



## 14471 - Hubble Heritage 2016

Cycle: 23, Proposal Category: GO/DD

(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-7635	ACS/WFC WFC3/UVIS	3	23-Jan-2016 21:12:42.0	yes
02	(1) NGC-7635	ACS/WFC WFC3/UVIS	3	23-Jan-2016 21:12:45.0	yes
03	(1) NGC-7635	ACS/WFC WFC3/UVIS	3	23-Jan-2016 21:12:48.0	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-7635	ACS/WFC WFC3/UVIS	3	23-Jan-2016 21:12:50.0	yes

12 Total Orbits Used

**ABSTRACT**

We propose new observations for the Hubble Heritage project in cycle 23. We have identified a new target that will be used to produce high-quality, high-impact images that ensure continued public support for the Hubble mission. This proposal is submitted to the cycle 23 DD program to provide new images that will be obtained and released over the coming year. Our continuing ability to do science with HST and our hopes for JWST depend crucially on public support generated by our continuing commitment to sharing new images with the public.

**OBSERVING DESCRIPTION**

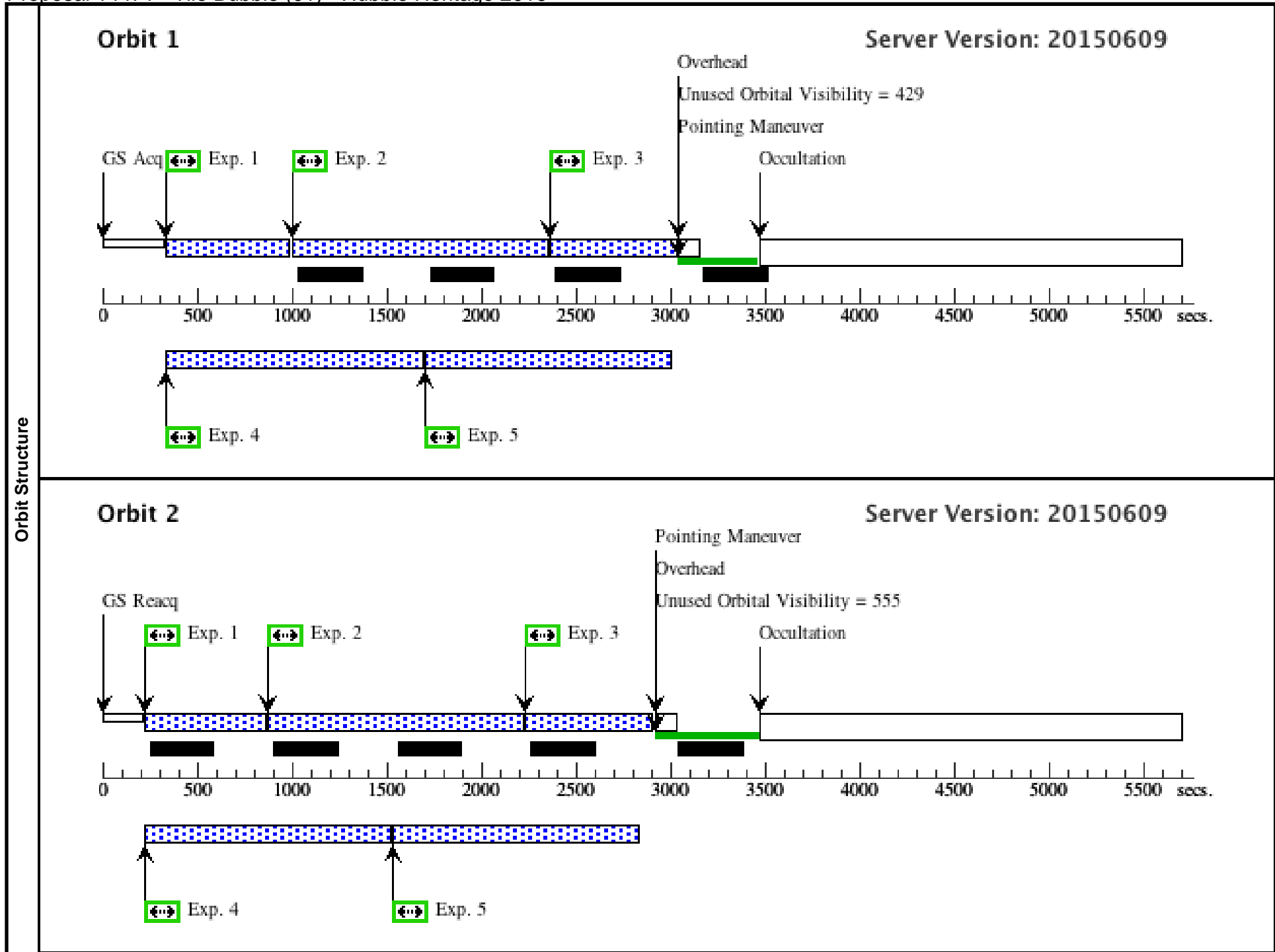
We will obtain a 2x2 mosaic in WFC3/UVIS in 3 narrowband filters.

