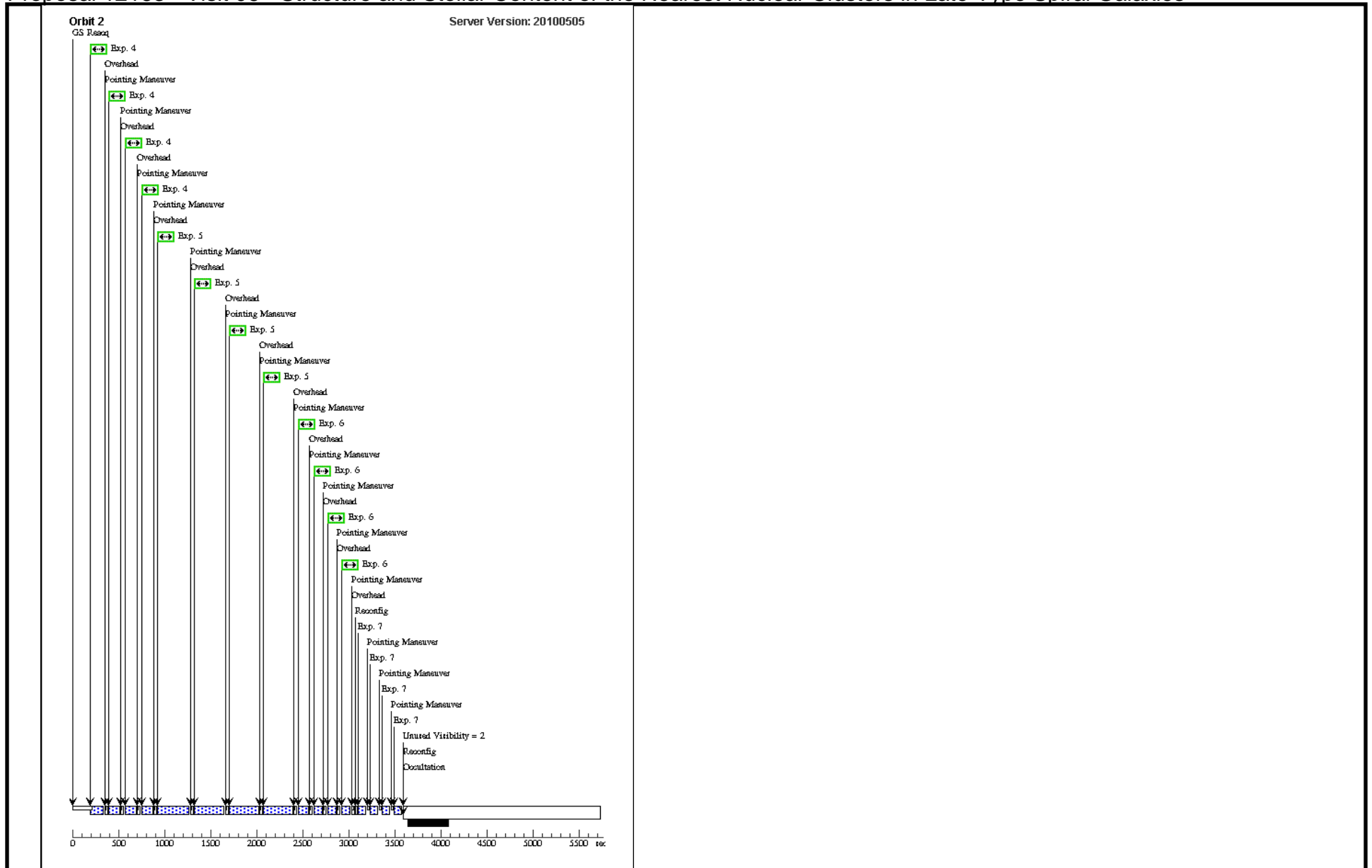
Visit	Proposal 12163, Visit 06 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)					
	#	Primary Pattern		Secondary Pattern	Exposures	
Patterns		(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1), (2), (4), (5), (6)
	(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=14.3 Line Spacing=9.125	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true		(3), (7)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(6)	NGC-2976	RA: 09 47 15.3890 (146.8141208d) Dec: +67 54 59.50 (67.91653d) Equinox: J2000		V=10.16	Reference Frame: ICRS
<i>Comments: Coordinates measured from 2MASS. 2MASS nucleus coordinates differ by a few arcsec from NED and WFPC2 coordinates.</i>						

Proposal 12163 - Visit 05 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	(6) NGC-2976	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F275W	CR-SPLIT=NO		Pattern 1, Exps 1-1 (1)	399 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	2	(6) NGC-2976	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F438W	CR-SPLIT=NO		Pattern 1, Exps 2-2 (1)	170 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	3	(6) NGC-2976	WFC3/IR, MULTIACCUM, IRSUB512	F127M	SAMP-SEQ=STEP2 5; NSAMP=7		Pattern 2, Exps 3-3 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	4	(6) NGC-2976	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F547M	CR-SPLIT=NO		Pattern 1, Exps 4-4 (1)	120 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]
	5	(6) NGC-2976	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F336W	CR-SPLIT=NO		Pattern 1, Exps 5-5 (1)	320 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]
	6	(6) NGC-2976	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F814W	CR-SPLIT=NO		Pattern 1, Exps 6-6 (1)	93 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]
	7	(6) NGC-2976	WFC3/IR, MULTIACCUM, IRSUB512	F153M	SAMP-SEQ=STEP2 5; NSAMP=7		Pattern 2, Exps 7-7 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]



