



15302 - Unveiling the formation of Andromeda XIX - a uniquely diffuse Local Group galaxy

Cycle: 25, Proposal Category: GO
(Availability Mode: SUPPORTED)

INVESTIGATORS

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Dr. Andrew Eugene Dolphin (CoI)	Raytheon Company	adolphin@raytheon.com

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) AND-XIX	ACS/WFC WFC3/UVIS	2	19-Jul-2017 15:07:55.0	yes
02	(1) AND-XIX	ACS/WFC WFC3/UVIS	2	19-Jul-2017 15:07:56.0	yes
03	(1) AND-XIX	ACS/WFC WFC3/UVIS	2	19-Jul-2017 15:07:57.0	yes
04	(1) AND-XIX	ACS/WFC WFC3/UVIS	2	19-Jul-2017 15:07:58.0	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	(1) AND-XIX	ACS/WFC WFC3/UVIS	2	19-Jul-2017 15:07:59.0	yes
06	(1) AND-XIX	ACS/WFC WFC3/UVIS	2	19-Jul-2017 15:08:00.0	yes
07	(1) AND-XIX	ACS/WFC WFC3/UVIS	2	19-Jul-2017 15:08:01.0	yes
08	(1) AND-XIX	ACS/WFC WFC3/UVIS	2	19-Jul-2017 15:08:03.0	yes

16 Total Orbits Used

ABSTRACT

We request 16 orbits of HST/ACS to obtain imaging in F606W and F814W of Andromeda (And) XIX, a truly unique galaxy. With an effective radius of 3.1 kpc, and a surface brightness of 29.3 mag per square arcsec, it is the only known Local Group analogue of the intriguing newly-discovered ultra diffuse galaxies found at higher redshift. And XIX contains significant substructure, and is one of only 3 low mass galaxies that is known to have prolate rotation. This suggests the possibility that And XIX formed as the result of a merger. Using deep, coordinated parallel HST/ACS and WFC3 imaging, we will efficiently test this formation scenario. Our proposed observations will allow us to measure detailed star formation histories for both the centre of And XIX, and its most significant substructure, the southern clump.

If And XIX has been formed as the result of a merger, we expect to see significant differences between the star formation histories of both fields. If And XIX has formed through secular processes or tidal stripping, we expect to see no difference between the two fields. Either result will place a strong constraint on the formation of And XIX, and therefore also the most diffuse galaxies known.

OBSERVING DESCRIPTION

Our primary objective is to measure the star formation history (SFH) in the center of And XIX, as well as its most significant substructure, the southern clump. As the southern clump is separated from the center of And XIX by the distance between the ACS and WFC3 camera, this can be achieved with a coordinated parallel observation using these two instruments. We will therefore observe And XIX with one central ACS/WFC field and one parallel WFC3/UVIS field positioned in the southern clump.

Field positioning

To coordinate our parallel WFC3 observation in the southern clump substructure with our primary ACS field, we require a specific ORIENT. Using the Aladin tool in APT, we determine that both the central field and the substructure can be efficiently targeted with ORIENTs between 155 and 177 degrees. All visits require the same orientation, to ensure we sample the same region of And XIX with each visit, and this has been specified in our visit descriptions.

Required depth

Our depth constraints are set by the need to measure precision SFHs over the lifetime of And XIX. We employ the F814W and F606W filters (for both ACS and WFC3), which are well-suited for measuring the SFHs of nearby dwarf galaxies (e.g. Brown et al. 2015). To achieve our science goal, we require $S/N > 8$ at the oldest main sequence turn-off (Weisz et al. 2014) for And XIX. This S/N will permit us to reliably distinguish stars from background galaxies at this depth (Radburn-Smith, 2011). Simulations of And XIX in our phase 1 proposal indicate that the oMSTO in And XIX is located at $F606W = 28.1$ mag and $F814W = 27.7$ mag.

Exposure times and observational strategy

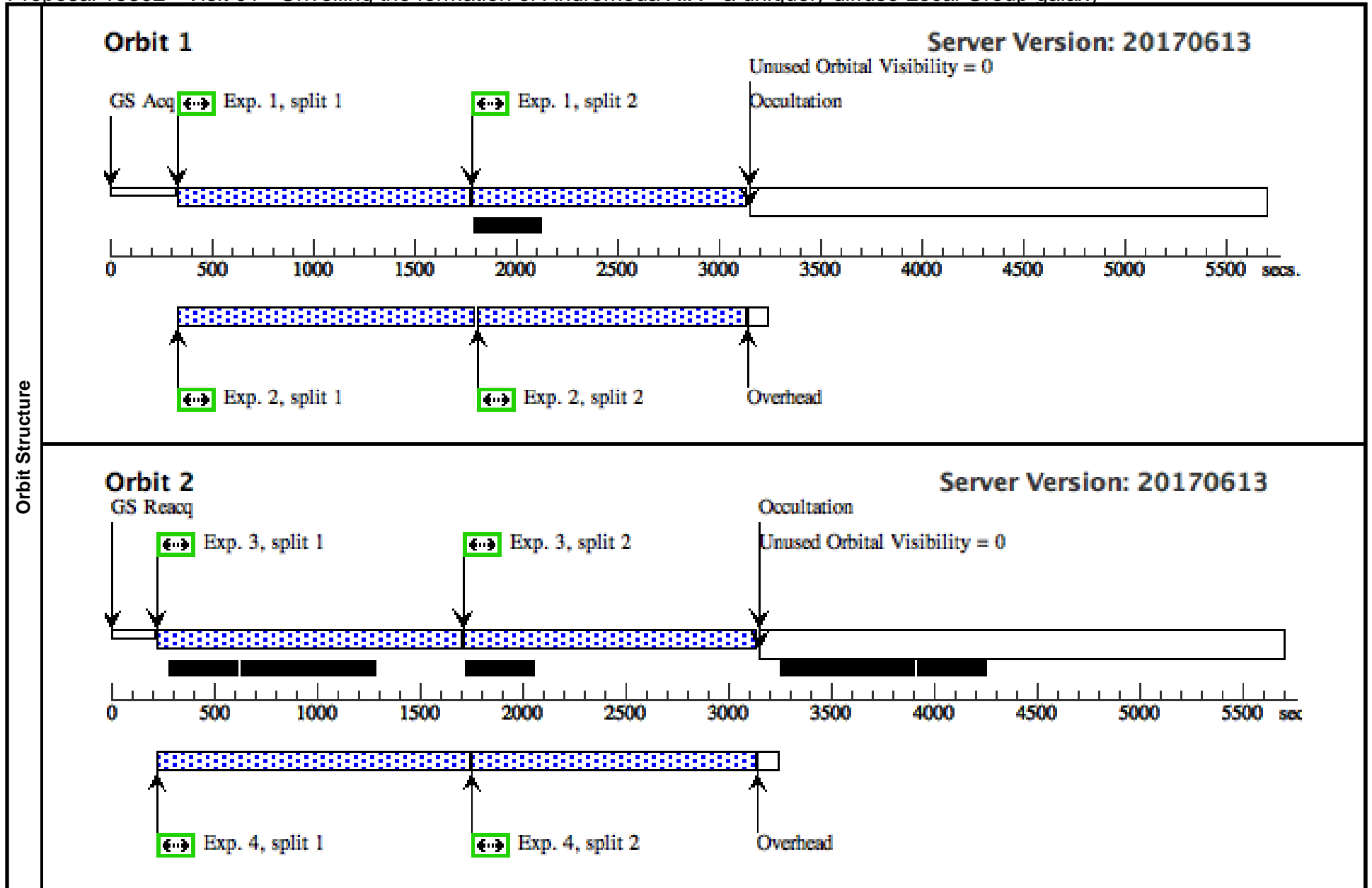
Using the ACS ETC, we determine that to reach a $S/N = 8$ at these depths, we require 7 orbits in F606W and 9 orbits in F814W, totalling 16 orbits. To increase the schedulability of our observations, we have set schedulability to 60, giving a total of 36 days in cycle 25, for which these observations can be made.