Proposal 14471 - Tile Bubble (01) - Hubble Heritage 2016

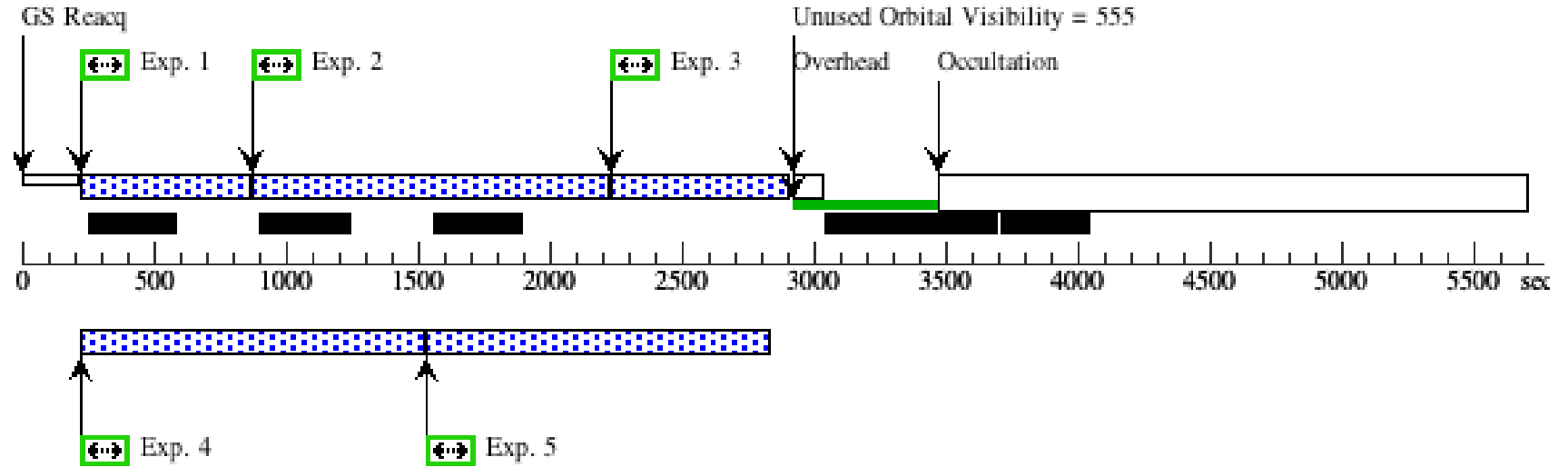
<b>Visit</b>	<b>Proposal 14471, Tile Bubble (01), implementation</b> <span style="float: right;">Sun Jan 24 02:12:52 GMT 2016</span> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 10D TO 10 D																																	
	<b>Diagnosics</b> (Tile Bubble (01)) Warning (Orbit Planner): PATTERN POSITION OUTSIDE APERTURE																																	
<b>Patterns</b>	<table border="1"> <thead> <tr> <th>#</th> <th>Primary Pattern</th> <th>Secondary Pattern</th> <th>Exposures</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>                     Pattern Type=WFC3-UVIS-DITHER-                      LINE                      Purpose=DITHER                      Number Of Points=3                      Point Spacing=3                      Line Spacing=                 </td> <td>                     Coordinate Frame=POS-TARG                      Pattern Orientation=85                      Angle Between Sides=                      Center Pattern=false                 </td> <td>(1-5)</td> </tr> </tbody> </table>	#	Primary Pattern	Secondary Pattern	Exposures	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE Purpose=DITHER Number Of Points=3 Point Spacing=3 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85 Angle Between Sides= Center Pattern=false	(1-5)																									
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#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																													
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Proposal 14471 - Tile Bubble (01) - Hubble Heritage 2016

