



## 15235 - The Perseus Cluster: Bridging the Extremes of Stellar Systems

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) NGC1275-F1 ANY	ACS/WFC WFC3/UVIS	2	14-Dec-2018 11:00:59.0	yes
02	(2) NGC1275-F2 ANY	ACS/WFC WFC3/UVIS	2	14-Dec-2018 11:01:01.0	yes
03	(3) NGC1275-F3 ANY	ACS/WFC WFC3/UVIS	2	14-Dec-2018 11:01:03.0	yes

Proposal 15235 (STScI Edit Number: 1, Created: Friday, December 14, 2018 at 11:01:23 AM Eastern Standard Time) - Overview

<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	(4) NGC1275-F4 ANY	ACS/WFC WFC3/UVIS	2	14-Dec-2018 11:01:04.0	yes
05	(5) NGC1275-F5 ANY	ACS/WFC WFC3/UVIS	2	14-Dec-2018 11:01:06.0	yes
06	(17) PERSEUS-UDG01 ANY	ACS/WFC WFC3/UVIS	2	14-Dec-2018 11:01:08.0	yes
11	(22) PERSEUS-UDG06 ANY	ACS/WFC WFC3/UVIS	2	14-Dec-2018 11:01:10.0	yes
12	(23) PERSEUS-UDG07 ANY	ACS/WFC WFC3/UVIS	2	14-Dec-2018 11:01:12.0	yes
13	(24) PERSEUS-UDG08 ANY	ACS/WFC WFC3/UVIS	2	14-Dec-2018 11:01:14.0	yes
15	(26) PERSEUS-UDG10 ANY	ACS/WFC WFC3/UVIS	2	14-Dec-2018 11:01:16.0	yes
07	(18) PERSEUS-UDG02 ANY	ACS/WFC WFC3/UVIS	2	14-Dec-2018 11:01:17.0	yes
08	(19) PERSEUS-UDG03 ANY	ACS/WFC WFC3/UVIS	2	14-Dec-2018 11:01:19.0	yes
09	(20) PERSEUS-UDG04 ANY	ACS/WFC WFC3/UVIS	2	14-Dec-2018 11:01:20.0	yes
10	(21) PERSEUS-UDG05 ANY	ACS/WFC WFC3/UVIS	2	14-Dec-2018 11:01:21.0	yes
14	(25) PERSEUS-UDG09 ANY	ACS/WFC WFC3/UVIS	2	14-Dec-2018 11:01:23.0	yes

30 Total Orbits Used

**ABSTRACT**

Proposal 15235 (STScI Edit Number: 1, Created: Friday, December 14, 2018 at 11:01:23 AM Eastern Standard Time) - Overview

The Perseus cluster (Abell 426) at  $d=75$  Mpc is as massive and diverse as Virgo and Coma and displays a rich laboratory for studying galaxy evolution. Its massive X-ray halo gas component and its high proportion of large early-type galaxies point to a long history of dynamical interaction amongst the cluster members. The central supergiant, NGC 1275, is perhaps the most active galaxy in the local universe, with a spectacular network of H-alpha filaments, cooling flows, feedback, and prominent star formation in plain view.

We propose to use the Globular Cluster (GC) populations in the Perseus region with two-band imaging to pursue three connected goals: the stellar Intracluster Medium (ICM); its Ultra-Diffuse Galaxies (UDGs); and the GC populations in the Perseus core galaxies. Our analysis of a few HST/ACS Archival images covering the Perseus core strongly indicates that a substantial Intragalactic GC component is present. Our newly discovered sample of UDGs in Perseus covers the entire parameter space of these intriguing galaxies and will be thoroughly sampled in our study: are they 'failed' underluminous galaxies with high masses, or are they a mixed bag? For all our goals, the GC populations will act as powerful tracers of the dominant old stellar populations -- their metallicity distributions and total populations in the ICM, the UDGs, and the three largest E galaxies in Perseus. As a bonus, we expect to find ~200 new Ultra-Compact Dwarfs (UCDs) and half a dozen rare compact ellipticals (cEs). The scientific payoffs will include a broader understanding of the nature and history of all these types of galaxies and their stripped stellar material.

## **OBSERVING DESCRIPTION**

We propose to use the Globular Cluster (GC) populations in the Perseus region with two-band (B,I) imaging to pursue three connected goals: the stellar Intracluster Medium (ICM); its Ultra-Diffuse Galaxies (UDGs); and the GC populations in the Perseus core galaxies. Five program fields target the large ellipticals in the Perseus core region, while ten outlying fields target known UDGs. In all targets, Parallel exposures will be used to sample the ICM.

Exposures in each field consist of one orbit per filter (F475W/F814W in ACS/WFC, F475X/F814W in WFC3/UVIS).

The core/ICM fields use a three-point dither pattern with small offsets between orbits to improve PSF sampling.

The UDG fields use a four-point dither pattern and have restrictive orient ranges in order to include all UDGs in the target regions.

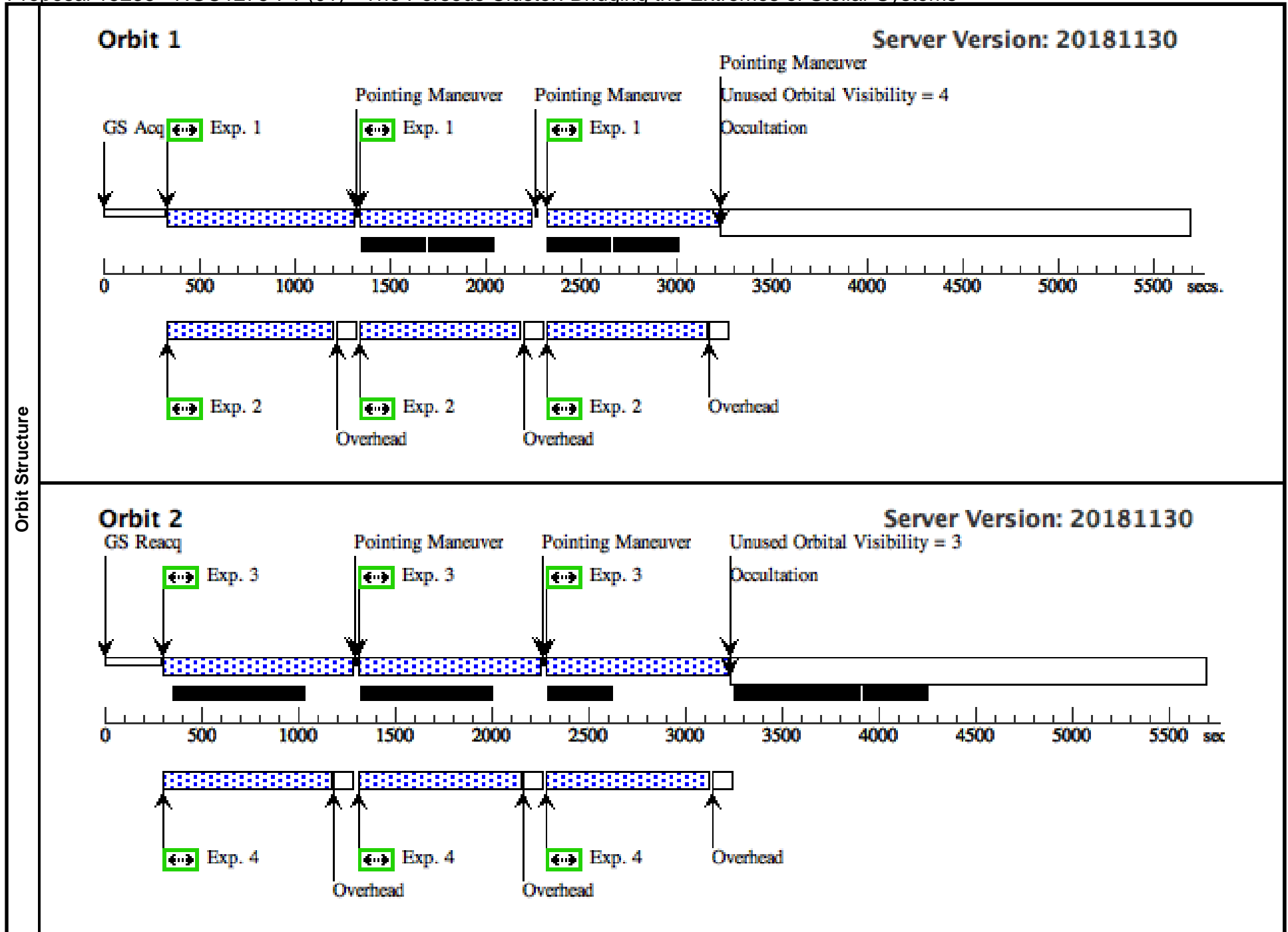
The exposure time calculator has been used to verify that post-flash is not needed.

Timing requirements have been used for some fields to prioritize the visit order.

Proposal 15235 - NGC1275-F1 (01) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

Fri Dec 14 16:01:24 GMT 2018

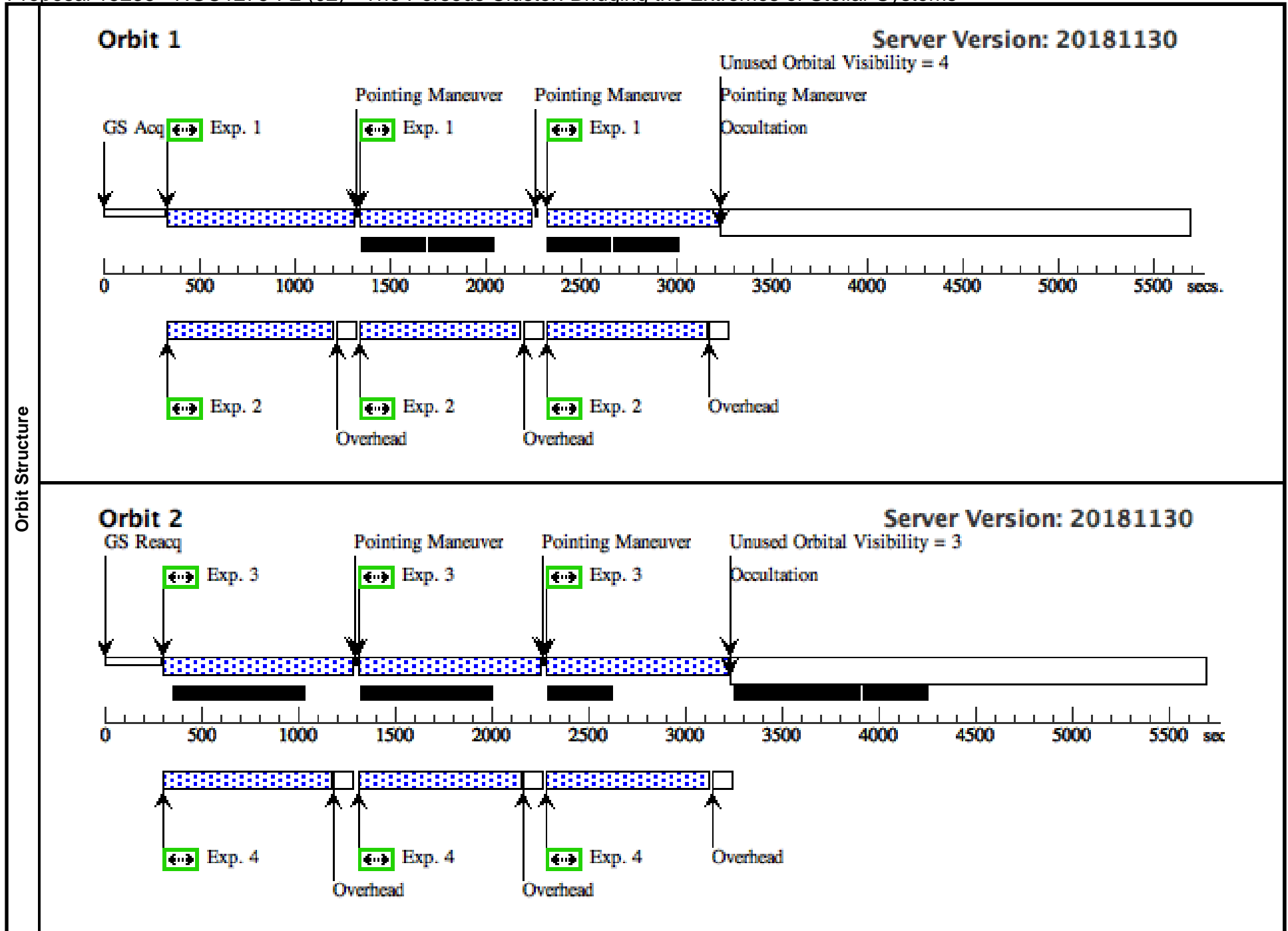
<b>Visit</b>	<b>Proposal 15235, NGC1275-F1 (01), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 95D TO 115 D Comments: > 2 months of schedulability									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>					
	(4)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.17 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false	(1-2), (3-4)						
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(1)	NGC1275-F1	RA: 03 19 49.6000 (49.9566667d) Dec: +41 30 36.00 (41.51000d) Equinox: J2000		V=28.0+/-0.2	Reference Frame: SIMBAD				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=GALAXY Description=[ELLIPTICAL]									
<b>Exposures</b>	<b>#</b>	<b>Label</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1		(1) NGC1275-F1	ACS/WFC, ACCUM, WFC	F814W			Pattern 4, Exps 1-2 in NGC1275-F1 (01) (4) Prime + Parallel Group 1-2 in Pattern 4, Exps 1-2 in NGC1275-F1 (01)	775 Secs (2325 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2	ANY		WFC3/UVIS, ACCUM, UVIS	F475X			Pattern 4, Exps 1-2 in NGC1275-F1 (01) (4) Prime + Parallel Group 1-2 in Pattern 4, Exps 1-2 in NGC1275-F1 (01)	845 Secs (2535 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	3		(1) NGC1275-F1	ACS/WFC, ACCUM, WFC	F475W		POS TARG 0.17,null	Pattern 4, Exps 3-4 in NGC1275-F1 (01) (4) Prime + Parallel Group 3-4 in Pattern 4, Exps 3-4 in NGC1275-F1 (01)	812 Secs (2436 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[2]
	4	ANY		WFC3/UVIS, ACCUM, UVIS	F814W			Pattern 4, Exps 3-4 in NGC1275-F1 (01) (4) Prime + Parallel Group 3-4 in Pattern 4, Exps 3-4 in NGC1275-F1 (01)	845 Secs (2535 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[2]