We will split each orbit between F606W and F814W, which will allow these observations to be used to obtain RR Lyrae light curves (e.g., Brown et al. 2004). While not a primary part of our science case, it does not detract from our use case and substantially enhances the archival value. To properly sample the lightcurves, we require our visits to be separated by between 4 hours and 3 days. Also, as RR Lyrae periods are ~ 12 hours, the visits must not be spaced by precisely $N \times 0.5$ days. Standard 4-point dither patterns will be used to achieve 0.5 pixel sampling.

Proposal 15302 - Visit 01 - Unveiling the formation of Andromeda XIX - a uniquely diffuse Local Group galaxy

Wed Jul 19 19:08:04 GMT 2017

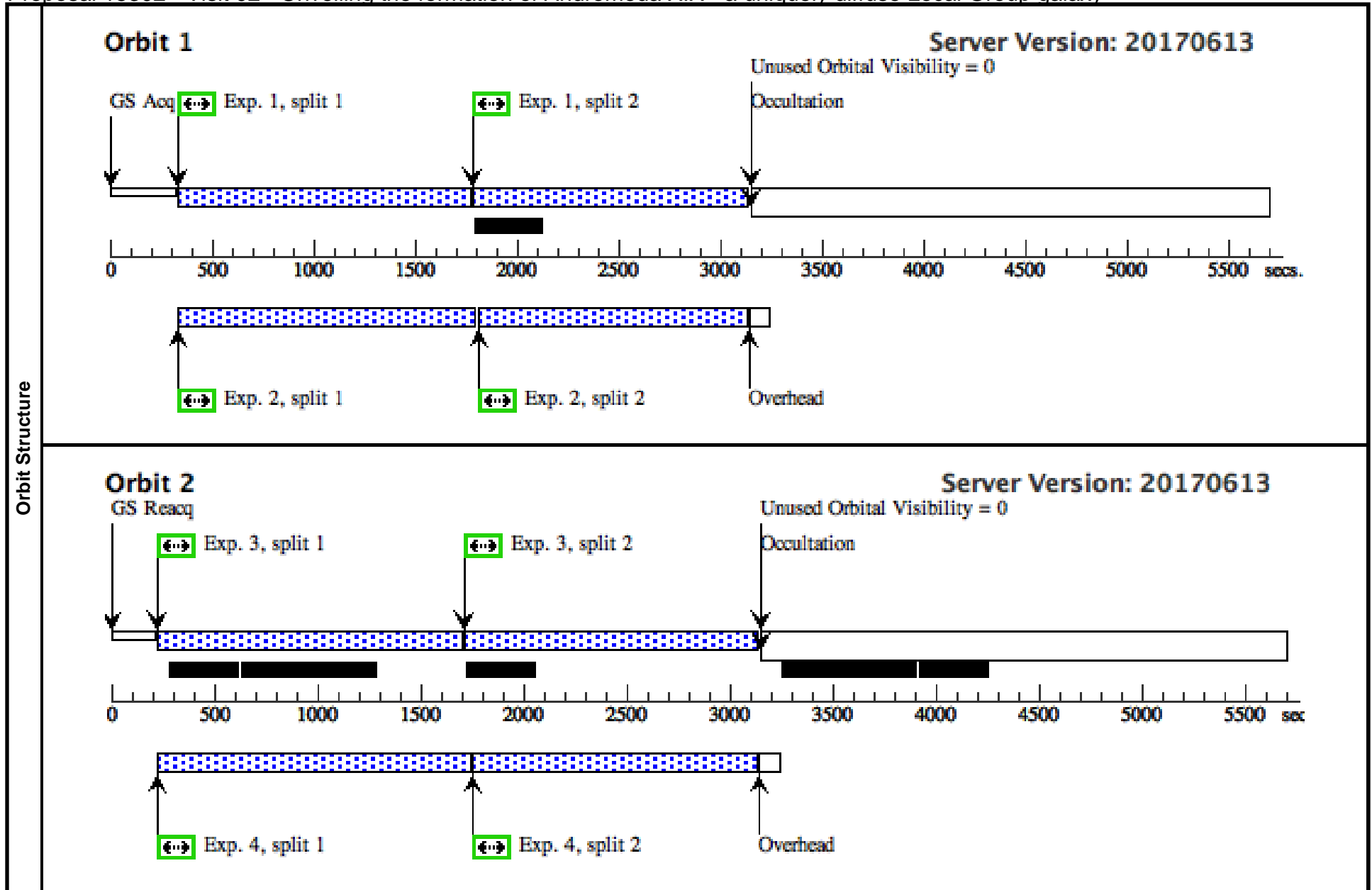
Visit	Proposal 15302, Visit 01 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SCHED 60%; ORIENT 155D TO 177 D <i>Comments: This sequence of visits are all for the same target, with the requirement of being spaced by 4 hours to 3 days. This is needed to appropriately sample light curves of variable stars. We also request that the visits *not* be spaced by ~0.5 days, as the variables in this galaxy are likely to have periods of about 0.5 days, and we need to adequately sample the variable phases.</i>												
	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>(1)</td> <td>AND-XIX</td> <td>RA: 00 19 35.4020 (4.8975083d) Dec: +35 04 22.58 (35.07294d) Equinox: J2000</td> <td></td> <td>V=15.6</td> <td>Reference Frame: SIMBAD</td> </tr> </tbody> </table> <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	AND-XIX	RA: 00 19 35.4020 (4.8975083d) Dec: +35 04 22.58 (35.07294d) Equinox: J2000		V=15.6
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Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit			
	1		(1) AND-XIX	ACS/WFC, ACCUM, WFCENTER	F606W	CR-SPLIT=2	POS TARG 0.0,0.0	Prime + Parallel Group 1-2 in Visit 01	2000 Secs (2460 Secs) [=>1230.0 Secs (Split 1)] [=>1230.0 Secs (Split 2)]	[1]			
	2		(1) AND-XIX	WFC3/UVIS, ACCUM, UVIS-CENTER	F606W	CR-SPLIT=2		Prime + Parallel Group 1-2 in Visit 01	2000 Secs (2638 Secs) [=>1319.0 Secs (Split 1)] [=>1319.0 Secs (Split 2)]	[1]			
	3		(1) AND-XIX	ACS/WFC, ACCUM, WFCENTER	F814W	CR-SPLIT=2	POS TARG 0.0,0.0	Prime + Parallel Group 3-4 in Visit 01	2000 Secs (2598 Secs) [=>1299.0 Secs (Split 1)] [=>1299.0 Secs (Split 2)]	[2]			
	4		(1) AND-XIX	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=2		Prime + Parallel Group 3-4 in Visit 01	2000 Secs (2758 Secs) [=>1379.0 Secs (Split 1)] [=>1379.0 Secs (Split 2)]	[2]			