Proposal 12163 - Visit 06 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies



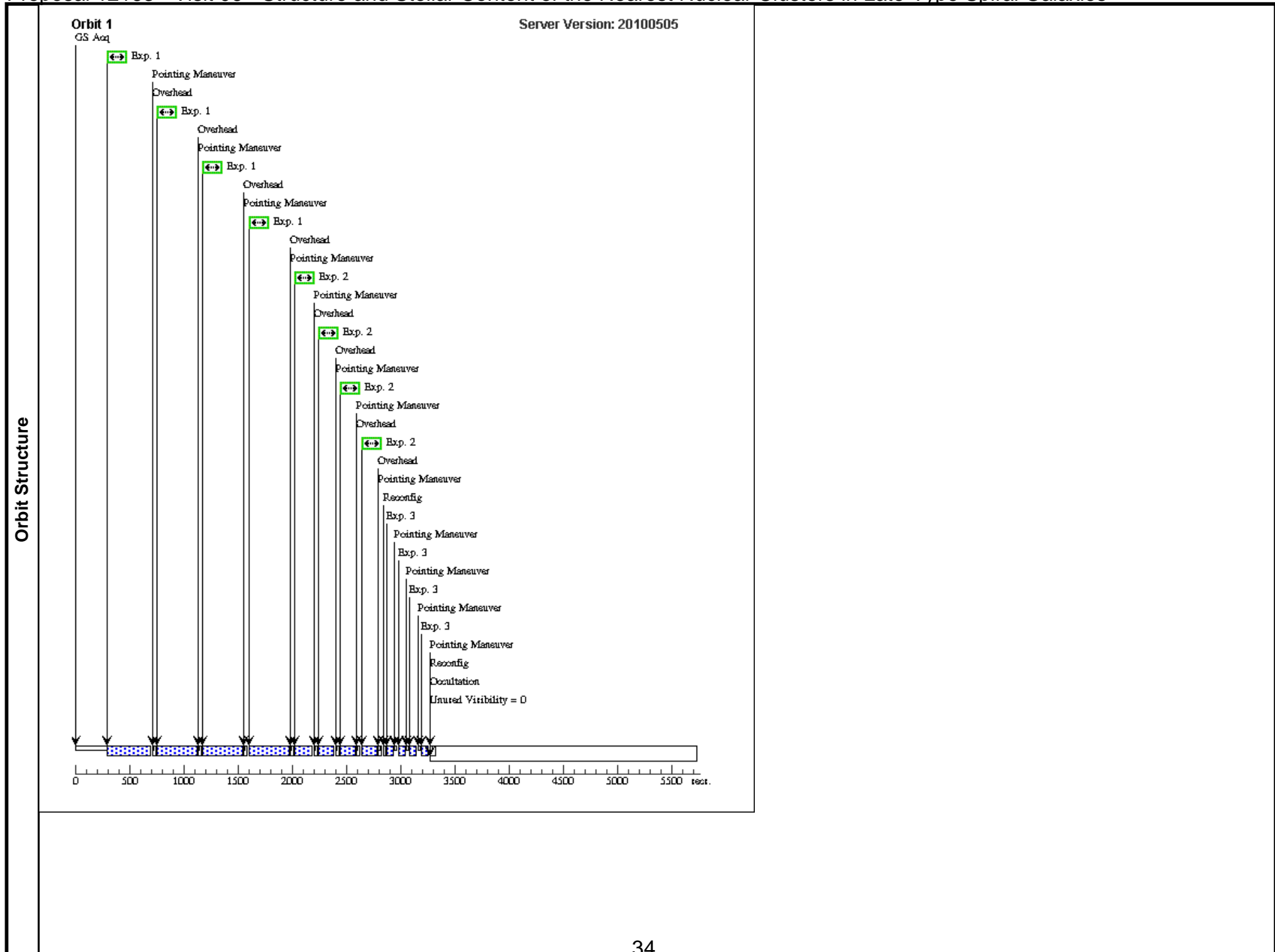
Proposal 12163 - Visit 06 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