Proposal 15235 - NGC1275-F2 (02) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

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<b>Visit</b>	<b>Proposal 15235, NGC1275-F2 (02), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 228D TO 248 D <i>Comments: 29 days of schedulability</i>									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>					
	(4)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.17 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false	(1-2), (3-4)						
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(2)	NGC1275-F2	RA: 03 20 3.4906 (50.0145442d) Dec: +41 29 39.38 (41.49427d) Equinox: J2000		V=28.0+/-0.2	Reference Frame: SIMBAD				
	<i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL]									
<b>Exposures</b>	<b>#</b>	<b>Label</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1		(2) NGC1275-F2	ACS/WFC, ACCUM, WFC	F814W			Pattern 4, Exps 1-2 in NGC1275-F2 (02) (4) Prime + Parallel Group 1-2 in Pattern 4, Exps 1-2 in NGC1275-F2 (02)	775 Secs (2325 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2	ANY		WFC3/UVIS, ACCUM, UVIS	F475X			Pattern 4, Exps 1-2 in NGC1275-F2 (02) (4) Prime + Parallel Group 1-2 in Pattern 4, Exps 1-2 in NGC1275-F2 (02)	845 Secs (2535 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	3		(2) NGC1275-F2	ACS/WFC, ACCUM, WFC	F475W		POS TARG 0.17,null	Pattern 4, Exps 3-4 in NGC1275-F2 (02) (4) Prime + Parallel Group 3-4 in Pattern 4, Exps 3-4 in NGC1275-F2 (02)	812 Secs (2436 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[2]
	4	ANY		WFC3/UVIS, ACCUM, UVIS	F814W			Pattern 4, Exps 3-4 in NGC1275-F2 (02) (4) Prime + Parallel Group 3-4 in Pattern 4, Exps 3-4 in NGC1275-F2 (02)	845 Secs (2535 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[2]



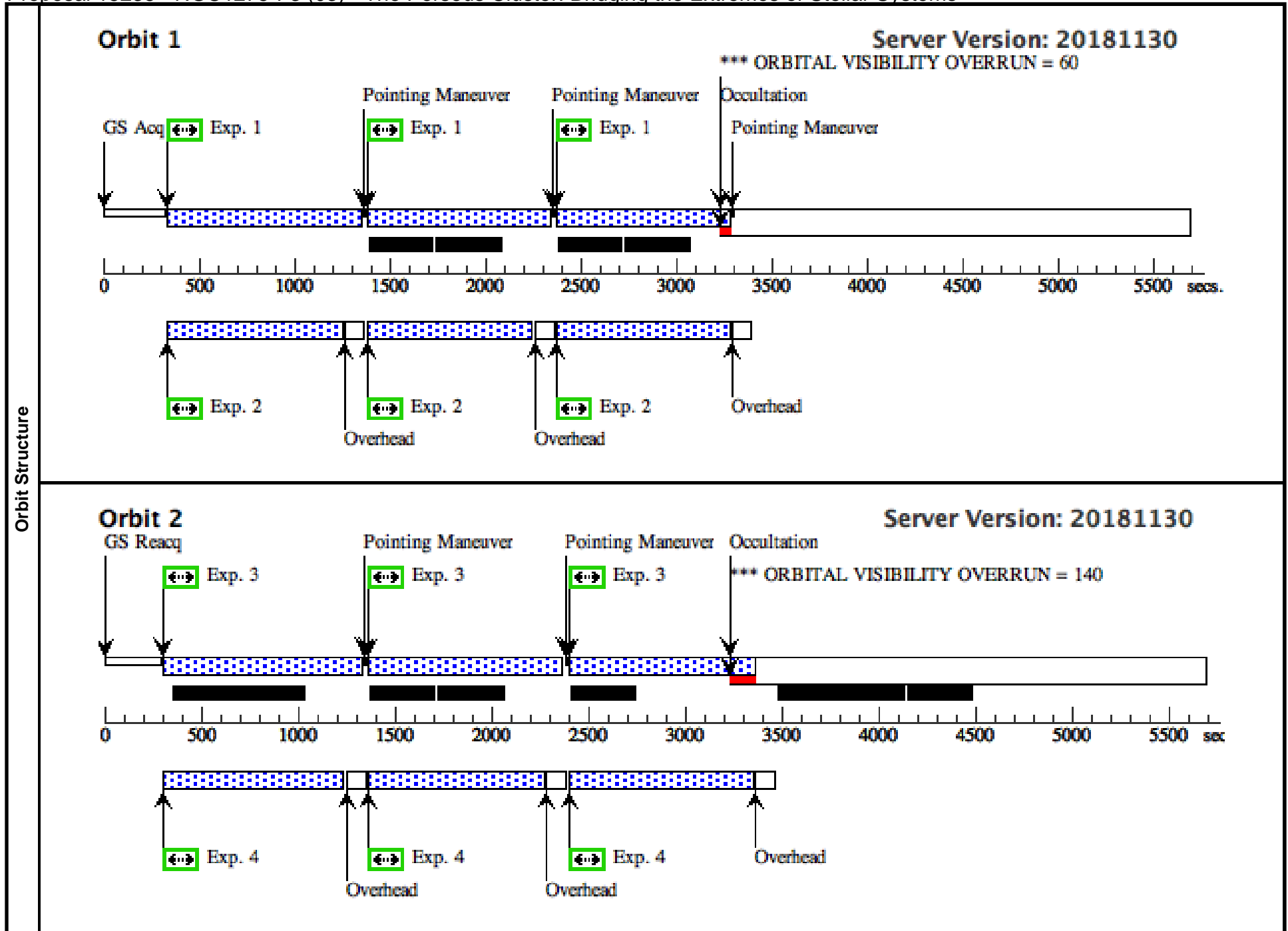
Proposal 15235 - NGC1275-F3 (03) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

Fri Dec 14 16:01:24 GMT 2018

<b>Visit</b>	<b>Proposal 15235, NGC1275-F3 (03), completed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 266D TO 306 D <i>Comments: 19 days of schedulability</i>					
	<b>Diagnosics</b> (NGC1275-F3 (03)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (NGC1275-F3 (03)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN					
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>		
	(4)	Pattern Type=ACS-WFC-DITHER- LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.17 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false	(1-2), (3-4)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(3)	NGC1275-F3	RA: 03 19 54.4724 (49.9769683d) Dec: +41 33 54.52 (41.56514d) Equinox: J2000		V=28.0+/-0.2	Reference Frame: SIMBAD
<i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL]						

Proposal 15235 - NGC1275-F3 (03) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

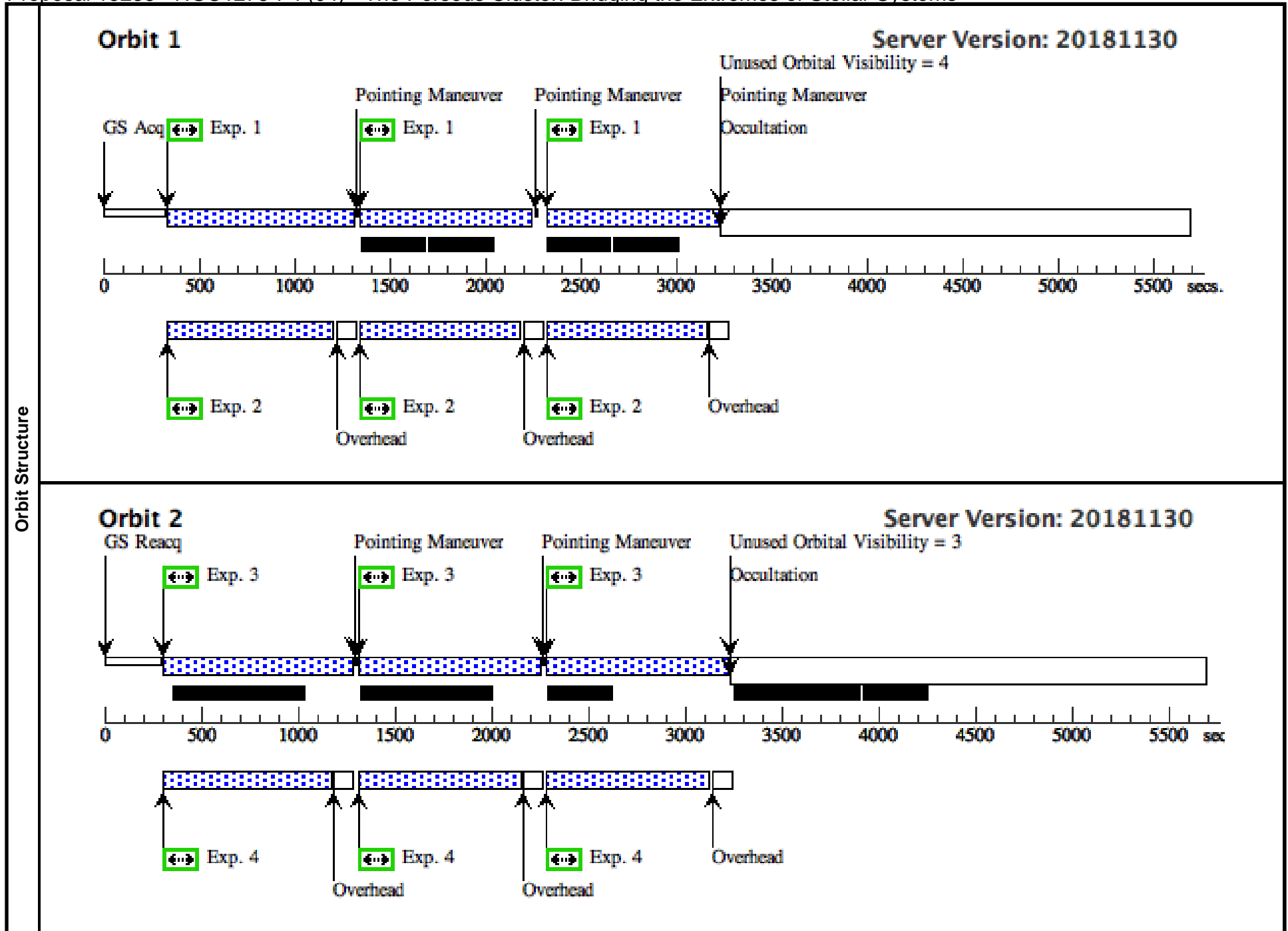
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(3) NGC1275-F3	ACS/WFC, ACCUM, WFC	F814W			Pattern 4, Exps 1-2 in NGC1275-F3 (03) (4) Prime + Parallel Group 1-2 in Pattern 4, Exps 1-2 in NGC1275-F3 (03)	805 Secs (2429 Secs) [==>813 Secs (Pattern 1)] [==>832 Secs (Pattern 2)] [==>784 Secs (Pattern 3)]	[1]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F475X			Pattern 4, Exps 1-2 in NGC1275-F3 (03) (4) Prime + Parallel Group 1-2 in Pattern 4, Exps 1-2 in NGC1275-F3 (03)	845 Secs (2659 Secs) [==>887 Secs (Pattern 1)] [==>862 Secs (Pattern 2)] [==>910 Secs (Pattern 3)]	[1]
	3		(3) NGC1275-F3	ACS/WFC, ACCUM, WFC	F475W		POS TARG 0.17,null	Pattern 4, Exps 3-4 in NGC1275-F3 (03) (4) Prime + Parallel Group 3-4 in Pattern 4, Exps 3-4 in NGC1275-F3 (03)	805 Secs (2577 Secs) [==>865 Secs (Pattern 1)] [==>876 Secs (Pattern 2)] [==>836 Secs (Pattern 3)]	[2]
	4		ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Pattern 4, Exps 3-4 in NGC1275-F3 (03) (4) Prime + Parallel Group 3-4 in Pattern 4, Exps 3-4 in NGC1275-F3 (03)	845 Secs (2772 Secs) [==>910 Secs (Pattern 1)] [==>910 Secs (Pattern 2)] [==>952 Secs (Pattern 3)]	[2]



Proposal 15235 - NGC1275-F4 (04) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

Fri Dec 14 16:01:24 GMT 2018

<b>Visit</b>	<b>Proposal 15235, NGC1275-F4 (04), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 70D TO 90 D Comments: > 2 months schedulability									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>					
	(4)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.17 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false	(1-2), (3-4)						
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(4)	NGC1275-F4	RA: 03 19 23.0547 (49.8460612d) Dec: +41 26 9.27 (41.43591d) Equinox: J2000		V=28.0 +/-0.2	Reference Frame: SIMBAD				
	Comments: Category=GALAXY Description=[ELLIPTICAL]									
<b>Exposures</b>	<b>#</b>	<b>Label</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1		(4) NGC1275-F4	ACS/WFC, ACCUM, WFC	F814W			Pattern 4, Exps 1-2 in NGC1275-F4 (04) (4) Prime + Parallel Group 1-2 in Pattern 4, Exps 1-2 in NGC1275-F4 (04)	775 Secs (2325 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2	ANY		WFC3/UVIS, ACCUM, UVIS	F475X			Pattern 4, Exps 1-2 in NGC1275-F4 (04) (4) Prime + Parallel Group 1-2 in Pattern 4, Exps 1-2 in NGC1275-F4 (04)	845 Secs (2535 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	3		(4) NGC1275-F4	ACS/WFC, ACCUM, WFC	F475W		POS TARG 0.17,null	Pattern 4, Exps 3-4 in NGC1275-F4 (04) (4) Prime + Parallel Group 3-4 in Pattern 4, Exps 3-4 in NGC1275-F4 (04)	812 Secs (2436 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[2]
	4	ANY		WFC3/UVIS, ACCUM, UVIS	F814W			Pattern 4, Exps 3-4 in NGC1275-F4 (04) (4) Prime + Parallel Group 3-4 in Pattern 4, Exps 3-4 in NGC1275-F4 (04)	845 Secs (2535 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[2]



