



## 17597 - Probing the galactic origin of ultra-compact dwarf galaxies

Cycle: 31, Proposal Category: GO

(Availability Mode: SUPPORTED)

### INVESTIGATORS

<i>Name</i>	<i>Institution</i>
<b>Dr. Eric W. Peng (PI) (Contact)</b>	<b>NOIRLab - (AZ)</b>
Dr. Matthew Taylor (CoI) (CSA Member)	University of Calgary

### 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) NGVS-UCD171 ANY	ACS/WFC WFC3/UVIS	1	13-Jan-2025 16:00:35.0	yes
51	(1) NGVS-UCD171 ANY	ACS/WFC WFC3/UVIS	1	13-Jan-2025 16:00:36.0	yes
02	(2) NGVS-UCD352 ANY	ACS/WFC WFC3/UVIS	1	13-Jan-2025 16:00:36.0	yes
03	(3) NGVS-UCD412 ANY	ACS/WFC WFC3/UVIS	1	13-Jan-2025 16:00:37.0	yes
04	(4) NGVS-UCD471 ANY	ACS/WFC WFC3/UVIS	1	13-Jan-2025 16:00:37.0	yes
05	(5) NGVS-UCD502 ANY	ACS/WFC WFC3/UVIS	1	13-Jan-2025 16:00:38.0	yes
06	(6) NGVS-UCD560 ANY	ACS/WFC WFC3/UVIS	1	13-Jan-2025 16:00:39.0	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>
07	(7) NGVS-UCD588 ANY	ACS/WFC WFC3/UVIS	1	13-Jan-2025 16:00:39.0	yes
08	(8) NGVS-UCD650 ANY	ACS/WFC WFC3/UVIS	1	13-Jan-2025 16:00:40.0	yes
58	(8) NGVS-UCD650 ANY	ACS/WFC WFC3/UVIS	1	13-Jan-2025 16:00:41.0	yes
09	(9) NGVS-UCD781 ANY	ACS/WFC WFC3/UVIS	1	13-Jan-2025 16:00:41.0	yes

11 Total Orbits Used

### **ABSTRACT**

Ultra-compact dwarfs (UCDs) are among the densest stellar systems in the Universe. Their resemblance to nuclear star clusters (NSCs) suggests that they may be the remnants of tidally-stripped dwarfs, but they could also be massive globular clusters. In many cases, it is difficult to determine which is the correct origin scenario. From a new sample of over 600 UCDs and 735 dE,Ns in the nearby Virgo cluster, ~100 objects have been identified that are potentially "caught in the act" of transformation: UCDs with a faint stellar envelope (eUCDs) and dE,Ns with a prominent NSC. Over half of the brightest UCDs have been found to display faint stellar envelopes (eUCDs), but most of the ones with no detectable envelope also have no HST observations, pointing to a clear observational bias. We aim to remedy this by observing 9 bright Virgo cluster UCDs with WFC3/UVIS to constrain the size of the central star cluster and reveal any existing stellar envelope, and determine the true "galactic" fraction of bright UCDs.

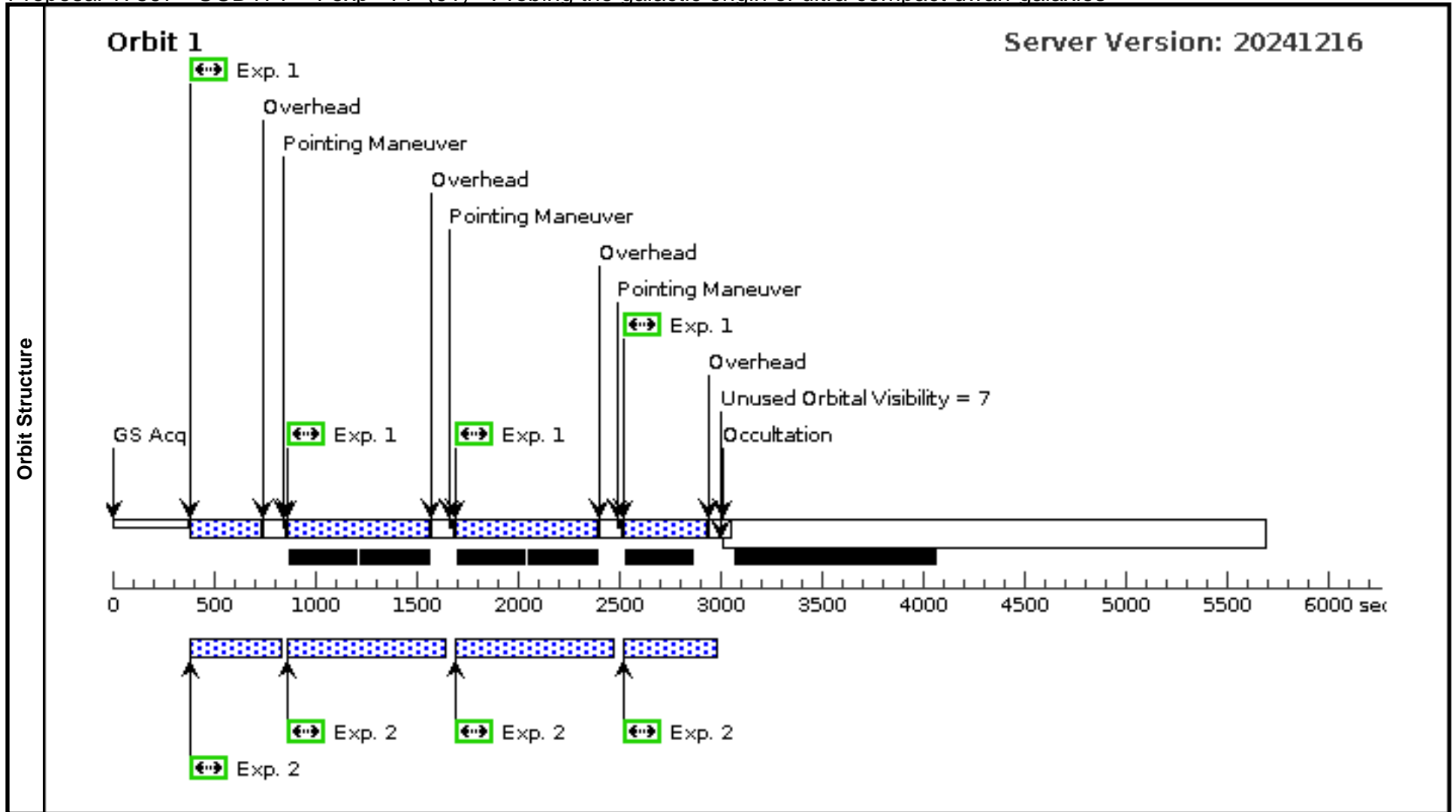
### **OBSERVING DESCRIPTION**

Our program is to image 9 bright Virgo cluster ultra-compact dwarf galaxies with WFC3/UVIS/F475W, one orbit for each object, with a corresponding ACS/WFC imaging of nearby fields.