Sat Jul 10 02:08:25 GMT 2010

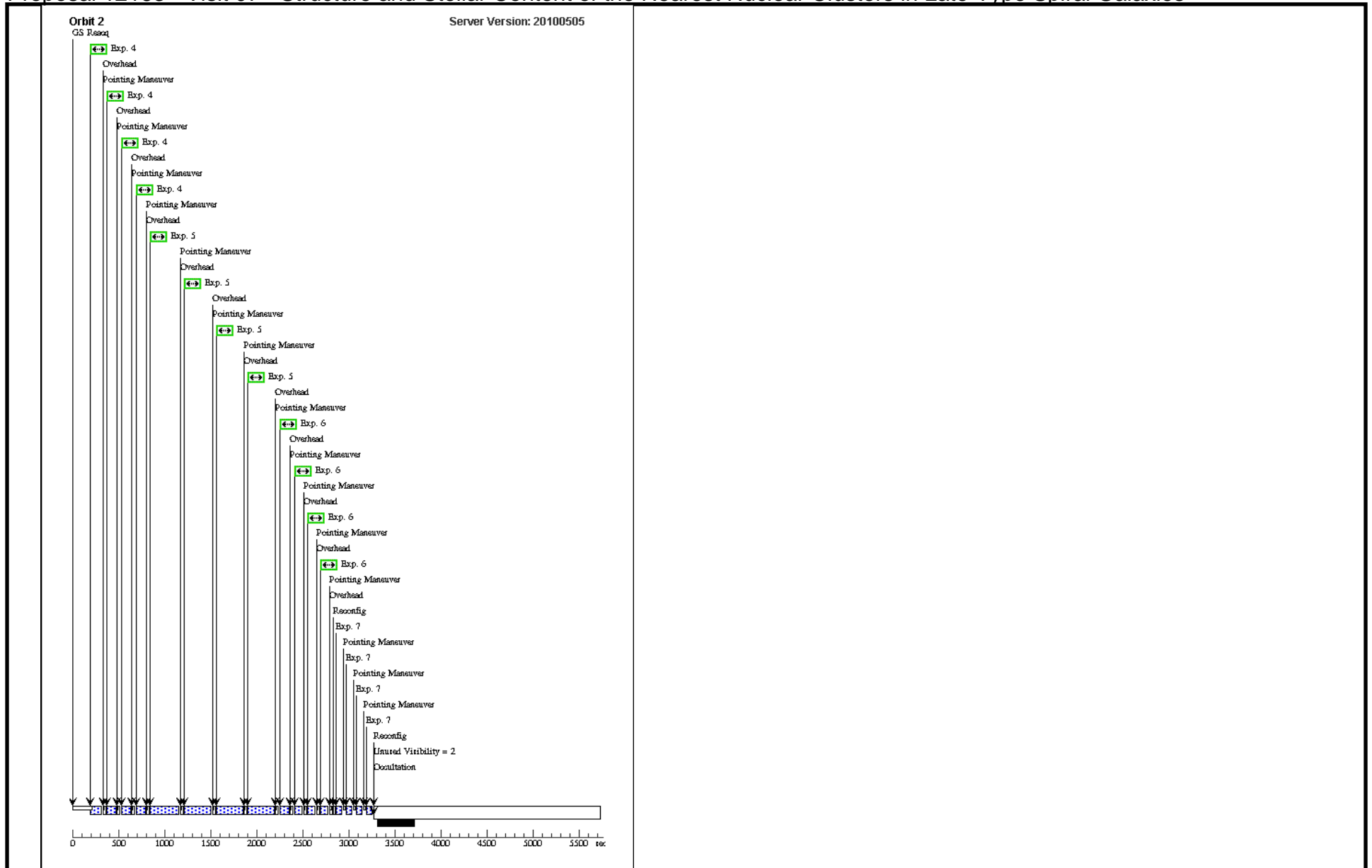
Visit	Proposal 12163, Visit 07 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)					
Patterns	#	Primary Pattern	Secondary Pattern	Exposures		
	(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112 Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1), (2), (4), (5), (6)		
	(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=14.3 Line Spacing=9.125 Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true		(3), (7)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(7)	NGC-3621	RA: 11 18 16.6000 (169.5691667d) Dec: -32 48 49.60 (-32.81378d) Equinox: J2000		V=9.56	Reference Frame: ICRS
<i>Comments: Coordinates measured from an ACS image, consistent with NED position, and within about 1" of 2MASS position.</i>						

Proposal 12163 - Visit 06 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	(7) NGC-3621	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F275W	CR-SPLIT=NO		Pattern 1, Exps 1-1 (1)	370 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	(7) NGC-3621	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F438W	CR-SPLIT=NO		Pattern 1, Exps 2-2 (1)	140 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3	(7) NGC-3621	WFC3/IR, MULTIACCUM, IRSUB512	F127M	SAMP-SEQ=STEP2 5; NSAMP=6		Pattern 2, Exps 3-3 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	4	(7) NGC-3621	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F547M	CR-SPLIT=NO		Pattern 1, Exps 4-4 (1)	100 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]
	5	(7) NGC-3621	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F336W	CR-SPLIT=NO		Pattern 1, Exps 5-5 (1)	290 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]
	6	(7) NGC-3621	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F814W	CR-SPLIT=NO		Pattern 1, Exps 6-6 (1)	84 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]
	7	(7) NGC-3621	WFC3/IR, MULTIACCUM, IRSUB512	F153M	SAMP-SEQ=STEP2 5; NSAMP=6		Pattern 2, Exps 7-7 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]



Proposal 12163 - Visit 07 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies