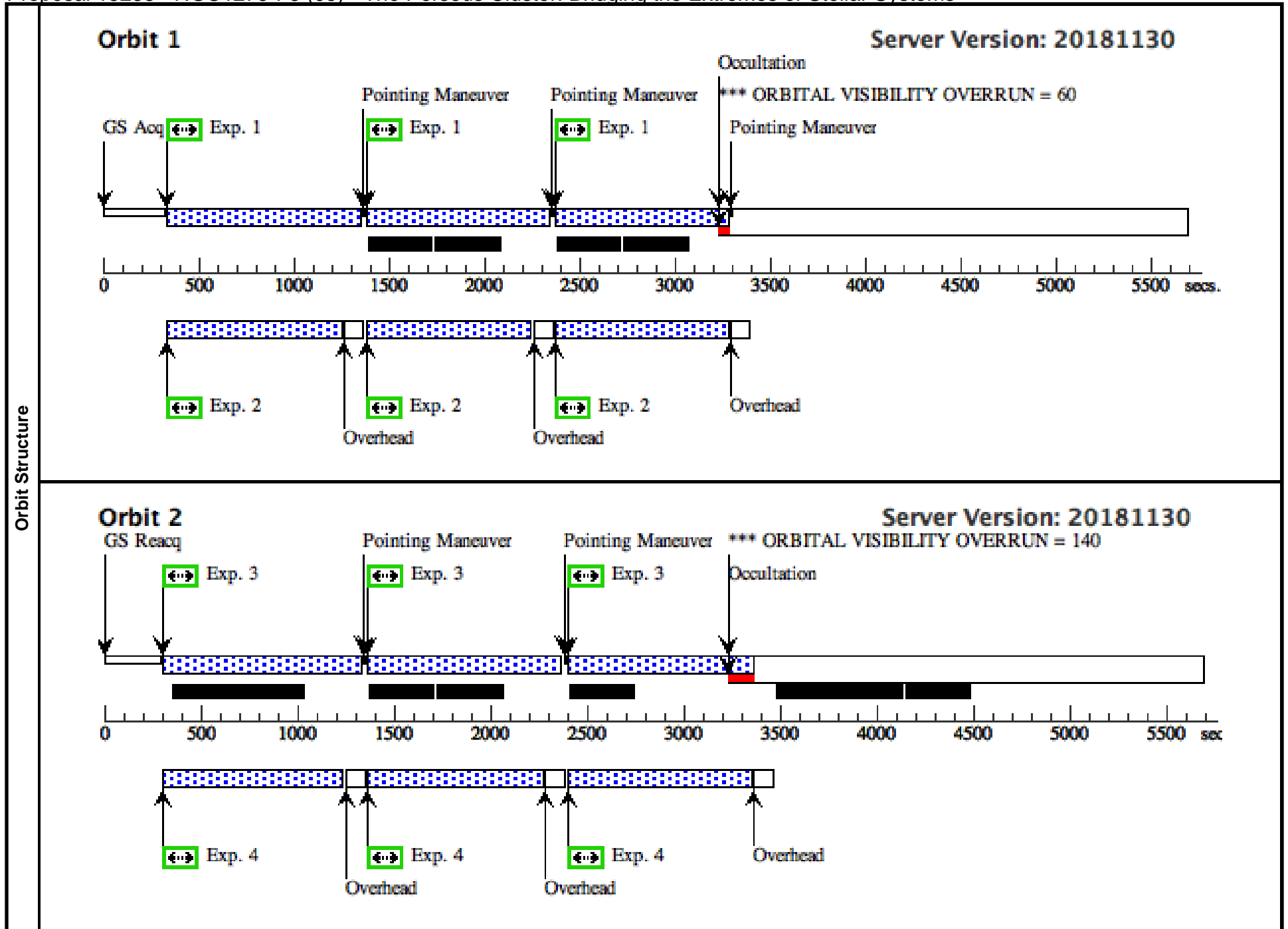
Proposal 15235 - NGC1275-F5 (05) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

Fri Dec 14 16:01:24 GMT 2018

<b>Visit</b>	<b>Proposal 15235, NGC1275-F5 (05), completed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 125D TO 145 D <i>Comments: 19 days of schedulability</i>					
	<b>Diagnosics</b> (NGC1275-F5 (05)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (NGC1275-F5 (05)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN					
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>		
	(4)	Pattern Type=ACS-WFC-DITHER- LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.17 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false	(1-2), (3-4)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(5)	NGC1275-F5	RA: 03 20 23.8000 (50.0991667d) Dec: +41 32 43.10 (41.54531d) Equinox: J2000		V=28.0+/-0.2	Reference Frame: SIMBAD
<i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL]						

Proposal 15235 - NGC1275-F5 (05) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(5) NGC1275-F5	ACS/WFC, ACCUM, WFC	F814W			Pattern 4, Exps 1-2 in NGC1275-F5 (05) (4) Prime + Parallel Group 1-2 in Pattern 4, Exps 1-2 in NGC1275-F5 (05)	805 Secs (2429 Secs) [==>813 Secs (Pattern 1)] [==>832 Secs (Pattern 2)] [==>784 Secs (Pattern 3)]	[1]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F475X			Pattern 4, Exps 1-2 in NGC1275-F5 (05) (4) Prime + Parallel Group 1-2 in Pattern 4, Exps 1-2 in NGC1275-F5 (05)	845 Secs (2659 Secs) [==>887 Secs (Pattern 1)] [==>862 Secs (Pattern 2)] [==>910 Secs (Pattern 3)]	[1]
	3		(5) NGC1275-F5	ACS/WFC, ACCUM, WFC	F475W		POS TARG 0.17,null	Pattern 4, Exps 3-4 in NGC1275-F5 (05) (4) Prime + Parallel Group 3-4 in Pattern 4, Exps 3-4 in NGC1275-F5 (05)	805 Secs (2577 Secs) [==>865 Secs (Pattern 1)] [==>876 Secs (Pattern 2)] [==>836 Secs (Pattern 3)]	[2]
	4		ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Pattern 4, Exps 3-4 in NGC1275-F5 (05) (4) Prime + Parallel Group 3-4 in Pattern 4, Exps 3-4 in NGC1275-F5 (05)	845 Secs (2772 Secs) [==>910 Secs (Pattern 1)] [==>910 Secs (Pattern 2)] [==>952 Secs (Pattern 3)]	[2]



Proposal 15235 - PERSEUS-UDG01 (06) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

Fri Dec 14 16:01:24 GMT 2018

<b>Visit</b>	<b>Proposal 15235, PERSEUS-UDG01 (06), completed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 247.1D TO 259.6 D <i>Comments: 48 days of schedulability</i>					
	<b>Diagnosics</b> (PERSEUS-UDG01 (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (PERSEUS-UDG01 (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN					
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>		
	(3)	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), (3-4)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(17)	PERSEUS-UDG01	RA: 03 17 15.9693 (49.3165387d) Dec: +41 34 10.07 (41.56946d) Equinox: J2000		V=20.4+/-0.1 contains WUDG05, WUDG08, WUDG13, WUDG14	Reference Frame: SIMBAD
<i>Comments:</i> Category=GALAXY Description=[DWARF SPHEROIDAL]						

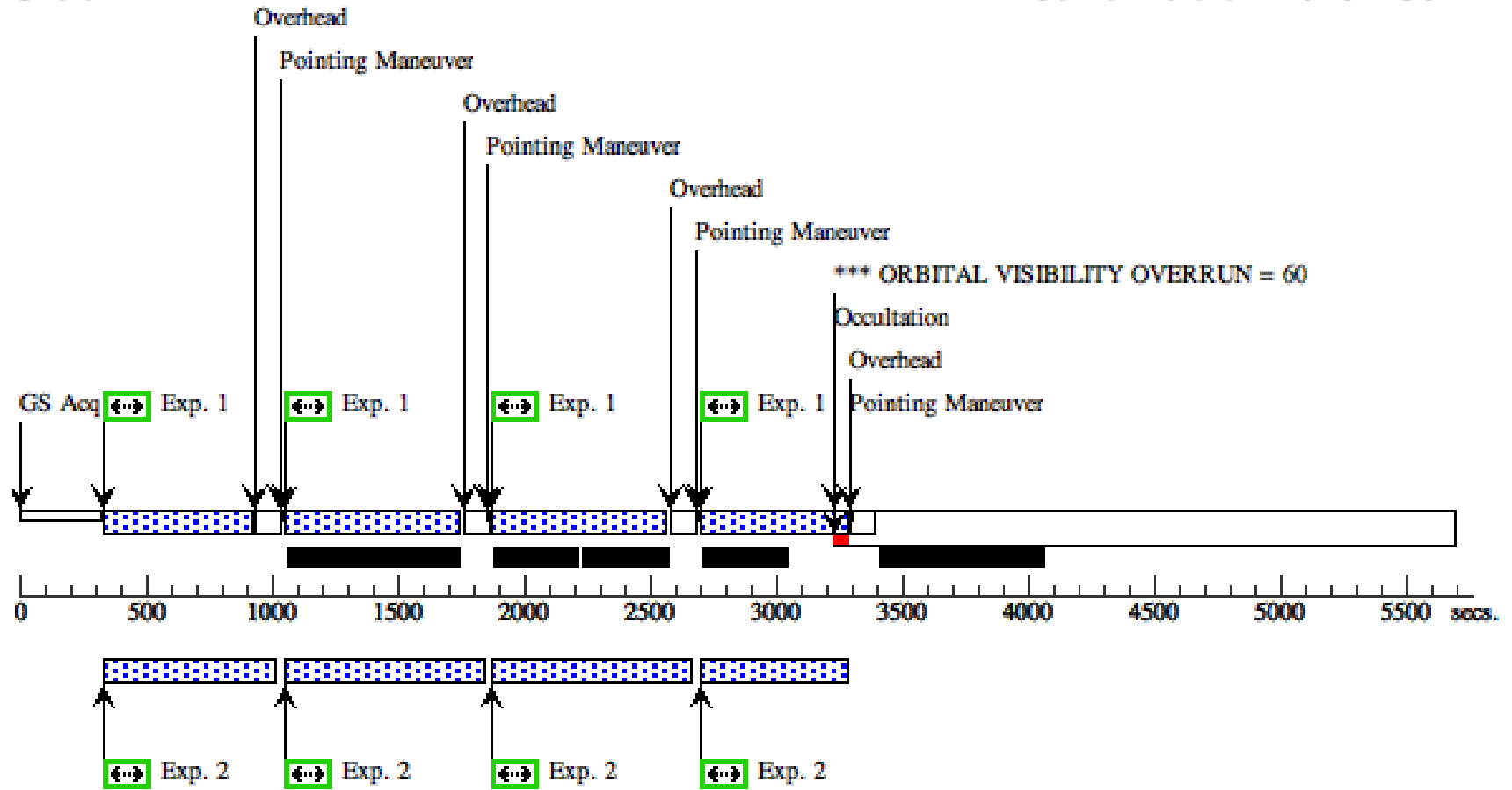
Proposal 15235 - PERSEUS-UDG01 (06) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(17) PERSEUS-UDG01	WFC3/UVIS, ACCUM, UVIS	F475X			Pattern 3, Exps 1-2 in PERSEUS-UDG01 (06) (3) Prime + Parallel Group 1-2 in Pattern 3, Exps 1-2 in PERSEUS-UDG01 (06)	858 Secs (2533 Secs) [==>559.0 Secs (Pattern 1)] [==>697.0 Secs (Pattern 2)] [==>697.0 Secs (Pattern 3)] [==>580.0 Secs (Pattern 4)]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F814W			Pattern 3, Exps 1-2 in PERSEUS-UDG01 (06) (3) Prime + Parallel Group 1-2 in Pattern 3, Exps 1-2 in PERSEUS-UDG01 (06)	800 Secs (2271 Secs) [==>479.0 Secs (Pattern 1)] [==>667.0 Secs (Pattern 2)] [==>667.0 Secs (Pattern 3)] [==>458.0 Secs (Pattern 4)]	[1]
	3		(17) PERSEUS-UDG01	WFC3/UVIS, ACCUM, UVIS	F814W			Pattern 3, Exps 3-4 in PERSEUS-UDG01 (06) (3) Prime + Parallel Group 3-4 in Pattern 3, Exps 3-4 in PERSEUS-UDG01 (06)	925 Secs (2653 Secs) [==>609.0 Secs (Pattern 1)] [==>697.0 Secs (Pattern 2)] [==>697.0 Secs (Pattern 3)] [==>650.0 Secs (Pattern 4)]	[2]
	4		ANY	ACS/WFC, ACCUM, WFC	F475W			Pattern 3, Exps 3-4 in PERSEUS-UDG01 (06) (3) Prime + Parallel Group 3-4 in Pattern 3, Exps 3-4 in PERSEUS-UDG01 (06)	805 Secs (2424 Secs) [==>565.0 Secs (Pattern 1)] [==>667.0 Secs (Pattern 2)] [==>667.0 Secs (Pattern 3)] [==>525.0 Secs (Pattern 4)]	[2]