Proposal 17597 - UCD171 - 4 exp - FF (01) - Probing the galactic origin of ultra-compact dwarf galaxies

Mon Jan 13 21:00:42 GMT 2025

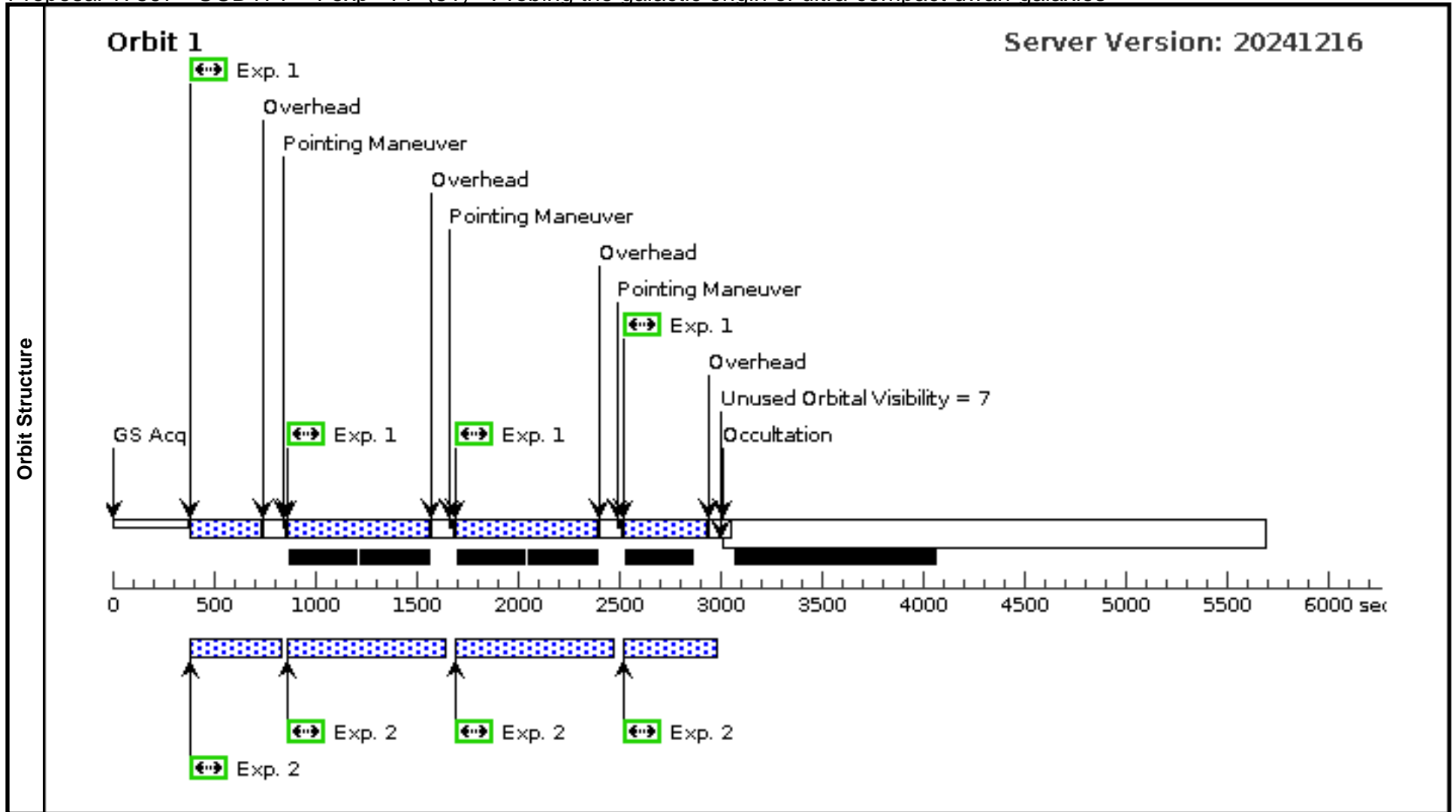
<b>Visit</b>	<p><b>Proposal 17597, UCD171 - 4 exp - FF (01), failed</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Scientific Instruments: WFC3/UVIS, ACS/WFC</p> <p>Special Requirements: (none)</p> <p><i>Comments: ORIENT limits are to avoid a bright (g=12.49) star from landing on the UVIS2 detector or being in the zone where it could cause Dragon's Breath. The best solution is to place this star on the UVIS1 detector. The ORIENT restrictions still enable a wide range of schedulability in April-July 2024.</i></p> <p><i>This object is the brightest in the sample, and would potentially be saturated in a 3-exposure visit. Therefore, this visit has 4 exposures, although they are of unequal lengths.</i></p> <p><i>The flash level is determined from the ETC, which seems to assume a higher zodiacal light background than the APT does. The post-flash is actually only needed for the first and last UVIS sub-exposures, although I don't seem to be able to set it for individual sub-exposures.</i></p> <p><i>In order to mitigate the effects of CTE for the faint stellar envelopes in these shorter exposures, the target was placed using the UVIS2-C1K1C-CTE aperture, but then was offset to allow for a greater range of ORIENT, opening up windows for observation in mid-2024.</i></p>									
	<p>(Primary Exposure 1 (Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in UCD171 - 4 exp - FF (01))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p>									
<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-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)					
<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)	NGVS-UCD171	RA: 12 24 43.8525 (186.1827187d) Dec: +05 37 46.67 (5.62963d) Equinox: J2000		V=(?) g'=19.10	Reference Frame: ICRS				
<p><i>Comments:</i>                  Category=GALAXY                  Description=[DWARF COMPACT]</p>										
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</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	(WFC3UVIS.im.1904858)	(1) NGVS-UCD171	WFC3/UVIS, ACCUM, UVIS2-C1K1C-CTE	F475W	FLASH=6	POS TARG 15.7196 30523771807,15.687 58367354229	Pattern 1, Exps 1-2 in UCD171 - 4 exp - FF (01) (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in UCD171 - 4 exp - FF (01)	340 Secs (2126 Secs) [==>320.0 Secs (Pattern 1)] [==>698.0 Secs (Pattern 2)] [==>698.0 Secs (Pattern 3)] [==>410.0 Secs (Pattern 4)]	[1]
	<p><i>Comments: Necessary flash is estimated from ETC using zodiacal light model for this sky position on 1 May 2024, with an extra 20% to account for the positioning of the target at the UVIS2-C1K1C-CTE aperture. The ETC Run # above is for the shortest exposure (410 sec).</i></p>									
2		ANY		ACS/WFC, ACCUM, WFC	F475W			Pattern 1, Exps 1-2 in UCD171 - 4 exp - FF (01) (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in UCD171 - 4 exp - FF (01)	300 Secs (1898 Secs) [==>240.0 Secs (Pattern 1)] [==>660.0 Secs (Pattern 2)] [==>660.0 Secs (Pattern 3)] [==>338.0 Secs (Pattern 4)]	[1]



Proposal 17597 - UCD171 - 4 exp - FF (51) - Probing the galactic origin of ultra-compact dwarf galaxies