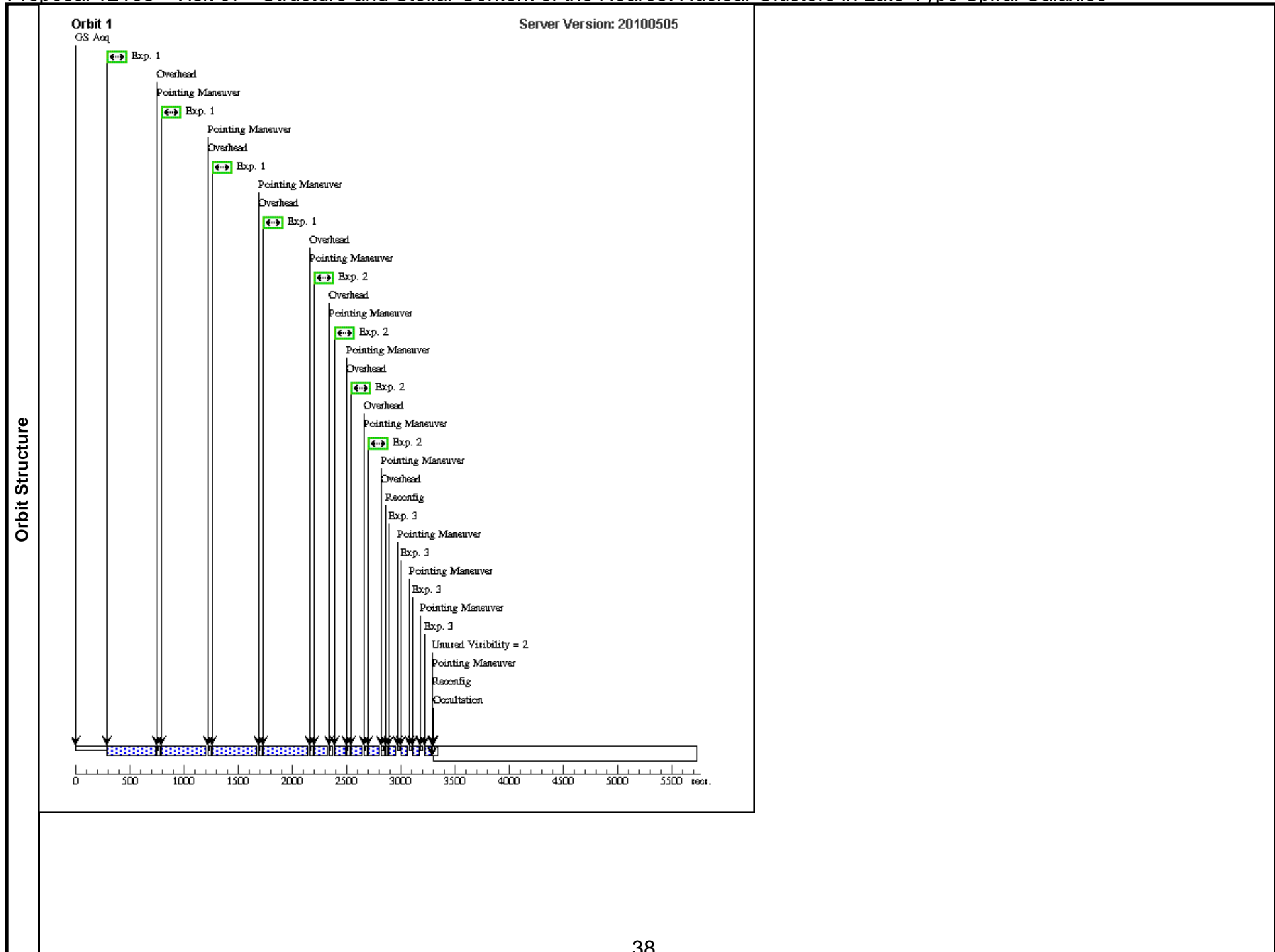
Proposal 12163 - Visit 07 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

