17528 - Ultradiffuse Galaxies in the Virgo Cluster

Cycle: 31, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) VCC1052 ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:16.0	yes
02	(1) VCC1052 ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:17.0	yes
03	(1) VCC1052 ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:18.0	yes
04	(1) VCC1052 ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:19.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
05	(2) VCC1287 ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:20.0	yes
06	(2) VCC1287 ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:20.0	yes
07	(2) VCC1287 ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:21.0	yes
08	(2) VCC1287 ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:22.0	yes
09	(3) VLSB-B ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:23.0	yes
10	(3) VLSB-B ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:24.0	yes
11	(3) VLSB-B ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:25.0	yes
12	(3) VLSB-B ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:26.0	yes
13	(4) VLSB-D ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:26.0	yes
23	(4) VLSB-D ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:27.0	yes
14	(4) VLSB-D ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:28.0	yes
15	(4) VLSB-D ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:28.0	yes
16	(4) VLSB-D ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:29.0	yes
21	(4) VLSB-D ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:30.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
22	(4) VLSB-D ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:31.0	yes
24	(4) VLSB-D ANY	ACS/WFC WFC3/UVIS	1	04-Mar-2025 15:00:32.0	yes
17	(5) VCC1448 ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:33.0	yes
19	(5) VCC1448 ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:34.0	yes
18	(5) VCC1448 ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:34.0	yes
20	(5) VCC1448 ANY	ACS/WFC WFC3/UVIS	2	04-Mar-2025 15:00:35.0	yes

47 Total Orbits Used

ABSTRACT

The "ultradiffuse galaxies" (UDGs) found within galaxy clusters present challenges to models of galaxy formation and evolution. They may be diffuse field galaxies only now falling into the cluster, post-infall galaxies undergoing rapid transformation, or long-lived cluster galaxies stabilized against disruption by massive dark halos. Recent observations also suggest systematic differences between their globular clusters (GCs) and those of normal galaxies. Unfortunately, large uncertainties in the distances, dynamics, and GC populations of UDGs continue to complicate our understanding of these galaxies.

We propose deep imaging of five Virgo Cluster UDGs to pinpoint their positions within Virgo via accurate tip of the red giant branch (TRGB) distances, allowing us to quantify their local environments: in the Virgo core, the cluster outskirts, or intervening field. Coupled with published kinematic data, we will determine if they are infalling objects or ones that have already passed through the Virgo core. Using imaging that probes three magnitudes below the GC luminosity function turnover, we will construct larger and cleaner GC samples than possible from the ground, allowing us to measure the physical sizes and luminosities of their GCs to test for systematic differences between GCs in UDGs and those in normal galaxies. Finally, we will compare the properties of their compact nuclei to ultracompact dwarf galaxies (UCDs) in Virgo to test the evolutionary link between UDGs and UCDs. The information provided by HST will be used in conjunction with simulations to study cluster-driven evolution and

transformation of low density galaxies.

OBSERVING DESCRIPTION

The program is to obtain deep F814W images of a sample of five ultra-diffuse galaxies (UDGs) in the Virgo cluster, and to obtain photometry of very faint point sources over the entire FOV. We are using ACS as primary to get the larger FOV on the target galaxy, and using WFC3 in parallel to obtain a 'background' field necessary for our science goals. There are also single orbit F475W visits in order to get photometry for any marginally resolved globular clusters wihtin each galaxy. We have used different ACS apertures and offset coordinates for our targets in order to get as much of the target galaxy in the ACS FOV, whilst still availding bright stars in either the ACS primary iomages or the CPAR WFC3 images, which we are using for background estimation.

F814W - we have 7 orbits (split into 4 visits) in this filter for each of the five targets. For each of the three 2-orbit visits, we are using a small custom 4 point dither-box to best sample the PSF in the ACS primary exposures AND the WFC3/UVIS parallels. We have used the POS-TARGS from Anderson (2023) ISR ACS 2023-04 for ACS primary, and WFC3/UVIS in parallel. Between visits, we are using POS-TARGs to create a slightly larger (~20 pixels) box pattern to assist with hot-pixel removal. As per suggestion from instrument scientists, we have combined the small and large POS-TARGs and defined each ACS+WFC3 exposure as an individual group.
The 4th part of this larger box (location 4) is a single orbit (2 exposures only), so we only use the first two points in the small dither pattern used in the 3 preceding visits. We are not trying to cover the ACS chip gap, and the box sizes we are using (4 to 20 pixels) should be small enough allow for decent sub-pixel dithering over as much of the ACS /WFC3 FOV as possible.

F475W - here we are taking 3 exposures over the single orbit in a single visit. There is no clear best way to dither 3 exposures to fill out the PSF, so we have used the first 3 POS-TARGS from the custom box pattern used above, and have each ACS+WFC3 exposure done at each specific POS-TARG. We have added this single oprbit to the single $814W orbit noted above to get a 4th visit.

Exposure times: All of our F814W observations (ACS and WFC3) are 2 images per orbit -- there will be a total 14 individual F814W images per target, so CR removal in construction of a single deep image will be straightforward. We have anywhere from 30-45 days of scheduability for all of our visits. The single orbit in F475W will employ 3 primary+parallel images; although not optimal for PSF re-contruction, the sky background should be high enough ACS that we do not require any FLASH for these ACS+F475W images.

Roll Angles: All Visitis for a given target to be made at the same roll angle as the first Visit. For each target, we have chosen ORIENT ranges that

(a) allow for as much schedule-ability as is possible, (b) avoid bright stars in the primary ACS FOV, and (c) place the WFC3 parallel fields in a location from of bright stars and/or other galaxies. For two objects the roll angles are further constrained to be sure the center of the galaxy does not approach the chip gap (both galaxies nearly fill the entire ACS FOV) -- on those cases (VCC 1052 and VCC 1448) the small ORIENT ranges did NOT result in reducing schedueability.

LOW-SKY: We had originally requested LOW-SKY for our observations, as our targets are ~15 degrees from the ecliptic, and we want as low a sky background as possible for the deep F814W images. However, with RGM mode, the strong cuts to exposure times and reducgtion in availble dates made this unfeasible. We have thus dropped the LOWSKY requirement (for RGM mode), and worked the schedule of the observations and ORIENT values to minimize the zodiacal light background of our images (using the ETC as a guide) while retaining most on-orbit visiility and much for flexability for scheduling. (these dates are Jan-May in any given year) This will only make our photometric limits 0.1 mag brighter that originally planned, which will not have an adverse effect on our science goals.

FLASH? To maximize sky backgrounds to reduce CTE effects, we are using long exposures : 1/2 orbit images in F814W, and 1/3 orbit images in F475W for both cameras. With our 1/2 orbit exposures in F814W for both ACS and WFC3, we will not need any post-FLASH for any exposures. For the shorter (~715s) F475W exposures, we will have high enough sky backgrounds in ACS (~30-40e- at lowest using plots from Anand et al 2022, and ETC https://etc.stsci.edu/etc/results/ACS.im.1889538/) to not require any post-FLASH.
For WFC3, the ~715s F475W exposures are predicted (via the APT) to have sky backgrounds of 12e-/pixel Thus we may need a FLASH of (at most) 8e- for these shorter F475W exposures for WFC3 only to reach the 20e- background. Most other CTE reduction strategies will not work here as our sources cover the entire FOV.

Visit

Proposal 17528, VCC 1052 - F814W location 1 (01), completed Tue Mar 04 20:00:36 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: ORIENT 262D TO 266 D

Comments: F814W images, 2 exposures per orbit in custom dither-box pattern using POS-TARGs. Location 1 of 4 different POST TARGS for each of the 4 F814W-related visits. ORIENT range chosen by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. Restricted ORIENT here to avoid bright stars (brighter than V=15) in the WFC3 parallel field, which is to be used as a background. Even with this, can schedule for over 5 weeks/yr.
Note: the schedulable dates for this ORIENT range also co-incides with with lowest zodiacal light values MU_V>22.2 (using the ACS ETC to calculate), which will maximize the S/N of faint sources on the deep images.

Fixed Targets

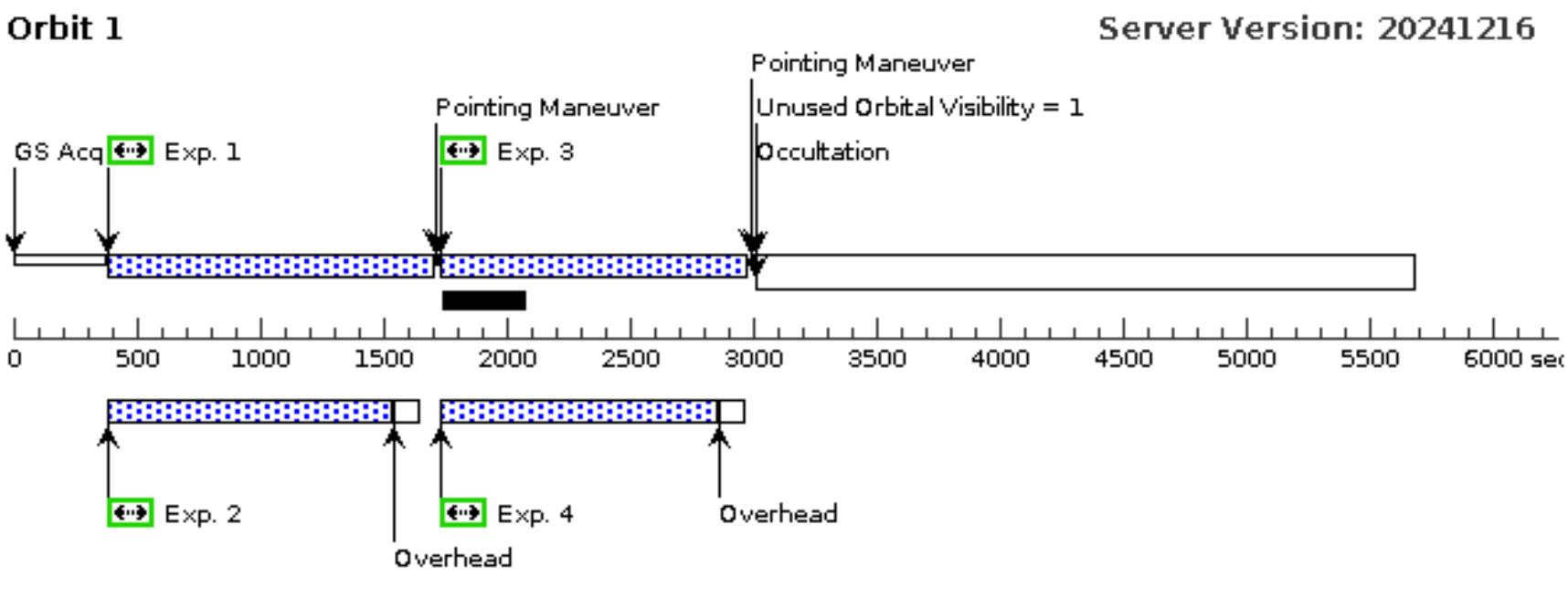
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	VCC1052	RA: 12 27 57.7724 (186.9907183d) Dec: +12 22 0.84 (12.36690d) Equinox: J2000		V=29	Reference Frame: ICRS

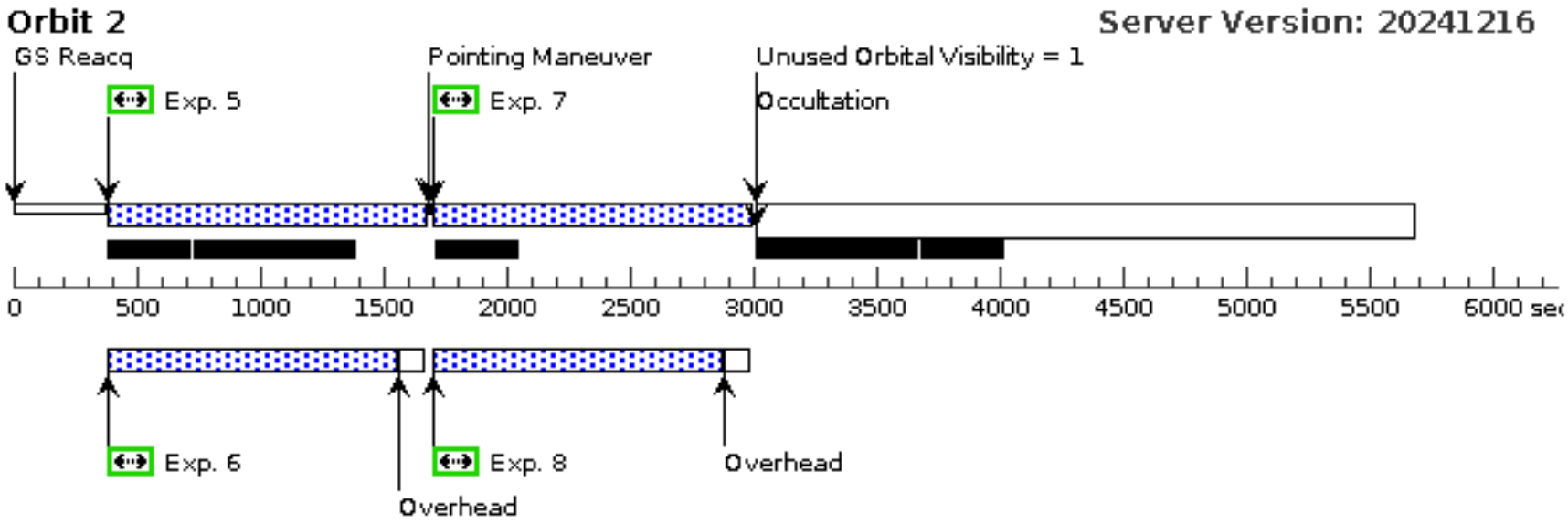
Comments:
Category=GALAXY
Description=[LSB]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VCC 1052	(1) VCC1052	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.00,0.00	Prime + Parallel Group 1-2 in VCC 1052 - F814W location 1 (01)	1118 Secs (1118 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VCC 1052 - F814W location 1 (01)	1118 Secs (1118 Secs) *[==>]*	***[1]***
3	VCC 1052	(1) VCC1052	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.14807, 0.08624	Prime + Parallel Group 3-4 in VCC 1052 - F814W location 1 (01)	1118 Secs (1118 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VCC 1052 - F814W location 1 (01)	1118 Secs (1118 Secs) *[==>]*	***[1]***
5	VCC 1052	(1) VCC1052	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.22215, -0.11866	Prime + Parallel Group 5-6 in VCC 1052 - F814W location 1 (01)	1169 Secs (1169 Secs) *[==>]*	***[2]***
6	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 5-6 in VCC 1052 - F814W location 1 (01)	1169 Secs (1169 Secs) *[==>]*	***[2]***
7	VCC 1052	(1) VCC1052	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.07405, -0.20489	Prime + Parallel Group 7-8 in VCC 1052 - F814W location 1 (01)	1169 Secs (1169 Secs) *[==>]*	***[2]***
8	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 7-8 in VCC 1052 - F814W location 1 (01)	1169 Secs (1169 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17528, VCC 1052 - F814W location 2 (02), completed Tue Mar 04 20:00:36 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 01

Comments: F814W images, 2 exposures per orbit in custom dither-box pattern using POS-TARGs. Location 2 of 4 different POST TARGS for each of the 4 F814W-related visits. ORIENT range chosen by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. Small ORIENT range does not significantly change schedulability.