Mon Jan 13 21:00:42 GMT 2025

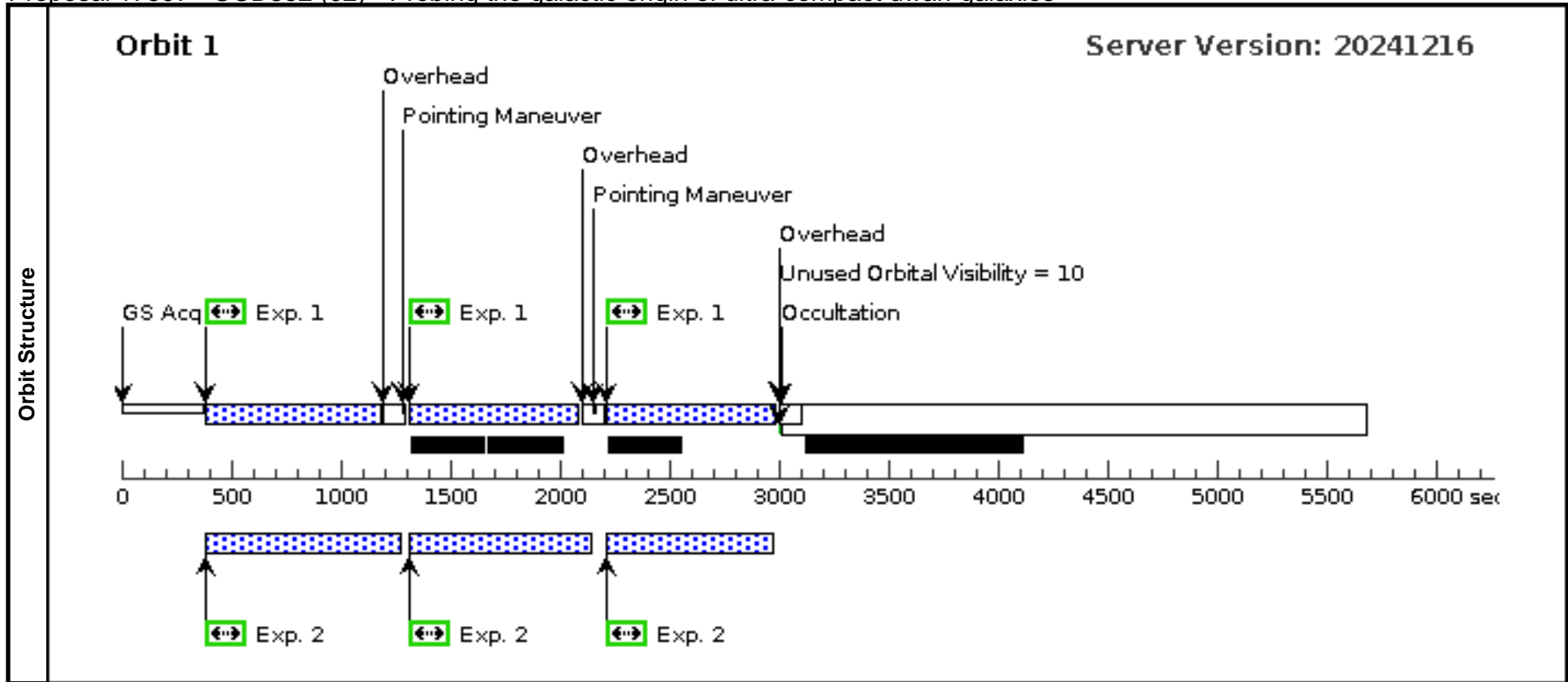
<b>Visit</b>	<p><b>Proposal 17597, UCD171 - 4 exp - FF (51), implementation</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Scientific Instruments: WFC3/UVIS, ACS/WFC</p> <p>Special Requirements: (none)</p> <p><i>Comments: ORIENT limits are to avoid a bright (g=12.49) star from landing on the UVIS2 detector or being in the zone where it could cause Dragon's Breath. The best solution is to place this star on the UVIS1 detector. The ORIENT restrictions still enable a wide range of schedulability in April-July 2024.</i></p> <p><i>This object is the brightest in the sample, and would potentially be saturated in a 3-exposure visit. Therefore, this visit has 4 exposures, although they are of unequal lengths.</i></p> <p><i>The flash level is determined from the ETC, which seems to assume a higher zodiacal light background than the APT does. The post-flash is actually only needed for the first and last UVIS sub-exposures, although I don't seem to be able to set it for individual sub-exposures.</i></p> <p><i>In order to mitigate the effects of CTE for the faint stellar envelopes in these shorter exposures, the target was placed using the UVIS2-C1K1C-CTE aperture, but then was offset to allow for a greater range of ORIENT, opening up windows for observation in mid-2024.</i></p>									
	<p>(Primary Exposure 1 (Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in UCD171 - 4 exp - FF (51))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p>									
<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-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)					
<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)	NGVS-UCD171	RA: 12 24 43.8525 (186.1827187d) Dec: +05 37 46.67 (5.62963d) Equinox: J2000		V=(?) g'=19.10	Reference Frame: ICRS				
<p><i>Comments: Category=GALAXY Description=[DWARF COMPACT]</i></p>										
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</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	(WFC3UVIS.im.1904858)	(1) NGVS-UCD171	WFC3/UVIS, ACCUM, UVIS2-C1K1C-CTE	F475W	FLASH=6	POS TARG 15.7196 30523771807,15.687 58367354229	Pattern 1, Exps 1-2 in UCD171 - 4 exp - FF (51) (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in UCD171 - 4 exp - FF (51)	340 Secs (2126 Secs) [==>320.0 Secs (Pattern 1)] [==>698.0 Secs (Pattern 2)] [==>698.0 Secs (Pattern 3)] [==>410.0 Secs (Pattern 4)]	[1]
	<p><i>Comments: Necessary flash is estimated from ETC using zodiacal light model for this sky position on 1 May 2024, with an extra 20% to account for the positioning of the target at the UVIS2-C1K1C-CTE aperture. The ETC Run # above is for the shortest exposure (410 sec).</i></p>									
2		ANY		ACS/WFC, ACCUM, WFC	F475W			Pattern 1, Exps 1-2 in UCD171 - 4 exp - FF (51) (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in UCD171 - 4 exp - FF (51)	300 Secs (1898 Secs) [==>240.0 Secs (Pattern 1)] [==>660.0 Secs (Pattern 2)] [==>660.0 Secs (Pattern 3)] [==>338.0 Secs (Pattern 4)]	[1]



Proposal 17597 - UCD352 (02) - Probing the galactic origin of ultra-compact dwarf galaxies

Mon Jan 13 21:00:42 GMT 2025

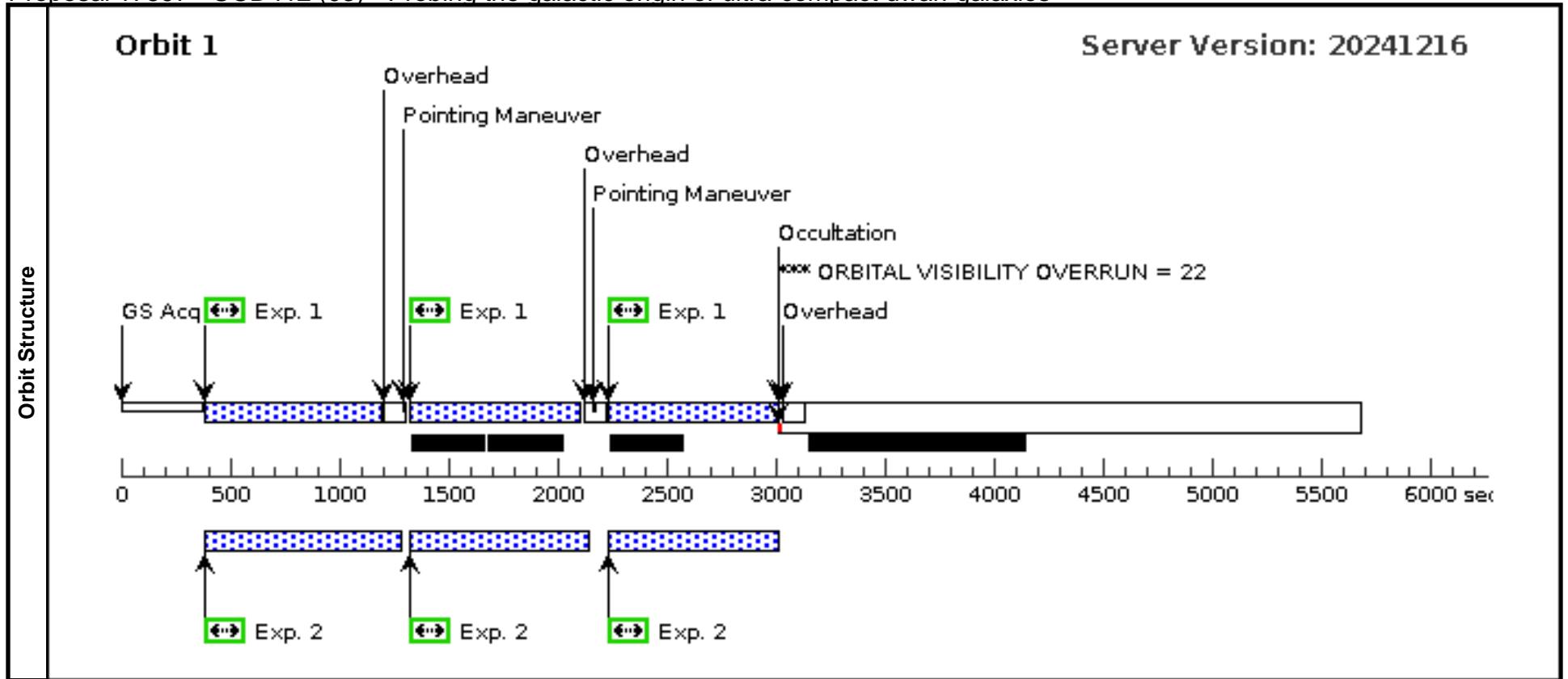
<b>Visit</b>	Proposal 17597, UCD352 (02), scheduling <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: (none)									
	(Primary Exposure 1 (Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD352 (02))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
<b>Diagnosics</b>										
<b>Patterns</b>	#	<b>Primary Pattern</b>	<b>Secondary Pattern</b>		<b>Exposures</b>					
	(2)	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)					
<b>Fixed Targets</b>	#	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(2)	NGVS-UCD352	RA: 12 30 6.0593 (187.5252471d) Dec: +12 39 53.97 (12.66499d) Equinox: J2000		V=(?) g'=19.40	Reference Frame: ICRS				
Comments: Category=GALAXY Description=[DWARF COMPACT]										
<b>Exposures</b>	#	<b>Label (ETC Run)</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	(WFC3UVI S.im.1904860)	(2) NGVS-UCD352	WFC3/UVIS, ACCUM, UVIS2	F475W			Pattern 2, Exps 1-2 in UCD352 (02) (2) Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD352 (02)	817 Secs (2325 Secs) [==>775.0 Secs (Pattern 1)] [==>775.0 Secs (Pattern 2)] [==>775.0 Secs (Pattern 3)]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F475W			Pattern 2, Exps 1-2 in UCD352 (02) (2) Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD352 (02)	730 Secs (2028 Secs) [==>685.0 Secs (Pattern 1)] [==>705.0 Secs (Pattern 2)] [==>638.0 Secs (Pattern 3)]	[1]