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) NGC-7635	WFC3/UVIS, ACCUM, UVIS1-FIX	F656N	FLASH=12	POS TARG -71.104 7834816927,-83.384 71180876985	Pattern 1, Exps 1-5 in Tile Bubble (01) (1 )	500 Secs (1500 Secs)	
									[==>(Pattern 1)]	[1]
									Prime + Parallel Gro up 1-5 in Pattern 1, E xps 1-5 in Tile Bubl e (01)	[==>(Pattern 2)]
									[==>(Pattern 3)]	[3]
	2		(1) NGC-7635	WFC3/UVIS, ACCUM, UVIS1-FIX	F658N	FLASH=12	POS TARG -71.104 7834816927,-83.384 71180876985	Pattern 1, Exps 1-5 in Tile Bubble (01) (1 )	1200 Secs (3600 Secs)	
[==>(Pattern 1)]									[1]	
Prime + Parallel Gro up 1-5 in Pattern 1, E xps 1-5 in Tile Bubl e (01)									[==>(Pattern 2)]	[2]
								[==>(Pattern 3)]	[3]	
3		(1) NGC-7635	WFC3/UVIS, ACCUM, UVIS1-FIX	F502N	FLASH=12	POS TARG -71.104 7834816927,-83.384 71180876985	Pattern 1, Exps 1-5 in Tile Bubble (01) (1 )	650 Secs (1950 Secs)		
								[==>(Pattern 1)]	[1]	
								Prime + Parallel Gro up 1-5 in Pattern 1, E xps 1-5 in Tile Bubl e (01)	[==>(Pattern 2)]	[2]
								[==>(Pattern 3)]	[3]	
4		(1) NGC-7635	ACS/WFC, ACCUM, WFC-FIX	F658N	FLASH=12		Pattern 1, Exps 1-5 in Tile Bubble (01) (1 )	1150 Secs (3450 Secs)		
								[==>(Pattern 1)]	[1]	
								Prime + Parallel Gro up 1-5 in Pattern 1, E xps 1-5 in Tile Bubl e (01)	[==>(Pattern 2)]	[2]
								[==>(Pattern 3)]	[3]	
5		(1) NGC-7635	ACS/WFC, ACCUM, WFC-FIX	F502N	FLASH=12		Pattern 1, Exps 1-5 in Tile Bubble (01) (1 )	1150 Secs (3450 Secs)		
								[==>(Pattern 1)]	[1]	
								Prime + Parallel Gro up 1-5 in Pattern 1, E xps 1-5 in Tile Bubl e (01)	[==>(Pattern 2)]	[2]
								[==>(Pattern 3)]	[3]	