Fixed Targets

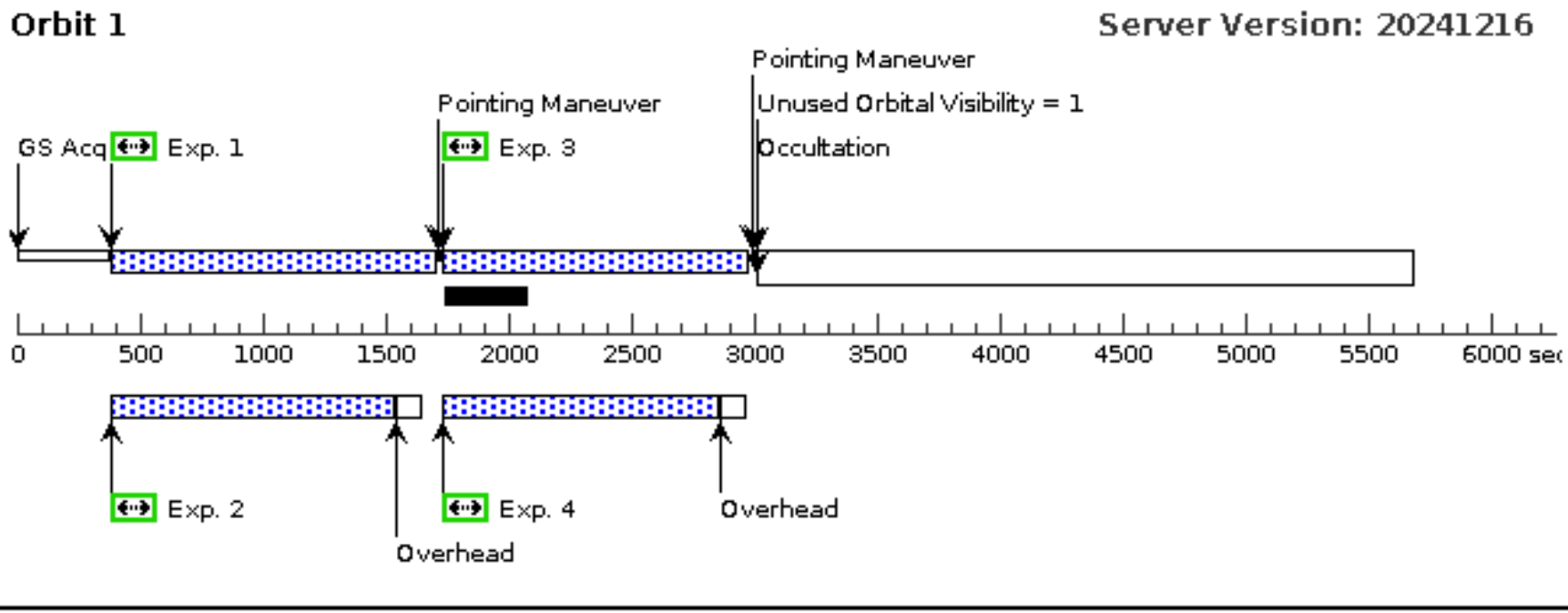
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	VCC1052	RA: 12 27 57.7724 (186.9907183d) Dec: +12 22 0.84 (12.36690d) Equinox: J2000		V=29	Reference Frame: ICRS

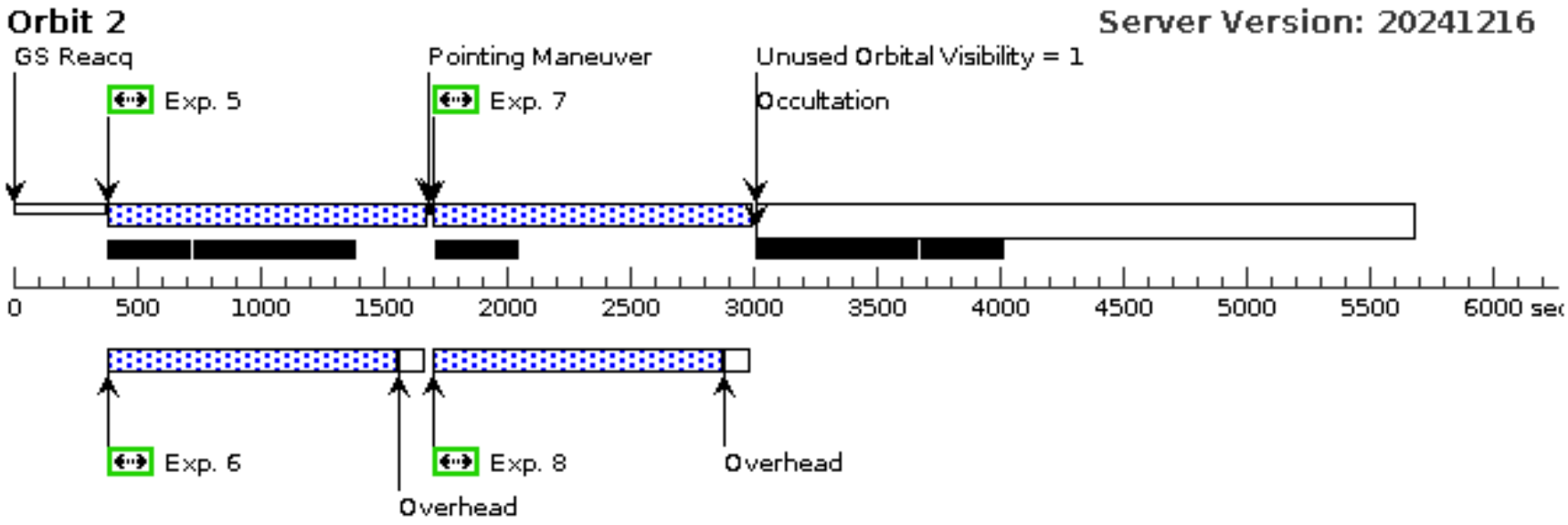
Comments:
Category=GALAXY
Description=[LSB]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VCC 1052	(1) VCC1052	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG -0.98,0.00	Prime + Parallel Group 1-2 in VCC 1052 - F814W location 2 (02)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VCC 1052 - F814W location 2 (02)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
3	VCC 1052	(1) VCC1052	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG -0.8319, 0.08624	Prime + Parallel Group 3-4 in VCC 1052 - F814W location 2 (02)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VCC 1052 - F814W location 2 (02)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
5	VCC 1052	(1) VCC1052	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG -0.7579, -0.11866	Prime + Parallel Group 5-6 in VCC 1052 - F814W location 2 (02)	1169 Secs (1169 Secs) *[==>]*	 ***[2]***
6	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 5-6 in VCC 1052 - F814W location 2 (02)	1169 Secs (1169 Secs) *[==>]*	 ***[2]***
7	VCC 1052	(1) VCC1052	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG -0.9060, -0.20489	Prime + Parallel Group 7-8 in VCC 1052 - F814W location 2 (02)	1169 Secs (1169 Secs) *[==>]*	 ***[2]***
8	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 7-8 in VCC 1052 - F814W location 2 (02)	1169 Secs (1169 Secs) *[==>]*	 ***[2]***

Orbit Structure





Visit

Proposal 17528, VCC 1052 - F814W location 3 (03), completed Tue Mar 04 20:00:36 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 01

Comments: F814W images, 2 exposures per orbit in custom dither-box pattern using POS-TARGs. Location 2 of 4 different POST TARGS for each of the 4 F814W-related visits. ORIENT range chosen by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. Small ORIENT range does not significantly change schedulability.

Fixed Targets

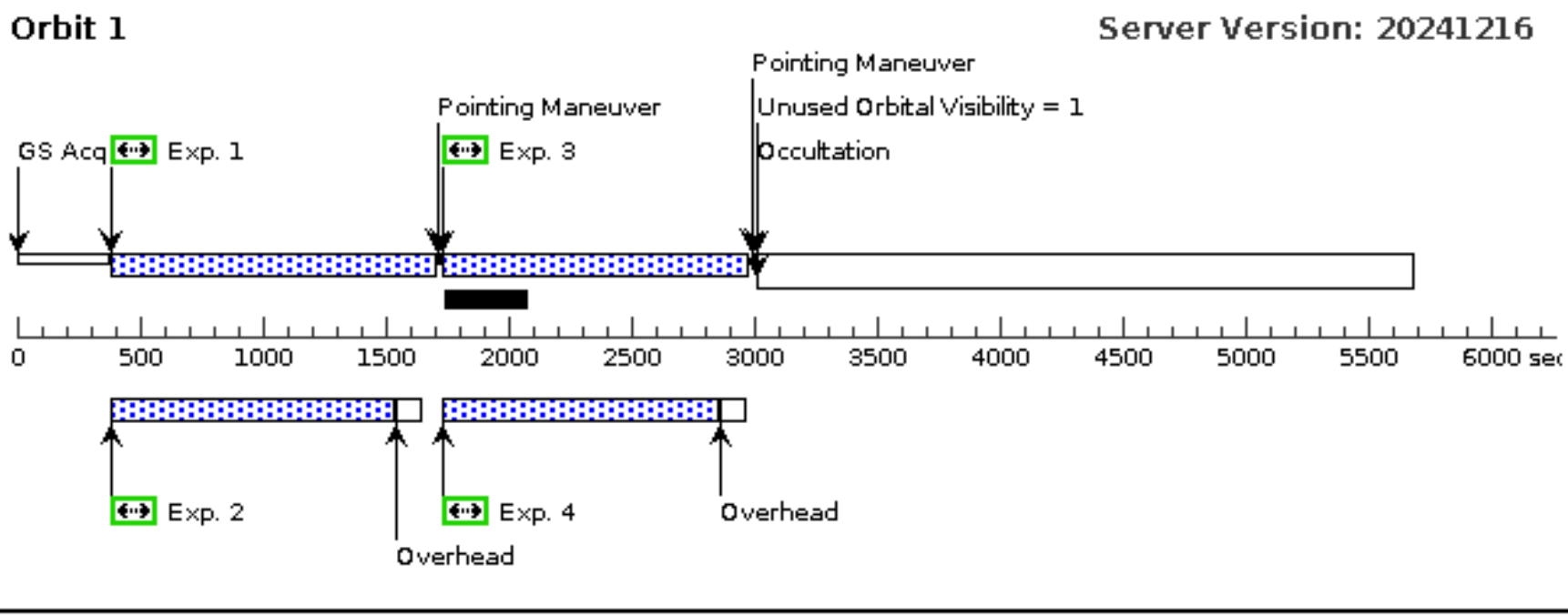
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	VCC1052	RA: 12 27 57.7724 (186.9907183d) Dec: +12 22 0.84 (12.36690d) Equinox: J2000		V=29	Reference Frame: ICRS

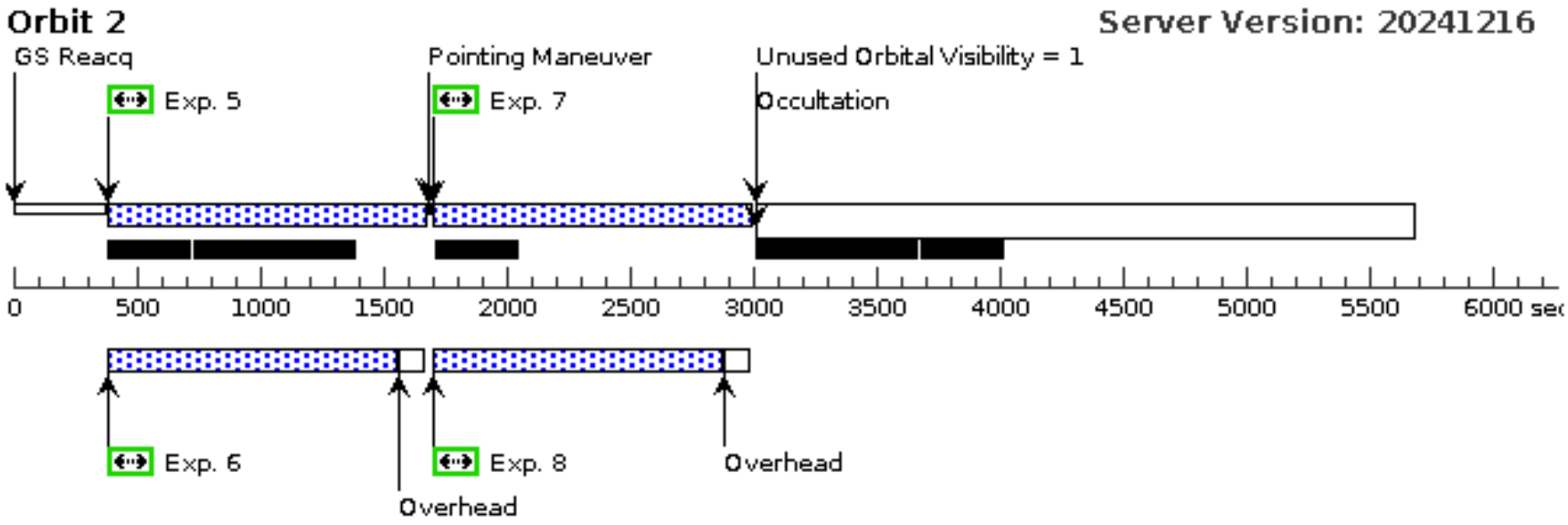
Comments:
Category=GALAXY
Description=[LSB]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VCC 1052	(1) VCC1052	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG -0.98,-0.98	Prime + Parallel Group 1-2 in VCC 1052 - F814W location 3 (03)	1118 Secs (1118 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VCC 1052 - F814W location 3 (03)	1118 Secs (1118 Secs) *[==>]*	***[1]***
3	VCC 1052	(1) VCC1052	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG -0.8319, -0.89376	Prime + Parallel Group 3-4 in VCC 1052 - F814W location 3 (03)	1118 Secs (1118 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VCC 1052 - F814W location 3 (03)	1118 Secs (1118 Secs) *[==>]*	***[1]***
5	VCC 1052	(1) VCC1052	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG -0.7579, -1.0987	Prime + Parallel Group 5-6 in VCC 1052 - F814W location 3 (03)	1169 Secs (1169 Secs) *[==>]*	***[2]***
6	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 5-6 in VCC 1052 - F814W location 3 (03)	1169 Secs (1169 Secs) *[==>]*	***[2]***
7	VCC 1052	(1) VCC1052	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG -0.9060, -1.1849	Prime + Parallel Group 7-8 in VCC 1052 - F814W location 3 (03)	1169 Secs (1169 Secs) *[==>]*	***[2]***
8	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 7-8 in VCC 1052 - F814W location 3 (03)	1169 Secs (1169 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17528, VCC 1052 - F814W/F475W location 4 (04), completed Tue Mar 04 20:00:36 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 01

Comments: F814W image, 2 exposures in first orbit in box pattern using POS-TARGS pattern. Location 4 of 4 different 20 pixel dithers 2 images in a single orbit). Small ORIENT range dictated by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. Small ORIENT range does not significantly change schedulability. Second orbit has three shorter F475W images (again, using a custom POS-TARG patatern) to be used to studies of brighter objects (globular clusters). FLASH will be required on the F475W CPAR WFC3 images to reach the 20 e- level required to reduce CTE effects.