Proposal 15302 - Visit 02 - Unveiling the formation of Andromeda XIX - a uniquely diffuse Local Group galaxy

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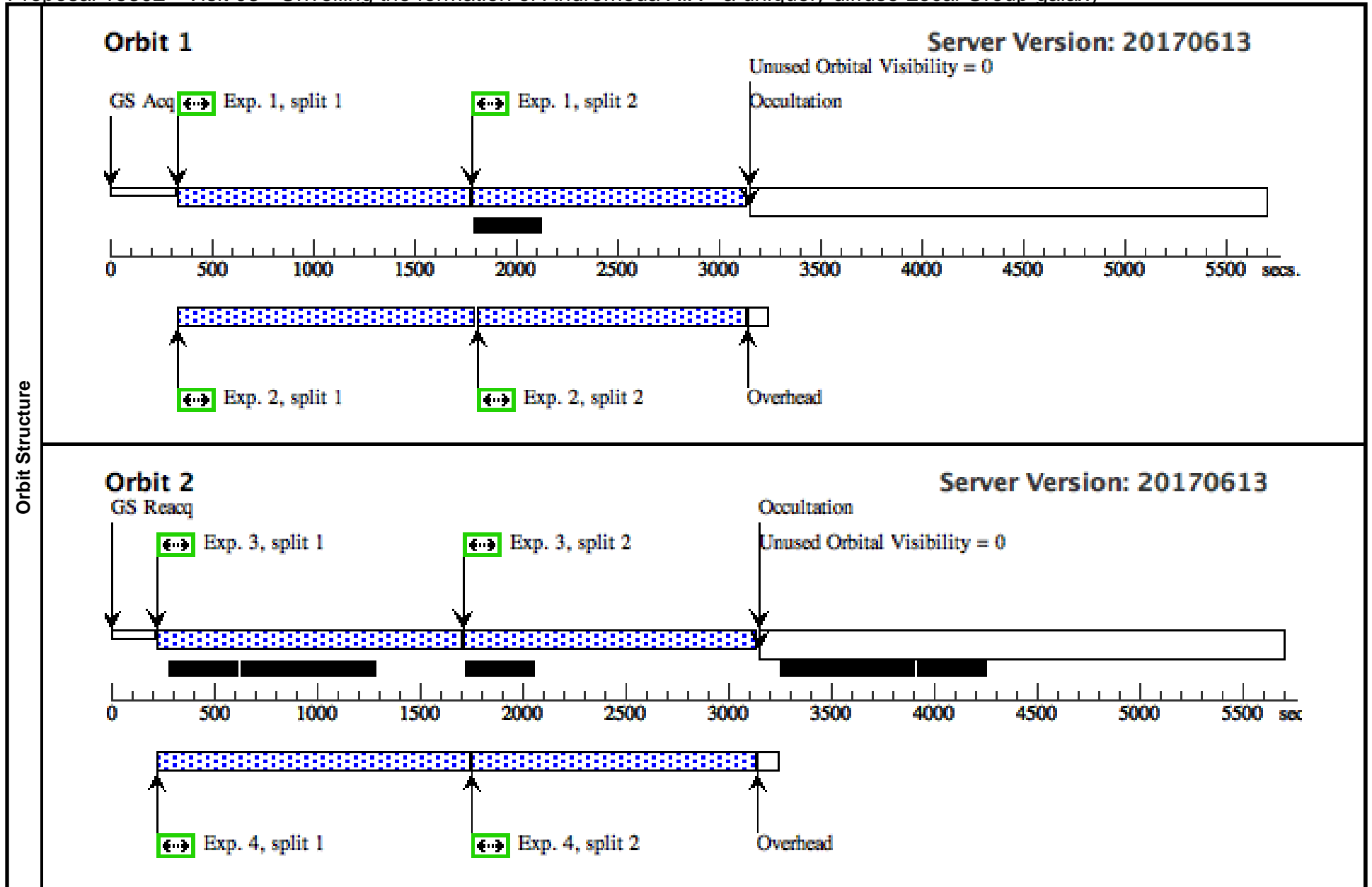
Visit	Proposal 15302, Visit 02 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SCHED 60%; SAME ORIENT AS 01; AFTER 01 BY 4 H TO 3 D <i>Comments: This sequence of visits are all for the same target, with the requirement of being spaced by 4 hours to 3 days. This is needed to appropriately sample light curves of variable stars. We also request that the visits *not* be spaced by ~0.5 days, as the variables in this galaxy are likely to have periods of about 0.5 days, and we need to adequately sample the variable phases.</i>												
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#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous								
(1)	AND-XIX	RA: 00 19 35.4020 (4.8975083d) Dec: +35 04 22.58 (35.07294d) Equinox: J2000		V=15.6	Reference Frame: SIMBAD								
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit			
	1	(1) AND-XIX	(1) AND-XIX	ACS/WFC, ACCUM, WFCENTER	F814W	CR-SPLIT=2	POS TARG 0.148,0.086	Prime + Parallel Group up 1-2 in Visit 02	2000 Secs (2460 Secs) [=>1230.0 Secs (Split 1)] [=>1230.0 Secs (Split 2)]	[1]			
	2	(1) AND-XIX	(1) AND-XIX	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=2		Prime + Parallel Group up 1-2 in Visit 02	2000 Secs (2638 Secs) [=>1319.0 Secs (Split 1)] [=>1319.0 Secs (Split 2)]	[1]			
	3	(1) AND-XIX	(1) AND-XIX	ACS/WFC, ACCUM, WFCENTER	F606W	CR-SPLIT=2	POS TARG 0.148,0.086	Prime + Parallel Group up 3-4 in Visit 02	2000 Secs (2598 Secs) [=>1299.0 Secs (Split 1)] [=>1299.0 Secs (Split 2)]	[2]			
	4	(1) AND-XIX	(1) AND-XIX	WFC3/UVIS, ACCUM, UVIS-CENTER	F606W	CR-SPLIT=2		Prime + Parallel Group up 3-4 in Visit 02	2000 Secs (2758 Secs) [=>1379.0 Secs (Split 1)] [=>1379.0 Secs (Split 2)]	[2]			



