



15063 - The elusive old stellar halo of low-mass spirals: RR Lyrae stars in NGC55

Cycle: 25, 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) NGC-55 ANY	ACS/WFC WFC3/UVIS	2	07-Jan-2019 12:00:20.0	yes
02	(1) NGC-55 ANY	ACS/WFC WFC3/UVIS	2	07-Jan-2019 12:00:21.0	yes
03	(1) NGC-55 ANY	ACS/WFC WFC3/UVIS	2	07-Jan-2019 12:00:22.0	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>
04	(1) NGC-55 ANY	ACS/WFC WFC3/UVIS	2	07-Jan-2019 12:00:23.0	yes
05	(1) NGC-55 ANY	ACS/WFC WFC3/UVIS	2	07-Jan-2019 12:00:24.0	yes
06	(1) NGC-55 ANY	ACS/WFC WFC3/UVIS	2	07-Jan-2019 12:00:26.0	yes
07	(1) NGC-55 ANY	ACS/WFC WFC3/UVIS	2	07-Jan-2019 12:00:27.0	yes
08	(1) NGC-55 ANY	ACS/WFC WFC3/UVIS	2	07-Jan-2019 12:00:28.0	yes
Z1	(1) NGC-55 ANY	ACS/WFC WFC3/UVIS	1	07-Jan-2019 12:00:29.0	yes

17 Total Orbits Used

ABSTRACT

Spiral galaxies dominate the stellar mass density in the Universe, yet the details of their formation and evolution are still greatly debated. The simulations based on the current cosmological model show that these galaxies grow in mass through accretion and mergers. One of the consequence of this galaxy assembly process is the formation of an old, metal-poor stellar halo. However, to date the presence of a spheroidal component in low-mass spirals is elusive and controversial, mostly due to the difficulty to detect such a faint, diffuse component amid the foreground/background contamination. We propose a novel method to detect and characterize such a halo in the nearby, edge-on spiral galaxy NGC 55, that by-passes these limitations by using the pulsational properties of its RR Lyrae stars. These observations will allow us to i) firmly establish the presence of an old stellar halo, ii) quantify its early chemical evolution, and iii) determine the nature of its building blocks. We will use the resulting deep color-magnitude diagrams reaching 1.5 magnitudes below the horizontal-branch to test halo and thick disk formation models.

OBSERVING DESCRIPTION

Proposal 15063 (STScI Edit Number: 11, Created: Monday, January 7, 2019 at 12:00:29 PM Eastern Standard Time) - Overview

The goal of this proposal is to obtain accurate light curves of RR Lyrae variable stars and a relatively deep color-magnitude diagram for a field in the halo of the nearby dwarf spiral galaxy NGC55. The two cameras used (ACS and WFC3) will probe slightly different radial distances from the center of the galaxy, hence the orientation is important.

Our visits span 2 orbits. For the first orbit, one F475W and one F814W exposure (with no CR-splits) are obtained with the ACS. For the second orbit, one F475W and one F814W exposure are obtained at the same pointing, but the order of the filters is reversed to provide better sampling of RR Lyrae variable star light curves. The images in the same visit are kept with the same POS TARG in order to have two images in the same position, which is supposed to help in the CR removal. Small ditherings are performed between visits in order to remove hot pixels and to smooth the detector response. We don't intend to cover the interchip gap. Ditherings are performed using POS-TARG, and following the basic UDF dither pattern, shifting the pointings by ~ 2 pix. Coordinated parallel exposures following the same strategy with WFC3 are requested.

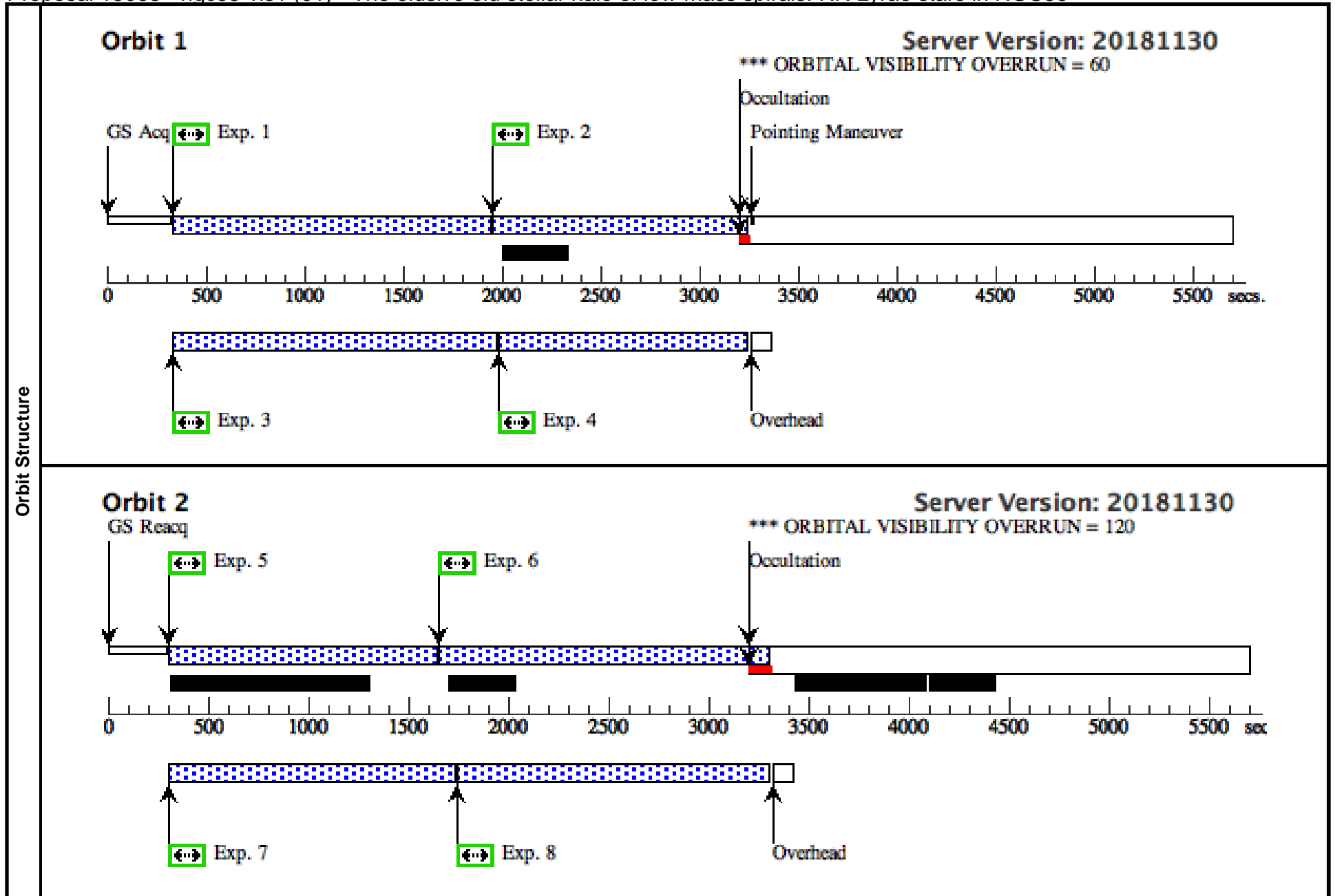
The first visit is requested within a given range of orientations. This range has been chosen to cover a range of distances from the center of the galaxy and to avoid bright stars in the main and the parallel field. Subsequent visits are requested to be obtained with the same ORIENT as the first visit, to maximize the sky area covered at full depth both in the prime and the parallel fields.