Proposal 17597 - UCD412 (03) - Probing the galactic origin of ultra-compact dwarf galaxies

Mon Jan 13 21:00:42 GMT 2025

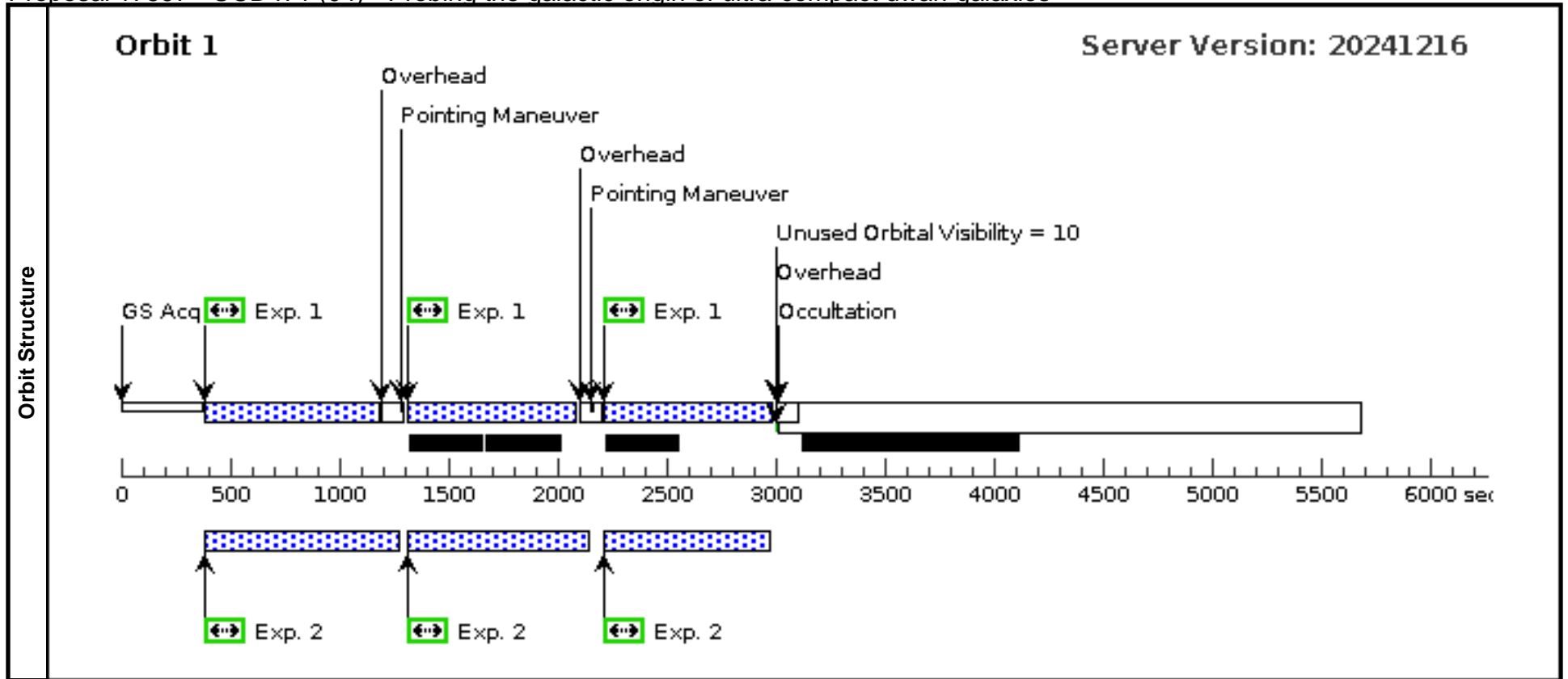
<b>Visit</b>	<b>Proposal 17597, UCD412 (03), completed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: (none)									
	<b>Diagnosics</b> (UCD412 (03)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Primary Exposure 1 (Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD412 (03))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
<b>Patterns</b>	#	<b>Primary Pattern</b>			<b>Secondary Pattern</b>		<b>Exposures</b>			
	(2)	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)			
<b>Fixed Targets</b>	#	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(3)	NGVS-UCD412	RA: 12 30 47.3972 (187.6974883d) Dec: +12 33 1.70 (12.55047d) Equinox: J2000		V=(?) g'=19.39	Reference Frame: ICRS				
<i>Comments:</i> Category=GALAXY Description=[DWARF COMPACT]										
<b>Exposures</b>	#	<b>Label (ETC Run)</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	(WFC3UVI S.im.190486 2)	(3) NGVS-UCD412	WFC3/UVIS, ACCUM, UVIS2	F475W			Pattern 2, Exps 1-2 in UCD412 (03) (2) Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD412 (03)	817 Secs (2355 Secs) [==>785.0 Secs (Pattern 1)] [==>785.0 Secs (Pattern 2)] [==>785.0 Secs (Pattern 3)]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F475W			Pattern 2, Exps 1-2 in UCD412 (03) (2) Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD412 (03)	730 Secs (2057 Secs) [==>698.0 Secs (Pattern 1)] [==>698.0 Secs (Pattern 2)] [==>661.0 Secs (Pattern 3)]	[1]



Proposal 17597 - UCD471 (04) - Probing the galactic origin of ultra-compact dwarf galaxies