Proposal 15302 - Visit 03 - Unveiling the formation of Andromeda XIX - a uniquely diffuse Local Group galaxy

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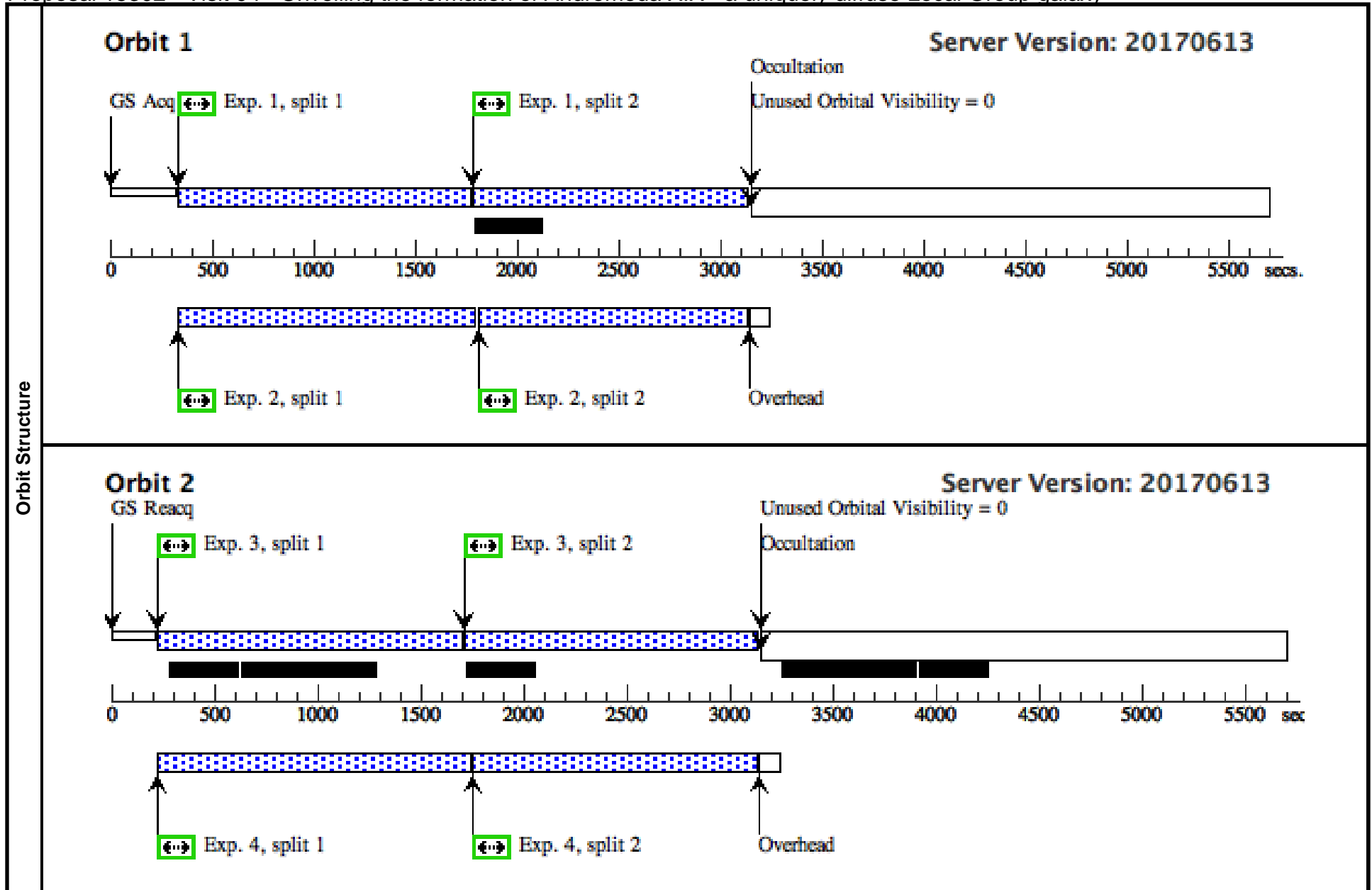
Visit	Proposal 15302, Visit 03 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SCHED 60%; SAME ORIENT AS 01; AFTER 02 BY 4 H TO 3 D Comments: This sequence of visits are all for the same target, with the requirement of being spaced by 4 hours to 3 days. This is needed to appropriately sample light curves of variable stars. We also request that the visits *not* be spaced by ~0.5 days, as the variables in this galaxy are likely to have periods of about 0.5 days, and we need to adequately sample the variable phases.												
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#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous								
(1)	AND-XIX	RA: 00 19 35.4020 (4.8975083d) Dec: +35 04 22.58 (35.07294d) Equinox: J2000		V=15.6	Reference Frame: SIMBAD								
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit			
	1	(1) AND-XIX	(1) AND-XIX	ACS/WFC, ACCUM, WFCENTER	F606W	CR-SPLIT=2	POS TARG 0.222,0.24	Prime + Parallel Group 1-2 in Visit 03	2000 Secs (2460 Secs) [=>1230.0 Secs (Split 1)] [=>1230.0 Secs (Split 2)]	[1]			
	2	(1) AND-XIX	(1) AND-XIX	WFC3/UVIS, ACCUM, UVIS-CENTER	F606W	CR-SPLIT=2		Prime + Parallel Group 1-2 in Visit 03	2000 Secs (2638 Secs) [=>1319.0 Secs (Split 1)] [=>1319.0 Secs (Split 2)]	[1]			
	3	(1) AND-XIX	(1) AND-XIX	ACS/WFC, ACCUM, WFCENTER	F814W	CR-SPLIT=2	POS TARG 0.222,0.24	Prime + Parallel Group 3-4 in Visit 03	2000 Secs (2598 Secs) [=>1299.0 Secs (Split 1)] [=>1299.0 Secs (Split 2)]	[2]			
	4	(1) AND-XIX	(1) AND-XIX	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=2		Prime + Parallel Group 3-4 in Visit 03	2000 Secs (2758 Secs) [=>1379.0 Secs (Split 1)] [=>1379.0 Secs (Split 2)]	[2]			