**Orbit 3**



Proposal 14471 - Tile Bubble (02) - Hubble Heritage 2016

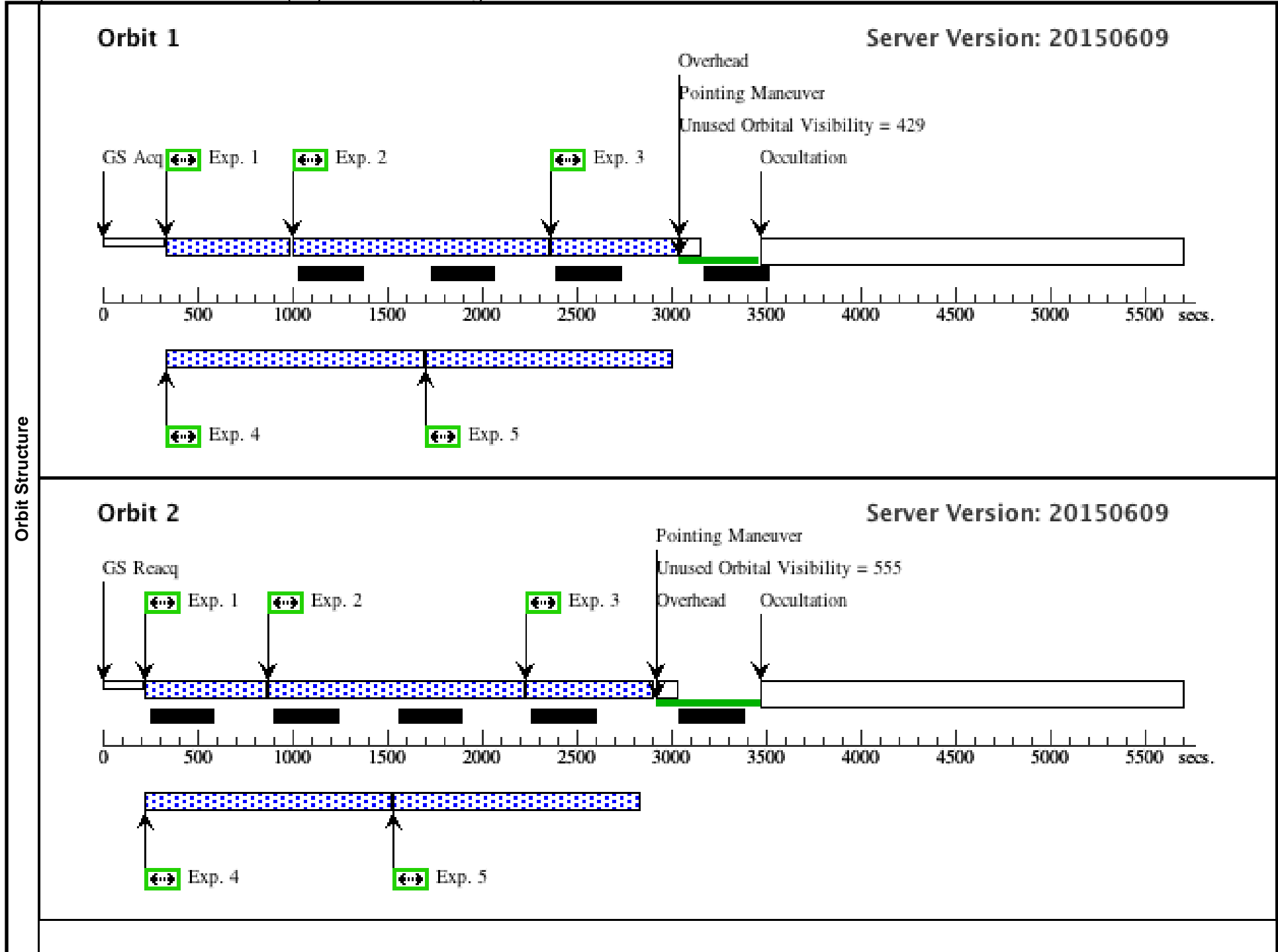
Sun Jan 24 02:12:52 GMT 2016

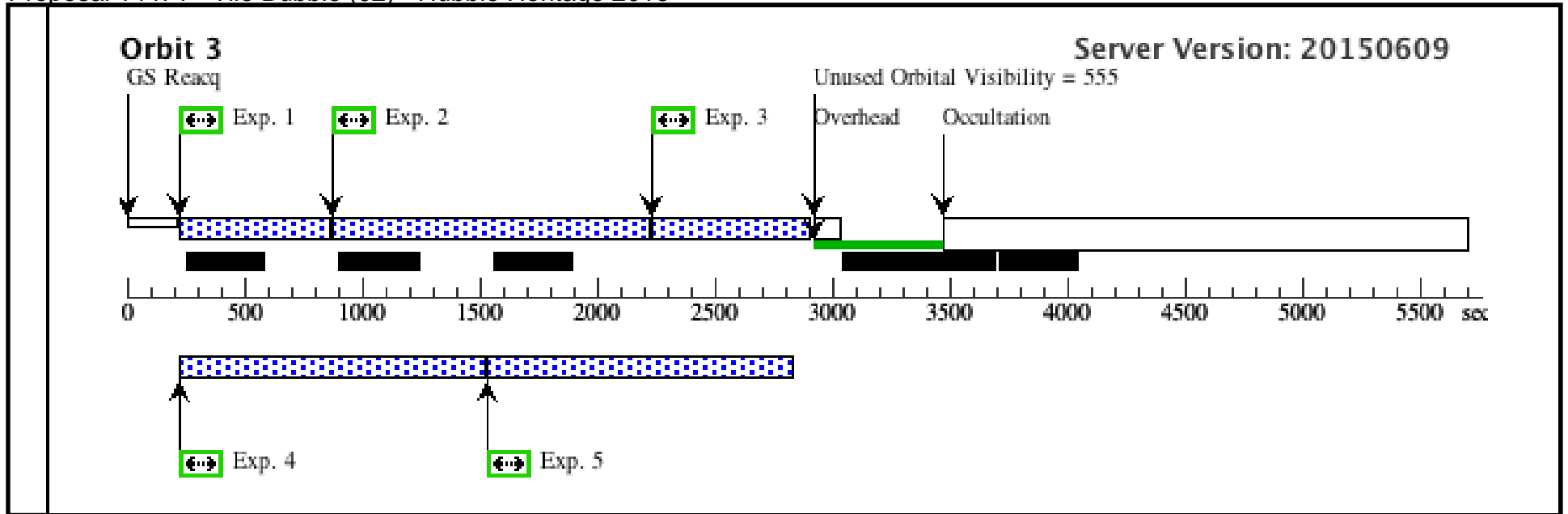
<b>Visit</b>	<b>Proposal 14471, Tile Bubble (02)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SAME ORIENT AS 01					
	(Tile Bubble (02)) Warning (Orbit Planner): PATTERN POSITION OUTSIDE APERTURE					
<b>Diagnosics</b>						
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>		
	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE Purpose=DITHER Number Of Points=3 Point Spacing=3 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85 Angle Between Sides= Center Pattern=false		(1-5)	
<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)	NGC-7635 Alt Name1: BUBBLE- NEBULA	RA: 23 20 36.8135 (350.1533896d) Dec: +61 11 2.24 (61.18396d) Equinox: J2000		V=8.7	Reference Frame: SIMBAD
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>						