Since the time sampling is crucial, we request the visits to be executed sequentially sometime after 4 hours but within 3 days of the previous visit, and grouped within a maximum time span of 5 days. We also request that visits separated by 8 orbits or multiples of 8 orbits be avoided. SAA impacted orbits are also to be avoided. This strategy proved successful in our previous programs (PID=13028, 13739 & 10505). This will ensure optimal sampling of the light curves of the RR Lyrae variable stars, which are the main targets of these observations.

Proposal 15063 - ngc55-vis1 (01) - The elusive old stellar halo of low-mass spirals: RR Lyrae stars in NGC55

Mon Jan 07 17:00:29 GMT 2019

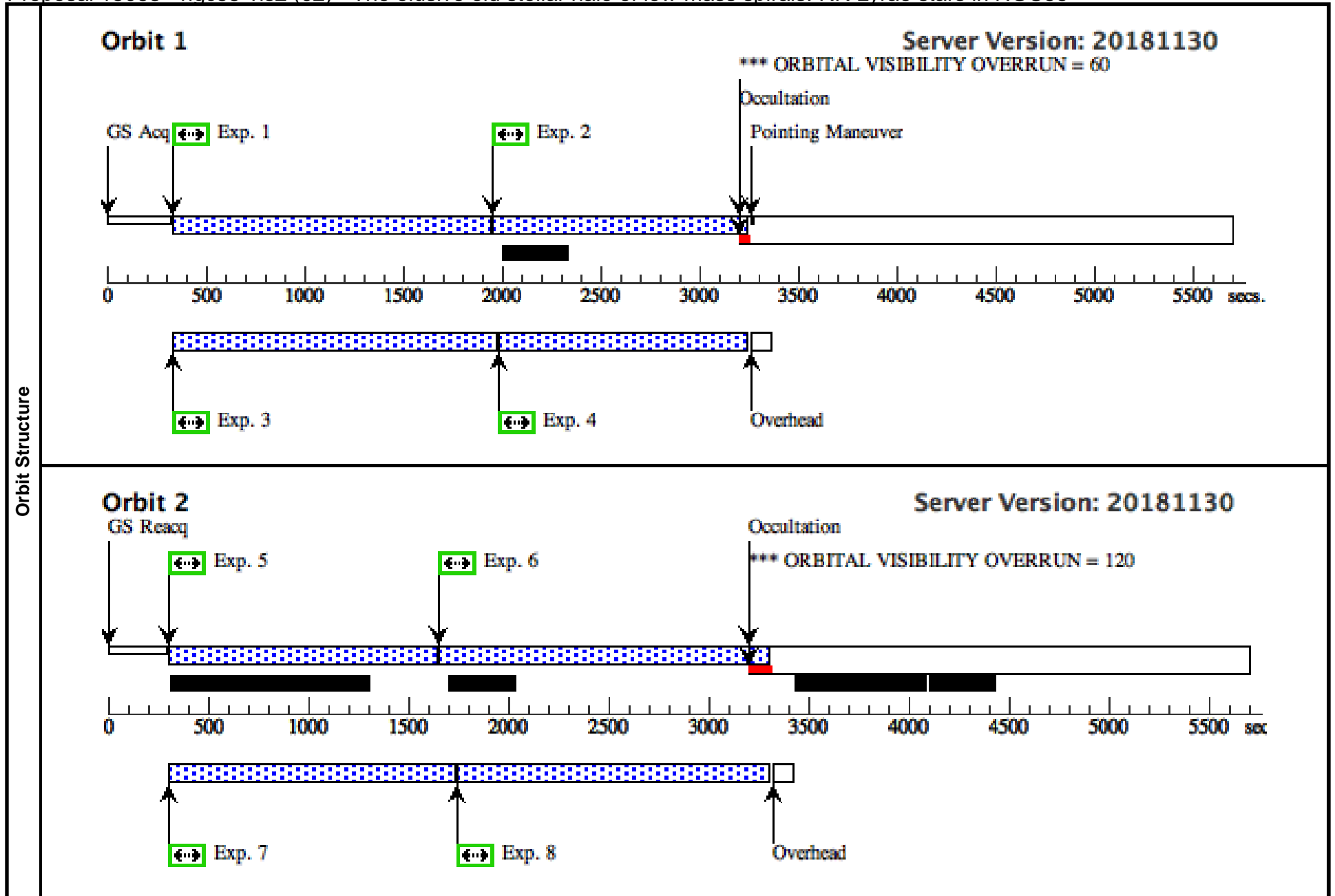
Visit	<p>Proposal 15063, ngc55-vis1 (01), failed</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: WFC3/UVIS, ACS/WFC</p> <p>Special Requirements: ORIENT 30D TO 85 D</p> <p><i>Comments: This is the first visit to our requested field. We request a range in orientations in this first visit with the same orientation requested in subsequent visits to this target. This requirement will ensure that the parallel WFC3 fields of view will match exactly across all visits to this target.</i></p> <p><i>We have requested timing constraints such that (1) all visits to NGC55 be executed sequentially sometime after 4 hours but within 3 days of the previous visit, and (2) all visits to NGC55 should be executed within 5 days. In addition, we also request that visits separated by 8 orbits or multiples of 8 orbits be avoided. SAA impacted orbits are to be avoided. These timing constraints provide optimal sampling of RR Lyrae light curves.</i></p>									
	<p>(ngc55-vis1 (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN</p> <p>(ngc55-vis1 (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN</p>									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC-55	RA: 00 15 18.1128 (3.8254700d) Dec: -39 01 52.94 (-39.03137d) Equinox: J2000		V=7.87	Reference Frame: SIMBAD				
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=GALAXY</i></p> <p><i>Description= HALO </i></p>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACS-F475 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F475W		GS ACQ SCENARI O BASE1B3	Prime + Parallel Group 1-4 in ngc55-vis1 (01)	1400 Secs (1400 Secs) [==>]	[1]
	2	ACS-F814 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F814W			Prime + Parallel Group 1-4 in ngc55-vis1 (01)	1130 Secs (1130 Secs) [==>]	[1]
	3	WFC3-F475 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in ngc55-vis1 (01)	1490 Secs (1490 Secs) [==>]	[1]
	4	WFC3-F814 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in ngc55-vis1 (01)	1245 Secs (1245 Secs) [==>]	[1]
	5	ACS-F814 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.085,0.105	Prime + Parallel Group 5-8 in ngc55-vis1 (01)	1222 Secs (1212 Secs) [==>1212.0 Secs]	[2]
	6	ACS-F475 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.085,0.105	Prime + Parallel Group 5-8 in ngc55-vis1 (01)	1500 Secs (1490 Secs) [==>1490.0 Secs]	[2]
	7	WFC3-F814 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in ngc55-vis1 (01)	1322 Secs (1312 Secs) [==>1312.0 Secs]	[2]
	8	WFC3-F475 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in ngc55-vis1 (01)	1550 Secs (1540 Secs) [==>1540.0 Secs]	[2]