Proposal 15302 - Visit 04 - Unveiling the formation of Andromeda XIX - a uniquely diffuse Local Group galaxy

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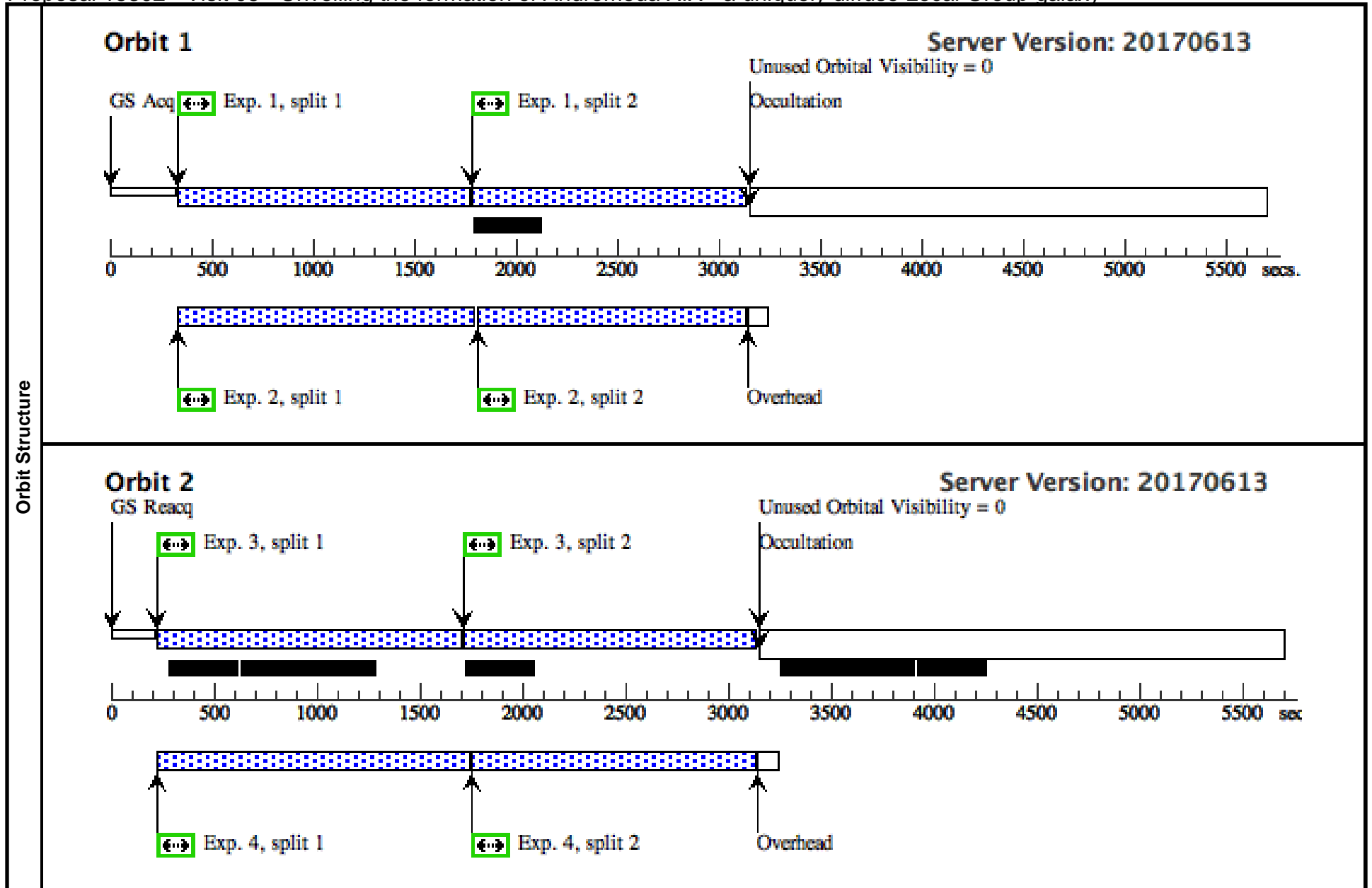
Visit	Proposal 15302, Visit 04 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SCHED 60%; SAME ORIENT AS 01; AFTER 03 BY 4 H TO 3 D Comments: This sequence of visits are all for the same target, with the requirement of being spaced by 4 hours to 3 days. This is needed to appropriately sample light curves of variable stars. We also request that the visits *not* be spaced by ~0.5 days, as the variables in this galaxy are likely to have periods of about 0.5 days, and we need to adequately sample the variable phases.												
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#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous								
(1)	AND-XIX	RA: 00 19 35.4020 (4.8975083d) Dec: +35 04 22.58 (35.07294d) Equinox: J2000		V=15.6	Reference Frame: SIMBAD								
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit			
	1	(1) AND-XIX	(1) AND-XIX	ACS/WFC, ACCUM, WFCENTER	F814W	CR-SPLIT=2	POS TARG 0.074,0.154	Prime + Parallel Group 1-2 in Visit 04	2000 Secs (2460 Secs) [=>1230.0 Secs (Split 1)] [=>1230.0 Secs (Split 2)]	[1]			
	2	(1) AND-XIX	(1) AND-XIX	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=2		Prime + Parallel Group 1-2 in Visit 04	2000 Secs (2638 Secs) [=>1319.0 Secs (Split 1)] [=>1319.0 Secs (Split 2)]	[1]			
	3	(1) AND-XIX	(1) AND-XIX	ACS/WFC, ACCUM, WFCENTER	F606W	CR-SPLIT=2	POS TARG 0.074,0.154	Prime + Parallel Group 3-4 in Visit 04	2000 Secs (2598 Secs) [=>1299.0 Secs (Split 1)] [=>1299.0 Secs (Split 2)]	[2]			
	4	(1) AND-XIX	(1) AND-XIX	WFC3/UVIS, ACCUM, UVIS-CENTER	F606W	CR-SPLIT=2		Prime + Parallel Group 3-4 in Visit 04	2000 Secs (2758 Secs) [=>1379.0 Secs (Split 1)] [=>1379.0 Secs (Split 2)]	[2]			