Proposal 14471 - Tile Bubble (02) - Hubble Heritage 2016

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) NGC-7635	WFC3/UVIS, ACCUM, UVIS1-FIX	F656N	FLASH=12	POS TARG 71.1047 834816927,-73.4404 5016315314	Pattern 1, Exps 1-5 in Tile Bubble (02) (1 )	500 Secs (1500 Secs)	
									[==>(Pattern 1)]	[1]
									Prime + Parallel Gro up 1-5 in Pattern 1, E xps 1-5 in Tile Bubl e (02)	[==>(Pattern 2)]
									[==>(Pattern 3)]	[3]
	2		(1) NGC-7635	WFC3/UVIS, ACCUM, UVIS1-FIX	F658N	FLASH=12	POS TARG 71.1047 834816927,-73.4404 5016315314	Pattern 1, Exps 1-5 in Tile Bubble (02) (1 )	1200 Secs (3600 Secs)	
[==>(Pattern 1)]									[1]	
Prime + Parallel Gro up 1-5 in Pattern 1, E xps 1-5 in Tile Bubl e (02)									[==>(Pattern 2)]	[2]
								[==>(Pattern 3)]	[3]	
3		(1) NGC-7635	WFC3/UVIS, ACCUM, UVIS1-FIX	F502N	FLASH=12	POS TARG 71.1047 834816927,-73.4404 5016315314	Pattern 1, Exps 1-5 in Tile Bubble (02) (1 )	650 Secs (1950 Secs)		
								[==>(Pattern 1)]	[1]	
								Prime + Parallel Gro up 1-5 in Pattern 1, E xps 1-5 in Tile Bubl e (02)	[==>(Pattern 2)]	[2]
								[==>(Pattern 3)]	[3]	
4		(1) NGC-7635	ACS/WFC, ACCUM, WFC-FIX	F658N	FLASH=12		Pattern 1, Exps 1-5 in Tile Bubble (02) (1 )	1150 Secs (3450 Secs)		
								[==>(Pattern 1)]	[1]	
								Prime + Parallel Gro up 1-5 in Pattern 1, E xps 1-5 in Tile Bubl e (02)	[==>(Pattern 2)]	[2]
								[==>(Pattern 3)]	[3]	
5		(1) NGC-7635	ACS/WFC, ACCUM, WFC-FIX	F502N	FLASH=12		Pattern 1, Exps 1-5 in Tile Bubble (02) (1 )	1150 Secs (3450 Secs)		
								[==>(Pattern 1)]	[1]	
								Prime + Parallel Gro up 1-5 in Pattern 1, E xps 1-5 in Tile Bubl e (02)	[==>(Pattern 2)]	[2]
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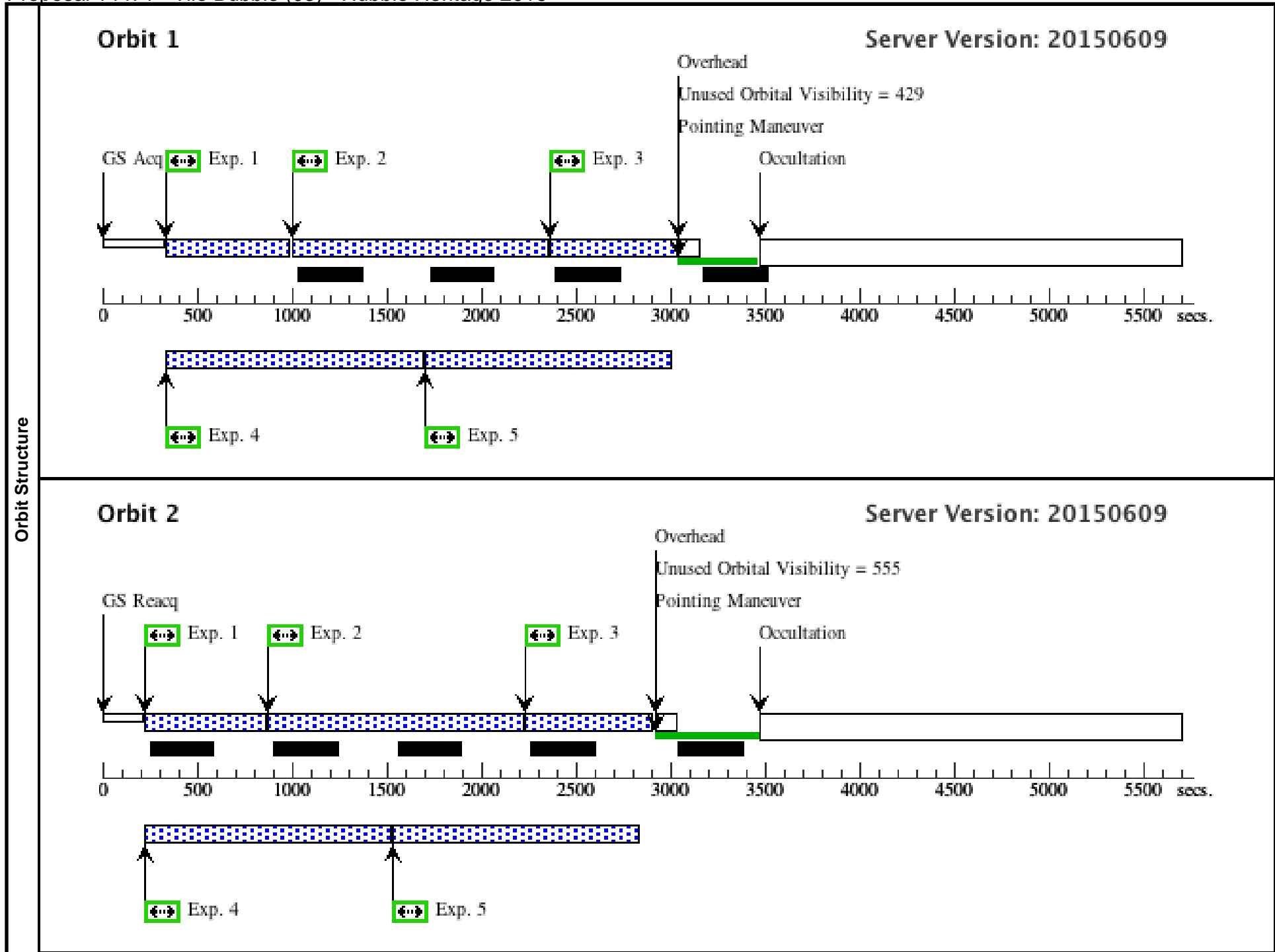
Proposal 14471 - Tile Bubble (03) - Hubble Heritage 2016