Proposal 15063 - ngc55-vis2 (02) - The elusive old stellar halo of low-mass spirals: RR Lyrae stars in NGC55

Mon Jan 07 17:00:29 GMT 2019

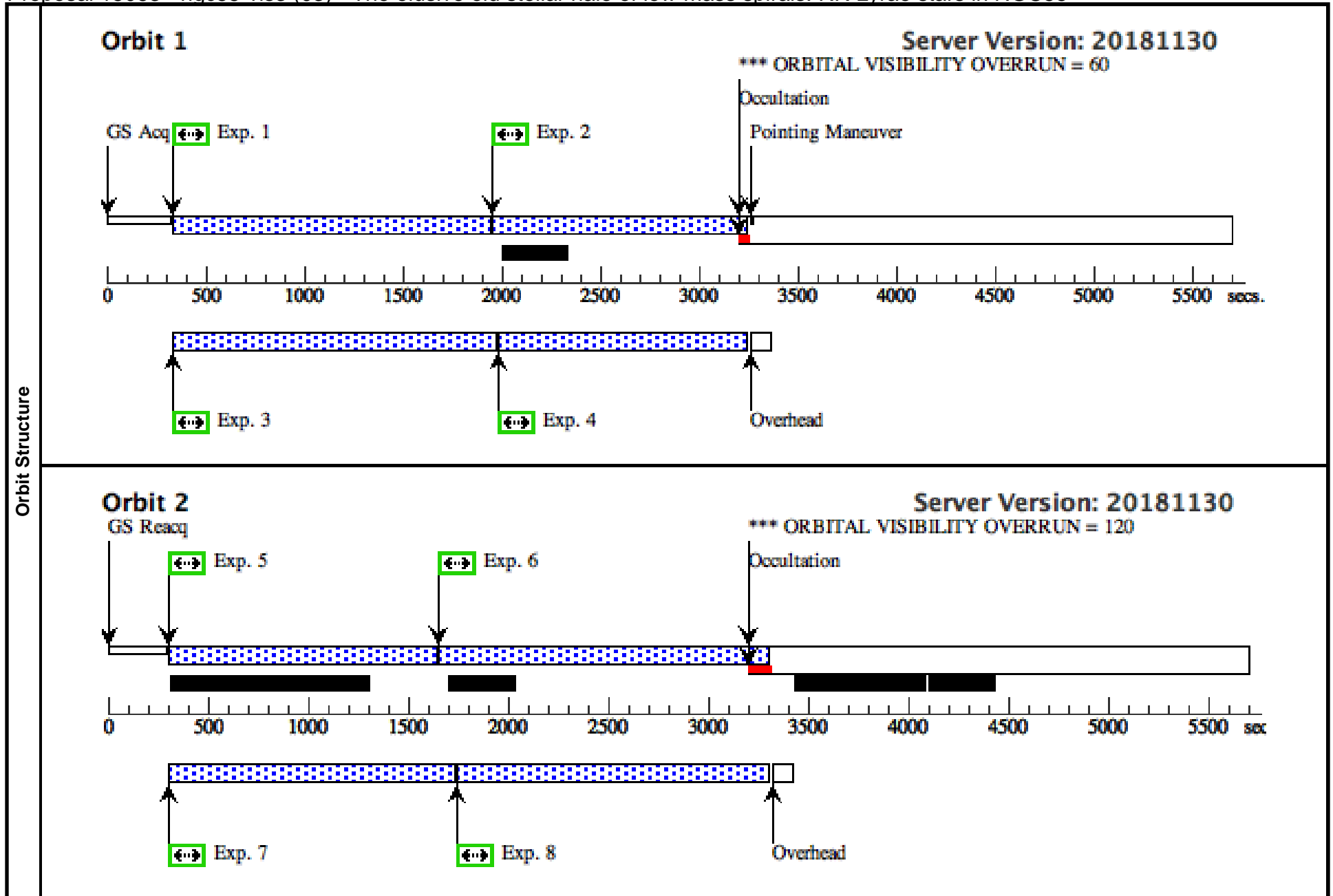
Visit	Proposal 15063, ngc55-vis2 (02), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SAME ORIENT AS 01; AFTER 01 BY 4 H TO 3 D <i>Comments: The orientation must be the same as in Visit 1 to ensure that the parallel WFC3 fields of view will match exactly across all visits to this target.</i>									
	Diagnostics	(ngc55-vis2 (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (ngc55-vis2 (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN								
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1) NGC-55 RA: 00 15 18.1128 (3.8254700d) Dec: -39 01 52.94 (-39.03137d) Equinox: J2000 <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[HALO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACS-F475 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.148,0.086; GS ACQ SCENARI O BASE1B3	Prime + Parallel Group 1-4 in ngc55-vis2 (02)	1400 Secs (1400 Secs) [==>]	[1]
	2	ACS-F814 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.148,0.086	Prime + Parallel Group 1-4 in ngc55-vis2 (02)	1130 Secs (1130 Secs) [==>]	[1]
	3	WFC3-F475 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in ngc55-vis2 (02)	1490 Secs (1490 Secs) [==>]	[1]
	4	WFC3-F814 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in ngc55-vis2 (02)	1245 Secs (1245 Secs) [==>]	[1]
	5	ACS-F814 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.233,0.191	Prime + Parallel Group 5-8 in ngc55-vis2 (02)	1222 Secs (1212 Secs) [==>1212.0 Secs]	[2]
	6	ACS-F475 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.233,0.191	Prime + Parallel Group 5-8 in ngc55-vis2 (02)	1500 Secs (1490 Secs) [==>1490.0 Secs]	[2]
	7	WFC3-F814 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in ngc55-vis2 (02)	1322 Secs (1312 Secs) [==>1312.0 Secs]	[2]
	8	WFC3-F475 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in ngc55-vis2 (02)	1550 Secs (1540 Secs) [==>1540.0 Secs]	[2]