Proposal 15302 - Visit 05 - Unveiling the formation of Andromeda XIX - a uniquely diffuse Local Group galaxy

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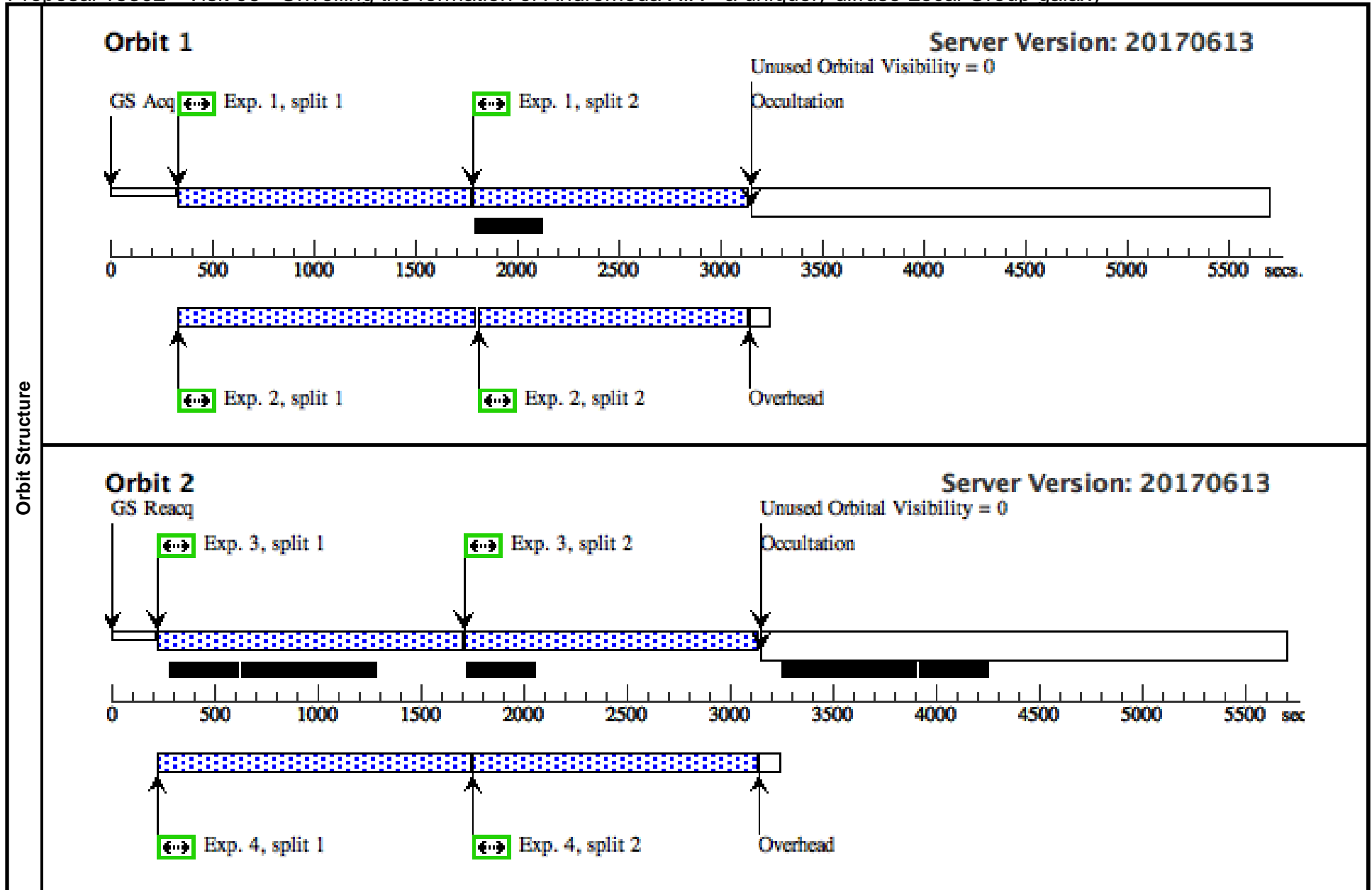
Visit	Proposal 15302, Visit 05 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SCHED 60%; SAME ORIENT AS 01; AFTER 04 BY 4 H TO 3 D Comments: This sequence of visits are all for the same target, with the requirement of being spaced by 4 hours to 3 days. This is needed to appropriately sample light curves of variable stars. We also request that the visits *not* be spaced by ~0.5 days, as the variables in this galaxy are likely to have periods of about 0.5 days, and we need to adequately sample the variable phases.												
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Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit			
	1	(1) AND-XIX	(1) AND-XIX	ACS/WFC, ACCUM, WFCENTER	F606W	CR-SPLIT=2	POS TARG 0.247,2.984	Prime + Parallel Group 1-2 in Visit 05	2000 Secs (2460 Secs) [=>1230.0 Secs (Split 1)] [=>1230.0 Secs (Split 2)]	[1]			
	2	(1) AND-XIX	(1) AND-XIX	WFC3/UVIS, ACCUM, UVIS-CENTER	F606W	CR-SPLIT=2		Prime + Parallel Group 1-2 in Visit 05	2000 Secs (2638 Secs) [=>1319.0 Secs (Split 1)] [=>1319.0 Secs (Split 2)]	[1]			
	3	(1) AND-XIX	(1) AND-XIX	ACS/WFC, ACCUM, WFCENTER	F814W	CR-SPLIT=2	POS TARG 0.247,2.984	Prime + Parallel Group 3-4 in Visit 05	2000 Secs (2598 Secs) [=>1299.0 Secs (Split 1)] [=>1299.0 Secs (Split 2)]	[2]			
	4	(1) AND-XIX	(1) AND-XIX	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=2		Prime + Parallel Group 3-4 in Visit 05	2000 Secs (2758 Secs) [=>1379.0 Secs (Split 1)] [=>1379.0 Secs (Split 2)]	[2]			