Fixed Targets

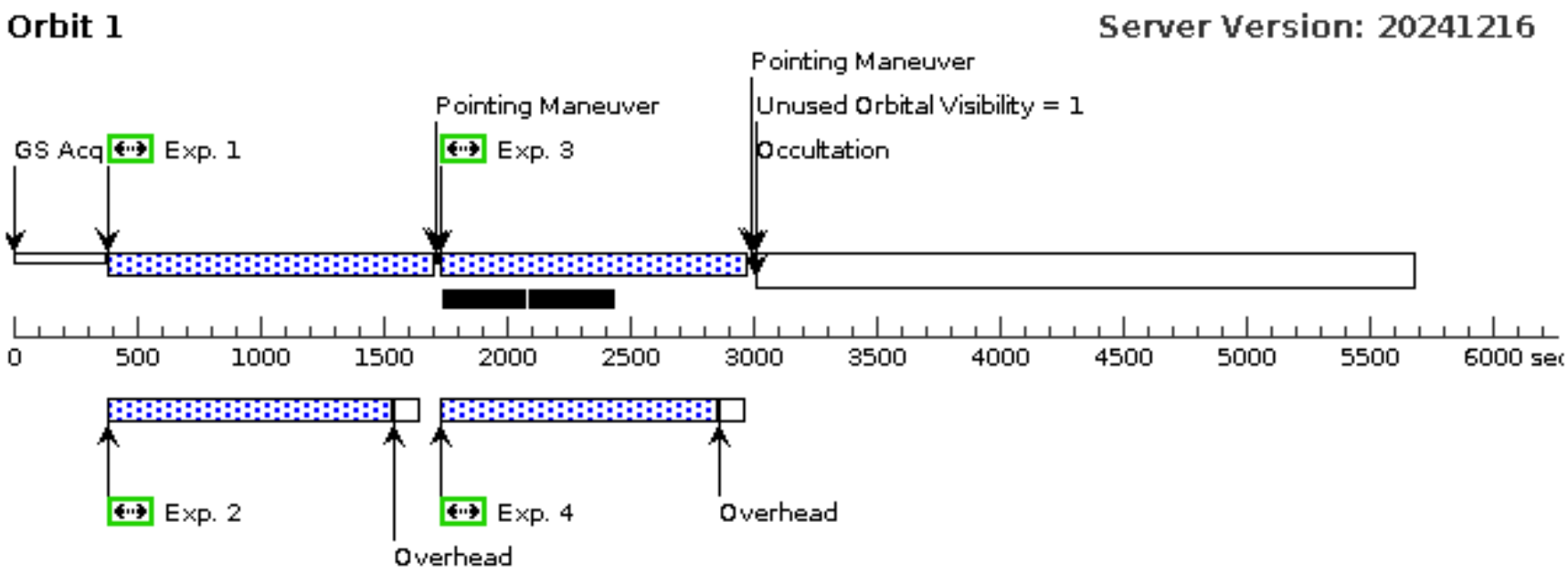
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	VCC1052	RA: 12 27 57.7724 (186.9907183d) Dec: +12 22 0.84 (12.36690d) Equinox: J2000		V=29	Reference Frame: ICRS

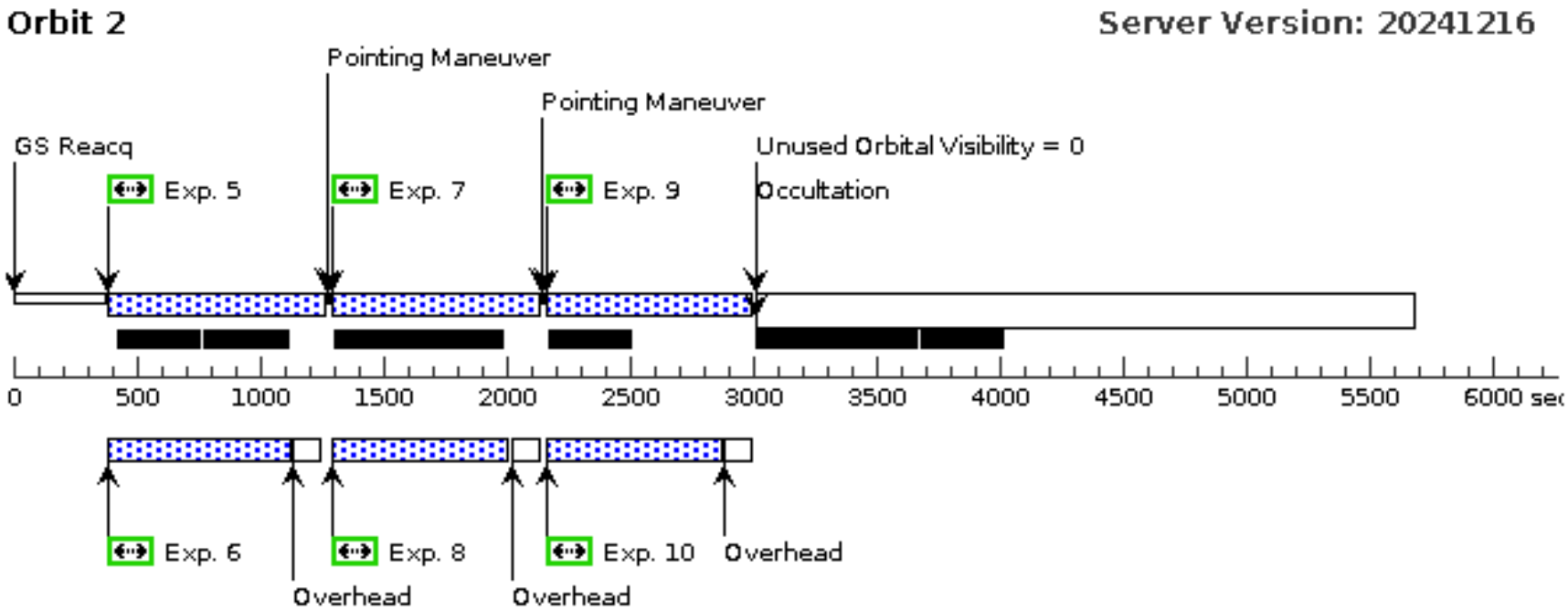
Comments:
Category=GALAXY
Description=[LSB]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VCC 1052	(1) VCC1052	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.00000, -0.98	Prime + Parallel Group 1-2 in VCC 1052 - F814W/F475W location 4 (04)	1118 Secs (1118 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VCC 1052 - F814W/F475W location 4 (04)	1118 Secs (1118 Secs) *[==>]*	***[1]***
3	VCC 1052	(1) VCC1052	ACS/WFC, ACCUM, WFCENTER	F814W		POS TARG 0.14807, -0.89376	Prime + Parallel Group 3-4 in VCC 1052 - F814W/F475W location 4 (04)	1118 Secs (1118 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VCC 1052 - F814W/F475W location 4 (04)	1118 Secs (1118 Secs) *[==>]*	***[1]***
5	VCC1052	(1) VCC1052	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.00000, 0.00000	Prime + Parallel Group 5-6 in VCC 1052 - F814W/F475W location 4 (04)	715 Secs (715 Secs) *[==>]*	***[2]***
6	WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F475W	FLASH=6.0		Prime + Parallel Group 5-6 in VCC 1052 - F814W/F475W location 4 (04)	715 Secs (715 Secs) *[==>]*	***[2]***
7	VCC1052	(1) VCC1052	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.14807, 0.08624	Prime + Parallel Group 7-8 in VCC 1052 - F814W/F475W location 4 (04)	715 Secs (715 Secs) *[==>]*	***[2]***
8	WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F475W	FLASH=6.0		Prime + Parallel Group 7-8 in VCC 1052 - F814W/F475W location 4 (04)	715 Secs (715 Secs) *[==>]*	***[2]***
9	VCC1052	(1) VCC1052	ACS/WFC, ACCUM, WFCENTER	F475W		POS TARG 0.22215, -0.11866	Prime + Parallel Group 9-10 in VCC 1052 - F814W/F475W location 4 (04)	711 Secs (711 Secs) *[==>]*	***[2]***
10	WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F475W	FLASH=6.0		Prime + Parallel Group 9-10 in VCC 1052 - F814W/F475W location 4 (04)	711 Secs (711 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17528, VCC 1287 - F814W location 1 (05), completed Tue Mar 04 20:00:36 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: ORIENT 292D TO 310 D; BETWEEN 01-JAN-2025:00:00:00 AND 01-JUL-2025:00:00:00

Comments: F814W images, 2 exposures per orbit in custom dither-box pattern using POS-TARGs. Location 1 of 4 different POST TARGS for each of the 4 F814W-related visits. Small ORIENT range dictated by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. ORIENT chosen to avoid bright galaxy to NW, and dates Jan-June 2025 requested to yield fainter zodiacal light levels (MU_V>22.2; based on simulations using the ETC) to improve S/N of faint stars. This request still leaves over 5 weeks of schedulability in a one year period

Fixed Targets

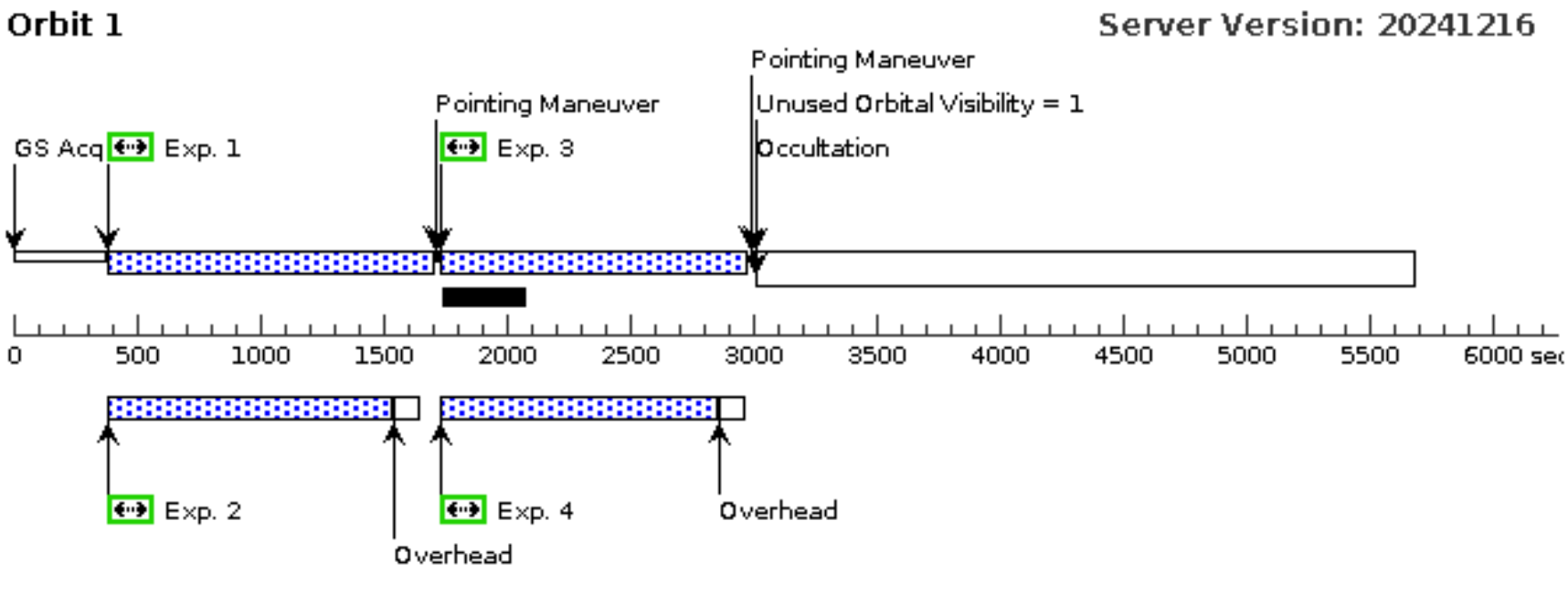
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	VCC1287	RA: 12 30 24.5497 (187.6022904d) Dec: +13 58 59.56 (13.98321d) Equinox: J2000		V=29	Reference Frame: ICRS

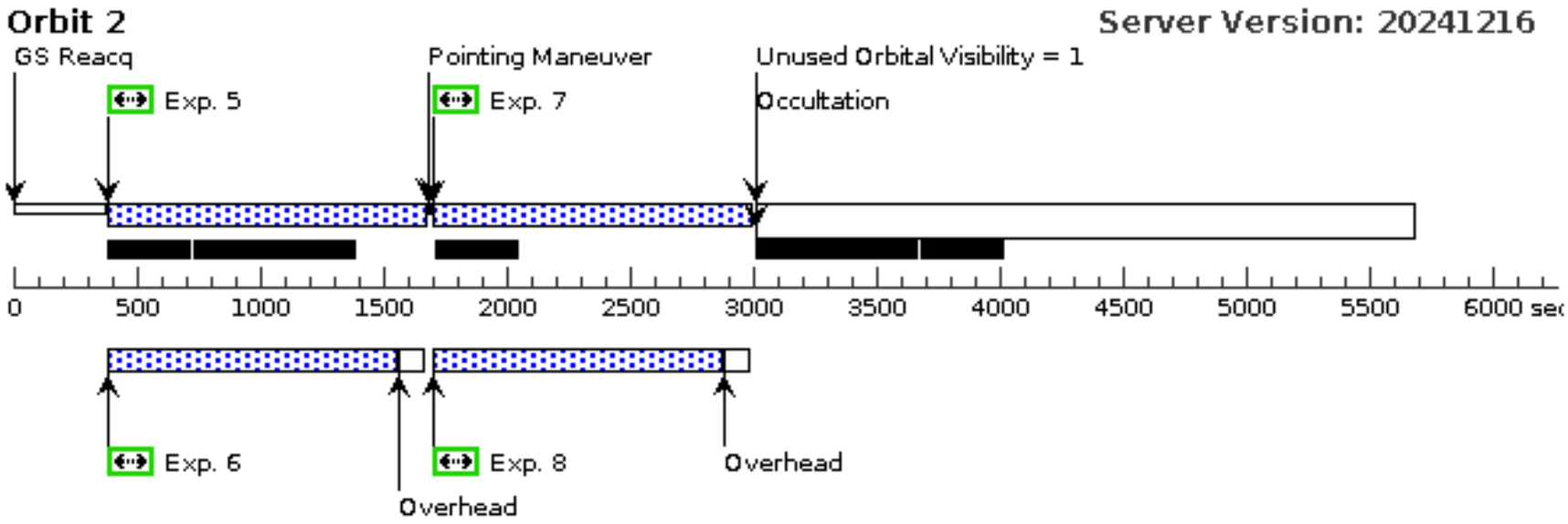
Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VCC 1287	(2) VCC1287	ACS/WFC, ACCUM, WFC1	F814W		POS TARG 0.00,0.00	Prime + Parallel Group 1-2 in VCC 1287 - F814W location 1 (05)	1118 Secs (1118 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VCC 1287 - F814W location 1 (05)	1118 Secs (1118 Secs) *[==>]*	***[1]***
3	VCC 1287	(2) VCC1287	ACS/WFC, ACCUM, WFC1	F814W		POS TARG 0.14807, 0.08624	Prime + Parallel Group 3-4 in VCC 1287 - F814W location 1 (05)	1118 Secs (1118 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VCC 1287 - F814W location 1 (05)	1118 Secs (1118 Secs) *[==>]*	***[1]***
5	VCC 1287	(2) VCC1287	ACS/WFC, ACCUM, WFC1	F814W		POS TARG 0.22215, -0.11866	Prime + Parallel Group 5-6 in VCC 1287 - F814W location 1 (05)	1169 Secs (1169 Secs) *[==>]*	***[2]***
6	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 5-6 in VCC 1287 - F814W location 1 (05)	1169 Secs (1169 Secs) *[==>]*	***[2]***
7	VCC 1287	(2) VCC1287	ACS/WFC, ACCUM, WFC1	F814W		POS TARG 0.07405, -0.20489	Prime + Parallel Group 7-8 in VCC 1287 - F814W location 1 (05)	1169 Secs (1169 Secs) *[==>]*	***[2]***
8	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 7-8 in VCC 1287 - F814W location 1 (05)	1169 Secs (1169 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17528, VCC 1287 - F814W location 2 (06), completed Tue Mar 04 20:00:36 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 05; BETWEEN 01-JAN-2025:00:00:00 AND 01-JUL-2025:00:00:00

Comments: F814W images, 2 exposures per orbit in box pattern using POS-TARGS pattern. Location 2 of 4 different POST TARGS for each of the 4 F814W-related visits. Small ORIENT range dictated by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield.