**Orbit 1**

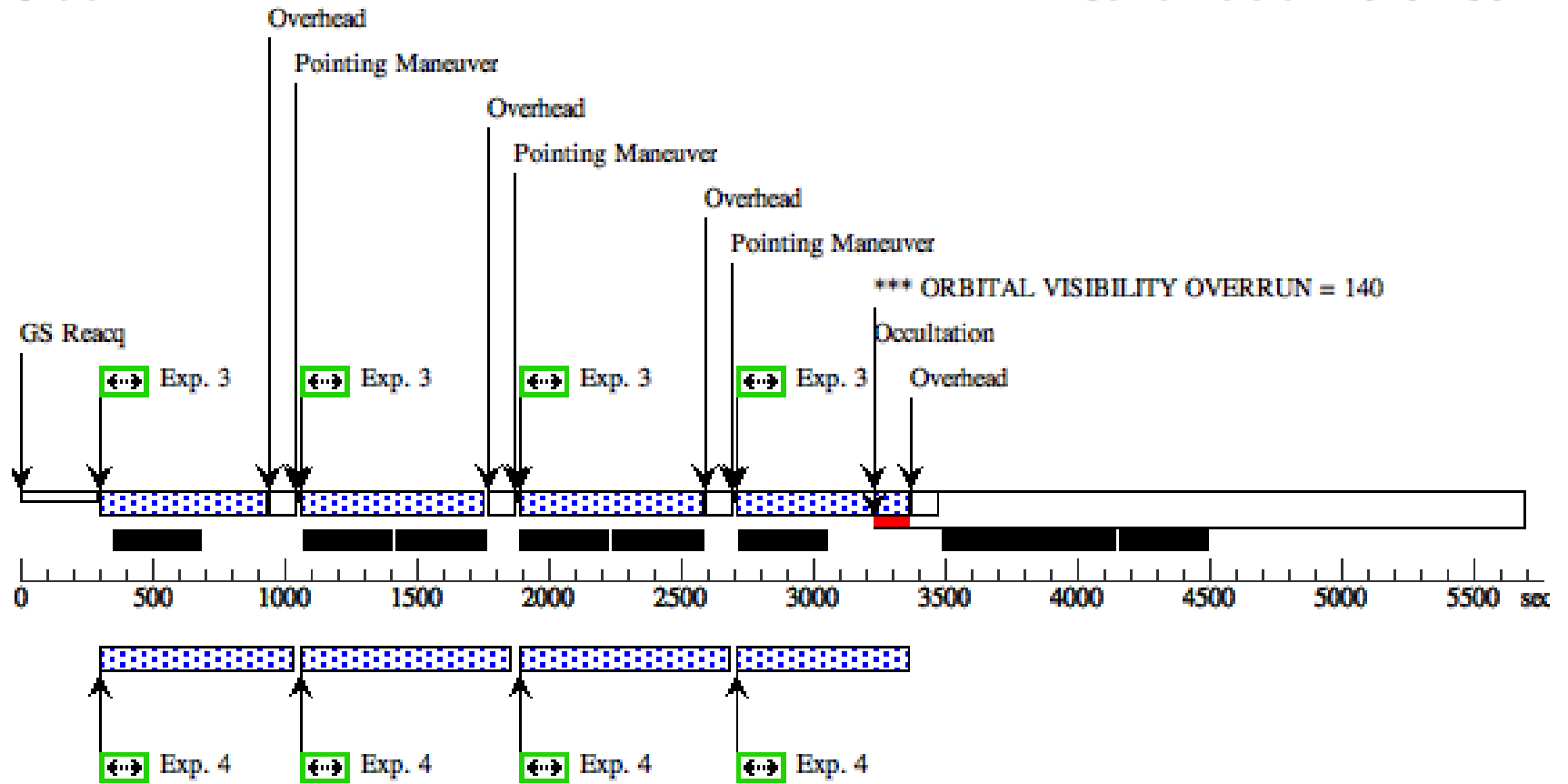
**Server Version: 20181130**

Orbit Structure



**Orbit 2**

Server Version: 20181130



Proposal 15235 - PERSEUS-UDG06 (11) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

Fri Dec 14 16:01:24 GMT 2018

<b>Visit</b>	<b>Proposal 15235, PERSEUS-UDG06 (11), completed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 168.5D TO 177.6 D; AFTER 15 <i>Comments: 18 days of schedulability.</i> <i>Window overlaps with PERSEUS-UDG02, 08, 10.</i> <i>Timing after PERSEUS-UDG10 because that one is higher priority.</i>					
	<b>Diagnosics</b> (PERSEUS-UDG06 (11)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (PERSEUS-UDG06 (11)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN					
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>		
	(3)	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), (3-4)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(22)	PERSEUS-UDG06	RA: 03 19 39.9334 (49.9163892d) Dec: +41 13 6.58 (41.21849d) Equinox: J2000		V=(?) contains WUDG79, WUDG80, WUDG88, WUDG89	Reference Frame: SIMBAD
<i>Comments:</i> Category=GALAXY Description=[DWARF SPHEROIDAL]						

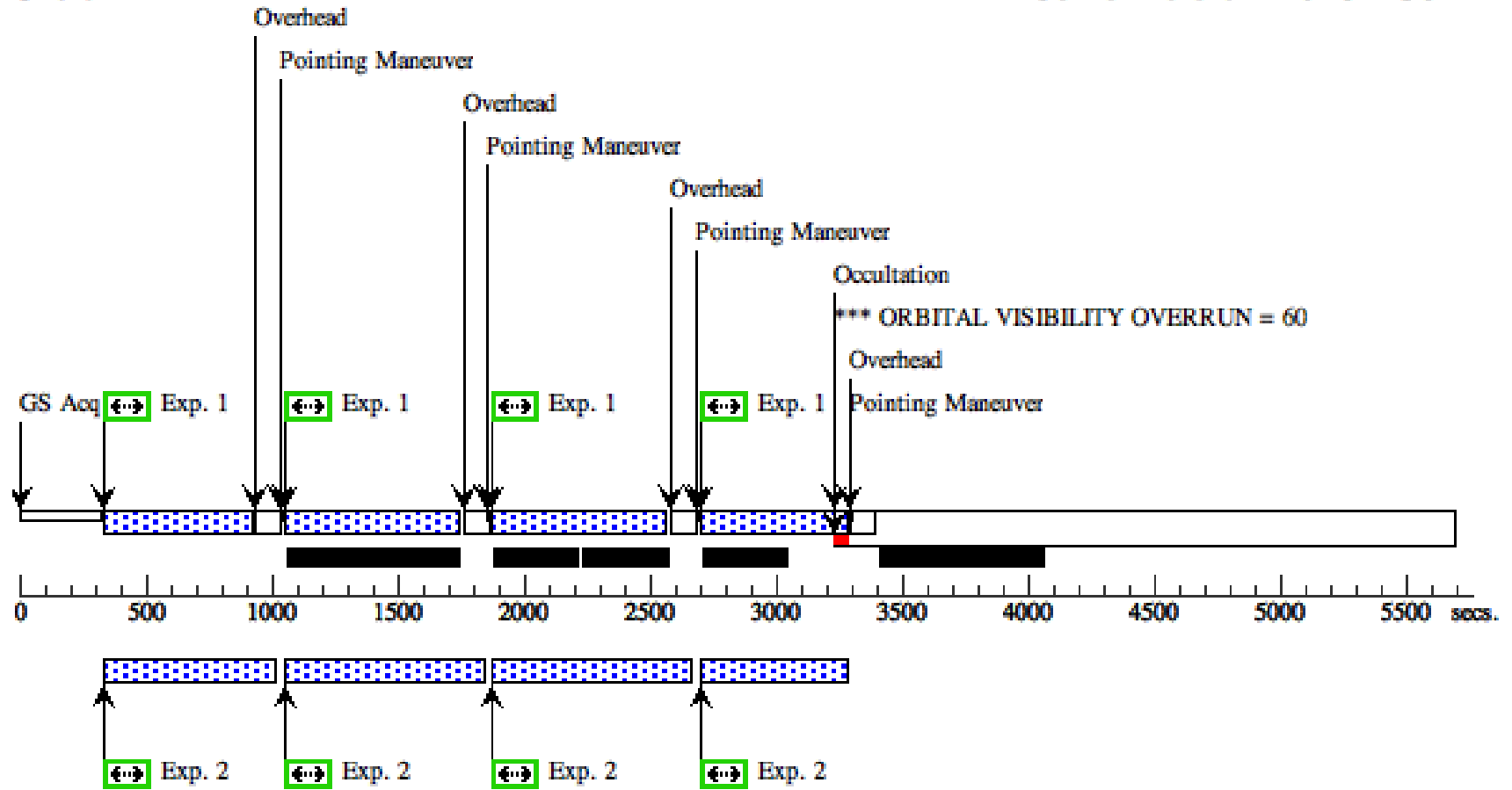
Proposal 15235 - PERSEUS-UDG06 (11) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(22) PERSEUS-UDG06	WFC3/UVIS, ACCUM, UVIS	F475X			Pattern 3, Exps 1-2 in PERSEUS-UDG06 (11) (3) Prime + Parallel Group 1-2 in Pattern 3, Exps 1-2 in PERSEUS-UDG06 (11)	858 Secs (2533 Secs) [==>559 Secs (Pattern 1)] [==>697 Secs (Pattern 2)] [==>697 Secs (Pattern 3)] [==>580 Secs (Pattern 4)]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F814W			Pattern 3, Exps 1-2 in PERSEUS-UDG06 (11) (3) Prime + Parallel Group 1-2 in Pattern 3, Exps 1-2 in PERSEUS-UDG06 (11)	800 Secs (2271 Secs) [==>479 Secs (Pattern 1)] [==>667 Secs (Pattern 2)] [==>667 Secs (Pattern 3)] [==>458 Secs (Pattern 4)]	[1]
	3		(22) PERSEUS-UDG06	WFC3/UVIS, ACCUM, UVIS	F814W			Pattern 3, Exps 3-4 in PERSEUS-UDG06 (11) (3) Prime + Parallel Group 3-4 in Pattern 3, Exps 3-4 in PERSEUS-UDG06 (11)	858 Secs (2653 Secs) [==>609 Secs (Pattern 1)] [==>697 Secs (Pattern 2)] [==>697 Secs (Pattern 3)] [==>650 Secs (Pattern 4)]	[2]
	4		ANY	ACS/WFC, ACCUM, WFC	F475W			Pattern 3, Exps 3-4 in PERSEUS-UDG06 (11) (3) Prime + Parallel Group 3-4 in Pattern 3, Exps 3-4 in PERSEUS-UDG06 (11)	800 Secs (2424 Secs) [==>565 Secs (Pattern 1)] [==>667 Secs (Pattern 2)] [==>667 Secs (Pattern 3)] [==>525 Secs (Pattern 4)]	[2]

Orbit 1

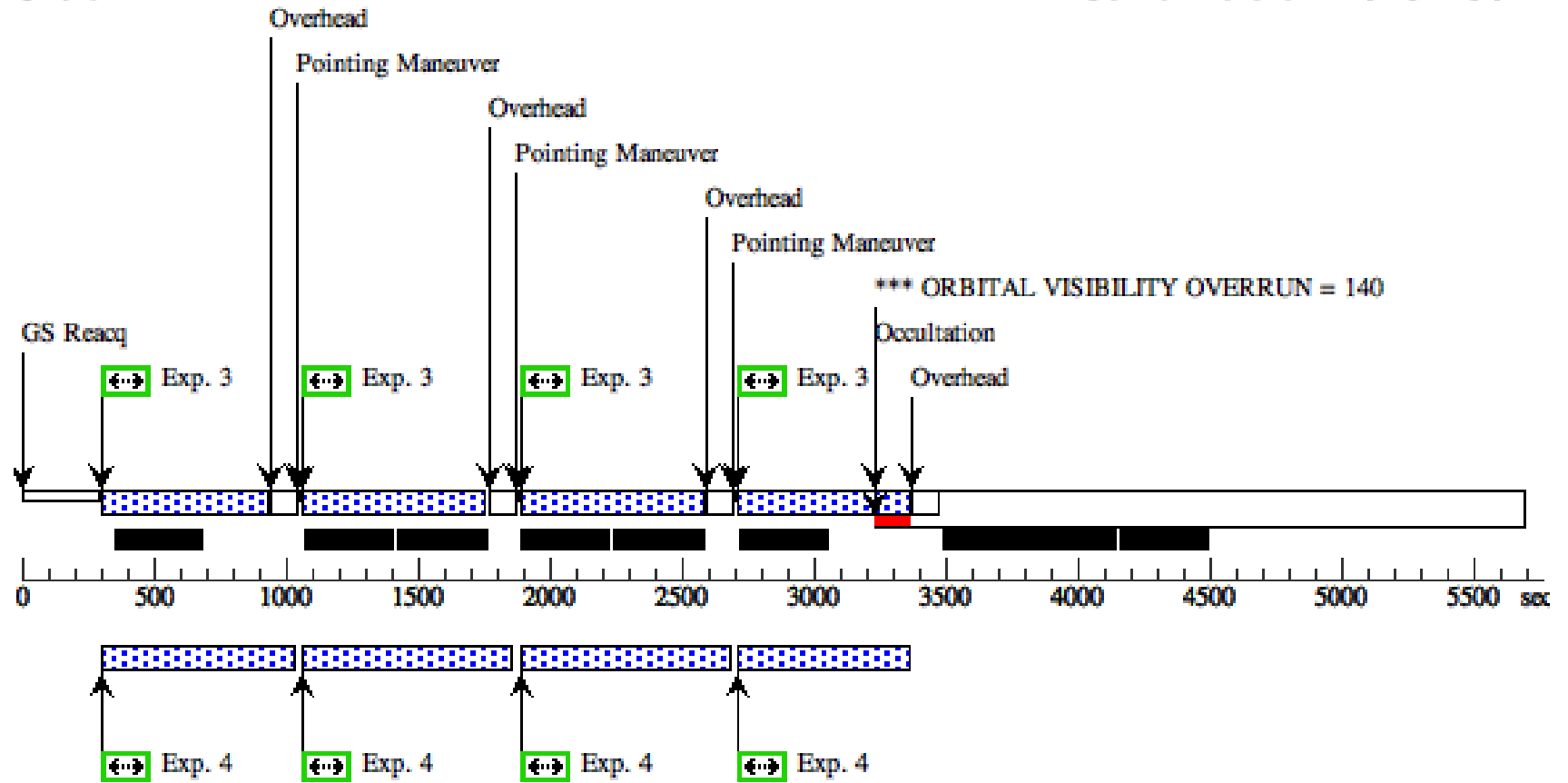
Server Version: 20181130

Orbit Structure



**Orbit 2**

Server Version: 20181130



Proposal 15235 - PERSEUS-UDG07 (12) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

Fri Dec 14 16:01:24 GMT 2018

<b>Visit</b>	<b>Proposal 15235, PERSEUS-UDG07 (12), completed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 129.0D TO 130.3 D <i>Comments: 10 days of schedulability</i>					
	<b>Diagnosics</b> (PERSEUS-UDG07 (12)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (PERSEUS-UDG07 (12)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN					
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>		
	(3)	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), (3-4)	
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(23)	PERSEUS-UDG07	RA: 03 17 9.0678 (49.2877825d) Dec: +41 14 9.33 (41.23593d) Equinox: J2000		V=(?) contains WUDG01, WUDG02, WUDG07, RUDG015	Reference Frame: SIMBAD
	<i>Comments:</i> Category=GALAXY Description=[DWARF SPHEROIDAL]					