Mon Jan 13 21:00:42 GMT 2025

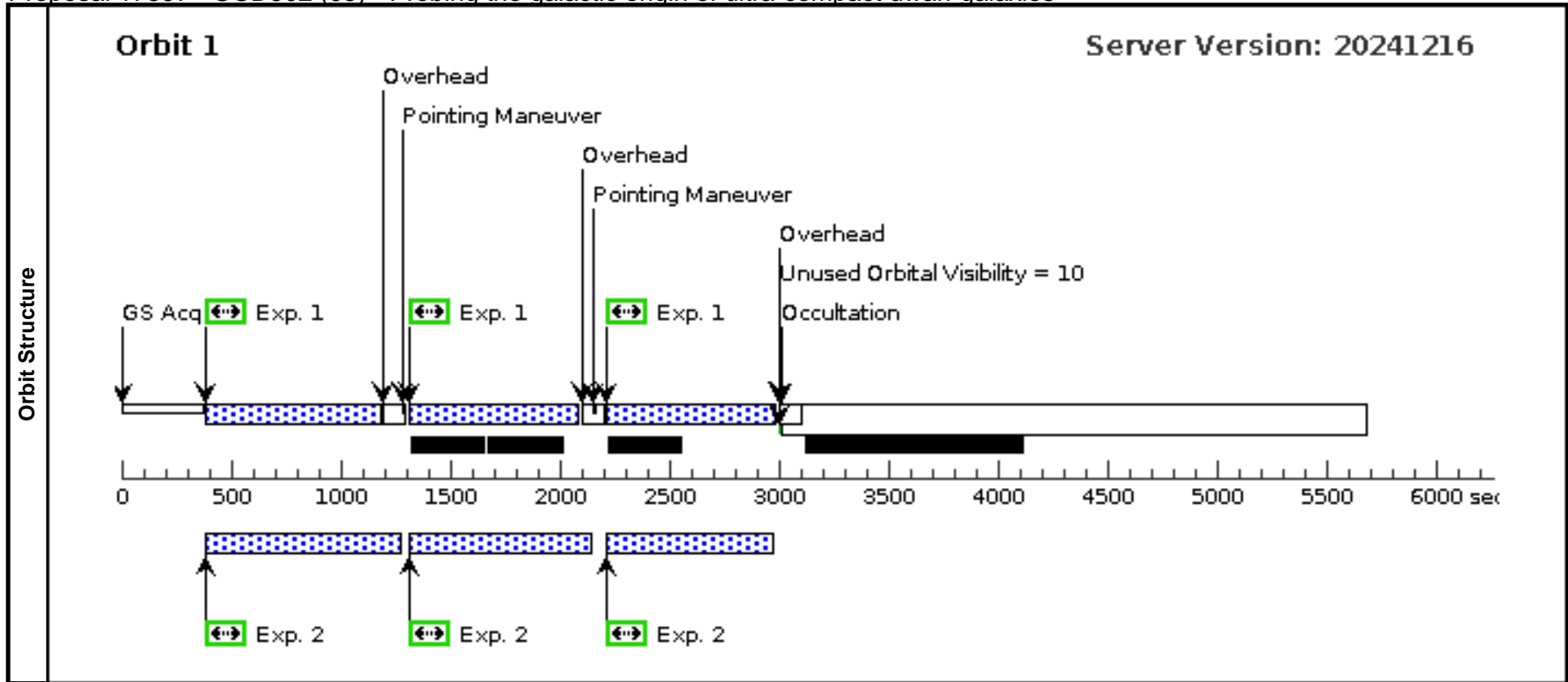
<b>Visit</b>	Proposal 17597, UCD471 (04), completed <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: (none)									
	(Primary Exposure 1 (Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD471 (04))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
<b>Diagnosics</b>										
<b>Patterns</b>	#	<b>Primary Pattern</b>	<b>Secondary Pattern</b>		<b>Exposures</b>					
	(2)	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)					
<b>Fixed Targets</b>	#	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(4)	NGVS-UCD471	RA: 12 31 31.7034 (187.8820975d) Dec: +12 41 30.35 (12.69176d) Equinox: J2000		V=(?) g'=19.42	Reference Frame: ICRS				
Comments: Category=GALAXY Description=[DWARF COMPACT]										
<b>Exposures</b>	#	<b>Label (ETC Run)</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	(WFC3UVI S.im.190486 4)	(4) NGVS-UCD471	WFC3/UVIS, ACCUM, UVIS2	F475W			Pattern 2, Exps 1-2 in UCD471 (04) (2) Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD471 (04)	817 Secs (2325 Secs) [==>775.0 Secs (Pattern 1)] [==>775.0 Secs (Pattern 2)] [==>775.0 Secs (Pattern 3)]	[1]
	2	ANY	ANY	ACS/WFC, ACCUM, WFC	F475W			Pattern 2, Exps 1-2 in UCD471 (04) (2) Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD471 (04)	730 Secs (2023 Secs) [==>680.0 Secs (Pattern 1)] [==>705.0 Secs (Pattern 2)] [==>638.0 Secs (Pattern 3)]	[1]



Proposal 17597 - UCD502 (05) - Probing the galactic origin of ultra-compact dwarf galaxies

Mon Jan 13 21:00:42 GMT 2025

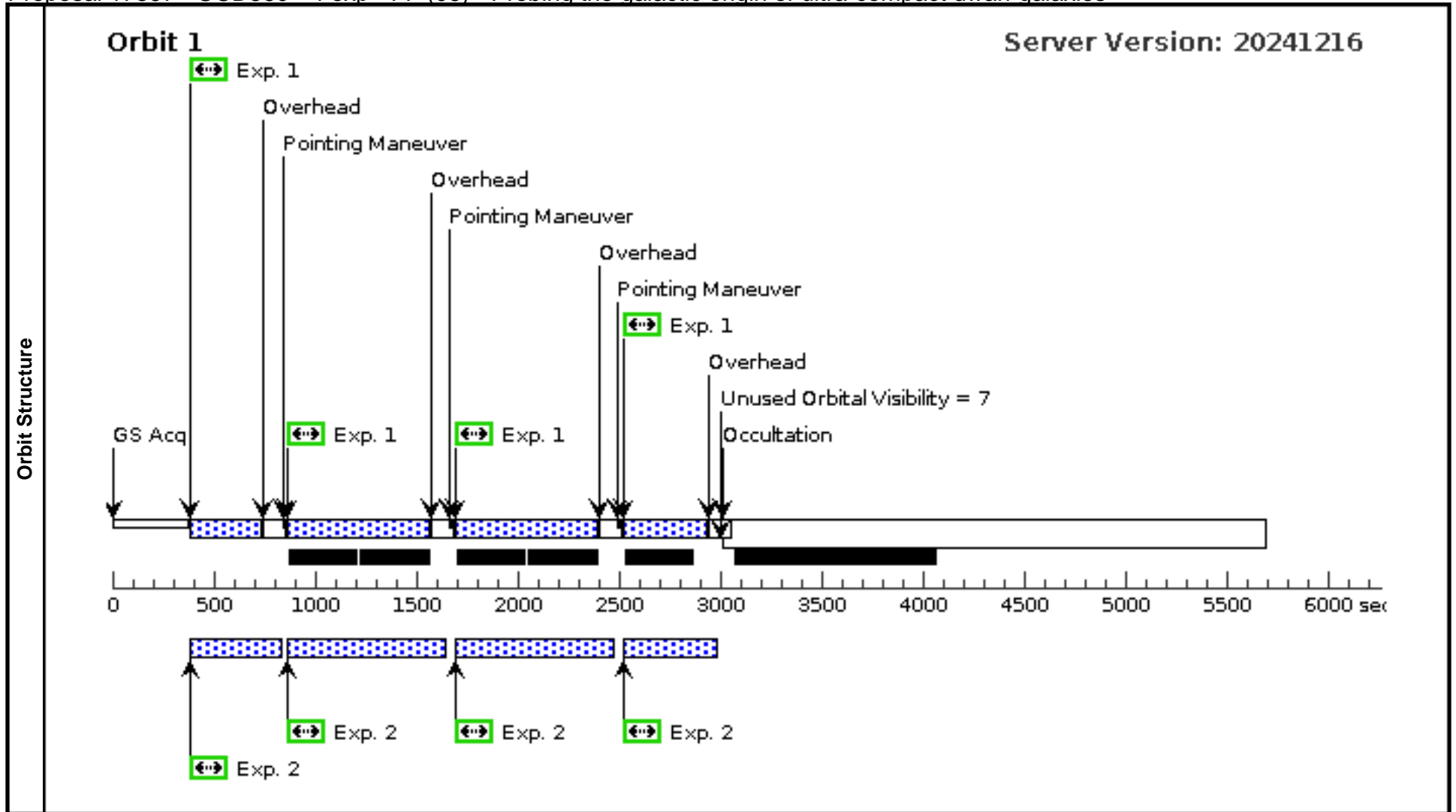
<b>Visit</b>	Proposal 17597, UCD502 (05), scheduled <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: (none)									
	(Primary Exposure 1 (Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD502 (05))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
<b>Diagnosics</b>										
<b>Patterns</b>	#	<b>Primary Pattern</b>	<b>Secondary Pattern</b>		<b>Exposures</b>					
	(2)	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)					
<b>Fixed Targets</b>	#	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(5)	NGVS-UCD502	RA: 12 32 13.6570 (188.0569042d) Dec: +14 24 13.65 (14.40379d) Equinox: J2000		V=(?) g'=19.46	Reference Frame: ICRS				
<i>Comments:</i> Category=GALAXY Description=[DWARF COMPACT]										
<b>Exposures</b>	#	<b>Label (ETC Run)</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	(WFC3UVI S.im.190486 5)	(5) NGVS-UCD502	WFC3/UVIS, ACCUM, UVIS2	F475W			Pattern 2, Exps 1-2 in UCD502 (05) (2) Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD502 (05)	817 Secs (2325 Secs) [==>775.0 Secs (Pattern 1)] [==>775.0 Secs (Pattern 2)] [==>775.0 Secs (Pattern 3)]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F475W			Pattern 2, Exps 1-2 in UCD502 (05) (2) Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD502 (05)	730 Secs (2028 Secs) [==>685.0 Secs (Pattern 1)] [==>705.0 Secs (Pattern 2)] [==>638.0 Secs (Pattern 3)]	[1]