Fixed Targets

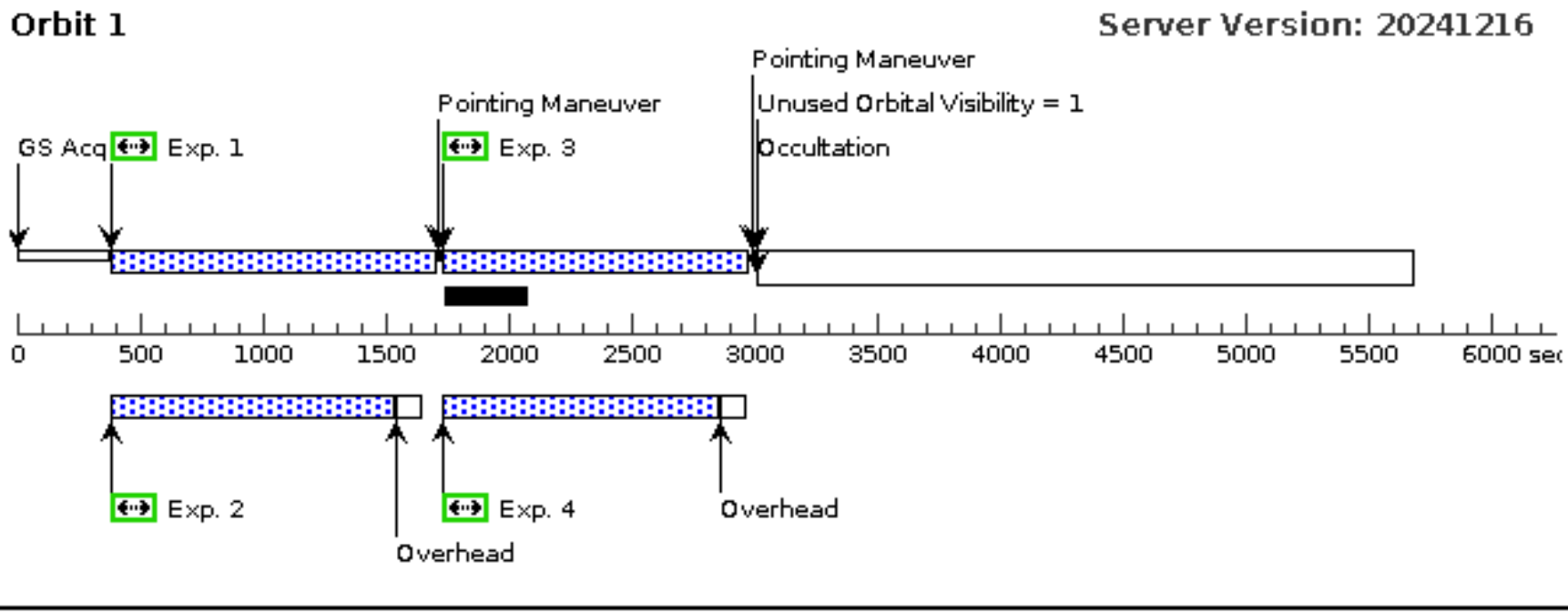
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	VCC1287	RA: 12 30 24.5497 (187.6022904d) Dec: +13 58 59.56 (13.98321d) Equinox: J2000		V=29	Reference Frame: ICRS

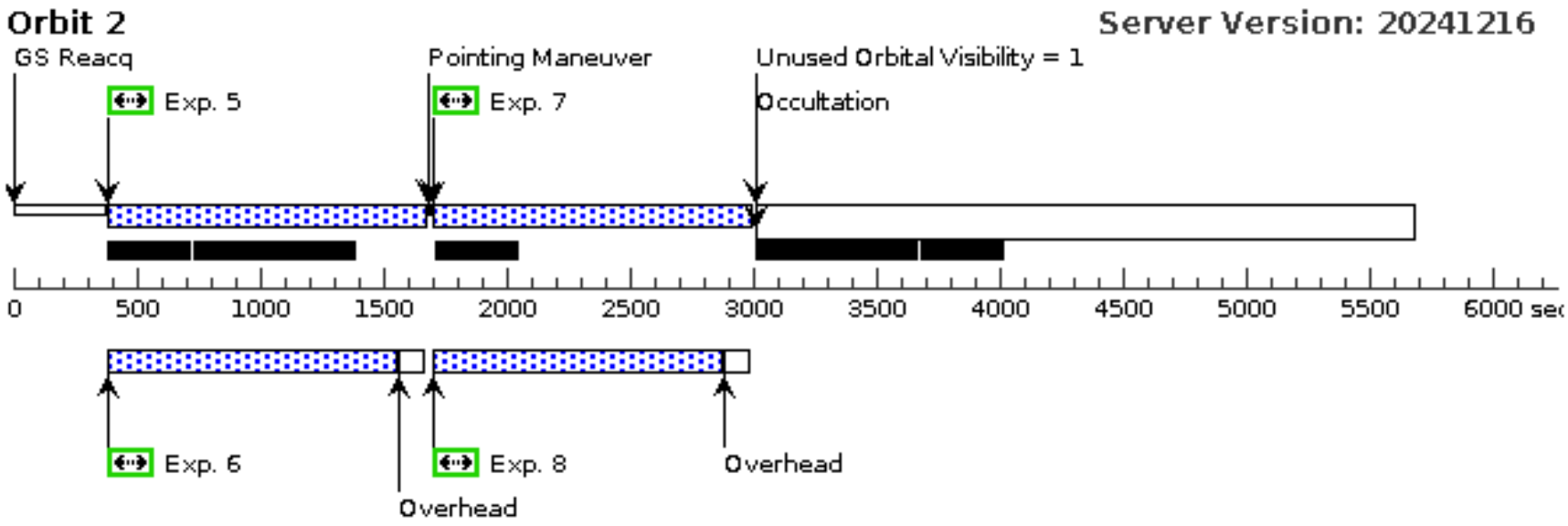
Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VCC 1287	(2) VCC1287	ACS/WFC, ACCUM, WFC1	F814W		POS TARG -0.98,0.00	Prime + Parallel Group 1-2 in VCC 1287 - F814W location 2 (06)	1118 Secs (1118 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VCC 1287 - F814W location 2 (06)	1118 Secs (1118 Secs) *[==>]*	***[1]***
3	VCC 1287	(2) VCC1287	ACS/WFC, ACCUM, WFC1	F814W		POS TARG -0.8319, 0.08624	Prime + Parallel Group 3-4 in VCC 1287 - F814W location 2 (06)	1118 Secs (1118 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VCC 1287 - F814W location 2 (06)	1118 Secs (1118 Secs) *[==>]*	***[1]***
5	VCC 1287	(2) VCC1287	ACS/WFC, ACCUM, WFC1	F814W		POS TARG -0.7579, -0.11866	Prime + Parallel Group 5-6 in VCC 1287 - F814W location 2 (06)	1169 Secs (1169 Secs) *[==>]*	***[2]***
6	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 5-6 in VCC 1287 - F814W location 2 (06)	1169 Secs (1169 Secs) *[==>]*	***[2]***
7	VCC 1287	(2) VCC1287	ACS/WFC, ACCUM, WFC1	F814W		POS TARG -0.9060, -0.20489	Prime + Parallel Group 7-8 in VCC 1287 - F814W location 2 (06)	1169 Secs (1169 Secs) *[==>]*	***[2]***
8	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 7-8 in VCC 1287 - F814W location 2 (06)	1169 Secs (1169 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17528, VCC 1287 - F814W location 3 (07), completed Tue Mar 04 20:00:36 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 05; BETWEEN 01-JAN-2025:00:00:00 AND 01-JUL-2025:00:00:00

Comments: F814W images, 2 exposures per orbit in box pattern using POS-TARGS pattern. Location 3 of 4 different 20 pixel dithers. Small ORIENT range dictated by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield.

Fixed Targets

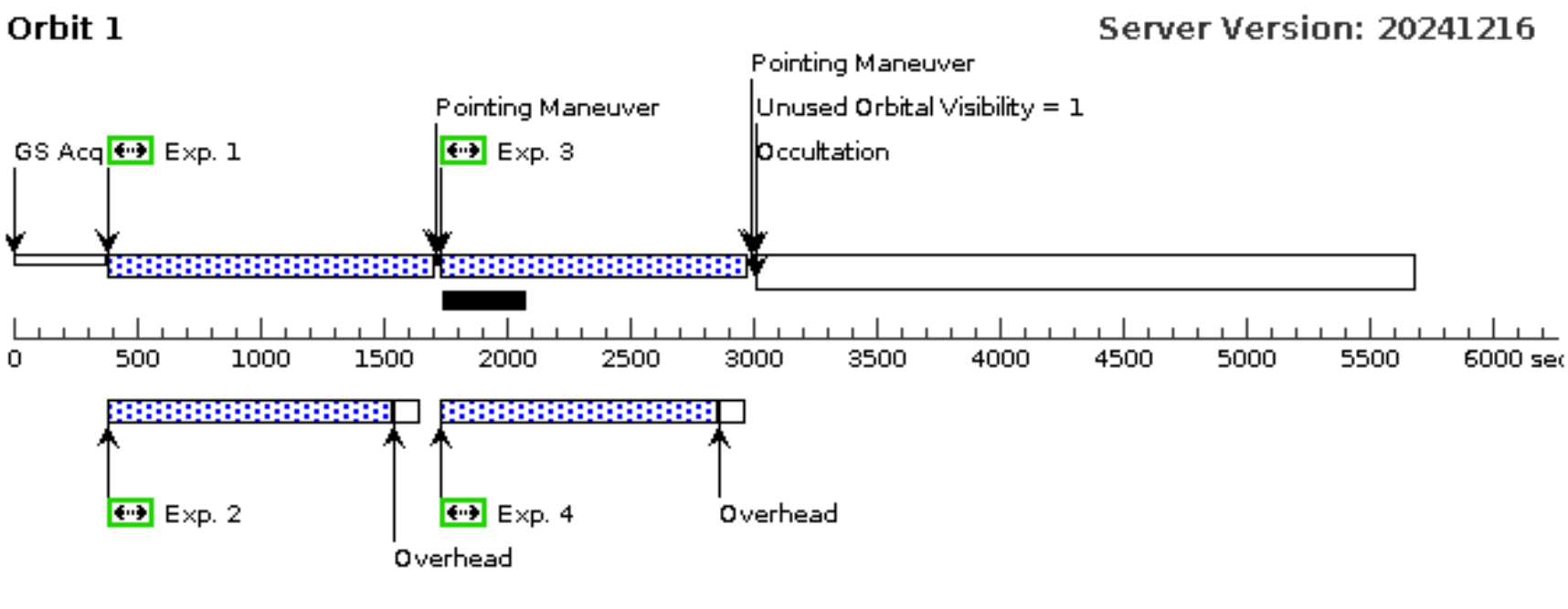
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	VCC1287	RA: 12 30 24.5497 (187.6022904d) Dec: +13 58 59.56 (13.98321d) Equinox: J2000		V=29	Reference Frame: ICRS

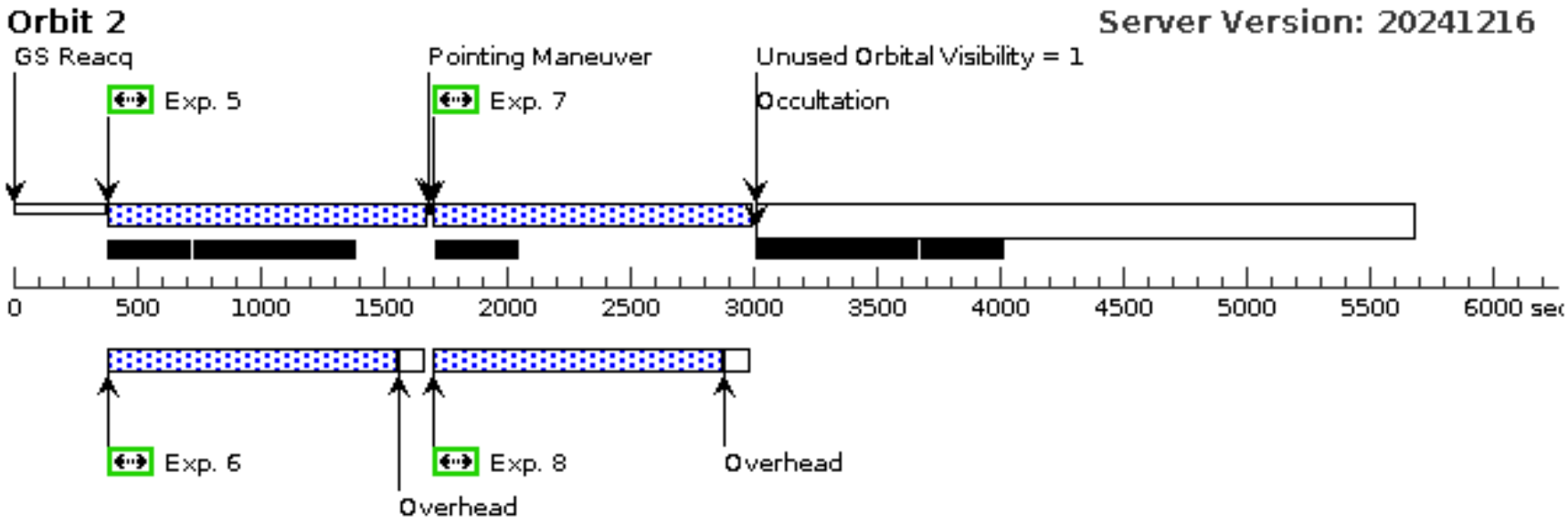
Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VCC 1287	(2) VCC1287	ACS/WFC, ACCUM, WFC1	F814W		POS TARG -0.98,-0.98	Prime + Parallel Group 1-2 in VCC 1287 - F814W location 3 (07)	1118 Secs (1118 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VCC 1287 - F814W location 3 (07)	1118 Secs (1118 Secs) *[==>]*	***[1]***
3	VCC 1287	(2) VCC1287	ACS/WFC, ACCUM, WFC1	F814W		POS TARG -0.8319,-0.89376	Prime + Parallel Group 3-4 in VCC 1287 - F814W location 3 (07)	1118 Secs (1118 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VCC 1287 - F814W location 3 (07)	1118 Secs (1118 Secs) *[==>]*	***[1]***
5	VCC 1287	(2) VCC1287	ACS/WFC, ACCUM, WFC1	F814W		POS TARG -0.7579,-1.0987	Prime + Parallel Group 5-6 in VCC 1287 - F814W location 3 (07)	1169 Secs (1169 Secs) *[==>]*	***[2]***
6	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 5-6 in VCC 1287 - F814W location 3 (07)	1169 Secs (1169 Secs) *[==>]*	***[2]***
7	VCC 1287	(2) VCC1287	ACS/WFC, ACCUM, WFC1	F814W		POS TARG -0.9060,-1.1849	Prime + Parallel Group 7-8 in VCC 1287 - F814W location 3 (07)	1169 Secs (1169 Secs) *[==>]*	***[2]***
8	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 7-8 in VCC 1287 - F814W location 3 (07)	1169 Secs (1169 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17528, VCC 1287 - F814W/F475W location 4 (08), completed Tue Mar 04 20:00:36 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 05; BETWEEN 01-JAN-2025:00:00:00 AND 01-JUL-2025:00:00:00

Comments: F814W image, 2 exposures in first orbit in box pattern using POS-TARGS pattern. Location 4 of 4 different 20 pixel dithers). Small ORIENT range dictated by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. SAME ORIENT as first visit in series
Second orbit has three shorter F475W images (again, using a custom POS-TARG pattern) to be used for studies of brighter objects (globular clusters). FLASH will be required on the F475W CPAR WFC3 images to reach the 20 e- level required to reduce CTE effects.