Proposal 15063 - ngc55-vis3 (03) - The elusive old stellar halo of low-mass spirals: RR Lyrae stars in NGC55

Mon Jan 07 17:00:29 GMT 2019

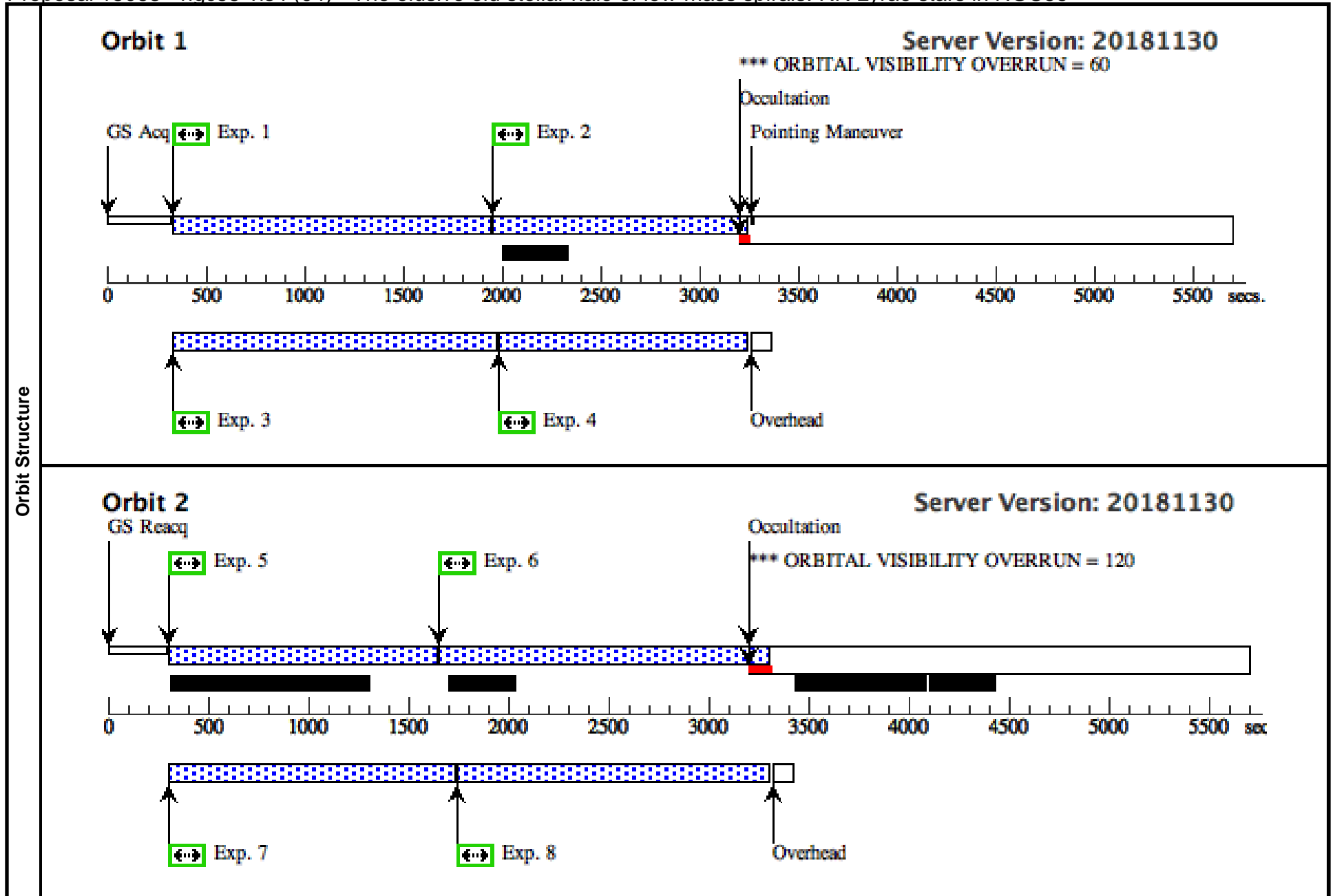
Visit	Proposal 15063, ngc55-vis3 (03), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SAME ORIENT AS 01; AFTER 02 BY 4 H TO 3 D <i>Comments: The orientation must be the same as in Visit 1 to ensure that the parallel WFC3 fields of view will match exactly across all visits to this target.</i>									
	Diagnostics	(ngc55-vis3 (03)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (ngc55-vis3 (03)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN								
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(1)	NGC-55	RA: 00 15 18.1128 (3.8254700d) Dec: -39 01 52.94 (-39.03137d) Equinox: J2000		V=7.87	Reference Frame: SIMBAD			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[HALO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACS-F475 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.222,0.240; GS ACQ SCENARI O BASE1B3	Prime + Parallel Group 1-4 in ngc55-vis3 (03)	1400 Secs (1400 Secs) [==>]	[1]
	2	ACS-F814 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.222,0.240	Prime + Parallel Group 1-4 in ngc55-vis3 (03)	1130 Secs (1130 Secs) [==>]	[1]
	3	WFC3-F475 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in ngc55-vis3 (03)	1490 Secs (1490 Secs) [==>]	[1]
	4	WFC3-F814 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in ngc55-vis3 (03)	1245 Secs (1245 Secs) [==>]	[1]
	5	ACS-F814 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.307,0.345	Prime + Parallel Group 5-8 in ngc55-vis3 (03)	1222 Secs (1212 Secs) [==>1212.0 Secs]	[2]
	6	ACS-F475 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.307,0.345	Prime + Parallel Group 5-8 in ngc55-vis3 (03)	1500 Secs (1490 Secs) [==>1490.0 Secs]	[2]
	7	WFC3-F814 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in ngc55-vis3 (03)	1322 Secs (1312 Secs) [==>1312.0 Secs]	[2]
	8	WFC3-F475 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in ngc55-vis3 (03)	1550 Secs (1540 Secs) [==>1540.0 Secs]	[2]



Proposal 15063 - ngc55-vis4 (04) - The elusive old stellar halo of low-mass spirals: RR Lyrae stars in NGC55