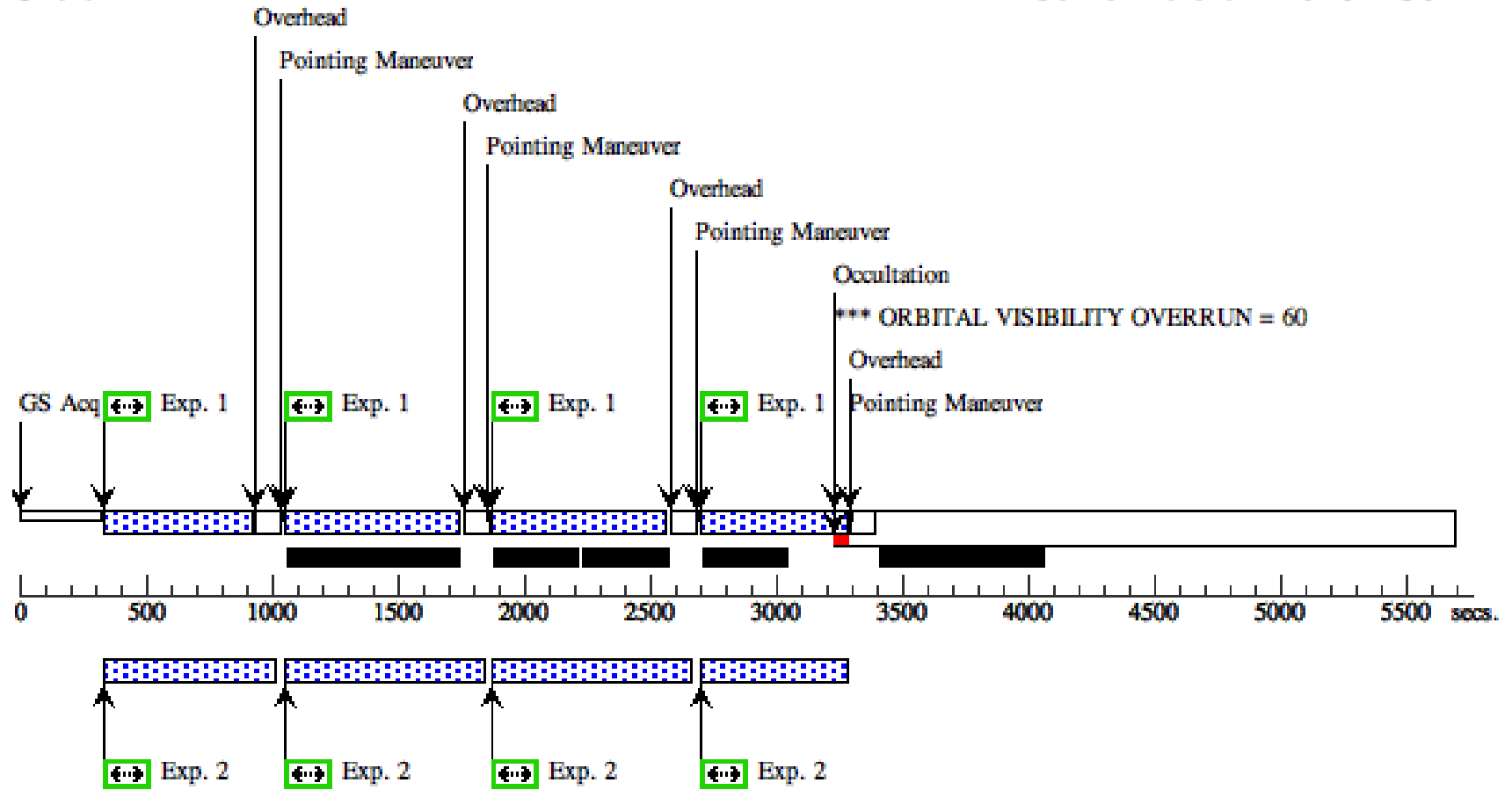
Proposal 15235 - PERSEUS-UDG07 (12) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(23) PERSEUS-UDG07	WFC3/UVIS, ACCUM, UVIS	F475X			Pattern 3, Exps 1-2 in PERSEUS-UDG07 (12) (3) Prime + Parallel Group 1-2 in Pattern 3, Exps 1-2 in PERSEUS-UDG07 (12)	858 Secs (2533 Secs) [==>559 Secs (Pattern 1)] [==>697 Secs (Pattern 2)] [==>697 Secs (Pattern 3)] [==>580 Secs (Pattern 4)]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F814W			Pattern 3, Exps 1-2 in PERSEUS-UDG07 (12) (3) Prime + Parallel Group 1-2 in Pattern 3, Exps 1-2 in PERSEUS-UDG07 (12)	800 Secs (2271 Secs) [==>479 Secs (Pattern 1)] [==>667 Secs (Pattern 2)] [==>667 Secs (Pattern 3)] [==>458 Secs (Pattern 4)]	[1]
	3		(23) PERSEUS-UDG07	WFC3/UVIS, ACCUM, UVIS	F814W			Pattern 3, Exps 3-4 in PERSEUS-UDG07 (12) (3) Prime + Parallel Group 3-4 in Pattern 3, Exps 3-4 in PERSEUS-UDG07 (12)	858 Secs (2653 Secs) [==>609 Secs (Pattern 1)] [==>697 Secs (Pattern 2)] [==>697 Secs (Pattern 3)] [==>650 Secs (Pattern 4)]	[2]
	4		ANY	ACS/WFC, ACCUM, WFC	F475W			Pattern 3, Exps 3-4 in PERSEUS-UDG07 (12) (3) Prime + Parallel Group 3-4 in Pattern 3, Exps 3-4 in PERSEUS-UDG07 (12)	800 Secs (2424 Secs) [==>565 Secs (Pattern 1)] [==>667 Secs (Pattern 2)] [==>667 Secs (Pattern 3)] [==>525.0 Secs (Pattern 4)]	[2]

Orbit 1

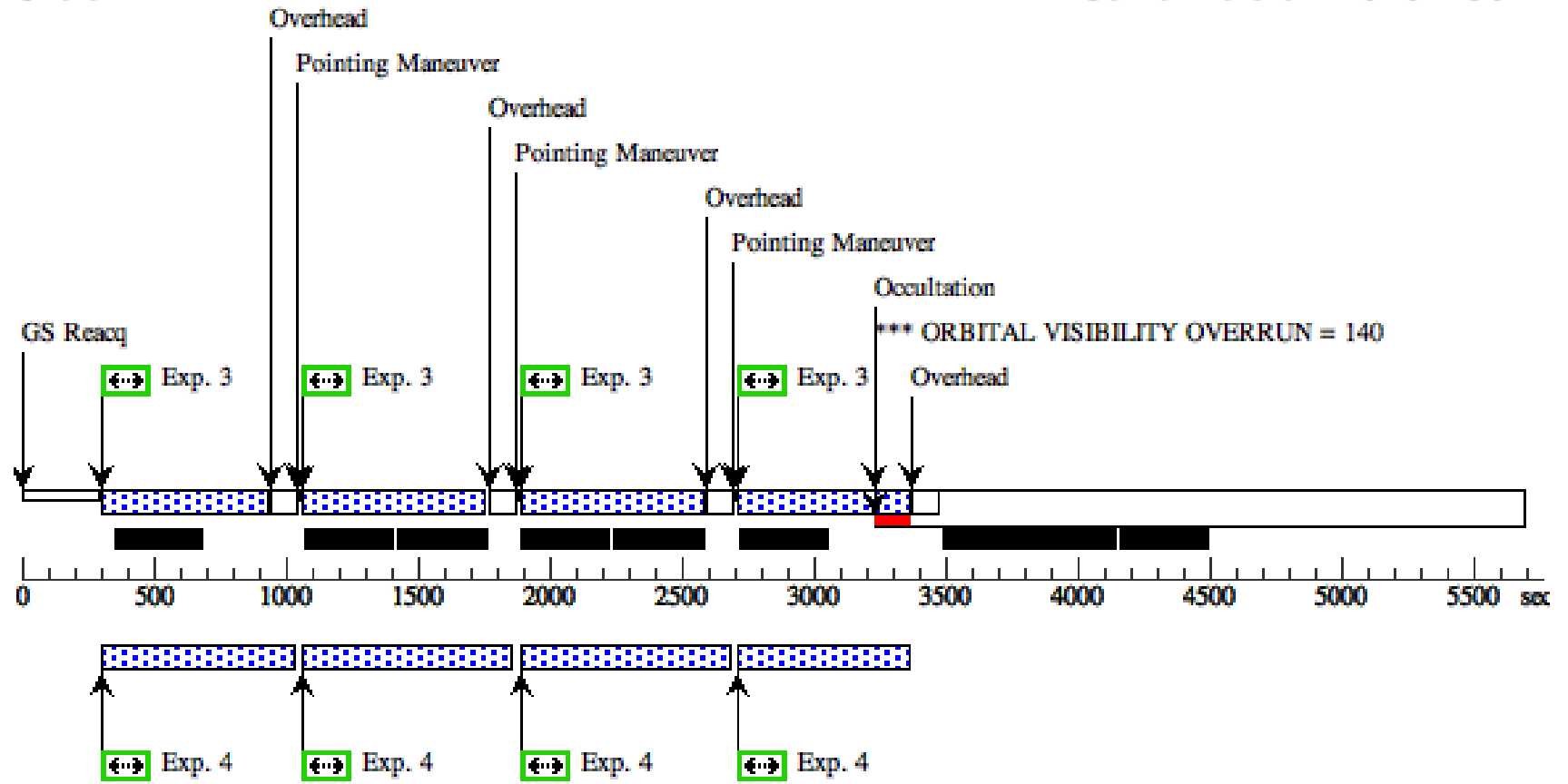
Server Version: 20181130

Orbit Structure



**Orbit 2**

Server Version: 20181130



Proposal 15235 - PERSEUS-UDG08 (13) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

Fri Dec 14 16:01:25 GMT 2018

<b>Visit</b>	<p><b>Proposal 15235, PERSEUS-UDG08 (13), completed</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Scientific Instruments: WFC3/UVIS, ACS/WFC</p> <p>Special Requirements: ORIENT 179.6D TO 180.9 D; AFTER 15</p> <p><i>Comments: 17 days of schedulability.</i></p> <p><i>Window overlaps with PERSEUS-UDG02, 06, 10.</i></p> <p><i>Timing after PERSEUS-UDG10 because that one is higher priority.</i></p>					
	<p>(PERSEUS-UDG08 (13)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN</p> <p>(PERSEUS-UDG08 (13)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN</p>					
<b>Diagnosics</b>						
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>		
	(3)	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), (3-4)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(24)	PERSEUS-UDG08	RA: 03 17 45.1510 (49.4381292d) Dec: +41 23 1.74 (41.38382d) Equinox: J2000		V=(?) contains WUDG12, WUDG16, WUDG17, WUDG22, WUDG25	Reference Frame: SIMBAD
<p><i>Comments:</i></p> <p><i>Category=GALAXY</i></p> <p><i>Description=[DWARF SPHEROIDAL]</i></p>						

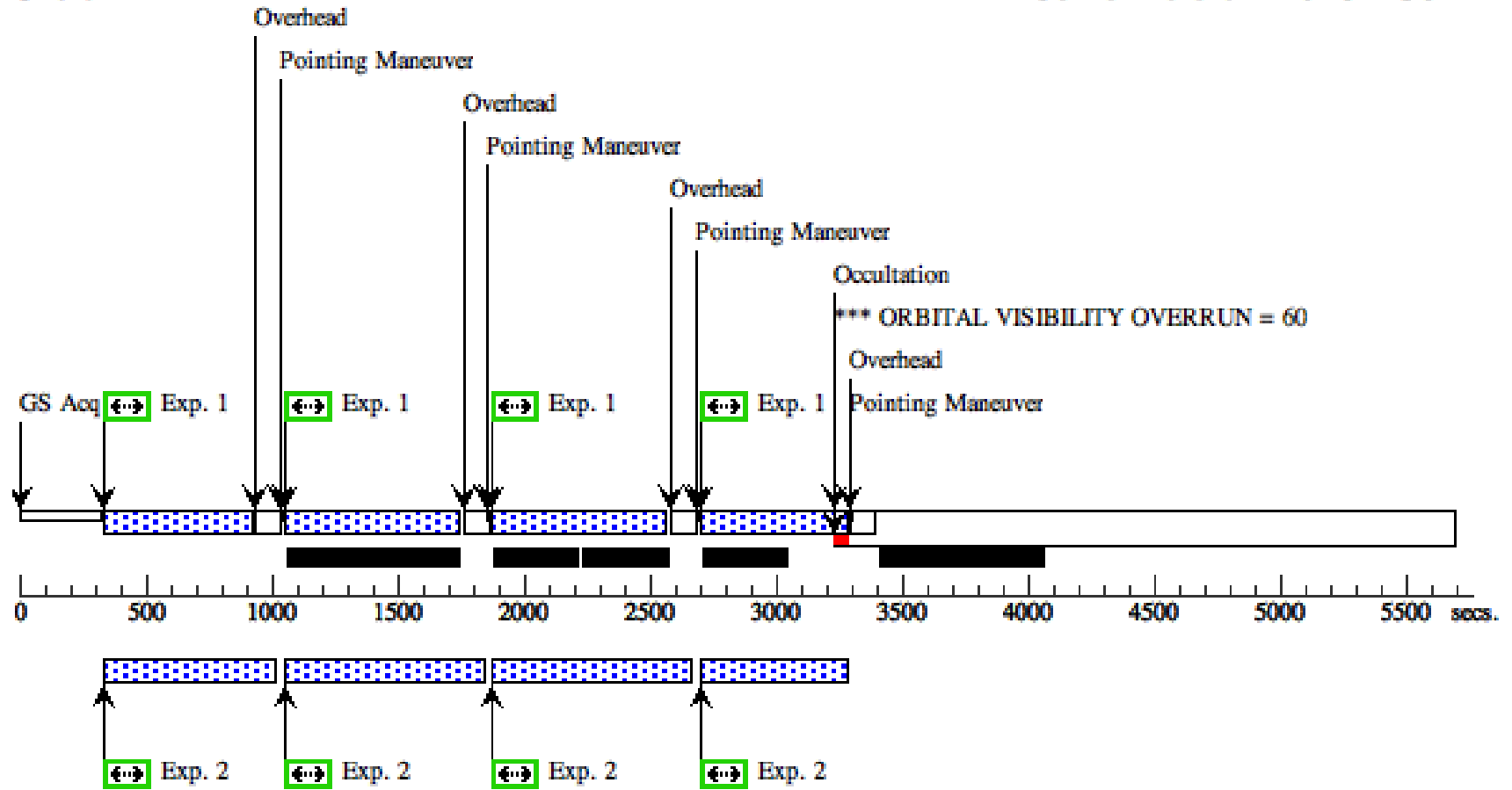
Proposal 15235 - PERSEUS-UDG08 (13) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(24) PERSEUS-UDG08	WFC3/UVIS, ACCUM, UVIS	F475X			Pattern 3, Exps 1-2 in PERSEUS-UDG08 (13) (3) Prime + Parallel Group 1-2 in Pattern 3, Exps 1-2 in PERSEUS-UDG08 (13)	858 Secs (2533 Secs) [==>559 Secs (Pattern 1)] [==>697 Secs (Pattern 2)] [==>697 Secs (Pattern 3)] [==>580 Secs (Pattern 4)]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F814W			Pattern 3, Exps 1-2 in PERSEUS-UDG08 (13) (3) Prime + Parallel Group 1-2 in Pattern 3, Exps 1-2 in PERSEUS-UDG08 (13)	800 Secs (2271 Secs) [==>479 Secs (Pattern 1)] [==>667 Secs (Pattern 2)] [==>667 Secs (Pattern 3)] [==>458 Secs (Pattern 4)]	[1]
	3		(24) PERSEUS-UDG08	WFC3/UVIS, ACCUM, UVIS	F814W			Pattern 3, Exps 3-4 in PERSEUS-UDG08 (13) (3) Prime + Parallel Group 3-4 in Pattern 3, Exps 3-4 in PERSEUS-UDG08 (13)	858 Secs (2653 Secs) [==>609 Secs (Pattern 1)] [==>697 Secs (Pattern 2)] [==>697 Secs (Pattern 3)] [==>650 Secs (Pattern 4)]	[2]
	4		ANY	ACS/WFC, ACCUM, WFC	F475W			Pattern 3, Exps 3-4 in PERSEUS-UDG08 (13) (3) Prime + Parallel Group 3-4 in Pattern 3, Exps 3-4 in PERSEUS-UDG08 (13)	800 Secs (2424 Secs) [==>565 Secs (Pattern 1)] [==>667 Secs (Pattern 2)] [==>667 Secs (Pattern 3)] [==>525 Secs (Pattern 4)]	[2]