Fixed Targets

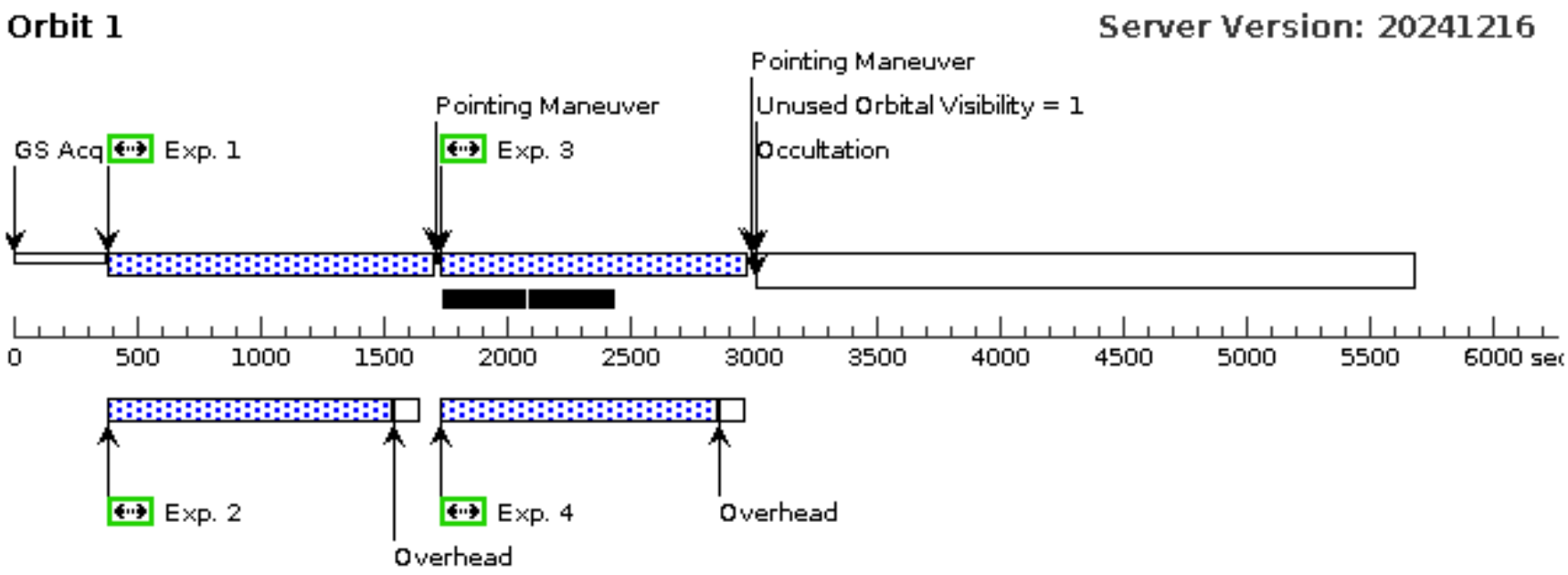
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	VCC1287	RA: 12 30 24.5497 (187.6022904d) Dec: +13 58 59.56 (13.98321d) Equinox: J2000		V=29	Reference Frame: ICRS

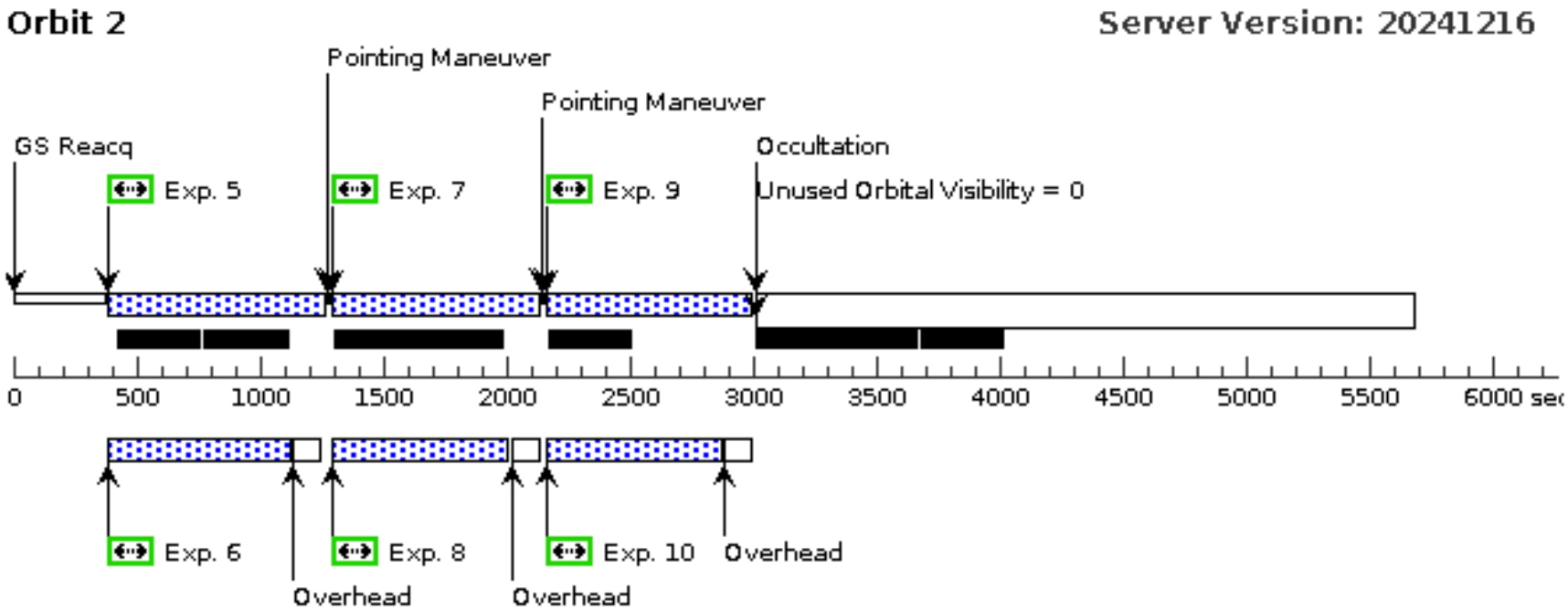
Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VCC 1287	(2) VCC1287	ACS/WFC, ACCUM, WFC1	F814W		POS TARG 0.00000, -0.98	Prime + Parallel Group 1-2 in VCC 1287 - F814W/F475W location 4 (08)	1118 Secs (1118 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VCC 1287 - F814W/F475W location 4 (08)	1118 Secs (1118 Secs) *[==>]*	***[1]***
3	VCC 1287	(2) VCC1287	ACS/WFC, ACCUM, WFC1	F814W		POS TARG 0.14807, -0.89376	Prime + Parallel Group 3-4 in VCC 1287 - F814W/F475W location 4 (08)	1118 Secs (1118 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VCC 1287 - F814W/F475W location 4 (08)	1118 Secs (1118 Secs) *[==>]*	***[1]***
5	VCC1287	(2) VCC1287	ACS/WFC, ACCUM, WFC1	F475W		POS TARG 0.00000, 0.00000	Prime + Parallel Group 5-6 in VCC 1287 - F814W/F475W location 4 (08)	715 Secs (715 Secs) *[==>]*	***[2]***
6	WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F475W	FLASH=6.0		Prime + Parallel Group 5-6 in VCC 1287 - F814W/F475W location 4 (08)	715 Secs (715 Secs) *[==>]*	***[2]***
7	VCC1287	(2) VCC1287	ACS/WFC, ACCUM, WFC1	F475W		POS TARG 0.14807, 0.08624	Prime + Parallel Group 7-8 in VCC 1287 - F814W/F475W location 4 (08)	715 Secs (715 Secs) *[==>]*	***[2]***
8	WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F475W	FLASH=6.0		Prime + Parallel Group 7-8 in VCC 1287 - F814W/F475W location 4 (08)	715 Secs (715 Secs) *[==>]*	***[2]***
9	VCC1287	(2) VCC1287	ACS/WFC, ACCUM, WFC1	F475W		POS TARG 0.22215, -0.11866	Prime + Parallel Group 9-10 in VCC 1287 - F814W/F475W location 4 (08)	711 Secs (711 Secs) *[==>]*	***[2]***
10	WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F475W	FLASH=6.0		Prime + Parallel Group 9-10 in VCC 1287 - F814W/F475W location 4 (08)	711 Secs (711 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17528, VLSB-B - F814W location 1 (09), completed Tue Mar 04 20:00:36 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: ORIENT 282D TO 292 D; BETWEEN 01-JAN-2025:00:00:00 AND 01-JUL-2025:00:00:00

Comments: F814W images, 2 exposures per orbit in custom dither-box pattern using POS-TARGs. Location 1 of 4 different POST TARGS for each of the 4 F814W-related visits. Small ORIENT range dictated by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. ORIENT range also offers reduced sky backgrounds (MU_V>22.2; based on simulations using the ETC) to improve S/N of faint stars. This request leaves over 6 weeks of schedulability in a one year period

Fixed Targets

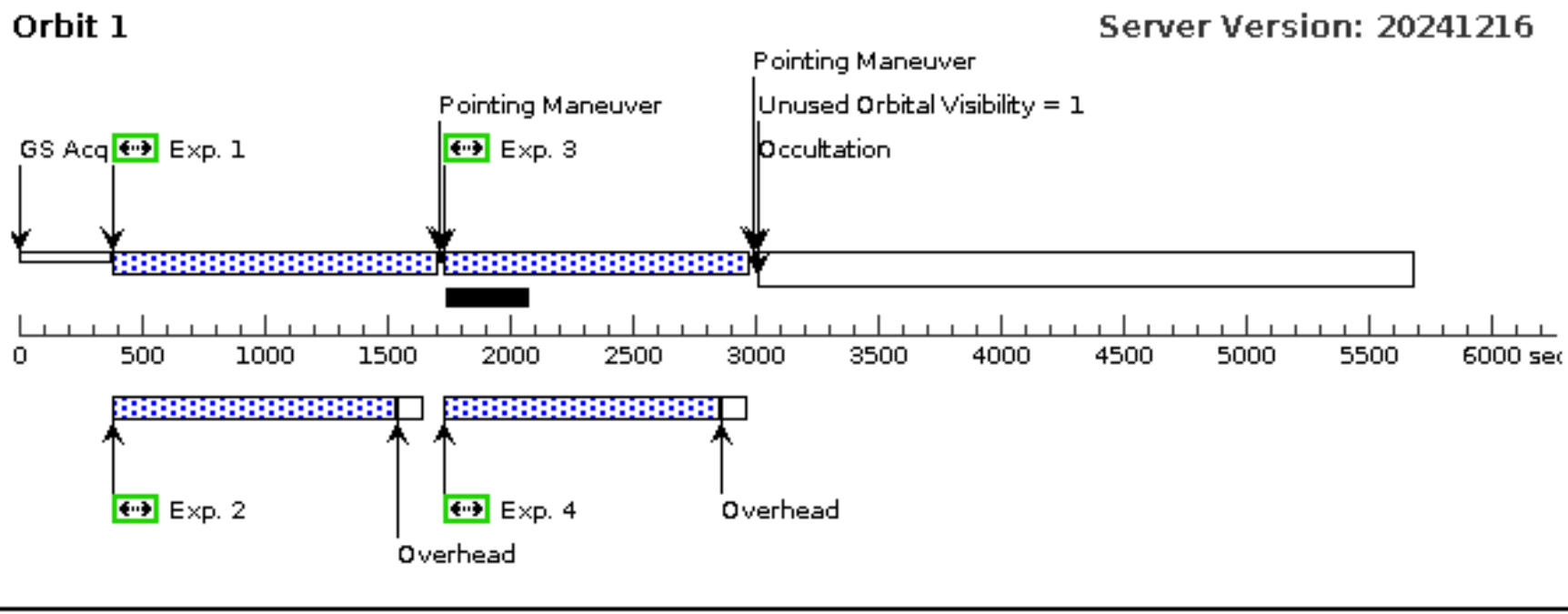
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	VLSB-B	RA: 12 28 12.0512 (187.0502133d) Dec: +12 43 17.83 (12.72162d) Equinox: J2000		V=29	Reference Frame: ICRS

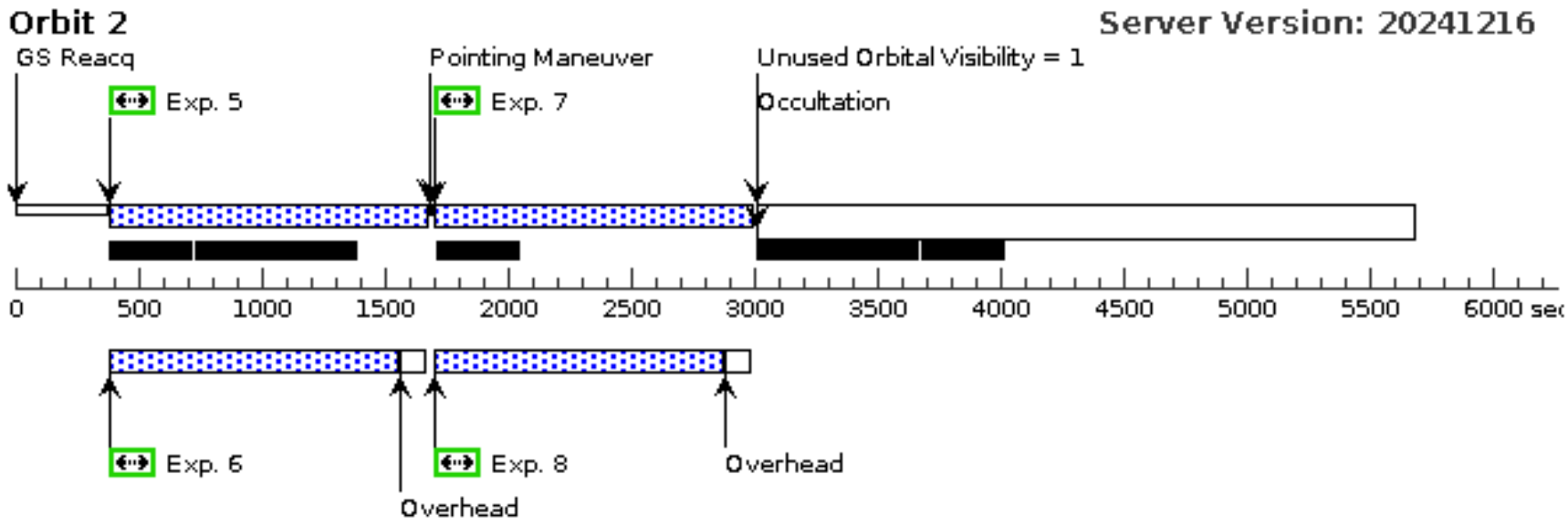
Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VLSB-B	(3) VLSB-B	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.00,0.00	Prime + Parallel Group 1-2 in VLSB-B - F814W location 1 (09)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VLSB-B - F814W location 1 (09)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
3	VLSB-B	(3) VLSB-B	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.14807, 0.08624	Prime + Parallel Group 3-4 in VLSB-B - F814W location 1 (09)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VLSB-B - F814W location 1 (09)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
5	VLSB-B	(3) VLSB-B	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.22215, -0.11866	Prime + Parallel Group 5-6 in VLSB-B - F814W location 1 (09)	1169 Secs (1169 Secs) *[==>]*	 ***[2]***
6	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 5-6 in VLSB-B - F814W location 1 (09)	1169 Secs (1169 Secs) *[==>]*	 ***[2]***
7	VLSB-B	(3) VLSB-B	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.07405, -0.20489	Prime + Parallel Group 7-8 in VLSB-B - F814W location 1 (09)	1169 Secs (1169 Secs) *[==>]*	 ***[2]***
8	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 7-8 in VLSB-B - F814W location 1 (09)	1169 Secs (1169 Secs) *[==>]*	 ***[2]***

Orbit Structure





Visit

Proposal 17528, VLSB-B - F814W location 2 (10), completed Tue Mar 04 20:00:36 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 09; BETWEEN 01-JAN-2025:00:00:00 AND 01-JUL-2025:00:00:00

Comments: F814W images, 2 exposures per orbit in custom dither-box pattern using POS-TARGs. Location 2 of 4 different POST TARGS for each of the 4 F814W-related visits. ORIENT range chosen by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. . SAME ORIENT as previous visit.