Mon Jan 07 17:00:29 GMT 2019

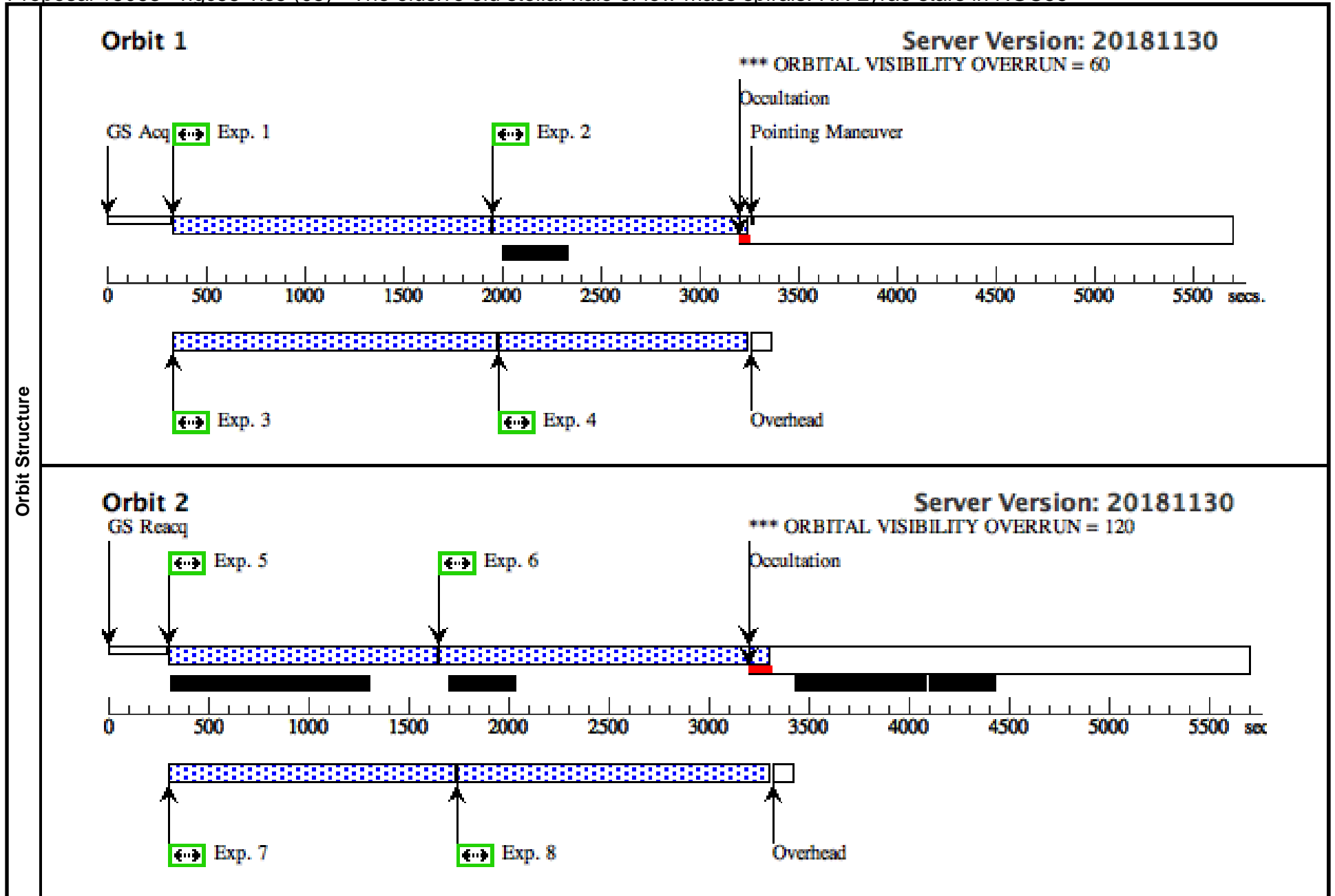
Visit	Proposal 15063, ngc55-vis4 (04), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SAME ORIENT AS 01; AFTER 03 BY 4 H TO 3 D <i>Comments: The orientation must be the same as in Visit 1 to ensure that the parallel WFC3 fields of view will match exactly across all visits to this target.</i>									
	Diagnostics	(ngc55-vis4 (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (ngc55-vis4 (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN								
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(1)	NGC-55	RA: 00 15 18.1128 (3.8254700d) Dec: -39 01 52.94 (-39.03137d) Equinox: J2000		V=7.87	Reference Frame: SIMBAD			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[HALO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACS-F475 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.074,0.154; GS ACQ SCENARI O BASE1B3	Prime + Parallel Group 1-4 in ngc55-vis4 (04)	1400 Secs (1400 Secs) [==>]	[1]
	2	ACS-F814 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.074,0.154	Prime + Parallel Group 1-4 in ngc55-vis4 (04)	1130 Secs (1130 Secs) [==>]	[1]
	3	WFC3-F475 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in ngc55-vis4 (04)	1490 Secs (1490 Secs) [==>]	[1]
	4	WFC3-F814 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in ngc55-vis4 (04)	1245 Secs (1245 Secs) [==>]	[1]
	5	ACS-F814 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.159,0.259	Prime + Parallel Group 5-8 in ngc55-vis4 (04)	1222 Secs (1212 Secs) [==>1212.0 Secs]	[2]
	6	ACS-F475 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.159,0.259	Prime + Parallel Group 5-8 in ngc55-vis4 (04)	1500 Secs (1490 Secs) [==>1490.0 Secs]	[2]
	7	WFC3-F814 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in ngc55-vis4 (04)	1322 Secs (1312 Secs) [==>1312.0 Secs]	[2]
	8	WFC3-F475 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in ngc55-vis4 (04)	1550 Secs (1540 Secs) [==>1540.0 Secs]	[2]



Proposal 15063 - ngc55-vis5 (05) - The elusive old stellar halo of low-mass spirals: RR Lyrae stars in NGC55