**Orbit 1**

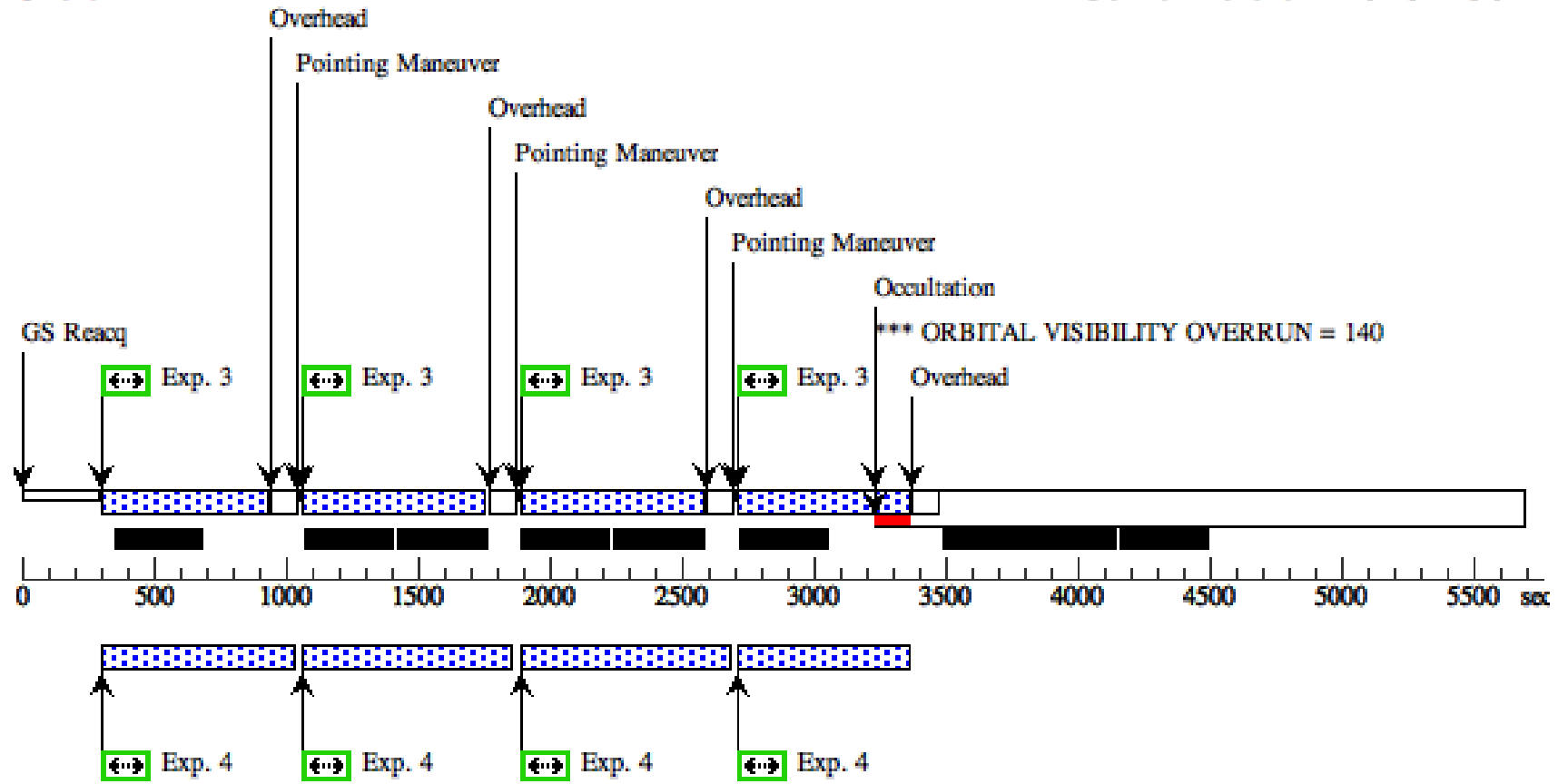
**Server Version: 20181130**

Orbit Structure



**Orbit 2**

Server Version: 20181130



Proposal 15235 - PERSEUS-UDG10 (15) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

Fri Dec 14 16:01:25 GMT 2018

<b>Visit</b>	<b>Proposal 15235, PERSEUS-UDG10 (15), completed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 183.2D TO 187.4 D Comments: 16 days of schedulability. Window overlaps with PERSEUS-UDG02, 06, 08.					
	<b>Diagnosics</b> (PERSEUS-UDG10 (15)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (PERSEUS-UDG10 (15)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN					
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>		
	(3)	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), (3-4)	
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(26)	PERSEUS-UDG10	RA: 03 18 31.2022 (49.6300092d) Dec: +41 11 29.57 (41.19155d) Equinox: J2000		V=(?) contains WUDG56, WUDG59, RUDG016	Reference Frame: SIMBAD
Comments: high priority target: contains RUDG016 Category=GALAXY Description=[DWARF SPHEROIDAL]						

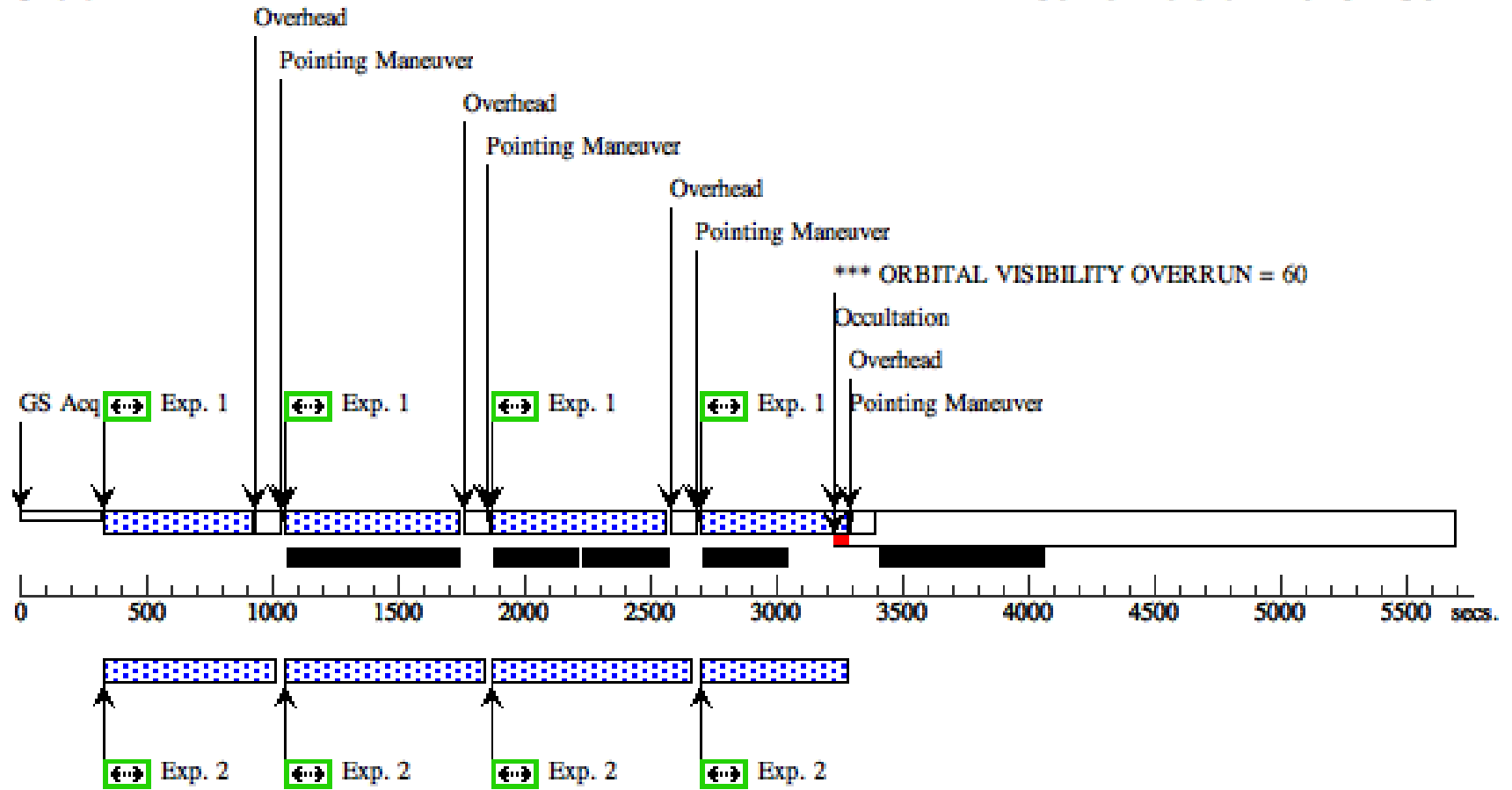
Proposal 15235 - PERSEUS-UDG10 (15) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(26) PERSEUS-UDG10	WFC3/UVIS, ACCUM, UVIS	F475X			Pattern 3, Exps 1-2 in PERSEUS-UDG10 (15) (3) Prime + Parallel Group 1-2 in Pattern 3, Exps 1-2 in PERSEUS-UDG10 (15)	858 Secs (2533 Secs) [==>559 Secs (Pattern 1)] [==>697.0 Secs (Pattern 2)] [==>697 Secs (Pattern 3)] [==>580.0 Secs (Pattern 4)]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F814W			Pattern 3, Exps 1-2 in PERSEUS-UDG10 (15) (3) Prime + Parallel Group 1-2 in Pattern 3, Exps 1-2 in PERSEUS-UDG10 (15)	800 Secs (2271 Secs) [==>479 Secs (Pattern 1)] [==>667.0 Secs (Pattern 2)] [==>667 Secs (Pattern 3)] [==>458 Secs (Pattern 4)]	[1]
	3		(26) PERSEUS-UDG10	WFC3/UVIS, ACCUM, UVIS	F814W			Pattern 3, Exps 3-4 in PERSEUS-UDG10 (15) (3) Prime + Parallel Group 3-4 in Pattern 3, Exps 3-4 in PERSEUS-UDG10 (15)	858 Secs (2653 Secs) [==>609 Secs (Pattern 1)] [==>697 Secs (Pattern 2)] [==>697 Secs (Pattern 3)] [==>650 Secs (Pattern 4)]	[2]
	4		ANY	ACS/WFC, ACCUM, WFC	F475W			Pattern 3, Exps 3-4 in PERSEUS-UDG10 (15) (3) Prime + Parallel Group 3-4 in Pattern 3, Exps 3-4 in PERSEUS-UDG10 (15)	800 Secs (2424 Secs) [==>565 Secs (Pattern 1)] [==>667 Secs (Pattern 2)] [==>667 Secs (Pattern 3)] [==>525 Secs (Pattern 4)]	[2]