Fixed Targets

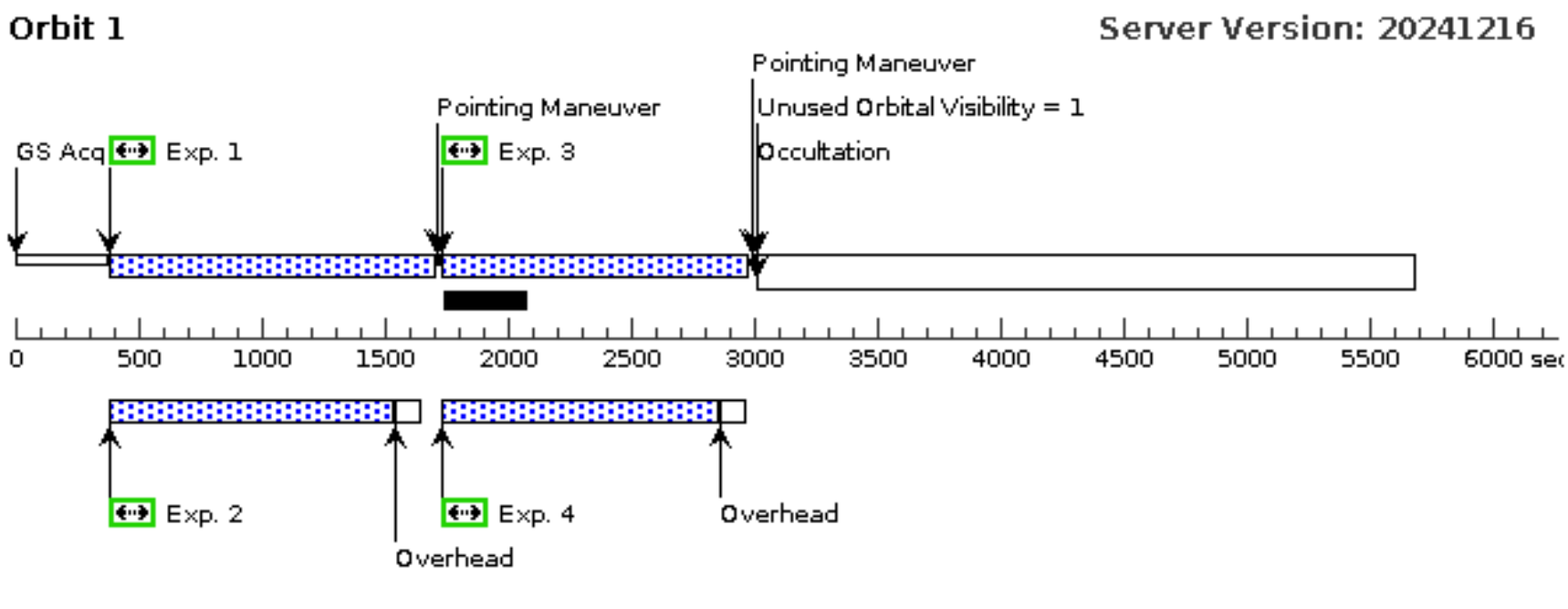
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	VLSB-B	RA: 12 28 12.0512 (187.0502133d) Dec: +12 43 17.83 (12.72162d) Equinox: J2000		V=29	Reference Frame: ICRS

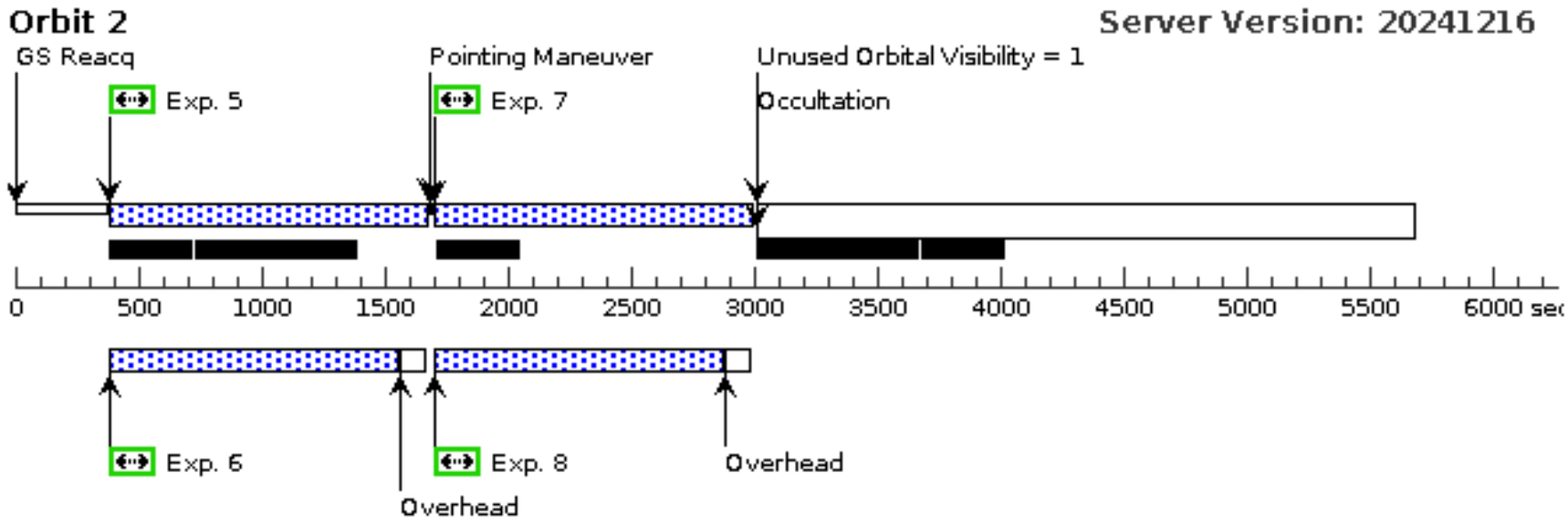
Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VLSB-B	(3) VLSB-B	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.98,0.00	Prime + Parallel Group 1-2 in VLSB-B - F814W location 2 (10)	1118 Secs (1118 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VLSB-B - F814W location 2 (10)	1118 Secs (1118 Secs) *[==>]*	***[1]***
3	VLSB-B	(3) VLSB-B	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.8319, 0.08624	Prime + Parallel Group 3-4 in VLSB-B - F814W location 2 (10)	1118 Secs (1118 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VLSB-B - F814W location 2 (10)	1118 Secs (1118 Secs) *[==>]*	***[1]***
5	VLSB-B	(3) VLSB-B	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.7579, -0.11866	Prime + Parallel Group 5-6 in VLSB-B - F814W location 2 (10)	1169 Secs (1169 Secs) *[==>]*	***[2]***
6	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 5-6 in VLSB-B - F814W location 2 (10)	1169 Secs (1169 Secs) *[==>]*	***[2]***
7	VLSB-B	(3) VLSB-B	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.9060, -0.20489	Prime + Parallel Group 7-8 in VLSB-B - F814W location 2 (10)	1169 Secs (1169 Secs) *[==>]*	***[2]***
8	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 7-8 in VLSB-B - F814W location 2 (10)	1169 Secs (1169 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17528, VLSB-B - F814W location 3 (11), completed Tue Mar 04 20:00:36 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 09; BETWEEN 01-JAN-2025:00:00:00 AND 01-JUL-2025:00:00:00

Comments: F814W images, 2 exposures per orbit in custom dither-box pattern using POS-TARGs. Location 3 of 4 different POST TARGS for each of the 4 F814W-related visits. ORIENT range chosen by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. Small ORIENT range does not significantly hurt schedulability. SAME ORIENT as previous visit

Fixed Targets

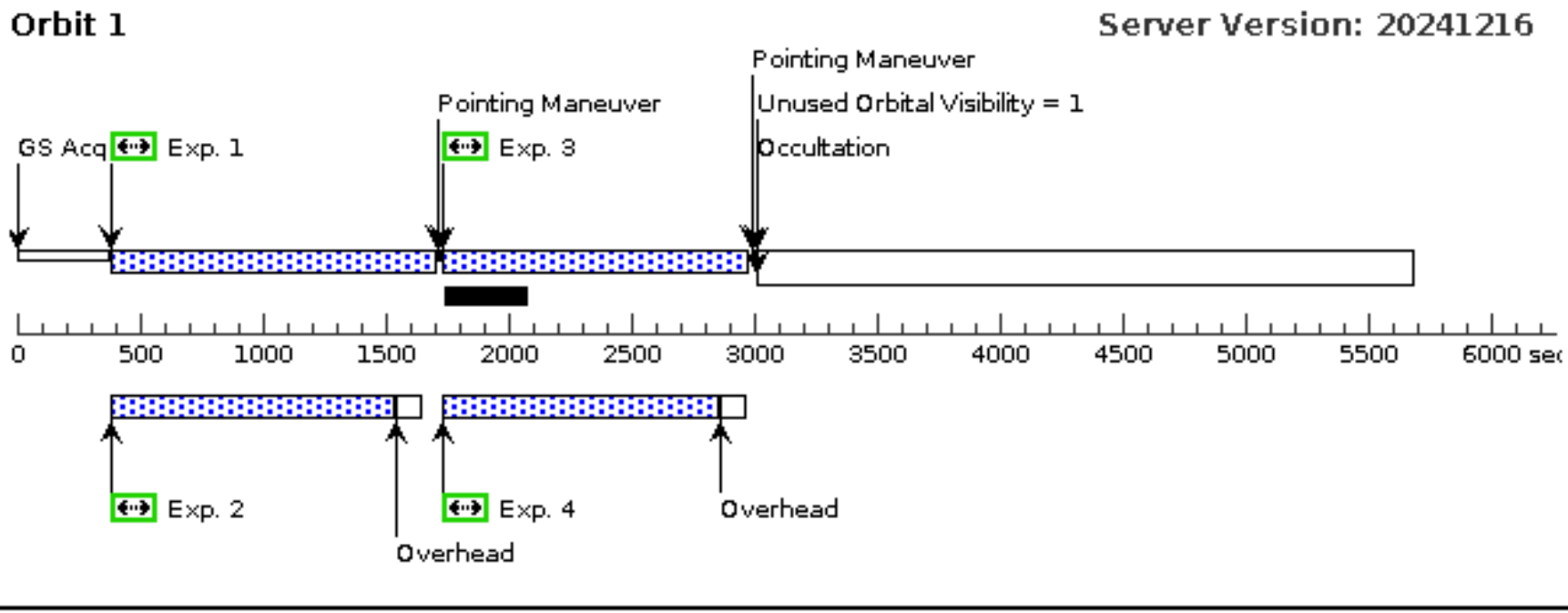
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	VLSB-B	RA: 12 28 12.0512 (187.0502133d) Dec: +12 43 17.83 (12.72162d) Equinox: J2000		V=29	Reference Frame: ICRS

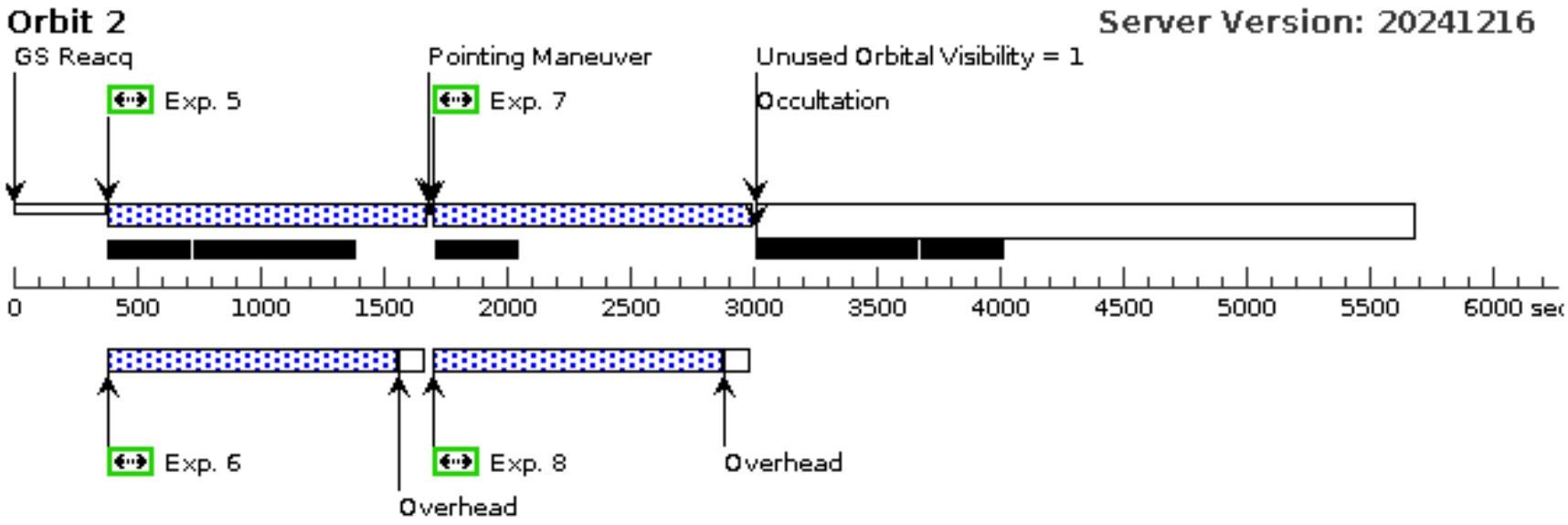
Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VLSB-B	(3) VLSB-B	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.98,-0.98	Prime + Parallel Group 1-2 in VLSB-B - F814W location 3 (11)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VLSB-B - F814W location 3 (11)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
3	VLSB-B	(3) VLSB-B	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.8319, -0.89376	Prime + Parallel Group 3-4 in VLSB-B - F814W location 3 (11)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VLSB-B - F814W location 3 (11)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
5	VLSB-B	(3) VLSB-B	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.7579, -1.0987	Prime + Parallel Group 5-6 in VLSB-B - F814W location 3 (11)	1169 Secs (1169 Secs) *[==>]*	 ***[2]***
6	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 5-6 in VLSB-B - F814W location 3 (11)	1169 Secs (1169 Secs) *[==>]*	 ***[2]***
7	VLSB-B	(3) VLSB-B	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.9060, -1.1849	Prime + Parallel Group 7-8 in VLSB-B - F814W location 3 (11)	1169 Secs (1169 Secs) *[==>]*	 ***[2]***
8	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 7-8 in VLSB-B - F814W location 3 (11)	1169 Secs (1169 Secs) *[==>]*	 ***[2]***

Orbit Structure





Visit

Proposal 17528, VLSB-B - F814W/F475W location 4 (12), completed Tue Mar 04 20:00:36 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 09; BETWEEN 01-JAN-2025:00:00:00 AND 01-JUL-2025:00:00:00

Comments: F814W image, 2 exposures in first orbit in box pattern using POS-TARGS pattern. Location 4 of 4 different 20 pixel dithers). Small ORIENT range dictated by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. SAME ORIENT as first visit in series
Second orbit has three shorter F475W images (again, using a custom POS-TARG pattern) to be used for studies of brighter objects (globular clusters). FLASH will be required on the F475W CPAR WFC3 images to reach the 20 e- level required to reduce CTE effects.