Sat Jul 10 02:08:26 GMT 2010

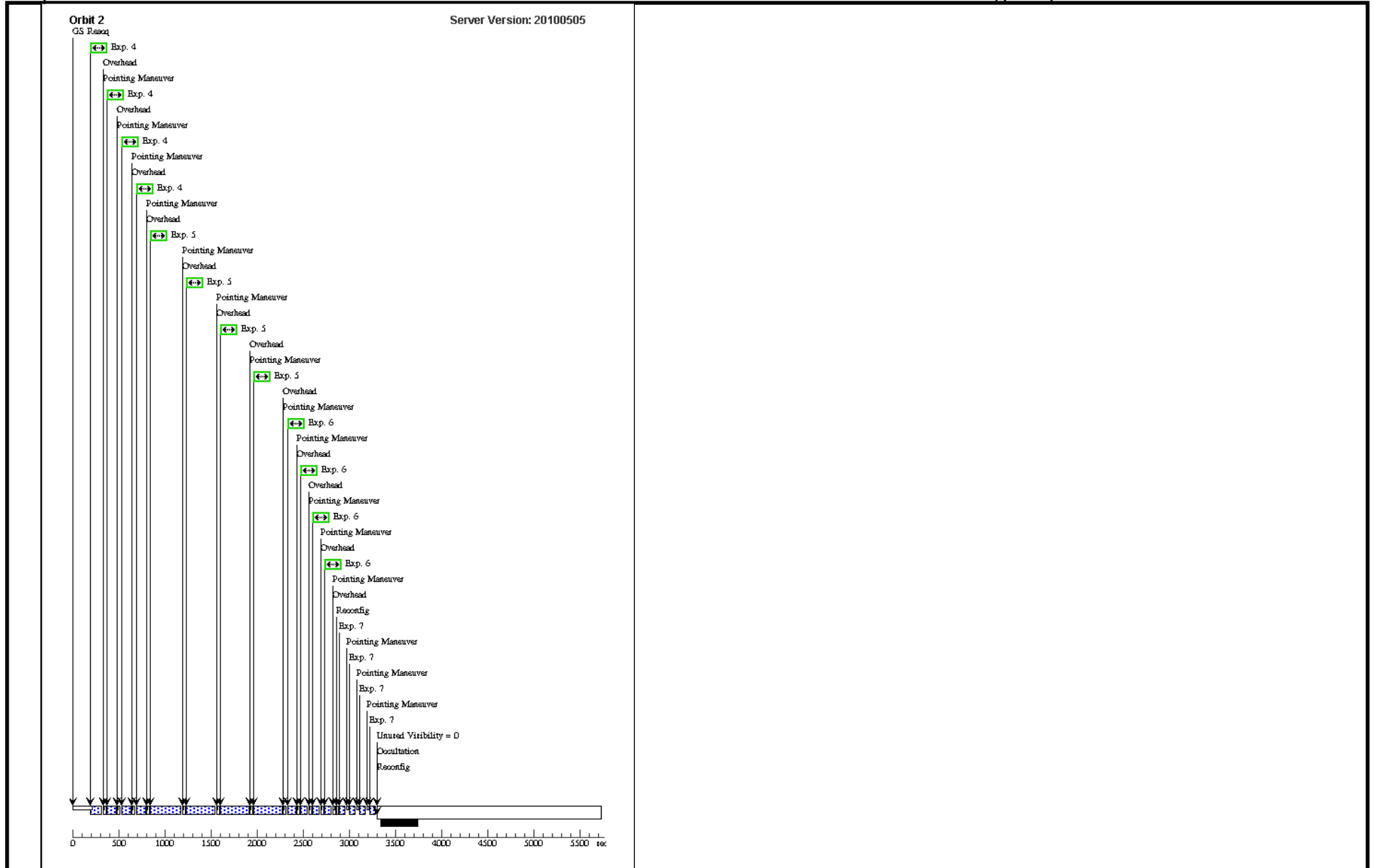
Visit	Proposal 12163, Visit 08 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)					
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures	
		(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1), (2), (4), (5), (6)
	(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=14.3 Line Spacing=9.125	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true		(3), (7)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(8)	NGC-4244	RA: 12 17 29.4960 (184.3729000d) Dec: +37 48 26.12 (37.80726d) Equinox: J2000		V=(?) B = 10.5	Reference Frame: ICRS
<i>Comments: Coordinates measured from 2MASS, but a few arcsec offset from NED coordinates.</i>						

Proposal 12163 - Visit 07 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	(8) NGC-4244	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F275W	CR-SPLIT=NO		Pattern 1, Exps 1-1 (1)	416 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	2	(8) NGC-4244	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F438W	CR-SPLIT=NO		Pattern 1, Exps 2-2 (1)	100 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	3	(8) NGC-4244	WFC3/IR, MULTIACCUM, IRSUB512	F127M	SAMP-SEQ=STEP2 5; NSAMP=6		Pattern 2, Exps 3-3 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	4	(8) NGC-4244	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F547M	CR-SPLIT=NO		Pattern 1, Exps 4-4 (1)	100 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]
	5	(8) NGC-4244	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F336W	CR-SPLIT=NO		Pattern 1, Exps 5-5 (1)	310 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]
	6	(8) NGC-4244	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F814W	CR-SPLIT=NO		Pattern 1, Exps 6-6 (1)	71 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]
	7	(8) NGC-4244	WFC3/IR, MULTIACCUM, IRSUB512	F153M	SAMP-SEQ=STEP2 5; NSAMP=6		Pattern 2, Exps 7-7 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]



Proposal 12163 - Visit 08 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies



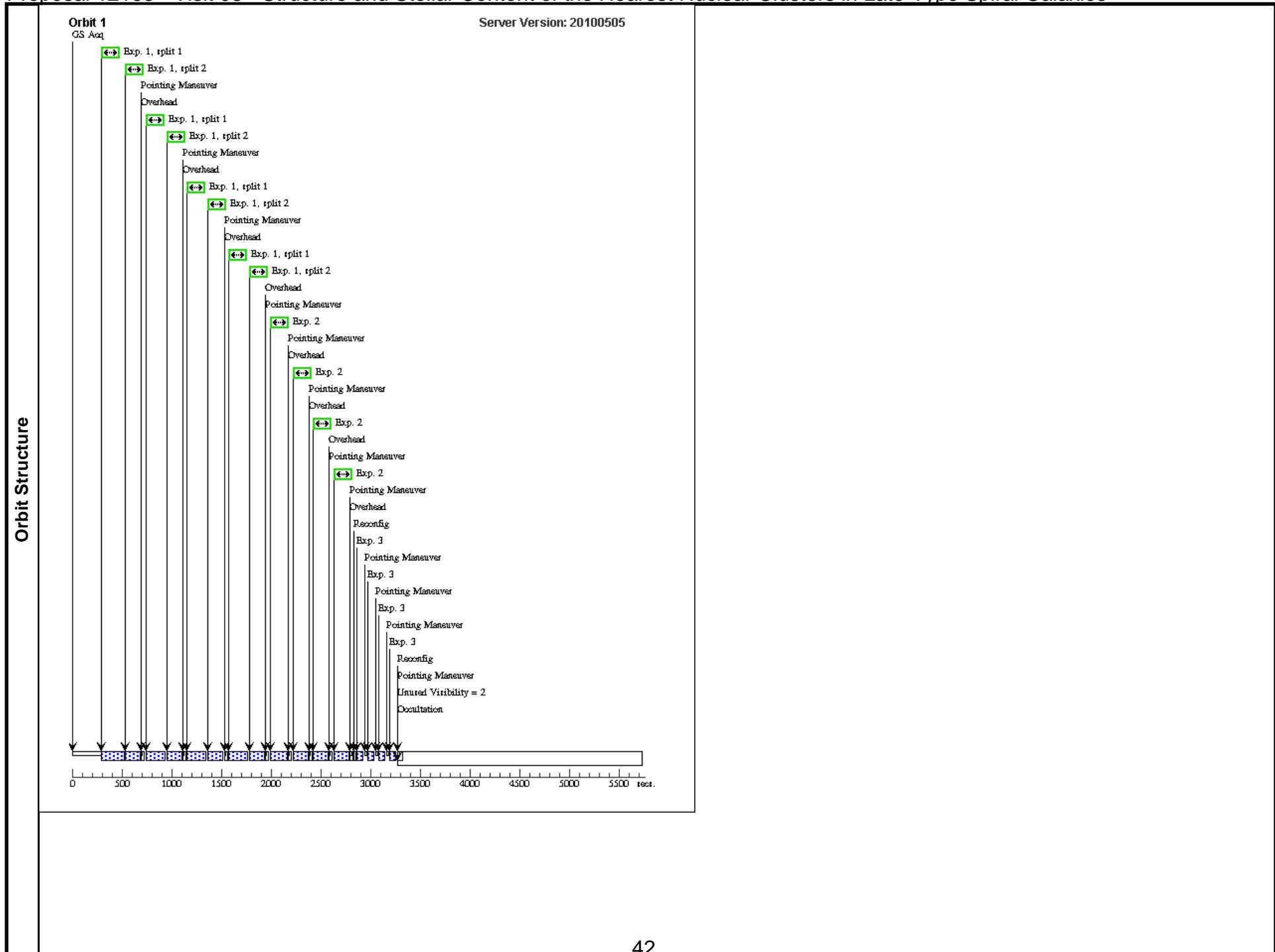
Proposal 12163 - Visit 08 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