Proposal 17597 - UCD560 - 4 exp - FF (06) - Probing the galactic origin of ultra-compact dwarf galaxies

Mon Jan 13 21:00:42 GMT 2025

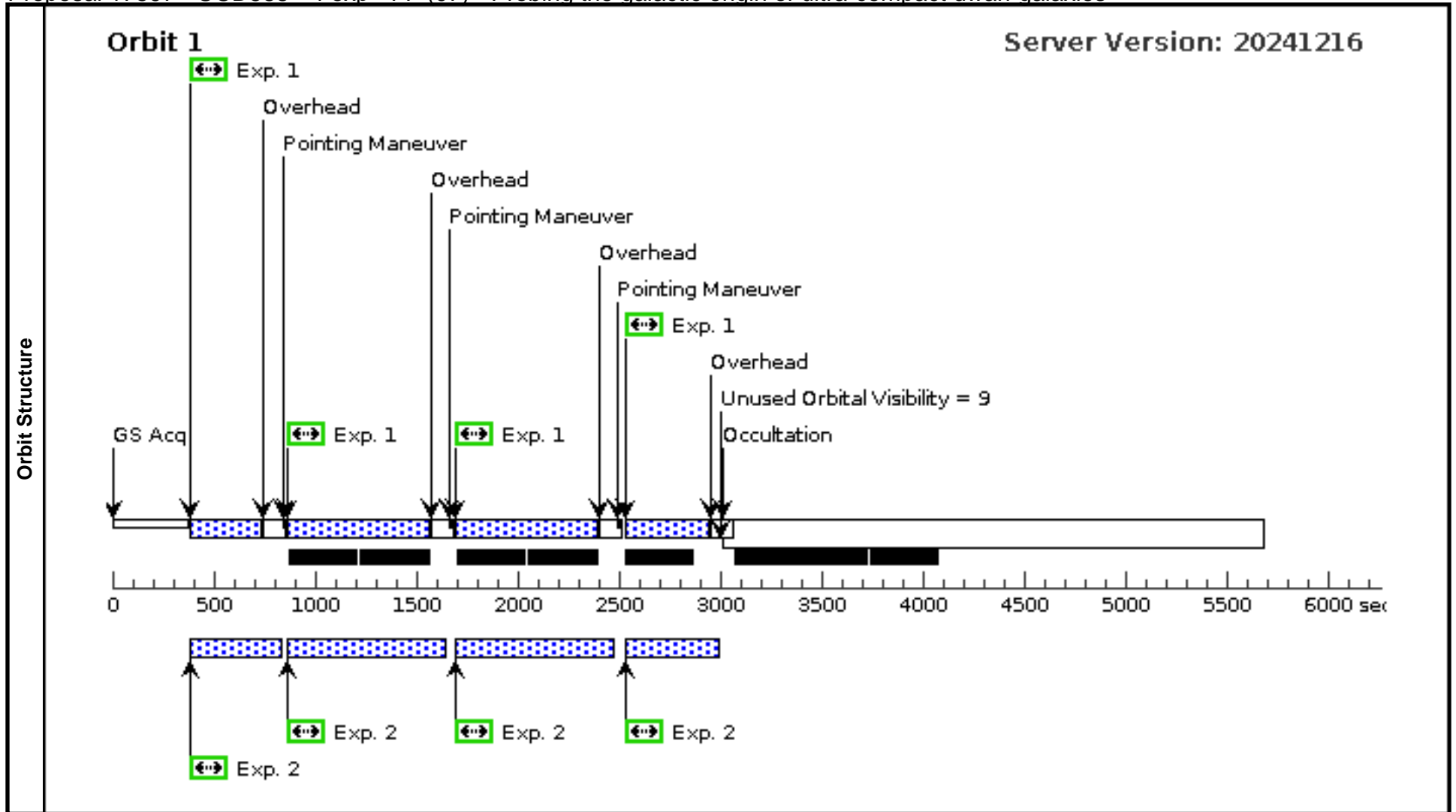
<b>Visit</b>	<p><b>Proposal 17597, UCD560 - 4 exp - FF (06), scheduling</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Scientific Instruments: WFC3/UVIS, ACS/WFC                  Special Requirements: ORIENT 210D TO 185 D                  Comments: <i>ORIENT limits are to avoid one bright star landing on the ACS/WFC detector.</i></p> <p><i>This object is the third brightest in the sample, and would potentially be saturated in a 3-exposure visit. Therefore, this visit has 4 exposures, although they are of unequal lengths.</i></p> <p><i>The flash level is determined from the ETC, which seems to assume a higher zodiacal light background than the APT does. The post-flash is actually only needed for the first and last UVIS sub-exposures, although I don't seem to be able to set it for individual sub-exposures.</i></p> <p><i>In order to mitigate the effects of CTE for the faint stellar envelopes in these shorter exposures, the target is placed using the UVIS2-C1K1C-CTE aperture.</i></p>									
	<p>(Primary Exposure 1 (Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in UCD560 - 4 exp - FF (06))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p>									
<b>Diagnosics</b>										
<b>Patterns</b>	#	<b>Primary Pattern</b>	<b>Secondary Pattern</b>		<b>Exposures</b>					
	(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1-2)					
<b>Fixed Targets</b>	#	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(6)	NGVS-UCD560	RA: 12 34 13.3807 (188.5557529d) Dec: +07 41 7.04 (7.68529d) Equinox: J2000		V=(?) g'=19.21	Reference Frame: ICRS				
<p>Comments:                  Category=GALAXY                  Description=[DWARF COMPACT]</p>										
<b>Exposures</b>	#	<b>Label (ETC Run)</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	(WFC3UVI S.im.190486 7)	(6) NGVS-UCD560	WFC3/UVIS, ACCUM, UVIS2-C1K1C-CTE	F475W	FLASH=7		Pattern 1, Exps 1-2 in UCD560 - 4 exp - FF (06) (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in UCD560 - 4 exp - FF (06)	410 Secs (2126 Secs) [==>320.0 Secs (Pattern 1)] [==>698.0 Secs (Pattern 2)] [==>698.0 Secs (Pattern 3)] [==>410.0 Secs (Pattern 4)]	[1]
<p>Comments: Necessary flash is estimated from ETC using zodiacal light model for this sky position on 1 May 2024.</p>										
2		ANY		ACS/WFC, ACCUM, WFC	F475W			Pattern 1, Exps 1-2 in UCD560 - 4 exp - FF (06) (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in UCD560 - 4 exp - FF (06)	300 Secs (1898 Secs) [==>240.0 Secs (Pattern 1)] [==>660.0 Secs (Pattern 2)] [==>660.0 Secs (Pattern 3)] [==>338.0 Secs (Pattern 4)]	[1]