Fixed Targets

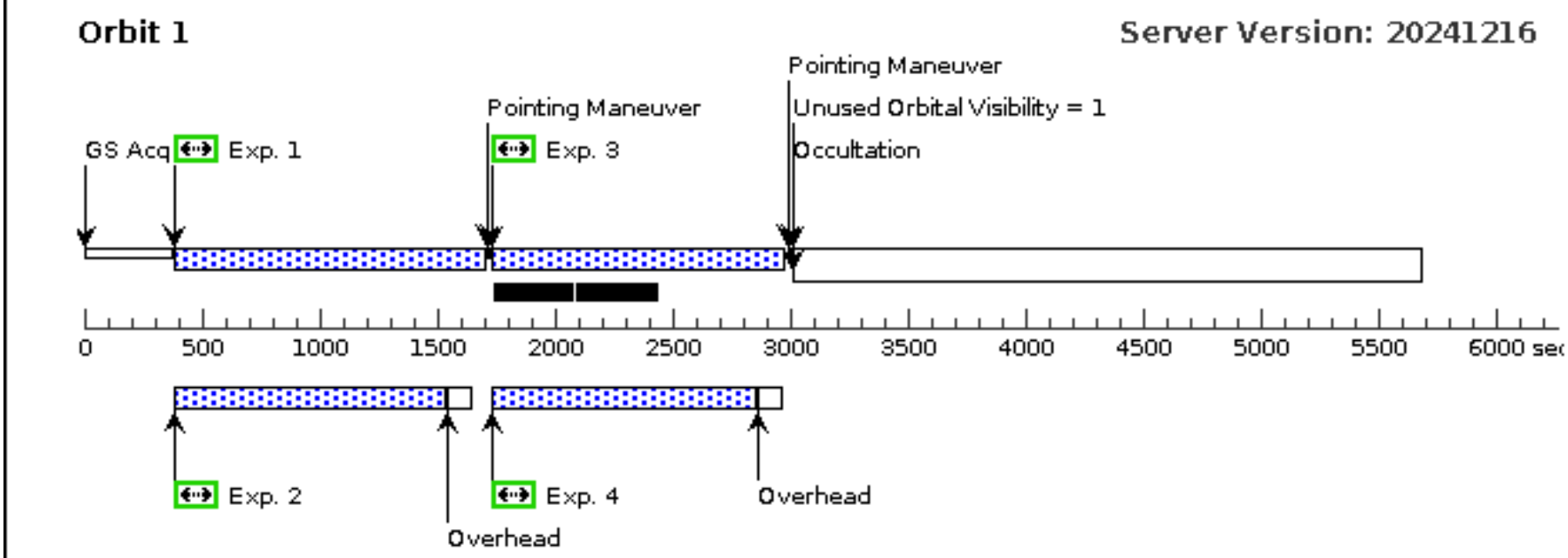
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	VLSB-B	RA: 12 28 12.0512 (187.0502133d) Dec: +12 43 17.83 (12.72162d) Equinox: J2000		V=29	Reference Frame: ICRS

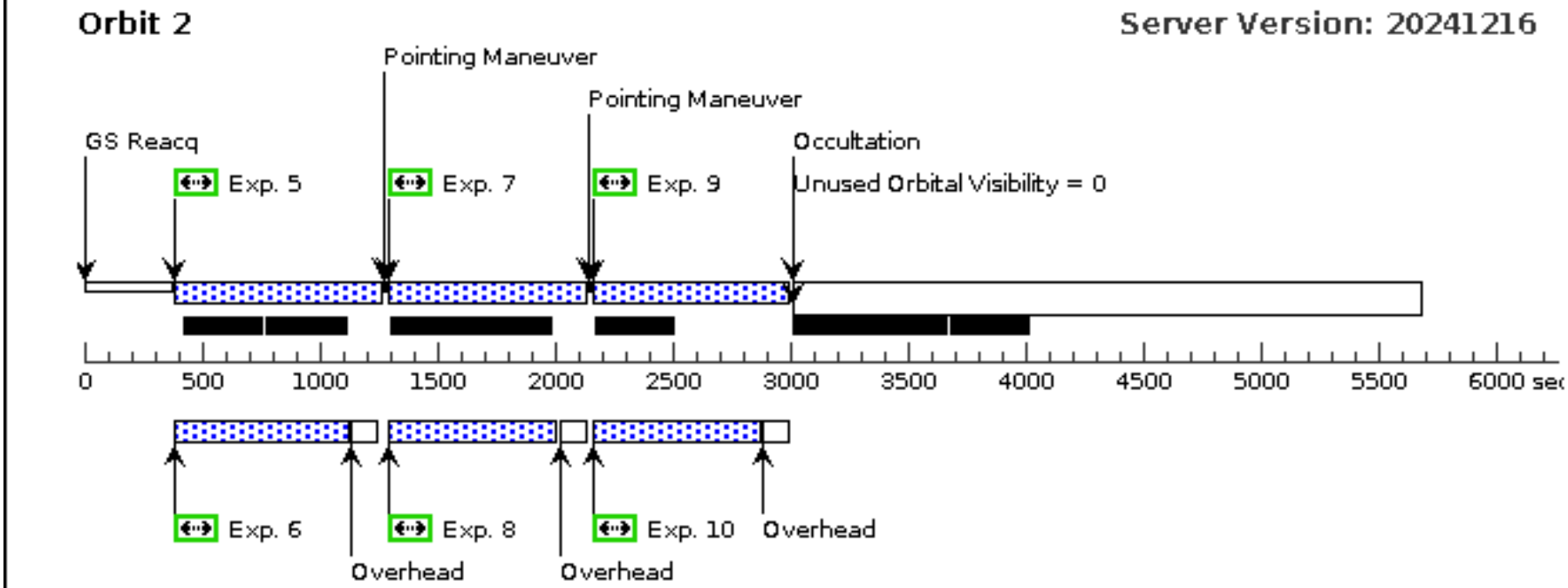
Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VLSB-B	(3) VLSB-B	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.00000, -0.98	Prime + Parallel Group 1-2 in VLSB-B - F814W/F475W location 4 (12)	1118 Secs (1118 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VLSB-B - F814W/F475W location 4 (12)	1118 Secs (1118 Secs) *[==>]*	***[1]***
3	VLSB-B	(3) VLSB-B	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.14807, -0.89376	Prime + Parallel Group 3-4 in VLSB-B - F814W/F475W location 4 (12)	1118 Secs (1118 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VLSB-B - F814W/F475W location 4 (12)	1118 Secs (1118 Secs) *[==>]*	***[1]***
5	VLSB-B	(3) VLSB-B	ACS/WFC, ACCUM, WFC2	F475W		POS TARG 0.00000, 0.00000	Prime + Parallel Group 5-6 in VLSB-B - F814W/F475W location 4 (12)	715 Secs (715 Secs) *[==>]*	***[2]***
6	WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F475W	FLASH=6		Prime + Parallel Group 5-6 in VLSB-B - F814W/F475W location 4 (12)	715 Secs (715 Secs) *[==>]*	***[2]***
7	VLSB-B	(3) VLSB-B	ACS/WFC, ACCUM, WFC2	F475W		POS TARG 0.14807, 0.08624	Prime + Parallel Group 7-8 in VLSB-B - F814W/F475W location 4 (12)	715 Secs (715 Secs) *[==>]*	***[2]***
8	WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F475W	FLASH=6		Prime + Parallel Group 7-8 in VLSB-B - F814W/F475W location 4 (12)	715 Secs (715 Secs) *[==>]*	***[2]***
9	VLSB-B	(3) VLSB-B	ACS/WFC, ACCUM, WFC2	F475W		POS TARG 0.22215, -0.11866	Prime + Parallel Group 9-10 in VLSB-B - F814W/F475W location 4 (12)	711 Secs (711 Secs) *[==>]*	***[2]***
10	WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F475W	FLASH=6.		Prime + Parallel Group 9-10 in VLSB-B - F814W/F475W location 4 (12)	711 Secs (711 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17528, VLSB-D - F814W location 1 (13), failed Tue Mar 04 20:00:37 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: ORIENT 295D TO 305 D; BETWEEN 01-JAN-2025:00:00:00 AND 01-JUL-2025:00:00:00

Comments: F814W images, 2 exposures per orbit in custom dither-box pattern using POS-TARGs. Location 1 of 4 different POST TARGS for each of the 4 F814W-related visits. ORIENT range chosen by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. Chosen ORIENT to gain access to guide stars. Chosen dates after Jan 1 2025 to obtain zodiacal light values MU_V>22.2 (using the ACS ETC to calculate), which will maximize the S/N of faint sources on the deep images. V=11.3 star located about 1' from ACS field; can shift field slightly further N if problematic. Tasrgrt schedulability about 5 weeks

Fixed Targets

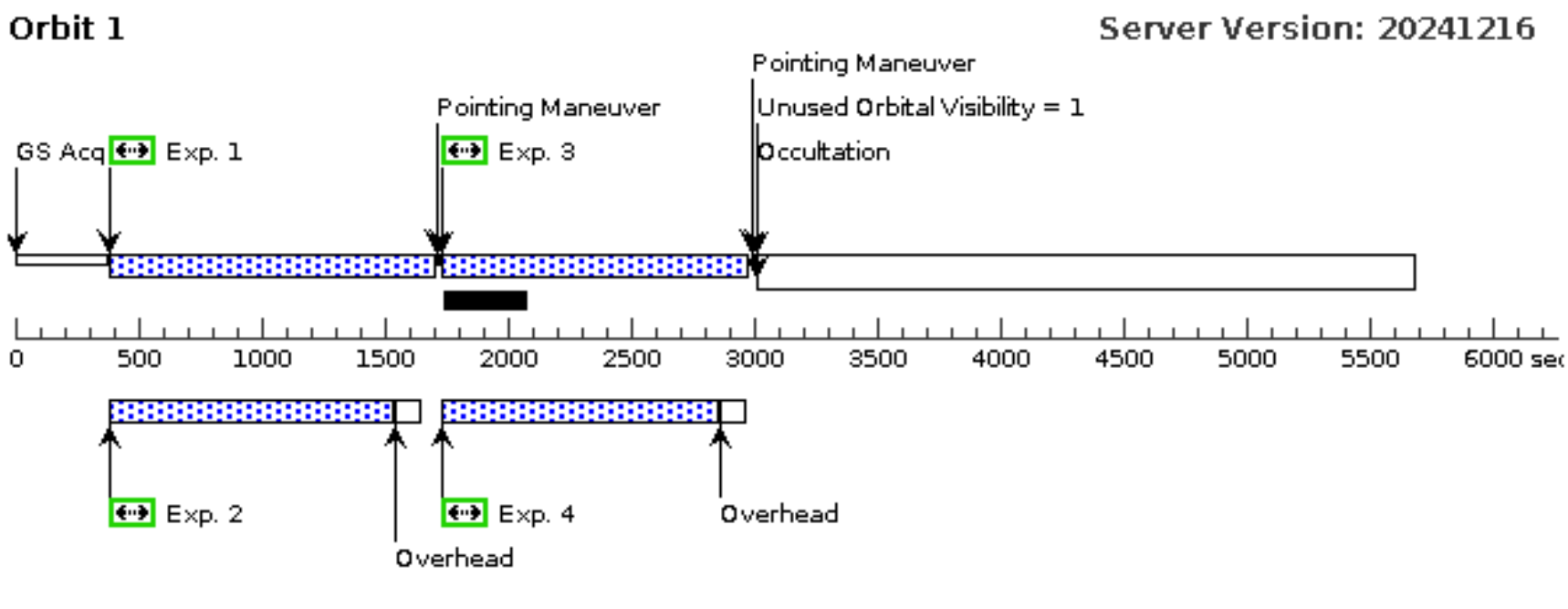
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	VLSB-D	RA: 12 24 41.6597 (186.1735821d) Dec: +13 31 15.04 (13.52084d) Equinox: J2000		V=29	Reference Frame: ICRS

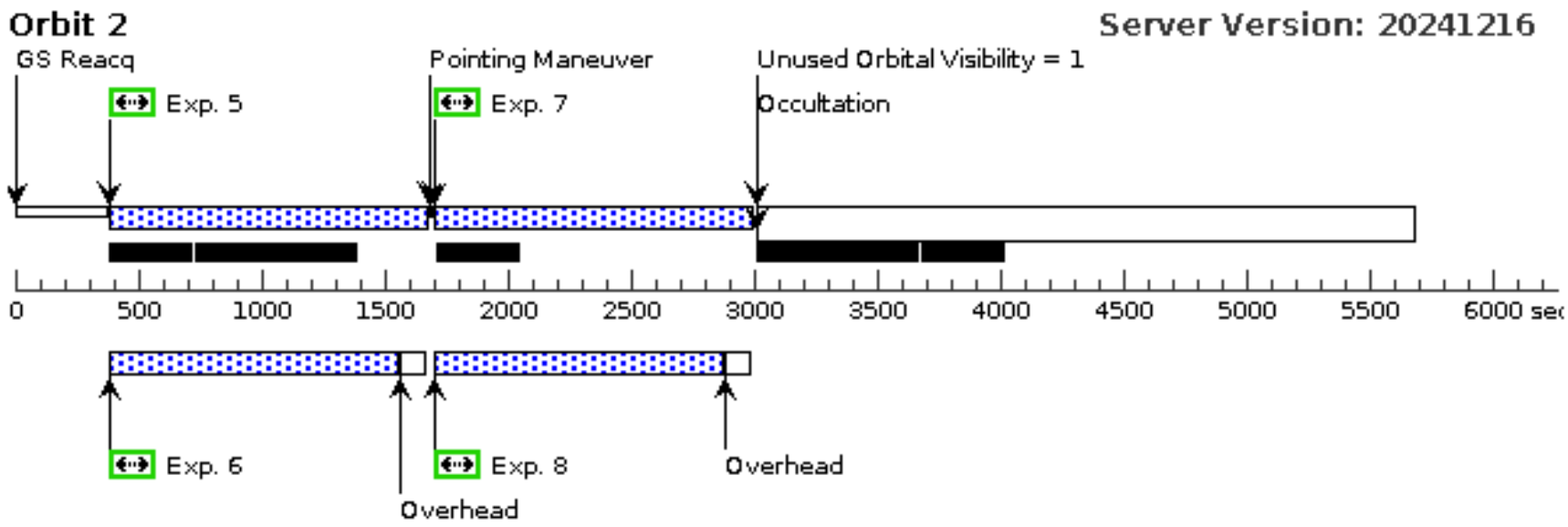
Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.00,0.00	Prime + Parallel Group 1-2 in VLSB-D - F814W location 1 (13)	1118 Secs (1118 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VLSB-D - F814W location 1 (13)	1118 Secs (1118 Secs) *[==>]*	***[1]***
3	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.14807, 0.08624	Prime + Parallel Group 3-4 in VLSB-D - F814W location 1 (13)	1118 Secs (1118 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VLSB-D - F814W location 1 (13)	1118 Secs (1118 Secs) *[==>]*	***[1]***
5	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.22215, -0.11866	Prime + Parallel Group 5-6 in VLSB-D - F814W location 1 (13)	1169 Secs (1169 Secs) *[==>]*	***[2]***
6	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 5-6 in VLSB-D - F814W location 1 (13)	1169 Secs (1169 Secs) *[==>]*	***[2]***
7	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.07405, -0.20489	Prime + Parallel Group 7-8 in VLSB-D - F814W location 1 (13)	1169 Secs (1169 Secs) *[==>]*	***[2]***
8	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 7-8 in VLSB-D - F814W location 1 (13)	1169 Secs (1169 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17528, VLSB-D - F814W location 1 (23), completed Tue Mar 04 20:00:37 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 22

Comments: F814W images, 2 exposures per orbit in custom dither-box pattern using POS-TARGs. Location 1 of 4 different POST TARGS for each of the 4 F814W-related visits. ORIENT range chosen by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. Chosen ORIENT to gain access to guide stars. Chosen dates after Jan 1 2025 to obtain zodiacal light values MU_V>22.2 (using the ACS ETC to calculate), which will maximize the S/N of faint sources on the deep images. V=11.3 star located about 1' from ACS field; can shift field slightly further N if problematic. Tasrgrt schedulability about 5 weeks
Visit 23 is a 2-orbit visit that combines the second failed orbit of VIsit 13, and the second failed orbit of Visit 14. In order to ease scheduabaility, VIsit 23 is same ORIENT as Visit 22, which has a more relaxed ORIENT range of 275-305 degrees compared to the successful images in VIsits 13, 14 and the scheduled VIsit 21.