Mon Jan 07 17:00:30 GMT 2019

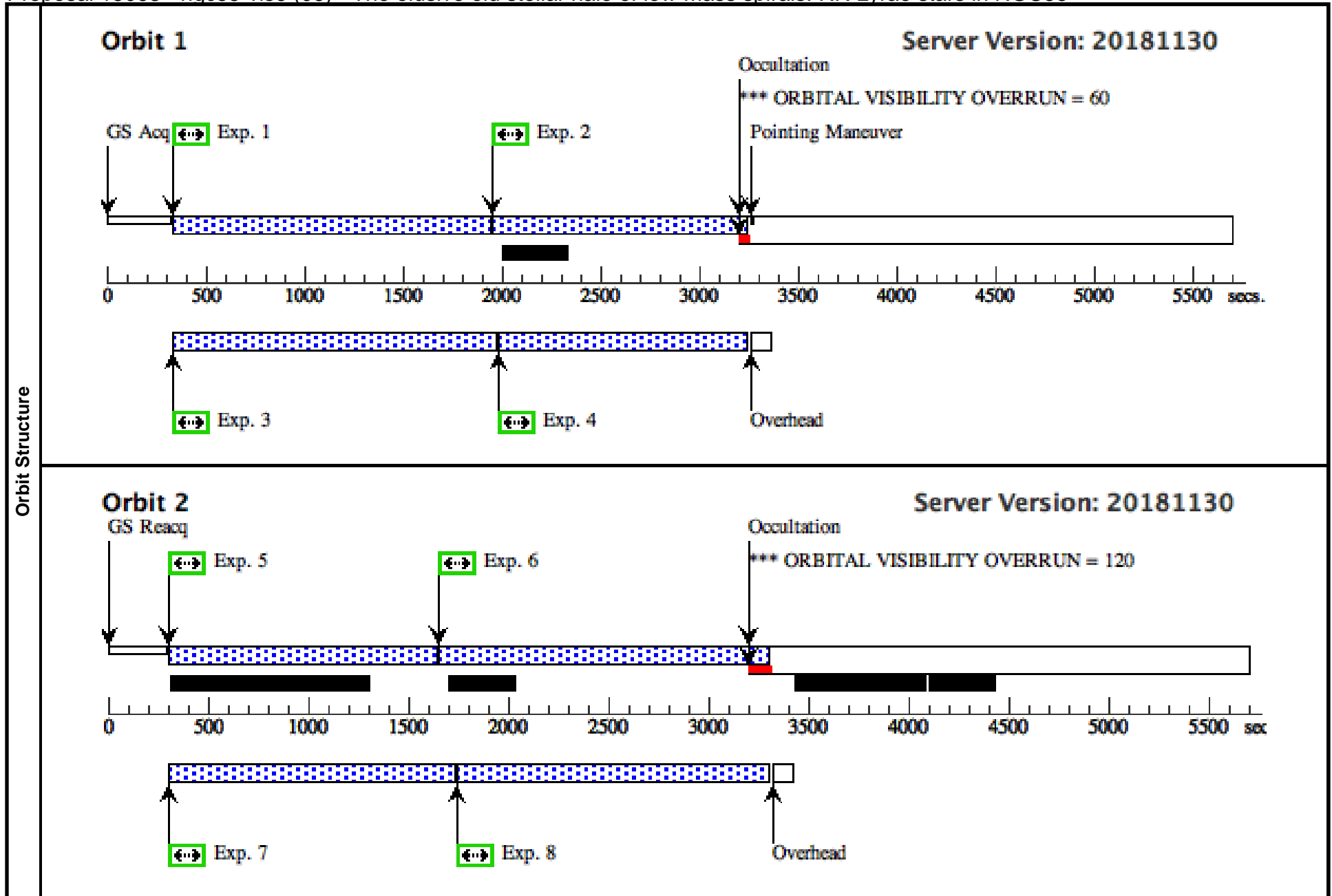
Visit	Proposal 15063, ngc55-vis5 (05), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SAME ORIENT AS 01; AFTER 04 BY 4 H TO 3 D <i>Comments: The orientation must be the same as in Visit 1 to ensure that the parallel WFC3 fields of view will match exactly across all visits to this target.</i>									
	Diagnostics	(ngc55-vis5 (05)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (ngc55-vis5 (05)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN								
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1) NGC-55 RA: 00 15 18.1128 (3.8254700d) Dec: -39 01 52.94 (-39.03137d) Equinox: J2000 <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[HALO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACS-F475 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.125,0.165; GS ACQ SCENARI O BASE1B3	Prime + Parallel Group 1-4 in ngc55-vis5 (05)	1400 Secs (1400 Secs) [==>]	[1]
	2	ACS-F814 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.125,0.165	Prime + Parallel Group 1-4 in ngc55-vis5 (05)	1130 Secs (1130 Secs) [==>]	[1]
	3	WFC3-F475 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in ngc55-vis5 (05)	1490 Secs (1490 Secs) [==>]	[1]
	4	WFC3-F814 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in ngc55-vis5 (05)	1245 Secs (1245 Secs) [==>]	[1]
	5	ACS-F814 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.130,0.330	Prime + Parallel Group 5-8 in ngc55-vis5 (05)	1222 Secs (1212 Secs) [==>1212.0 Secs]	[2]
	6	ACS-F475 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.130,0.330	Prime + Parallel Group 5-8 in ngc55-vis5 (05)	1500 Secs (1490 Secs) [==>1490.0 Secs]	[2]
	7	WFC3-F814 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in ngc55-vis5 (05)	1322 Secs (1312 Secs) [==>1312.0 Secs]	[2]
	8	WFC3-F475 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in ngc55-vis5 (05)	1550 Secs (1540 Secs) [==>1540.0 Secs]	[2]



Proposal 15063 - ngc55-vis6 (06) - The elusive old stellar halo of low-mass spirals: RR Lyrae stars in NGC55