Sat Jul 10 02:08:27 GMT 2010

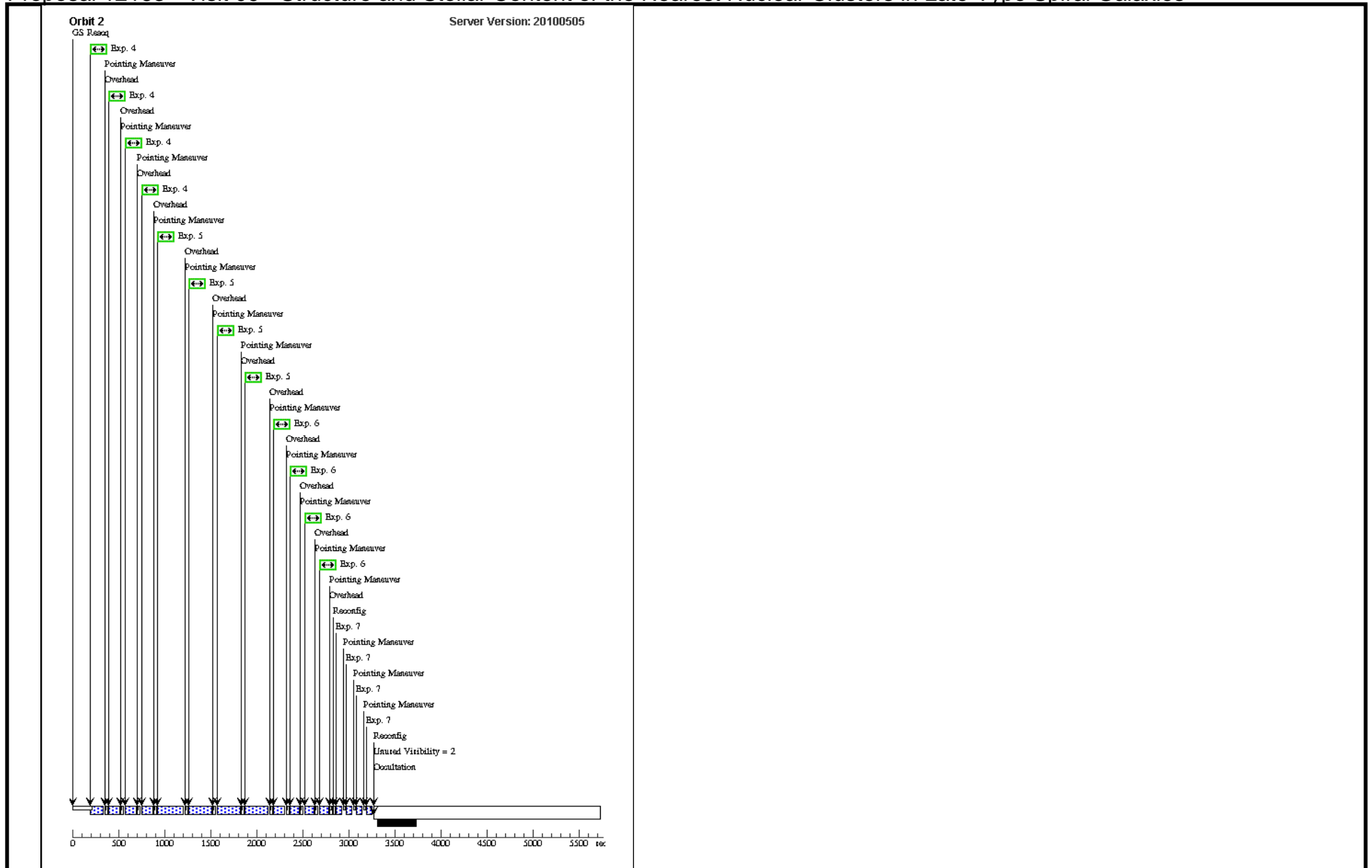
Visit	Proposal 12163, Visit 09 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)					
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures	
		(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1), (2), (4), (5), (6)
	(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=14.3 Line Spacing=9.125	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true		(3), (7)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(9)	NGC-4395	RA: 12 25 48.8600 (186.4535833d) Dec: +33 32 48.95 (33.54693d) Equinox: J2000		V=10.18	Reference Frame: ICRS
<i>Comments: Coordinates measured from 2MASS, reasonably consistent with coordinates from ACS image.</i>						

Proposal 12163 - Visit 08 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	(9) NGC-4395	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F275W	CR-SPLIT=2		Pattern 1, Exps 1-1 (1)	300 Secs [=>(Pattern 1, Split 1)] [=>(Pattern 1, Split 2)] [=>(Pattern 2, Split 1)] [=>(Pattern 2, Split 2)] [=>(Pattern 3, Split 1)] [=>(Pattern 3, Split 2)] [=>(Pattern 4, Split 1)] [=>(Pattern 4, Split 2)]	[1]
	2	(9) NGC-4395	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F438W	CR-SPLIT=NO		Pattern 1, Exps 2-2 (1)	148 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	3	(9) NGC-4395	WFC3/IR, MULTIACCUM, IRSUB512	F127M	SAMP-SEQ=STEP2 5; NSAMP=6		Pattern 2, Exps 3-3 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	4	(9) NGC-4395	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F547M	CR-SPLIT=NO		Pattern 1, Exps 4-4 (1)	120 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]
	5	(9) NGC-4395	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F336W	CR-SPLIT=NO		Pattern 1, Exps 5-5 (1)	254 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]
	6	(9) NGC-4395	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F814W	CR-SPLIT=NO		Pattern 1, Exps 6-6 (1)	100 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]
	7	(9) NGC-4395	WFC3/IR, MULTIACCUM, IRSUB512	F153M	SAMP-SEQ=STEP2 5; NSAMP=6		Pattern 2, Exps 7-7 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]



Proposal 12163 - Visit 09 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies