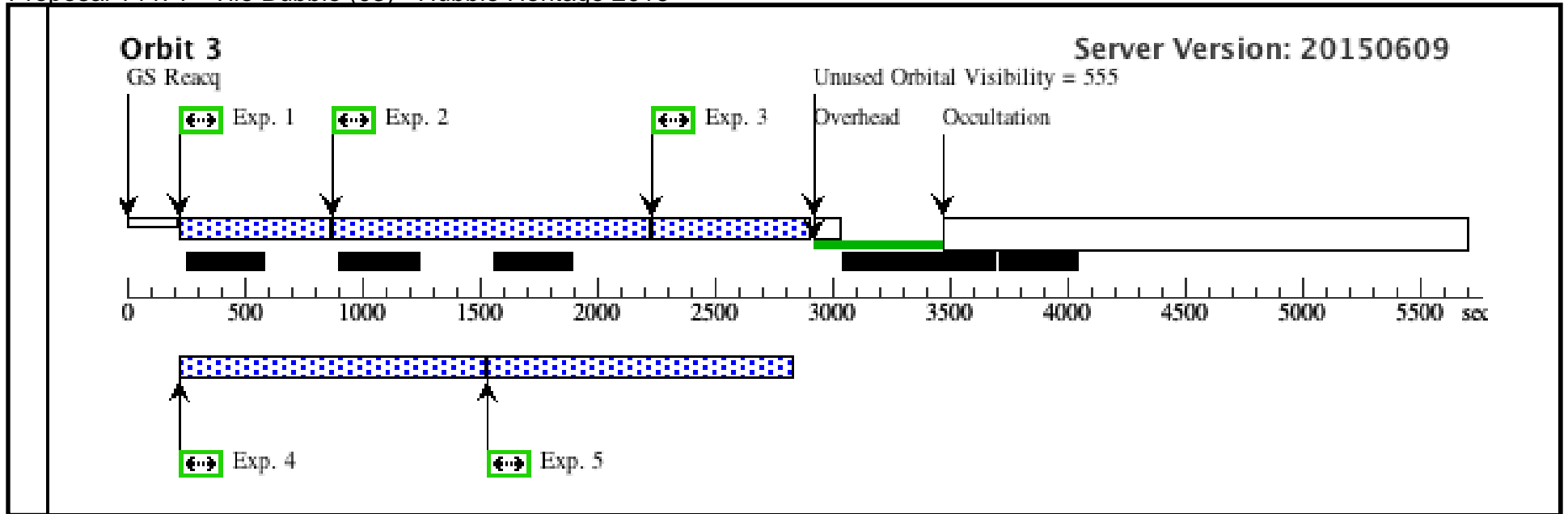
Sun Jan 24 02:12:52 GMT 2016

<b>Visit</b>	<b>Proposal 14471, Tile Bubble (03)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SAME ORIENT AS 01					
	(Tile Bubble (03)) Warning (Orbit Planner): PATTERN POSITION OUTSIDE APERTURE					
<b>Diagnosics</b>						
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>		
	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE Purpose=DITHER Number Of Points=3 Point Spacing=3 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85 Angle Between Sides= Center Pattern=false		(1-5)	
<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)	NGC-7635 Alt Name1: BUBBLE- NEBULA	RA: 23 20 36.8135 (350.1533896d) Dec: +61 11 2.24 (61.18396d) Equinox: J2000		V=8.7	Reference Frame: SIMBAD
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>						

Proposal 14471 - Tile Bubble (03) - Hubble Heritage 2016

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) NGC-7635	WFC3/UVIS, ACCUM, UVIS1-FIX	F656N	FLASH=12	POS TARG -71.104 7834816927,73.4404 5016315314	Pattern 1, Exps 1-5 in Tile Bubble (03) (1 )	500 Secs (1500 Secs)	
									[==>(Pattern 1)]	[1]
									Prime + Parallel Gro up 1-5 in Pattern 1, E xps 1-5 in Tile Bubl e (03)	[==>(Pattern 2)]
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	2		(1) NGC-7635	WFC3/UVIS, ACCUM, UVIS1-FIX	F658N	FLASH=12	POS TARG -71.104 7834816927,73.4404 5016315314	Pattern 1, Exps 1-5 in Tile Bubble (03) (1 )	1200 Secs (3600 Secs)	
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Proposal 14471 - Tile Bubble (04) - Hubble Heritage 2016

<b>Visit</b>	<b>Proposal 14471, Tile Bubble (04)</b> <span style="float: right;">Sun Jan 24 02:12:52 GMT 2016</span> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SAME ORIENT AS 01																					