Mon Jan 07 17:00:30 GMT 2019

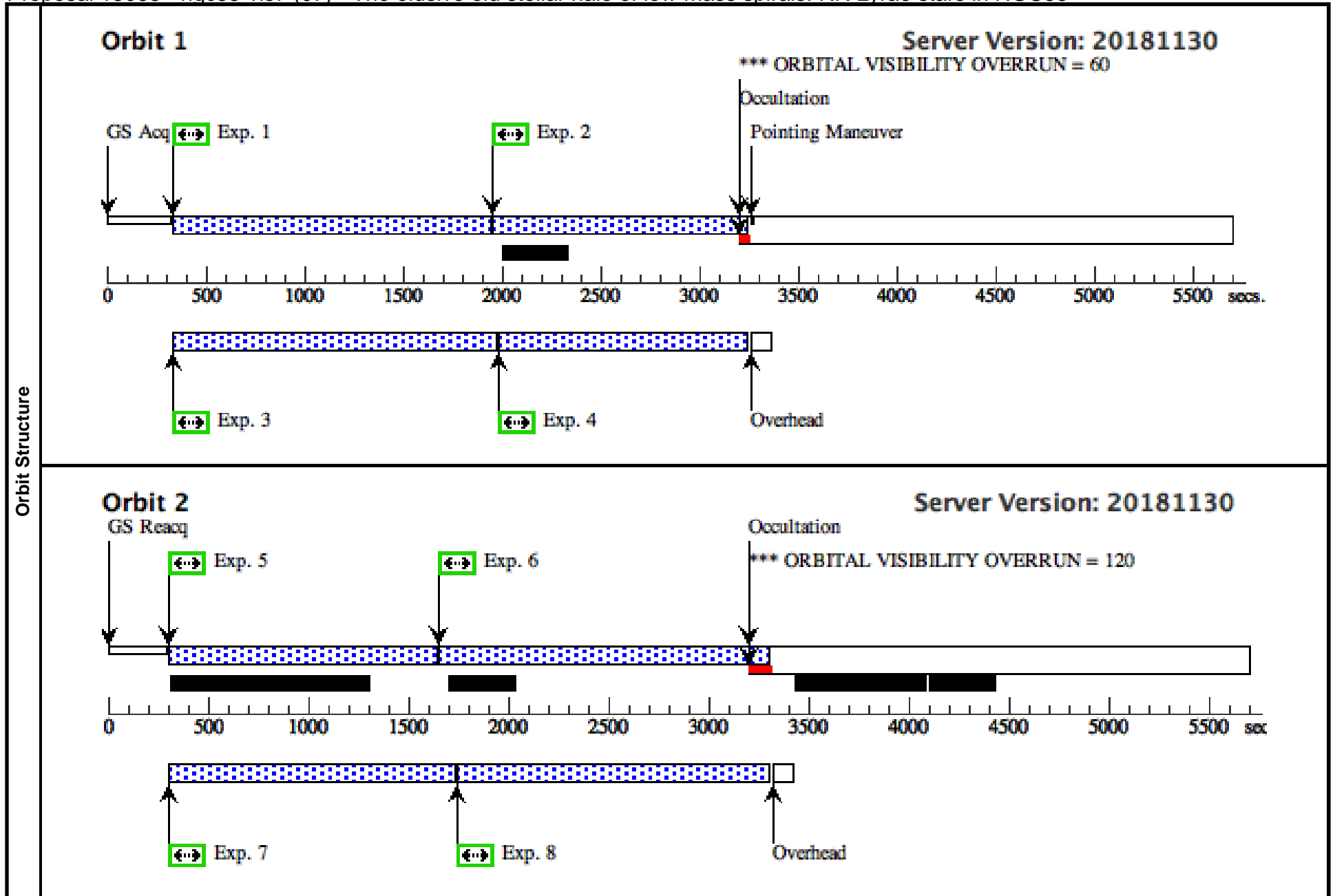
Visit	Proposal 15063, ngc55-vis6 (06), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SAME ORIENT AS 01; AFTER 05 BY 4 H TO 3 D <i>Comments: The orientation must be the same as in Visit 1 to ensure that the parallel WFC3 fields of view will match exactly across all visits to this target.</i>									
	Diagnostics	(ngc55-vis6 (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (ngc55-vis6 (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN								
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(1)	NGC-55	RA: 00 15 18.1128 (3.8254700d) Dec: -39 01 52.94 (-39.03137d) Equinox: J2000		V=7.87	Reference Frame: SIMBAD			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[HALO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACS-F475 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.283,0.141; GS ACQ SCENARI O BASE1B3	Prime + Parallel Group 1-4 in ngc55-vis6 (06)	1400 Secs (1400 Secs) [==>]	[1]
	2	ACS-F814 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.283,0.141	Prime + Parallel Group 1-4 in ngc55-vis6 (06)	1130 Secs (1130 Secs) [==>]	[1]
	3	WFC3-F475 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in ngc55-vis6 (06)	1490 Secs (1490 Secs) [==>]	[1]
	4	WFC3-F814 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in ngc55-vis6 (06)	1245 Secs (1245 Secs) [==>]	[1]
	5	ACS-F814 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.198,0.161	Prime + Parallel Group 5-8 in ngc55-vis6 (06)	1222 Secs (1212 Secs) [==>1212.0 Secs]	[2]
	6	ACS-F475 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.198,0.161	Prime + Parallel Group 5-8 in ngc55-vis6 (06)	1500 Secs (1490 Secs) [==>1490.0 Secs]	[2]
	7	WFC3-F814 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in ngc55-vis6 (06)	1322 Secs (1312 Secs) [==>1312.0 Secs]	[2]
	8	WFC3-F475 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in ngc55-vis6 (06)	1550 Secs (1540 Secs) [==>1540.0 Secs]	[2]



Proposal 15063 - ngc55-vis7 (07) - The elusive old stellar halo of low-mass spirals: RR Lyrae stars in NGC55

Mon Jan 07 17:00:30 GMT 2019

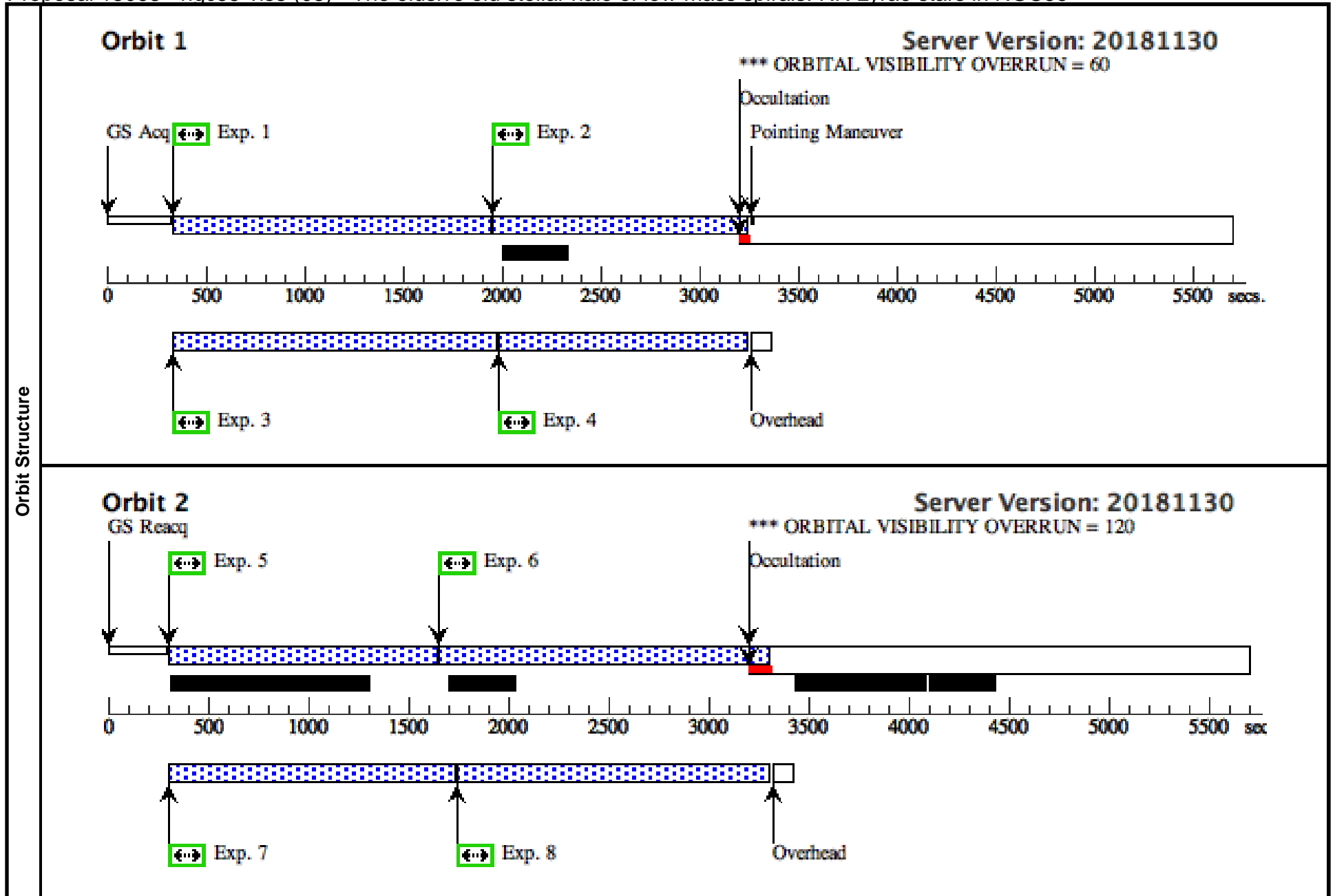
Visit	Proposal 15063, ngc55-vis7 (07), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SAME ORIENT AS 01; AFTER 06 BY 4 H TO 3 D <i>Comments: The orientation must be the same as in Visit 1 to ensure that the parallel WFC3 fields of view will match exactly across all visits to this target.</i>									
	Diagnostics	(ngc55-vis7 (07)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (ngc55-vis7 (07)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN								
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(1)	NGC-55	RA: 00 15 18.1128 (3.8254700d) Dec: -39 01 52.94 (-39.03137d) Equinox: J2000		V=7.87	Reference Frame: SIMBAD			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[HALO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACS-F475 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.357,0.395; GS ACQ SCENARI O BASE1B3	Prime + Parallel Group 1-4 in ngc55-vis7 (07)	1400 Secs (1400 Secs) [==>]	[1]
	2	ACS-F814 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.357,0.395	Prime + Parallel Group 1-4 in ngc55-vis7 (07)	1130 Secs (1130 Secs) [==>]	[1]
	3	WFC3-F475 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in ngc55-vis7 (07)	1490 Secs (1490 Secs) [==>]	[1]
	4	WFC3-F814 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in ngc55-vis7 (07)	1245 Secs (1245 Secs) [==>]	[1]
	5	ACS-F814 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.272,0.290	Prime + Parallel Group 5-8 in ngc55-vis7 (07)	1222 Secs (1212 Secs) [==>1212.0 Secs]	[2]
	6	ACS-F475 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.272,0.290	Prime + Parallel Group 5-8 in ngc55-vis7 (07)	1500 Secs (1490 Secs) [==>1490.0 Secs]	[2]
	7	WFC3-F814 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in ngc55-vis7 (07)	1322 Secs (1312 Secs) [==>1312.0 Secs]	[2]
	8	WFC3-F475 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in ngc55-vis7 (07)	1550 Secs (1540 Secs) [==>1540.0 Secs]	[2]