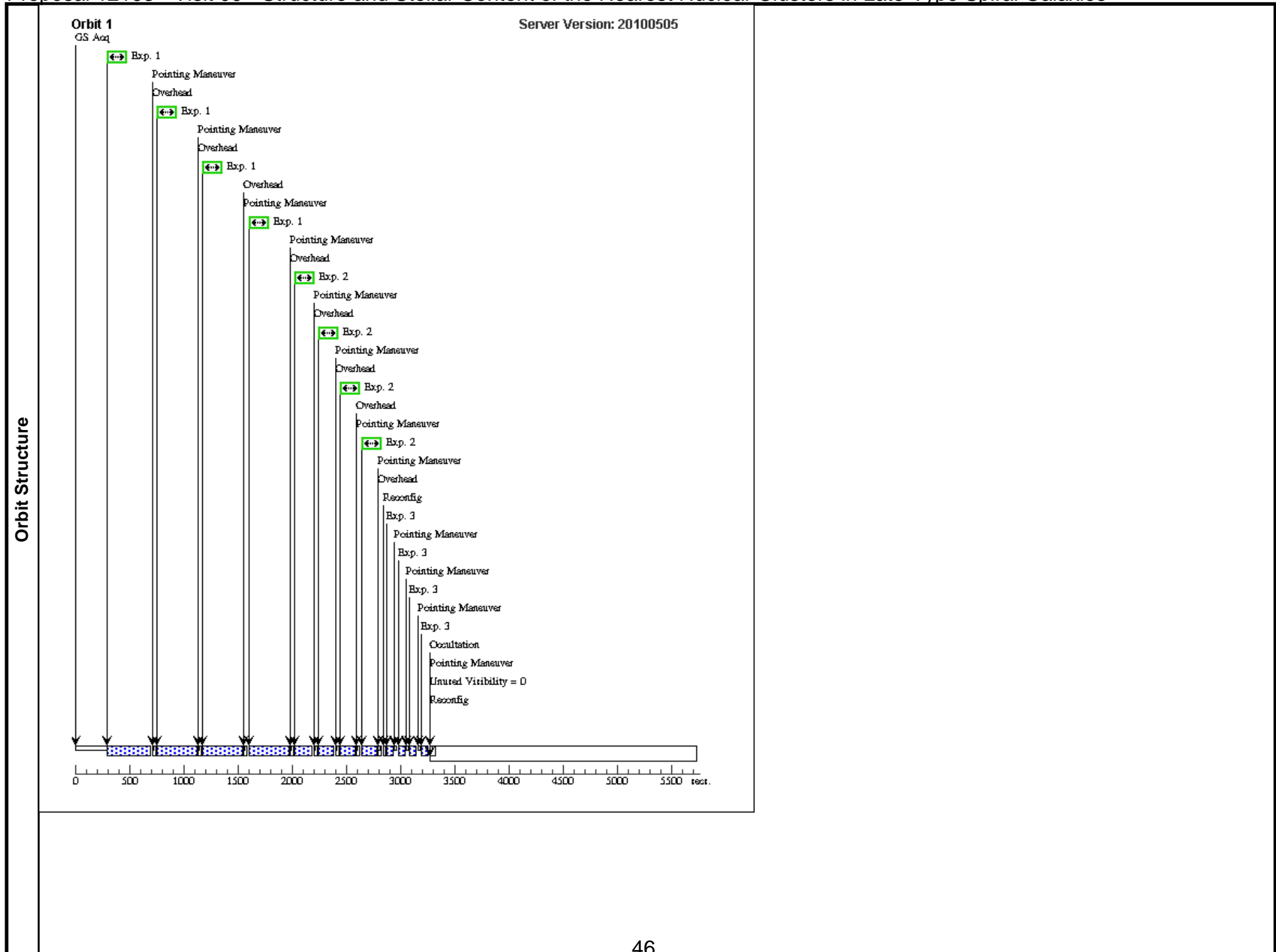
Proposal 12163 - Visit 09 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

Sat Jul 10 02:08:28 GMT 2010

Visit	Proposal 12163, Visit 10					
		Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)				
Patterns	#	Primary Pattern	Secondary Pattern	Exposures		
	(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1), (2), (4), (5), (6)	
	(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=14.3 Line Spacing=9.125	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true		(3), (7)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(10)	NGC-7793	RA: 23 57 49.7930 (359.4574708d) Dec: -32 35 27.05 (-32.59085d) Equinox: J2000		V=9.11	Reference Frame: ICRS
	<i>Comments: Coordinates of nucleus measured from 2MASS image, consistent with NED.</i>					

Proposal 12163 - Visit 09 - Structure and Stellar Content of the Nearest Nuclear Clusters in Late-Type Spiral Galaxies

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	(10) NGC-7793	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F275W	CR-SPLIT=NO		Pattern 1, Exps 1-1 (1)	370 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	(10) NGC-7793	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F438W	CR-SPLIT=NO		Pattern 1, Exps 2-2 (1)	140 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3	(10) NGC-7793	WFC3/IR, MULTIACCUM, IRSUB512	F127M	SAMP-SEQ=STEP2 5; NSAMP=6		Pattern 2, Exps 3-3 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	4	(10) NGC-7793	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F547M	CR-SPLIT=NO		Pattern 1, Exps 4-4 (1)	100 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]
	5	(10) NGC-7793	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F336W	CR-SPLIT=NO		Pattern 1, Exps 5-5 (1)	290 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]
	6	(10) NGC-7793	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F814W	CR-SPLIT=NO		Pattern 1, Exps 6-6 (1)	84 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]
	7	(10) NGC-7793	WFC3/IR, MULTIACCUM, IRSUB512	F153M	SAMP-SEQ=STEP2 5; NSAMP=6		Pattern 2, Exps 7-7 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]



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