**Orbit 1**

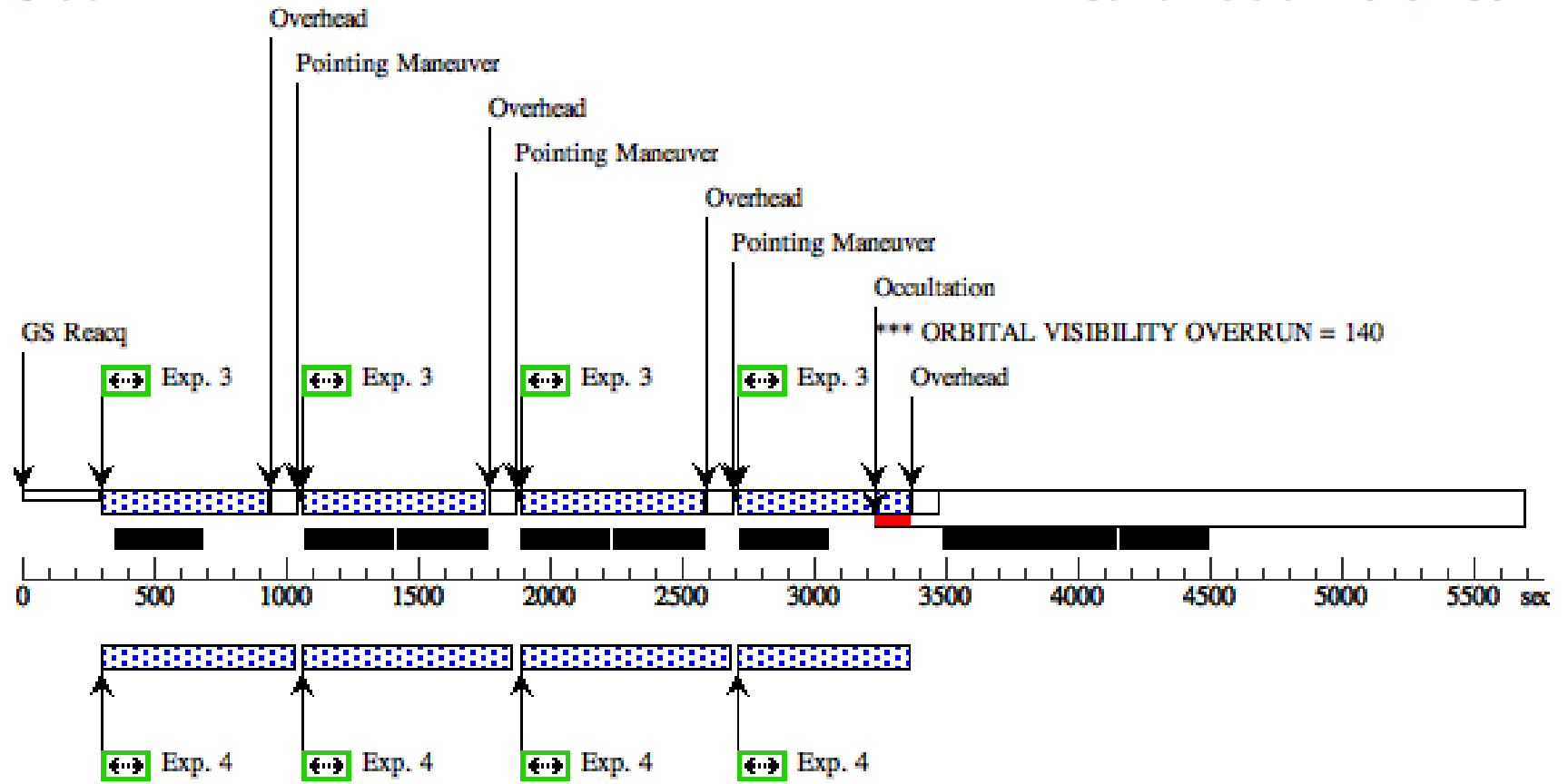
**Server Version: 20181130**

Orbit Structure



**Orbit 2**

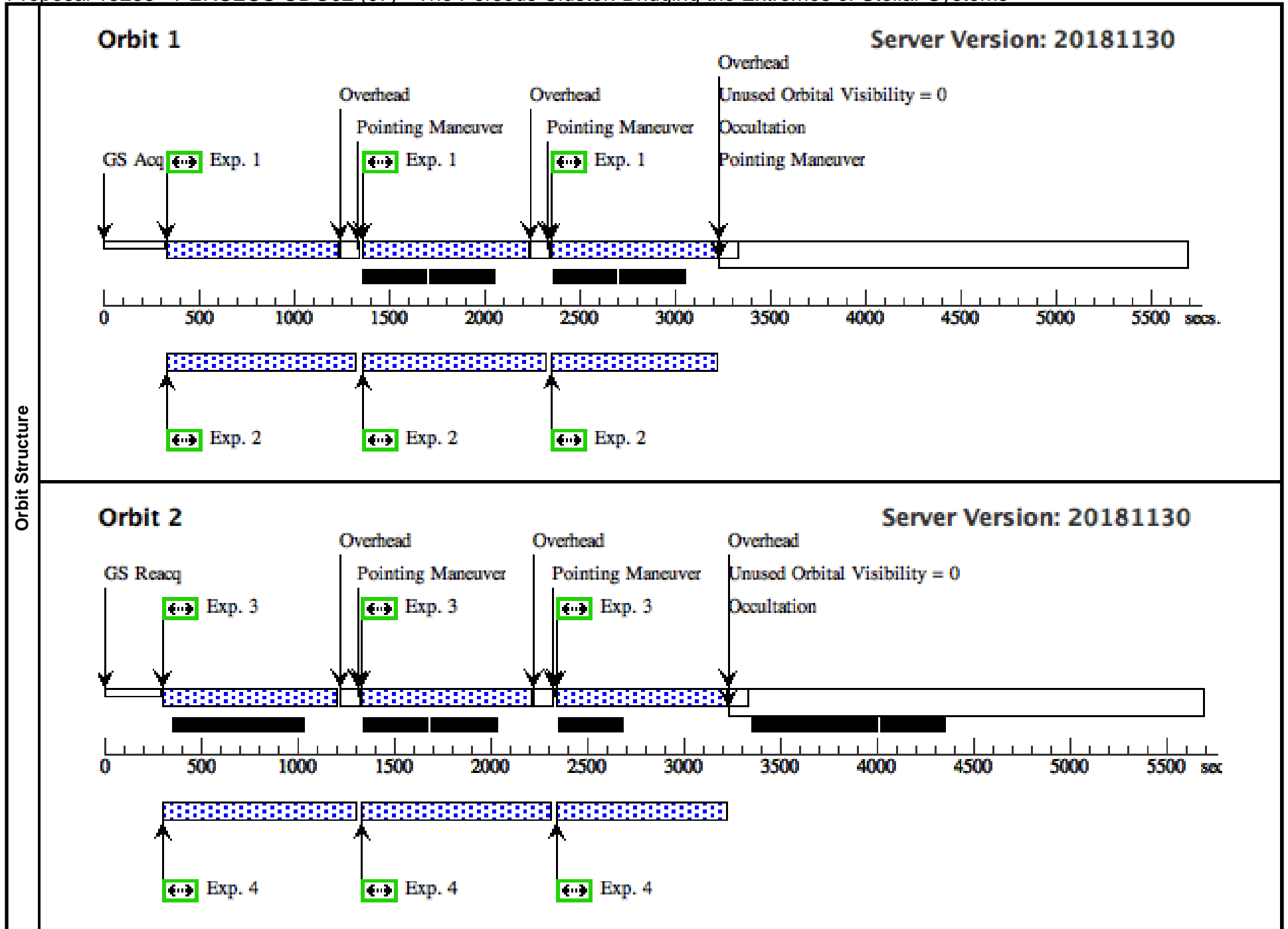
Server Version: 20181130



Proposal 15235 - PERSEUS-UDG02 (07) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

Fri Dec 14 16:01:25 GMT 2018

<b>Visit</b>	<b>Proposal 15235, PERSEUS-UDG02 (07), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 205.9D TO 214.5 D Comments: 15 days of schedulability. Window overlaps with PERSEUS-UDG06, 08, 10.									
	<b>Patterns</b>	#	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>					
	(5)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1-2), (3-4)					
<b>Fixed Targets</b>	#	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(18)	PERSEUS-UDG02	RA: 03 17 1.3831 (49.2557629d) Dec: +41 43 14.04 (41.72057d) Equinox: J2000		V=(?) contains RUDG005, RUDG006, RUDG084	Reference Frame: SIMBAD				
	Comments: Category=GALAXY Description=[DWARF SPHEROIDAL]									
<b>Exposures</b>	#	<b>Label</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1		(18) PERSEUS-UDG02	WFC3/UVIS, ACCUM, UVIS	F475X			Pattern 5, Exps 1-2 in PERSEUS-UDG02 (07) (5) Prime + Parallel Group 1-2 in Pattern 5, Exps 1-2 in PERSEUS-UDG02 (07)	868 Secs (2604 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2	ANY		ACS/WFC, ACCUM, WFC	F814W			Pattern 5, Exps 1-2 in PERSEUS-UDG02 (07) (5) Prime + Parallel Group 1-2 in Pattern 5, Exps 1-2 in PERSEUS-UDG02 (07)	743 Secs (2359 Secs) [==>783.0 Secs (Pattern 1)] [==>833.0 Secs (Pattern 2)] [==>(Pattern 3)]	[1]
	3		(18) PERSEUS-UDG02	WFC3/UVIS, ACCUM, UVIS	F814W			Pattern 5, Exps 3-4 in PERSEUS-UDG02 (07) (5) Prime + Parallel Group 3-4 in Pattern 5, Exps 3-4 in PERSEUS-UDG02 (07)	880 Secs (2640 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[2]
	4	ANY		ACS/WFC, ACCUM, WFC	F475W			Pattern 5, Exps 3-4 in PERSEUS-UDG02 (07) (5) Prime + Parallel Group 3-4 in Pattern 5, Exps 3-4 in PERSEUS-UDG02 (07)	752 Secs (2436 Secs) [==>832.0 Secs (Pattern 1)] [==>852.0 Secs (Pattern 2)] [==>752.0 Secs (Pattern 3)]	[2]



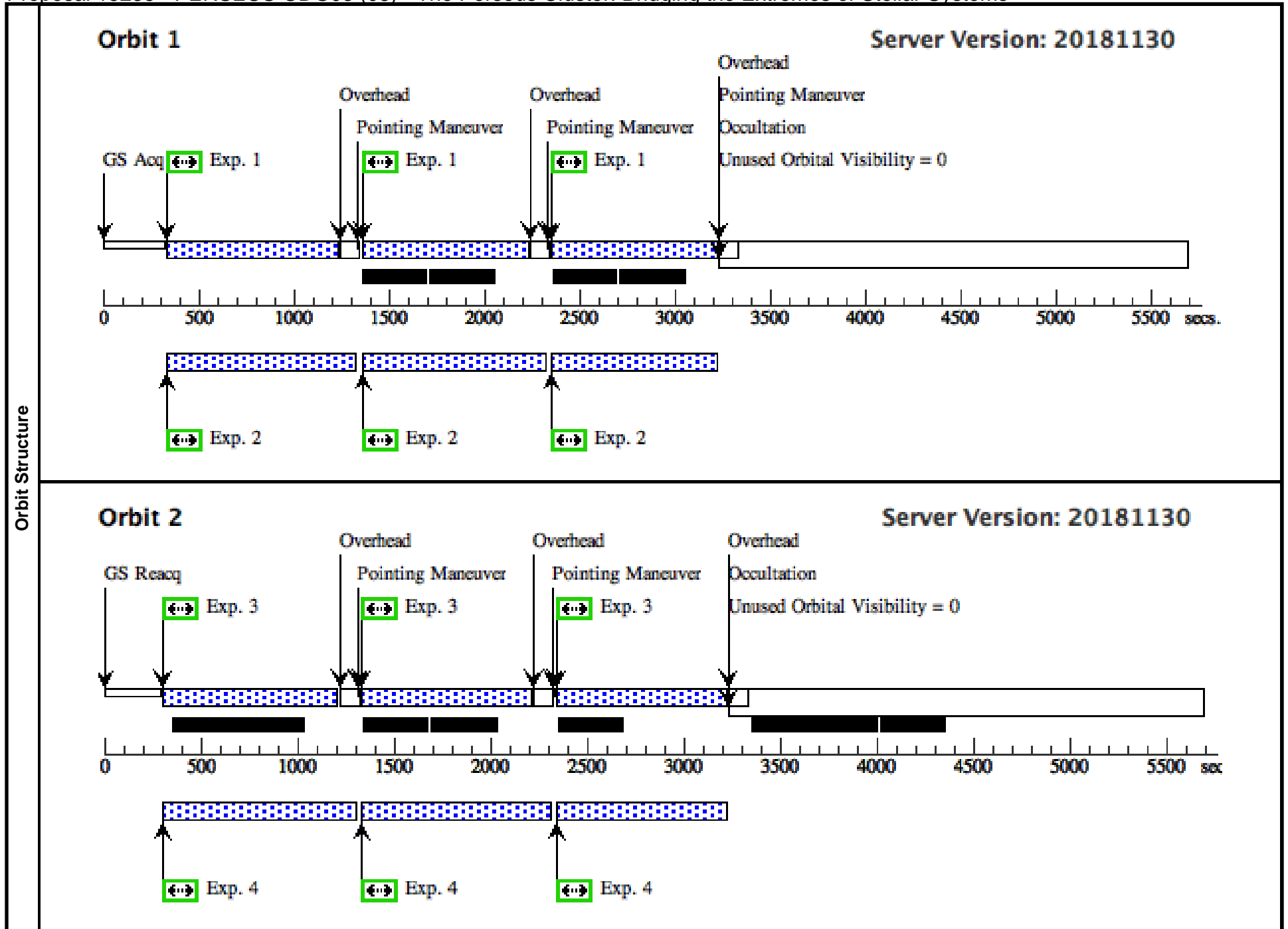
Proposal 15235 - PERSEUS-UDG03 (08) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

Fri Dec 14 16:01:25 GMT 2018

<b>Visit</b>	<b>Proposal 15235, PERSEUS-UDG03 (08), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 114.2D TO 114.4 D <i>Comments: 22 days of schedulability</i>					
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>	
	(5)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1-2), (3-4)	
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(19)	PERSEUS-UDG03	RA: 03 18 30.8256 (49.6284400d) Dec: +41 41 8.80 (41.68578d) Equinox: J2000		V=(?) contains UWDG27, WUDG28, WUDG29, WUDG33, WUDG35, WUDG36, WUDG40, WUDG41	Reference Frame: SIMBAD
	<i>Comments: high priority target: contains many UDGs</i> Category=GALAXY Description=[DWARF SPHEROIDAL]					

Proposal 15235 - PERSEUS-UDG03 (08) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