Proposal 15063 - ngc55-vis8 (08) - The elusive old stellar halo of low-mass spirals: RR Lyrae stars in NGC55

Mon Jan 07 17:00:30 GMT 2019

Visit	Proposal 15063, ngc55-vis8 (08), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SAME ORIENT AS 01; AFTER 07 BY 4 H TO 3 D <i>Comments: The orientation must be the same as in Visit 1 to ensure that the parallel WFC3 fields of view will match exactly across all visits to this target.</i>									
	(ngc55-vis8 (08)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (ngc55-vis8 (08)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC-55	RA: 00 15 18.1128 (3.8254700d) Dec: -39 01 52.94 (-39.03137d) Equinox: J2000		V=7.87	Reference Frame: SIMBAD				
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[HALO]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACS-F475 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.189,0.209; GS ACQ SCENARI O BASE1B3	Prime + Parallel Group 1-4 in ngc55-vis8 (08)	1400 Secs (1400 Secs) [==>]	[1]
	2	ACS-F814 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.189,0.209	Prime + Parallel Group 1-4 in ngc55-vis8 (08)	1130 Secs (1130 Secs) [==>]	[1]
	3	WFC3-F475 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in ngc55-vis8 (08)	1490 Secs (1490 Secs) [==>]	[1]
	4	WFC3-F814 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in ngc55-vis8 (08)	1245 Secs (1245 Secs) [==>]	[1]
	5	ACS-F814 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.074,0.154	Prime + Parallel Group 5-8 in ngc55-vis8 (08)	1222 Secs (1212 Secs) [==>1212.0 Secs]	[2]
	6	ACS-F475 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.074,0.154	Prime + Parallel Group 5-8 in ngc55-vis8 (08)	1500 Secs (1490 Secs) [==>1490.0 Secs]	[2]
	7	WFC3-F814 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 5-8 in ngc55-vis8 (08)	1322 Secs (1312 Secs) [==>1312.0 Secs]	[2]
	8	WFC3-F475 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 5-8 in ngc55-vis8 (08)	1550 Secs (1540 Secs) [==>1540.0 Secs]	[2]



Proposal 15063 - HOPRngc55vis-1 (Z1) - The elusive old stellar halo of low-mass spirals: RR Lyrae stars in NGC55

Mon Jan 07 17:00:30 GMT 2019

Visit	Proposal 15063, HOPRngc55vis-1 (Z1) Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 30D TO 85 D Comments: This is the first visit to our requested field. We request a range in orientations in this first visit with the same orientation requested in subsequent visits to this target. This requirement will ensure that the parallel WFC3 fields of view will match exactly across all visits to this target. We have requested timing constraints such that (1) all visits to NGC55 be executed sequentially sometime after 4 hours but within 3 days of the previous visit, and (2) all visits to NGC55 should be executed within 5 days. In addition, we also request that visits separated by 8 orbits or multiples of 8 orbits be avoided. SAA impacted orbits are to be avoided. These timing constraints provide optimal sampling of RR Lyrae light curves.				

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	NGC-55	RA: 00 15 18.1128 (3.8254700d) Dec: -39 01 52.94 (-39.03137d) Equinox: J2000		V=7.87	Reference Frame: SIMBAD
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=GALAXY Description=[HALO]						

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
		1	ACS-F814 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.085,0.105	Prime + Parallel Group 1-4 in HOPRngc55vis-1 (Z1)	1222 Secs (1095 Secs) [=>1095.0 Secs]
	2	ACS-F475 W	(1) NGC-55	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.085,0.105	Prime + Parallel Group 1-4 in HOPRngc55vis-1 (Z1)	1500 Secs (1373 Secs) [=>1373.0 Secs]	[1]
	3	WFC3-F814 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W			Prime + Parallel Group 1-4 in HOPRngc55vis-1 (Z1)	1322 Secs (1220 Secs) [=>1220.0 Secs]	[1]
	4	WFC3-F475 W	ANY	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W			Prime + Parallel Group 1-4 in HOPRngc55vis-1 (Z1)	1550 Secs (1448 Secs) [=>1448.0 Secs]	[1]