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(1)	Pattern Type=WFC3-UVIS-DITHER- LINE Purpose=DITHER Number Of Points=3 Point Spacing=3 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85 Angle Between Sides= Center Pattern=false	(1-5)																			
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Proposal 14471 - Tile Bubble (04) - Hubble Heritage 2016

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	2		(1) NGC-7635	WFC3/UVIS, ACCUM, UVIS1-FIX	F658N	FLASH=12	POS TARG 71.1047 834816927,83.38471 180876985	Pattern 1, Exps 1-5 in Tile Bubble (04) (1 )	1200 Secs (3600 Secs)	
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Prime + Parallel Gro up 1-5 in Pattern 1, E xps 1-5 in Tile Bubl e (04)									[==>(Pattern 2)]	[2]
								[==>(Pattern 3)]	[3]	
3		(1) NGC-7635	WFC3/UVIS, ACCUM, UVIS1-FIX	F502N	FLASH=12	POS TARG 71.1047 834816927,83.38471 180876985	Pattern 1, Exps 1-5 in Tile Bubble (04) (1 )	650 Secs (1950 Secs)		
								[==>(Pattern 1)]	[1]	
								Prime + Parallel Gro up 1-5 in Pattern 1, E xps 1-5 in Tile Bubl e (04)	[==>(Pattern 2)]	[2]
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4		(1) NGC-7635	ACS/WFC, ACCUM, WFC-FIX	F658N	FLASH=12		Pattern 1, Exps 1-5 in Tile Bubble (04) (1 )	1150 Secs (3450 Secs)		
								[==>(Pattern 1)]	[1]	
								Prime + Parallel Gro up 1-5 in Pattern 1, E xps 1-5 in Tile Bubl e (04)	[==>(Pattern 2)]	[2]
								[==>(Pattern 3)]	[3]	
5		(1) NGC-7635	ACS/WFC, ACCUM, WFC-FIX	F502N	FLASH=12		Pattern 1, Exps 1-5 in Tile Bubble (04) (1 )	1150 Secs (3450 Secs)		
								[==>(Pattern 1)]	[1]	
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								[==>(Pattern 3)]	[3]	