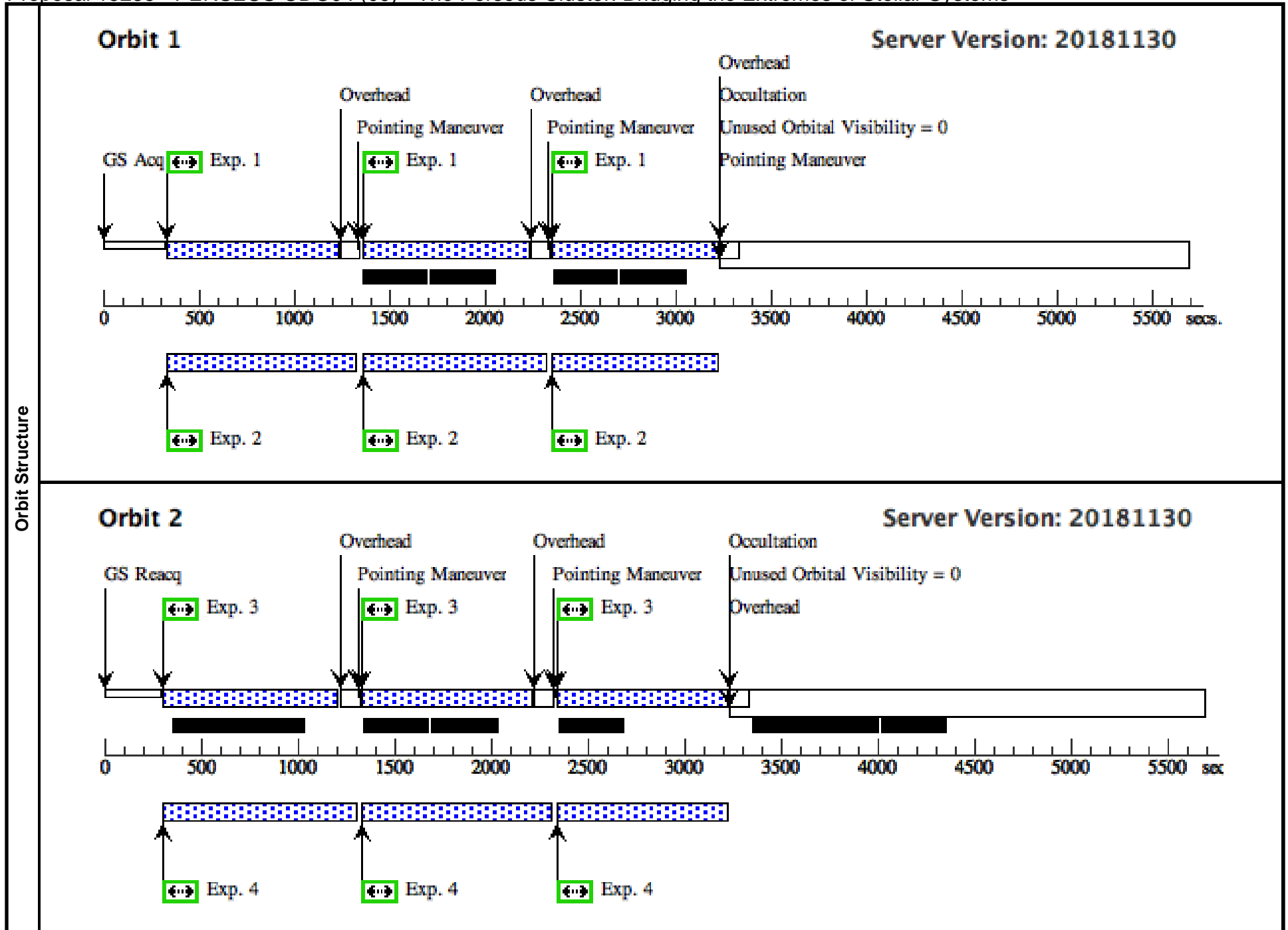
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(19) PERSEUS-UDG03	WFC3/UVIS, ACCUM, UVIS	F475X			Pattern 5, Exps 1-2 in PERSEUS-UDG03 (08) (5) Prime + Parallel Group 1-2 in Pattern 5, Exps 1-2 in PERSEUS-UDG03 (08)	868 Secs (2604 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F814W			Pattern 5, Exps 1-2 in PERSEUS-UDG03 (08) (5) Prime + Parallel Group 1-2 in Pattern 5, Exps 1-2 in PERSEUS-UDG03 (08)	743 Secs (2359 Secs) [==>783.0 Secs (Pattern 1)] [==>833.0 Secs (Pattern 2)] [==>(Pattern 3)]	[1]
	3		(19) PERSEUS-UDG03	WFC3/UVIS, ACCUM, UVIS	F814W			Pattern 5, Exps 3-4 in PERSEUS-UDG03 (08) (5) Prime + Parallel Group 3-4 in Pattern 5, Exps 3-4 in PERSEUS-UDG03 (08)	880 Secs (2640 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[2]
	4		ANY	ACS/WFC, ACCUM, WFC	F475W			Pattern 5, Exps 3-4 in PERSEUS-UDG03 (08) (5) Prime + Parallel Group 3-4 in Pattern 5, Exps 3-4 in PERSEUS-UDG03 (08)	752 Secs (2436 Secs) [==>832.0 Secs (Pattern 1)] [==>852.0 Secs (Pattern 2)] [==>752.0 Secs (Pattern 3)]	[2]



Proposal 15235 - PERSEUS-UDG04 (09) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

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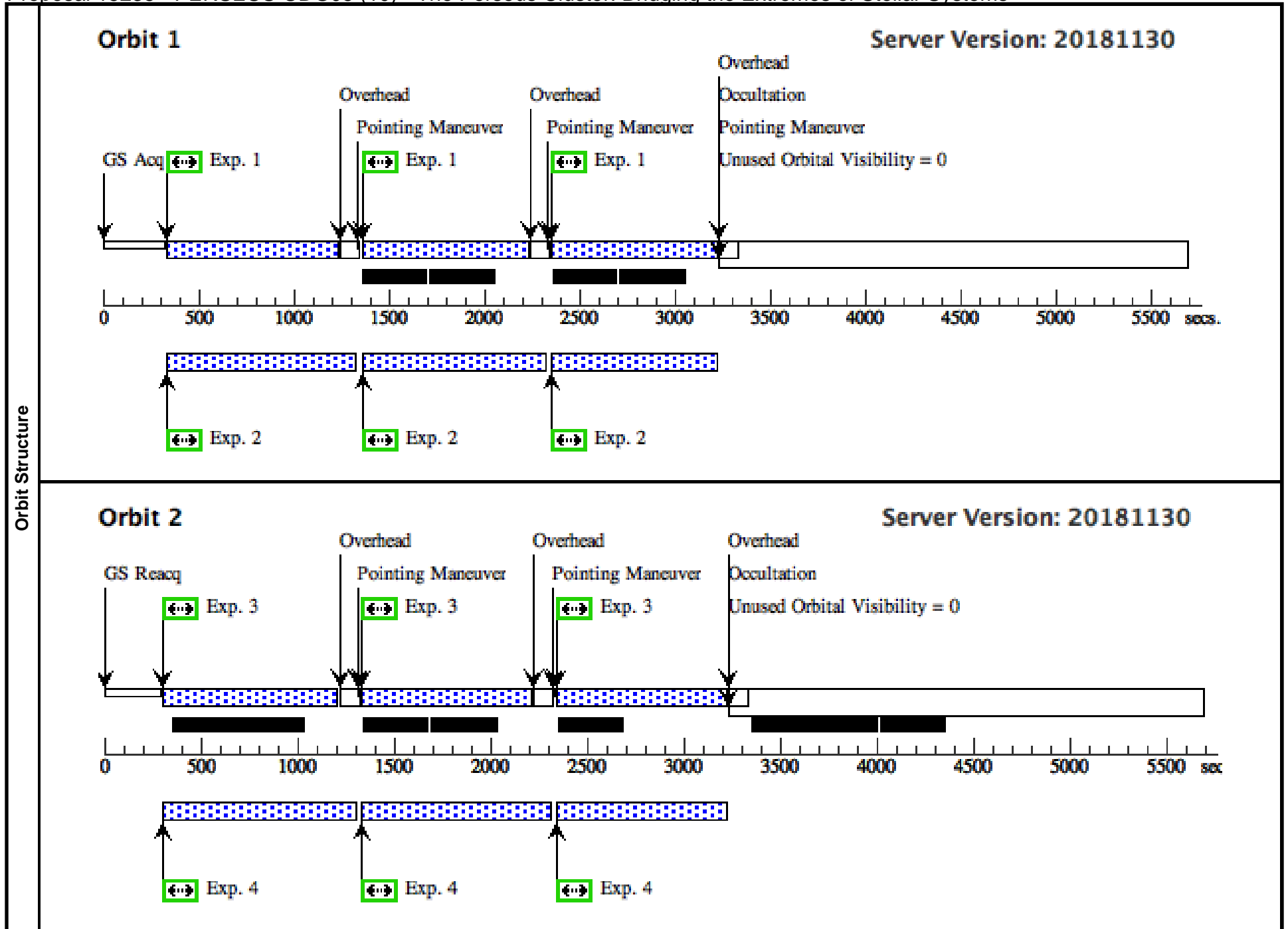
<b>Visit</b>	<b>Proposal 15235, PERSEUS-UDG04 (09), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 86.8D TO 96.4 D Comments: > 2 months of schedulability. Timing was originally specified to be after PERSEUS-UDG03 because that one is higher priority, but restriction now removed.									
	<b>Patterns</b>	#	Primary Pattern	Secondary Pattern	Exposures					
	(5)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1-2), (3-4)					
<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(20)	PERSEUS-UDG04	RA: 03 19 52.8662 (49.9702758d) Dec: +41 54 6.34 (41.90176d) Equinox: J2000		V=(?) contains RUDG023, RUDG060	Reference Frame: SIMBAD				
	Comments: Category=GALAXY Description=[DWARF SPHEROIDAL]									
<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(20) PERSEUS-UDG04	WFC3/UVIS, ACCUM, UVIS	F475X			Pattern 5, Exps 1-2 in PERSEUS-UDG04 (09) (5) Prime + Parallel Group 1-2 in Pattern 5, Exps 1-2 in PERSEUS-UDG04 (09)	868 Secs (2604 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F814W			Pattern 5, Exps 1-2 in PERSEUS-UDG04 (09) (5) Prime + Parallel Group 1-2 in Pattern 5, Exps 1-2 in PERSEUS-UDG04 (09)	743 Secs (2359 Secs) [==>783.0 Secs (Pattern 1)] [==>833.0 Secs (Pattern 2)] [==>743.0 Secs (Pattern 3)]	[1]
	3		(20) PERSEUS-UDG04	WFC3/UVIS, ACCUM, UVIS	F814W			Pattern 5, Exps 3-4 in PERSEUS-UDG04 (09) (5) Prime + Parallel Group 3-4 in Pattern 5, Exps 3-4 in PERSEUS-UDG04 (09)	880 Secs (2640 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[2]
	4		ANY	ACS/WFC, ACCUM, WFC	F475W			Pattern 5, Exps 3-4 in PERSEUS-UDG04 (09) (5) Prime + Parallel Group 3-4 in Pattern 5, Exps 3-4 in PERSEUS-UDG04 (09)	752 Secs (2436 Secs) [==>832.0 Secs (Pattern 1)] [==>852.0 Secs (Pattern 2)] [==>752.0 Secs (Pattern 3)]	[2]



Proposal 15235 - PERSEUS-UDG05 (10) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

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Visit	<b>Proposal 15235, PERSEUS-UDG05 (10), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 216.2D TO 217.6 D Comments: 23 days of schedulability									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(5)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1-2), (3-4)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(21)	PERSEUS-UDG05	RA: 03 19 48.9473 (49.9539471d) Dec: +41 43 46.59 (41.72961d) Equinox: J2000		V=(?) contains WUDG83, WUDG84, RUDG021, RUDG027	Reference Frame: SIMBAD				
	Comments: Category=GALAXY Description=[DWARF SPHEROIDAL]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(21) PERSEUS-UDG05	WFC3/UVIS, ACCUM, UVIS	F475X			Pattern 5, Exps 1-2 in PERSEUS-UDG05 (10) (5) Prime + Parallel Group 1-2 in Pattern 5, Exps 1-2 in PERSEUS-UDG05 (10)	868 Secs (2604 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F814W			Pattern 5, Exps 1-2 in PERSEUS-UDG05 (10) (5) Prime + Parallel Group 1-2 in Pattern 5, Exps 1-2 in PERSEUS-UDG05 (10)	743 Secs (2359 Secs) [==>783.0 Secs (Pattern 1)] [==>833.0 Secs (Pattern 2)] [==>(Pattern 3)]	[1]
	3		(21) PERSEUS-UDG05	WFC3/UVIS, ACCUM, UVIS	F814W			Pattern 5, Exps 3-4 in PERSEUS-UDG05 (10) (5) Prime + Parallel Group 3-4 in Pattern 5, Exps 3-4 in PERSEUS-UDG05 (10)	880 Secs (2640 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[2]
	4		ANY	ACS/WFC, ACCUM, WFC	F475W			Pattern 5, Exps 3-4 in PERSEUS-UDG05 (10) (5) Prime + Parallel Group 3-4 in Pattern 5, Exps 3-4 in PERSEUS-UDG05 (10)	752 Secs (2436 Secs) [==>832.0 Secs (Pattern 1)] [==>852.0 Secs (Pattern 2)] [==>752.0 Secs (Pattern 3)]	[2]



Proposal 15235 - PERSEUS-UDG09 (14) - The Perseus Cluster: Bridging the Extremes of Stellar Systems

Fri Dec 14 16:01:25 GMT 2018

<b>Visit</b>	<b>Proposal 15235, PERSEUS-UDG09 (14), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 73.0D TO 73.1 D Comments: UDG-W07 is partially cut off here but is fully in Visit-12-PERSEUS-UDG07. Recentering with PA = 70.8-71.9 would give a bit longer observability. > 2 months of schedulability									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>					
(5)		Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1-2), (3-4)					
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(25)	PERSEUS-UDG09	RA: 03 17 43.9481 (49.4331171d) Dec: +41 19 10.78 (41.31966d) Equinox: J2000		V=(?) contains WUDG04, WUDG06, WUDG07, WUDG18, WUDG19	Reference Frame: SIMBAD				
Comments: Category=GALAXY Description=[DWARF SPHEROIDAL]										
<b>Exposures</b>	<b>#</b>	<b>Label</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1		(25) PERSEUS-UDG09	WFC3/UVIS, ACCUM, UVIS	F475X			Pattern 5, Exps 1-2 in PERSEUS-UDG09 (14) (5) Prime + Parallel Group 1-2 in Pattern 5, Exps 1-2 in PERSEUS-UDG09 (14)	868 Secs (2604 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2	ANY		ACS/WFC, ACCUM, WFC	F814W			Pattern 5, Exps 1-2 in PERSEUS-UDG09 (14) (5) Prime + Parallel Group 1-2 in Pattern 5, Exps 1-2 in PERSEUS-UDG09 (14)	743 Secs (2359 Secs) [==>783.0 Secs (Pattern 1)] [==>833.0 Secs (Pattern 2)] [==>(Pattern 3)]	[1]
	3		(25) PERSEUS-UDG09	WFC3/UVIS, ACCUM, UVIS	F814W			Pattern 5, Exps 3-4 in PERSEUS-UDG09 (14) (5) Prime + Parallel Group 3-4 in Pattern 5, Exps 3-4 in PERSEUS-UDG09 (14)	880 Secs (2640 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[2]
	4	ANY		ACS/WFC, ACCUM, WFC	F475W			Pattern 5, Exps 3-4 in PERSEUS-UDG09 (14) (5) Prime + Parallel Group 3-4 in Pattern 5, Exps 3-4 in PERSEUS-UDG09 (14)	752 Secs (2436 Secs) [==>832.0 Secs (Pattern 1)] [==>852.0 Secs (Pattern 2)] [==>752.0 Secs (Pattern 3)]	[2]