Proposal 15302 - Visit 06 - Unveiling the formation of Andromeda XIX - a uniquely diffuse Local Group galaxy

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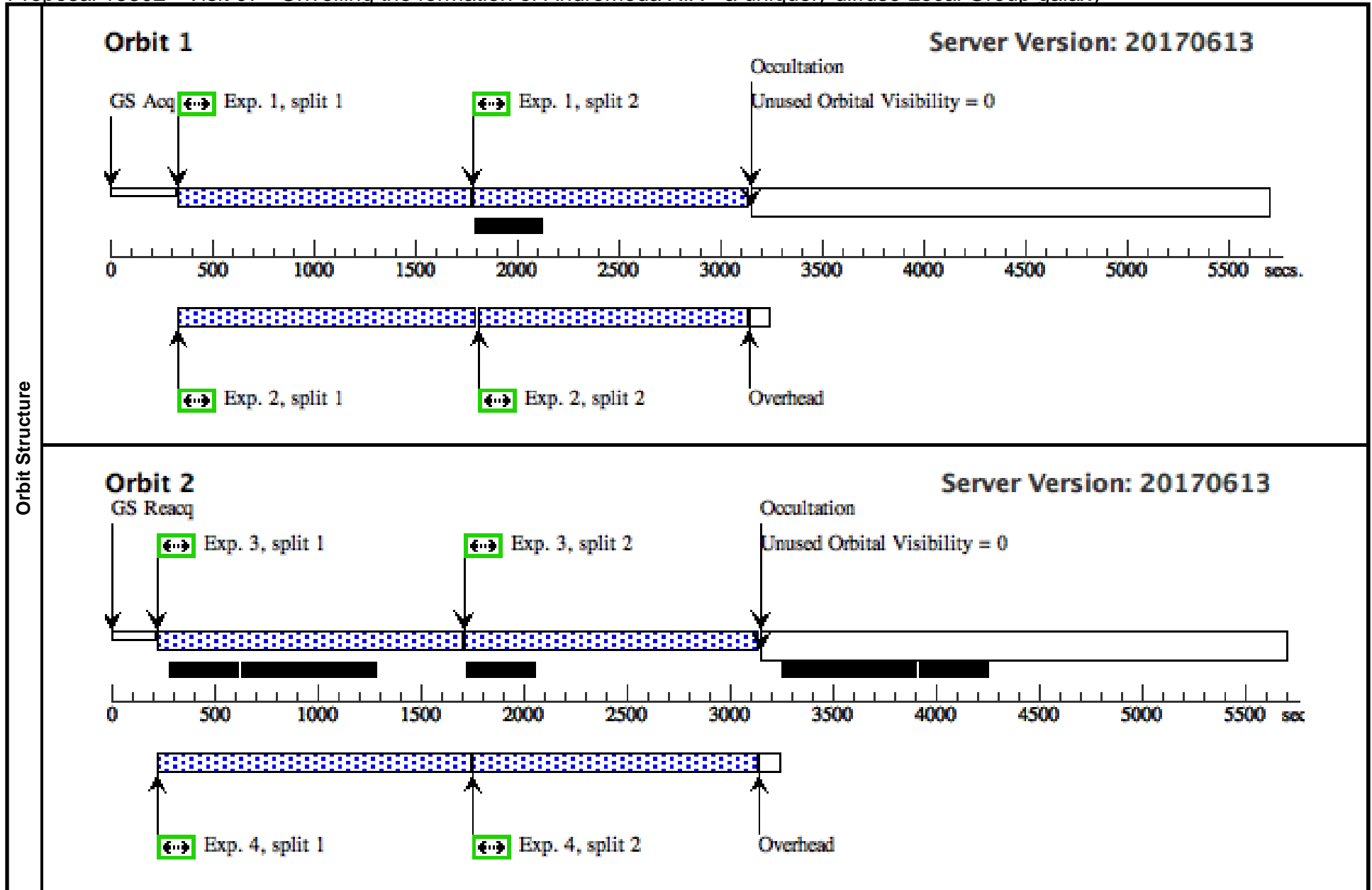
Visit	Proposal 15302, Visit 06 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SCHED 60%; SAME ORIENT AS 01; AFTER 05 BY 4 H TO 3 D Comments: This sequence of visits are all for the same target, with the requirement of being spaced by 4 hours to 3 days. This is needed to appropriately sample light curves of variable stars. We also request that the visits *not* be spaced by ~0.5 days, as the variables in this galaxy are likely to have periods of about 0.5 days, and we need to adequately sample the variable phases.												
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#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous								
(1)	AND-XIX	RA: 00 19 35.4020 (4.8975083d) Dec: +35 04 22.58 (35.07294d) Equinox: J2000		V=15.6	Reference Frame: SIMBAD								
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit			
	1	(1) AND-XIX	(1) AND-XIX	ACS/WFC, ACCUM, WFCENTER	F814W	CR-SPLIT=2	POS TARG 0.395,3.07	Prime + Parallel Group 1-2 in Visit 06	2000 Secs (2460 Secs) [=>1230.0 Secs (Split 1)] [=>1230.0 Secs (Split 2)]	[1]			
	2	(1) AND-XIX	(1) AND-XIX	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=2		Prime + Parallel Group 1-2 in Visit 06	2000 Secs (2638 Secs) [=>1319.0 Secs (Split 1)] [=>1319.0 Secs (Split 2)]	[1]			
	3	(1) AND-XIX	(1) AND-XIX	ACS/WFC, ACCUM, WFCENTER	F606W	CR-SPLIT=2	POS TARG 0.395,3.07	Prime + Parallel Group 3-4 in Visit 06	2000 Secs (2598 Secs) [=>1299.0 Secs (Split 1)] [=>1299.0 Secs (Split 2)]	[2]			
	4	(1) AND-XIX	(1) AND-XIX	WFC3/UVIS, ACCUM, UVIS-CENTER	F606W	CR-SPLIT=2		Prime + Parallel Group 3-4 in Visit 06	2000 Secs (2758 Secs) [=>1379.0 Secs (Split 1)] [=>1379.0 Secs (Split 2)]	[2]			