Proposal 17597 - UCD588 - 4 exp - FF (07) - Probing the galactic origin of ultra-compact dwarf galaxies

Mon Jan 13 21:00:42 GMT 2025

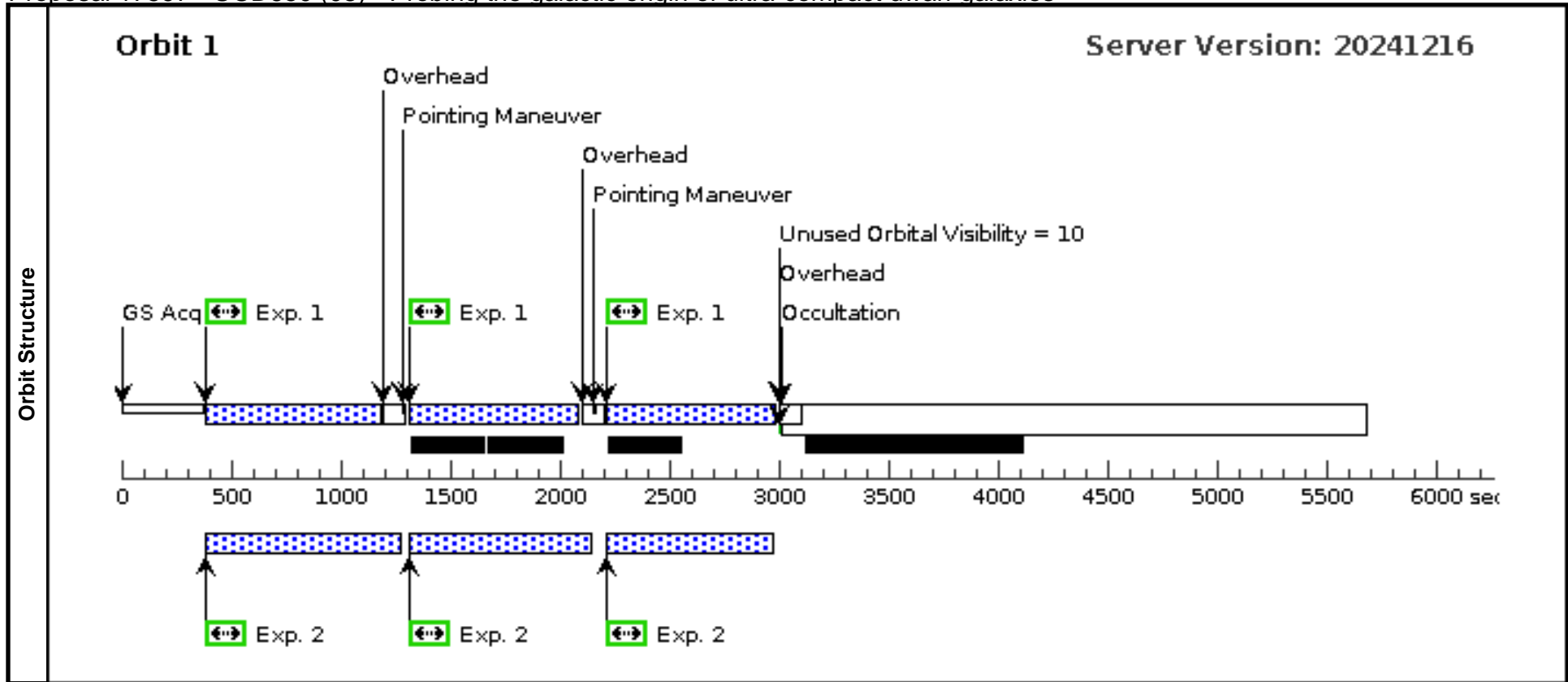
<b>Visit</b>	<p><b>Proposal 17597, UCD588 - 4 exp - FF (07), completed</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Scientific Instruments: WFC3/UVIS, ACS/WFC                  Special Requirements: ORIENT 234D TO 195 D                  Comments: <i>ORIENT limits are to avoid one bright star landing on the ACS/WFC detector.</i></p> <p><i>This object is the second brightest in the sample, and would potentially be saturated in a 3-exposure visit. Therefore, this visit has 4 exposures, although they are of unequal lengths.</i></p> <p><i>The flash level is determined from the ETC, which seems to assume a higher zodiacal light background than the APT does. The post-flash is actually only needed for the first and last UVIS sub-exposures, although I don't seem to be able to set it for individual sub-exposures.</i></p> <p><i>In order to mitigate the effects of CTE for the faint stellar envelopes in these shorter exposures, the target is placed using the UVIS2-C1K1C-CTE aperture.</i></p>									
	<p>(Primary Exposure 1 (Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in UCD588 - 4 exp - FF (07))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p>									
<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-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)					
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(7)	NGVS-UCD588	RA: 12 35 30.3049 (188.8762704d) Dec: +12 38 24.31 (12.64009d) Equinox: J2000		V=(?) g'=19.13	Reference Frame: ICRS				
<p>Comments:                  Category=GALAXY                  Description=[DWARF COMPACT]</p>										
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</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	(WFC3UVI S.im.190486 8)	(7) NGVS-UCD588	WFC3/UVIS, ACCUM, UVIS2-C1K1C-CTE	F475W	FLASH=8		Pattern 1, Exps 1-2 in UCD588 - 4 exp - FF (07) (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in UCD588 - 4 exp - FF (07)	340 Secs (2126 Secs) [==>320.0 Secs (Pattern 1)] [==>698.0 Secs (Pattern 2)] [==>698.0 Secs (Pattern 3)] [==>410.0 Secs (Pattern 4)]	[1]
<p>Comments: Necessary flash is estimated from ETC using zodiacal light model for this sky position on 1 May 2024.</p>										
2		ANY		ACS/WFC, ACCUM, WFC	F475W			Pattern 1, Exps 1-2 in UCD588 - 4 exp - FF (07) (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in UCD588 - 4 exp - FF (07)	300 Secs (1898 Secs) [==>240.0 Secs (Pattern 1)] [==>660.0 Secs (Pattern 2)] [==>660.0 Secs (Pattern 3)] [==>338.0 Secs (Pattern 4)]	[1]



Proposal 17597 - UCD650 (08) - Probing the galactic origin of ultra-compact dwarf galaxies

Mon Jan 13 21:00:42 GMT 2025

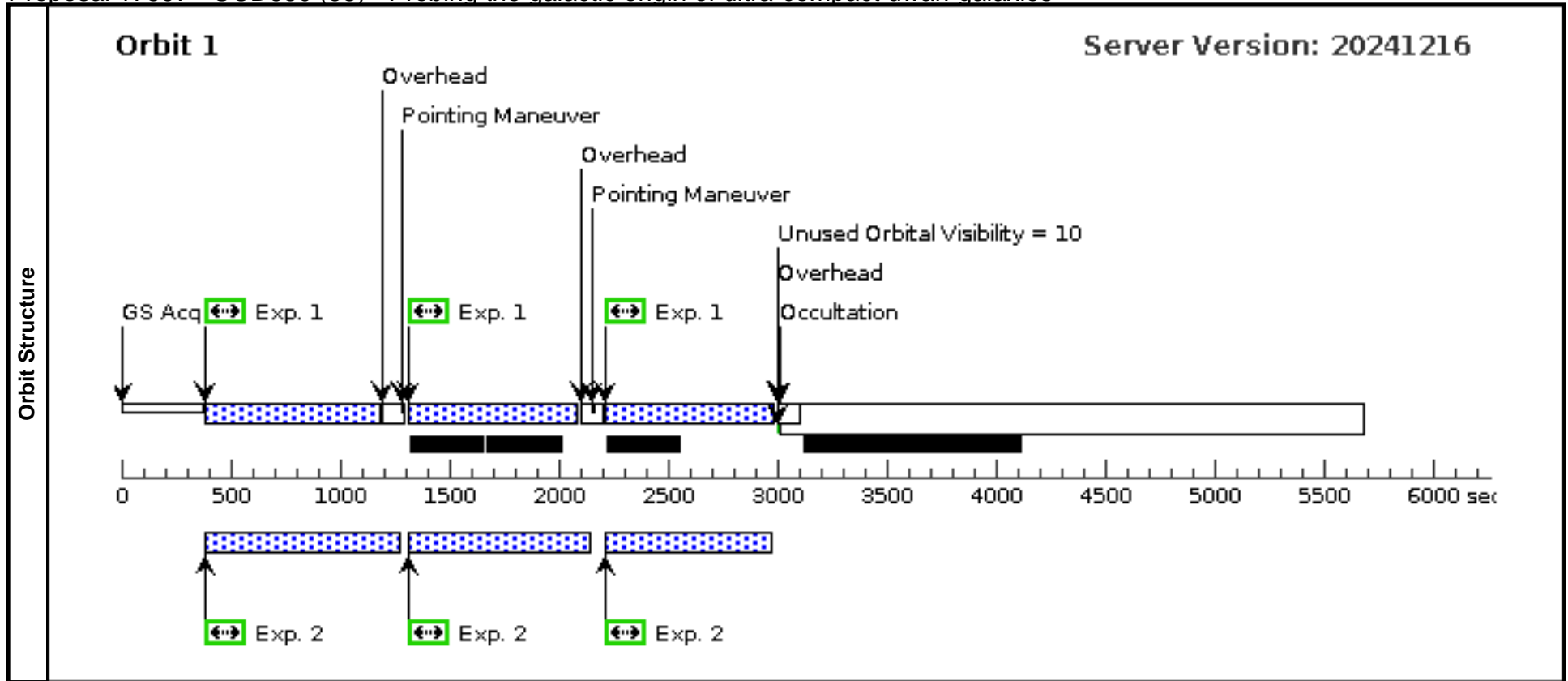
<b>Visit</b>	<b>Proposal 17597, UCD650 (08), completed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 238D TO 195 D <i>Comments: ORIENT constraints are to avoid two bright stars in the ACS/WFC field of view.</i>									
	(Primary Exposure 1 (Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD650 (08))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
<b>Diagnosics</b>										
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>			<b>Exposures</b>				
	(2)	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)				
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(8)	NGVS-UCD650	RA: 12 38 20.5825 (189.5857604d) Dec: +12 50 33.98 (12.84277d) Equinox: J2000		V=(?) g'=19.40	Reference Frame: ICRS				
<i>Comments:</i> Category=GALAXY Description=[DWARF COMPACT]										
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</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	(WFC3UVI S.im.1904870)	(8) NGVS-UCD650	WFC3/UVIS, ACCUM, UVIS2	F475W			Pattern 2, Exps 1-2 in UCD650 (08) (2) Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD650 (08)	817 Secs (2325 Secs) [==>775.0 Secs (Pattern 1)] [==>775.0 Secs (Pattern 2)] [==>775.0 Secs (Pattern 3)]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F475W			Pattern 2, Exps 1-2 in UCD650 (08) (2) Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD650 (08)	730 Secs (2028 Secs) [==>685.0 Secs (Pattern 1)] [==>705.0 Secs (Pattern 2)] [==>638.0 Secs (Pattern 3)]	[1]



Proposal 17597 - UCD650 (58) - Probing the galactic origin of ultra-compact dwarf galaxies

Mon Jan 13 21:00:42 GMT 2025

<b>Visit</b>	<b>Proposal 17597, UCD650 (58)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 238D TO 195 D <i>Comments: ORIENT constraints are to avoid two bright stars in the ACS/WFC field of view.</i>									
	<b>Diagnosics</b> (Primary Exposure 1 (Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD650 (58))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
<b>Patterns</b>	#	<b>Primary Pattern</b>		<b>Secondary Pattern</b>		<b>Exposures</b>				
	(2)	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)				
<b>Fixed Targets</b>	#	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(8)	NGVS-UCD650	RA: 12 38 20.5825 (189.5857604d) Dec: +12 50 33.98 (12.84277d) Equinox: J2000		V=(?) g'=19.40	Reference Frame: ICRS				
<i>Comments:</i> Category=GALAXY Description=[DWARF COMPACT]										
<b>Exposures</b>	#	<b>Label (ETC Run)</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	(WFC3UVI S.im.1904870)	(8) NGVS-UCD650	WFC3/UVIS, ACCUM, UVIS2	F475W			Pattern 2, Exps 1-2 in UCD650 (58) (2) Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD650 (58)	817 Secs (2325 Secs) [==>775.0 Secs (Pattern 1)] [==>775.0 Secs (Pattern 2)] [==>775.0 Secs (Pattern 3)]	[1]
	2	ANY	ANY	ACS/WFC, ACCUM, WFC	F475W			Pattern 2, Exps 1-2 in UCD650 (58) (2) Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD650 (58)	730 Secs (2028 Secs) [==>685.0 Secs (Pattern 1)] [==>705.0 Secs (Pattern 2)] [==>638.0 Secs (Pattern 3)]	[1]



Proposal 17597 - UCD781 (09) - Probing the galactic origin of ultra-compact dwarf galaxies

Mon Jan 13 21:00:42 GMT 2025

<b>Visit</b>	<b>Proposal 17597, UCD781 (09), scheduling</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: (none) <i>Comments: ORIENT constraints are to avoid two brights stars in the ACS/WFC field of view.</i>									
	(Primary Exposure 1 (Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD781 (09))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
<b>Diagnosics</b>										
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>			<b>Exposures</b>				
	(2)	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)			
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(9)	NGVS-UCD781	RA: 12 45 24.0223 (191.3500929d) Dec: +11 05 35.16 (11.09310d) Equinox: J2000		V=(?) g'=19.34	Reference Frame: ICRS				
<i>Comments:                  Category=GALAXY                  Description=[DWARF COMPACT]</i>										
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</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	(WFC3UVI S.im.190487 2)	(9) NGVS-UCD781	WFC3/UVIS, ACCUM, UVIS2	F475W			Pattern 2, Exps 1-2 in UCD781 (09) (2) Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD781 (09)	817 Secs (2265 Secs) [==>755.0 Secs (Pattern 1)] [==>755.0 Secs (Pattern 2)] [==>755.0 Secs (Pattern 3)]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F475W			Pattern 2, Exps 1-2 in UCD781 (09) (2) Prime + Parallel Group 1-2 in Pattern 2, Exps 1-2 in UCD781 (09)	730 Secs (1965 Secs) [==>675.0 Secs (Pattern 1)] [==>695.0 Secs (Pattern 2)] [==>595.0 Secs (Pattern 3)]	[1]