Proposal 15302 - Visit 07 - Unveiling the formation of Andromeda XIX - a uniquely diffuse Local Group galaxy

Wed Jul 19 19:08:04 GMT 2017

Visit	Proposal 15302, Visit 07 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SCHED 60%; SAME ORIENT AS 01; AFTER 06 BY 4 H TO 3 D <i>Comments: This sequence of visits are all for the same target, with the requirement of being spaced by 4 hours to 3 days. This is needed to appropriately sample light curves of variable stars. We also request that the visits *not* be spaced by ~0.5 days, as the variables in this galaxy are likely to have periods of about 0.5 days, and we need to adequately sample the variable phases.</i>												
	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>(1)</td> <td>AND-XIX</td> <td>RA: 00 19 35.4020 (4.8975083d) Dec: +35 04 22.58 (35.07294d) Equinox: J2000</td> <td></td> <td>V=15.6</td> <td>Reference Frame: SIMBAD</td> </tr> </tbody> </table> <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	AND-XIX	RA: 00 19 35.4020 (4.8975083d) Dec: +35 04 22.58 (35.07294d) Equinox: J2000		V=15.6
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous								
(1)	AND-XIX	RA: 00 19 35.4020 (4.8975083d) Dec: +35 04 22.58 (35.07294d) Equinox: J2000		V=15.6	Reference Frame: SIMBAD								
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit			
	1	(1) AND-XIX	(1) AND-XIX	ACS/WFC, ACCUM, WFCENTER	F606W	CR-SPLIT=2	POS TARG 0.469,3.224	Prime + Parallel Group 1-2 in Visit 07	2000 Secs (2460 Secs) [=>1230.0 Secs (Split 1)] [=>1230.0 Secs (Split 2)]	[1]			
	2	(1) AND-XIX	(1) AND-XIX	WFC3/UVIS, ACCUM, UVIS-CENTER	F606W	CR-SPLIT=2		Prime + Parallel Group 1-2 in Visit 07	2000 Secs (2638 Secs) [=>1319.0 Secs (Split 1)] [=>1319.0 Secs (Split 2)]	[1]			
	3	(1) AND-XIX	(1) AND-XIX	ACS/WFC, ACCUM, WFCENTER	F814W	CR-SPLIT=2	POS TARG 0.469,3.224	Prime + Parallel Group 3-4 in Visit 07	2000 Secs (2598 Secs) [=>1299.0 Secs (Split 1)] [=>1299.0 Secs (Split 2)]	[2]			
	4	(1) AND-XIX	(1) AND-XIX	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=2		Prime + Parallel Group 3-4 in Visit 07	2000 Secs (2758 Secs) [=>1379.0 Secs (Split 1)] [=>1379.0 Secs (Split 2)]	[2]			



Proposal 15302 - Visit 08 - Unveiling the formation of Andromeda XIX - a uniquely diffuse Local Group galaxy

Wed Jul 19 19:08:04 GMT 2017

Visit	Proposal 15302, Visit 08 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SCHED 60%; SAME ORIENT AS 01; AFTER 07 BY 4 H TO 3 D <i>Comments: This sequence of visits are all for the same target, with the requirement of being spaced by 4 hours to 3 days. This is needed to appropriately sample light curves of variable stars. We also request that the visits *not* be spaced by ~0.5 days, as the variables in this galaxy are likely to have periods of about 0.5 days, and we need to adequately sample the variable phases.</i>												
	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>(1)</td> <td>AND-XIX</td> <td>RA: 00 19 35.4020 (4.8975083d) Dec: +35 04 22.58 (35.07294d) Equinox: J2000</td> <td></td> <td>V=15.6</td> <td>Reference Frame: SIMBAD</td> </tr> </tbody> </table> <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	AND-XIX	RA: 00 19 35.4020 (4.8975083d) Dec: +35 04 22.58 (35.07294d) Equinox: J2000		V=15.6
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous								
(1)	AND-XIX	RA: 00 19 35.4020 (4.8975083d) Dec: +35 04 22.58 (35.07294d) Equinox: J2000		V=15.6	Reference Frame: SIMBAD								
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit			
	1	(1) AND-XIX	(1) AND-XIX	ACS/WFC, ACCUM, WFCENTER	F814W	CR-SPLIT=2	POS TARG 0.321,3.138	Prime + Parallel Group 1-2 in Visit 08	2000 Secs (2460 Secs) [=>1230.0 Secs (Split 1)] [=>1230.0 Secs (Split 2)]	[1]			
	2	(1) AND-XIX	(1) AND-XIX	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=2		Prime + Parallel Group 1-2 in Visit 08	2000 Secs (2638 Secs) [=>1319.0 Secs (Split 1)] [=>1319.0 Secs (Split 2)]	[1]			
	3	(1) AND-XIX	(1) AND-XIX	ACS/WFC, ACCUM, WFCENTER	F814W	CR-SPLIT=2	POS TARG 0.0,0.0	Prime + Parallel Group 3-4 in Visit 08	2000 Secs (2652 Secs) [=>1326.0 Secs (Split 1)] [=>1326.0 Secs (Split 2)]	[2]			
	4	(1) AND-XIX	(1) AND-XIX	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=2		Prime + Parallel Group 3-4 in Visit 08	2000 Secs (2788 Secs) [=>1394.0 Secs (Split 1)] [=>1394.0 Secs (Split 2)]	[2]			