Fixed Targets

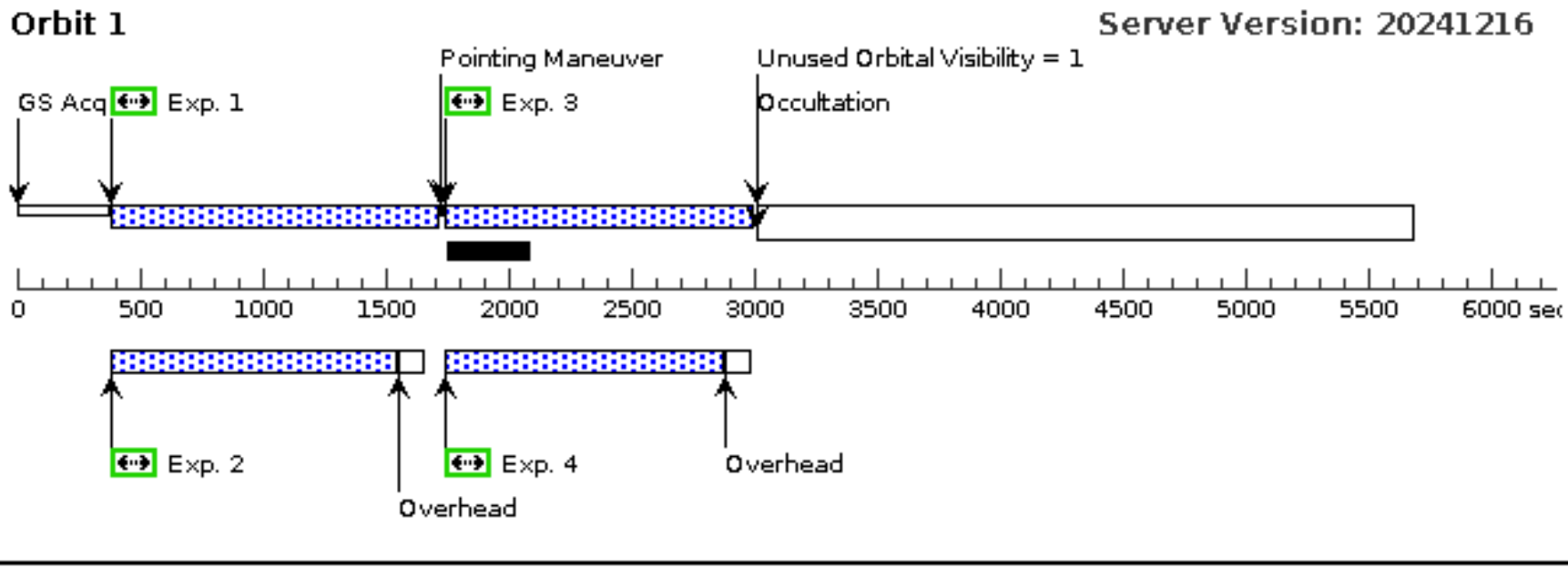
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	VLSB-D	RA: 12 24 41.6597 (186.1735821d) Dec: +13 31 15.04 (13.52084d) Equinox: J2000		V=29	Reference Frame: ICRS

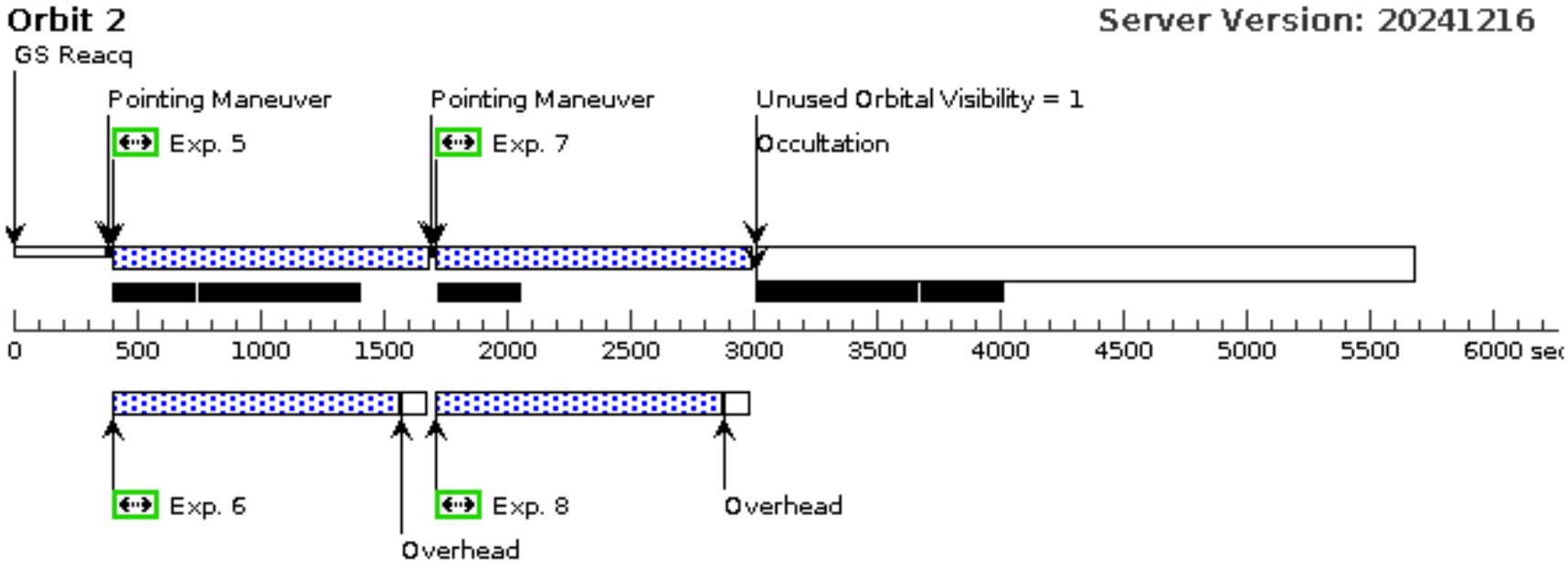
Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.22215, -0.11866	Prime + Parallel Group 1-2 in VLSB-D - F814W location 1 (23)	1128 Secs (1128 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VLSB-D - F814W location 1 (23)	1128 Secs (1128 Secs) *[==>]*	***[1]***
3	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.07405, -0.20489	Prime + Parallel Group 3-4 in VLSB-D - F814W location 1 (23)	1128 Secs (1128 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VLSB-D - F814W location 1 (23)	1128 Secs (1128 Secs) *[==>]*	***[1]***
5	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.7579, -0.11866	Prime + Parallel Group 5-6 in VLSB-D - F814W location 1 (23)	1159 Secs (1159 Secs) *[==>]*	***[2]***
6	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 5-6 in VLSB-D - F814W location 1 (23)	1159 Secs (1159 Secs) *[==>]*	***[2]***
7	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.9060, -0.20489	Prime + Parallel Group 7-8 in VLSB-D - F814W location 1 (23)	1159 Secs (1159 Secs) *[==>]*	***[2]***
8	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 7-8 in VLSB-D - F814W location 1 (23)	1159 Secs (1159 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17528, VLSB-D - F814W location 2 (14), failed Tue Mar 04 20:00:37 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 13; BETWEEN 01-JAN-2025:00:00:00 AND 01-JUL-2025:00:00:00

Comments: F814W images, 2 exposures per orbit in custom dither-box pattern using POS-TARGs. Location 2 of 4 different POST TARGS for each of the 4 F814W-related visits. Small ORIENT range dictated by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. For VLSB-D, the elongated nature of this galaxy necessitates a smaller ORIENT range (very schedule-able) to maximize TRGB stars in the WFC1 chip. V=11.3 star located about 1'; from ACS field; can shift field slightly further N if problematic.

Fixed Targets

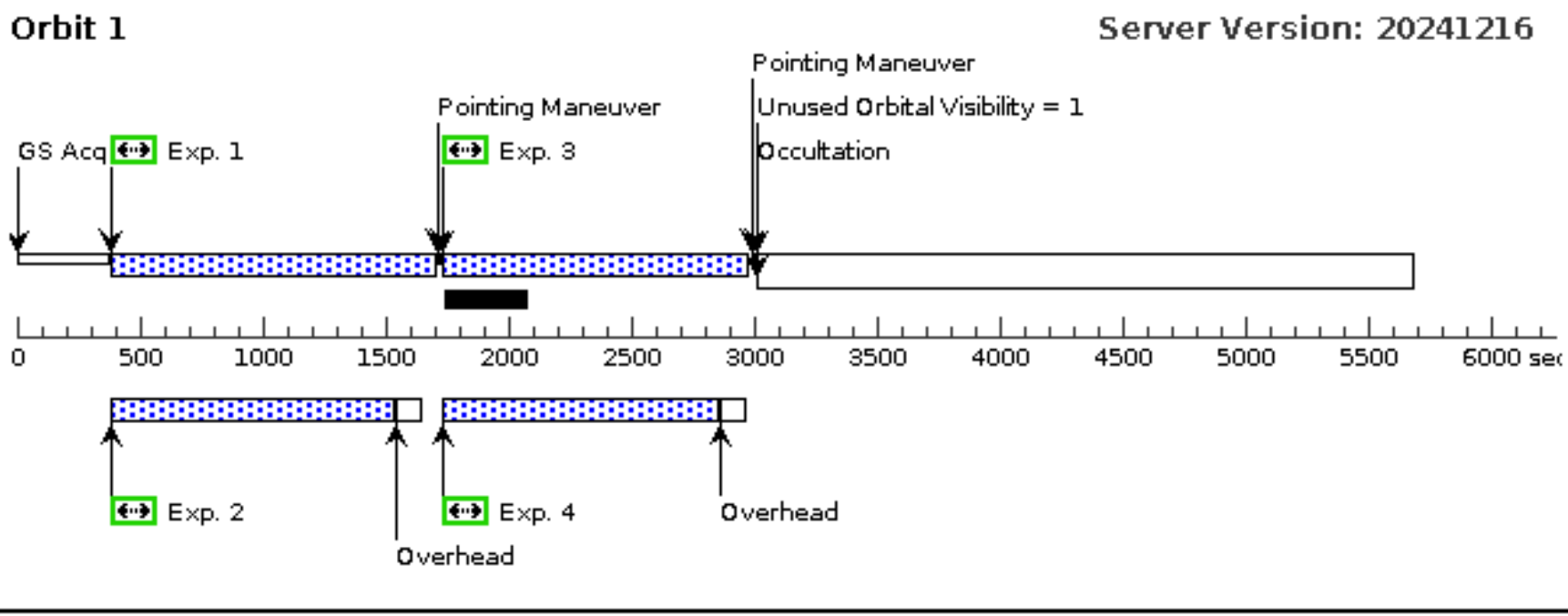
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	VLSB-D	RA: 12 24 41.6597 (186.1735821d) Dec: +13 31 15.04 (13.52084d) Equinox: J2000		V=29	Reference Frame: ICRS

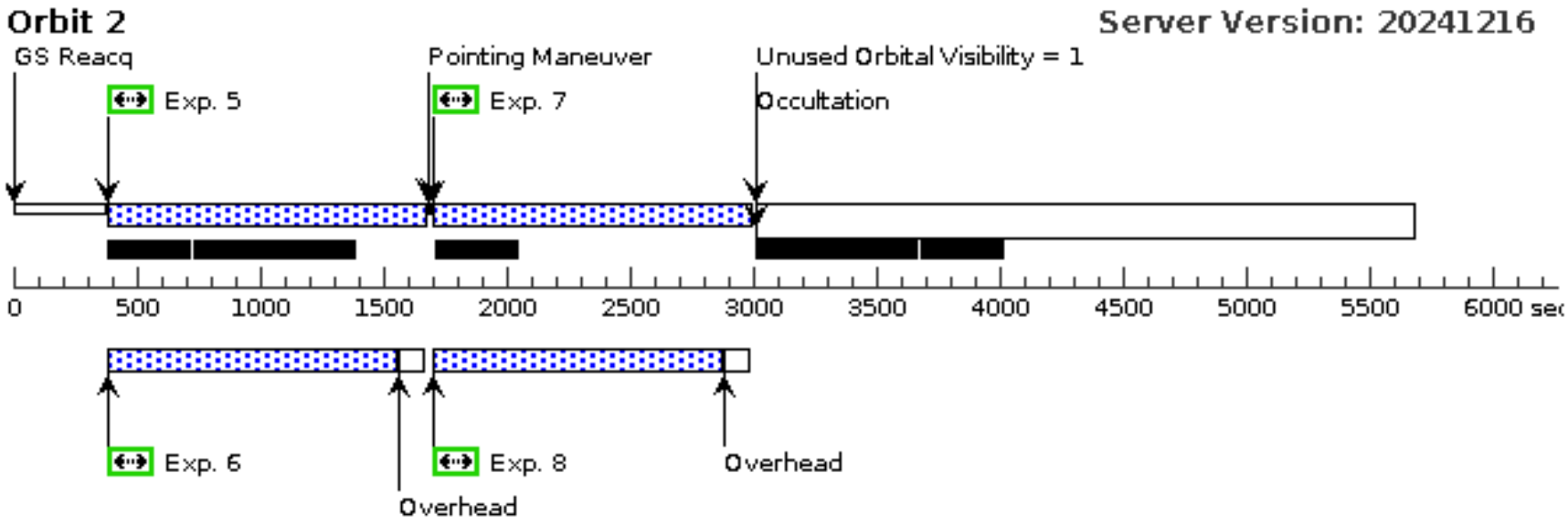
Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.98,0.00	Prime + Parallel Group 1-2 in VLSB-D - F814W location 2 (14)	1118 Secs (1118 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VLSB-D - F814W location 2 (14)	1118 Secs (1118 Secs) *[==>]*	***[1]***
3	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.8319, 0.08624	Prime + Parallel Group 3-4 in VLSB-D - F814W location 2 (14)	1118 Secs (1118 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VLSB-D - F814W location 2 (14)	1118 Secs (1118 Secs) *[==>]*	***[1]***
5	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.7579, -0.11866	Prime + Parallel Group 5-6 in VLSB-D - F814W location 2 (14)	1169 Secs (1169 Secs) *[==>]*	***[2]***
6	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 5-6 in VLSB-D - F814W location 2 (14)	1169 Secs (1169 Secs) *[==>]*	***[2]***
7	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.9060, -0.20489	Prime + Parallel Group 7-8 in VLSB-D - F814W location 2 (14)	1169 Secs (1169 Secs) *[==>]*	***[2]***
8	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 7-8 in VLSB-D - F814W location 2 (14)	1169 Secs (1169 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17528, VLSB-D - F814W location 3 (15), failed Tue Mar 04 20:00:37 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 13; BETWEEN 01-JAN-2025:00:00:00 AND 01-JUL-2025:00:00:00

Comments: F814W images, 2 exposures per orbit in custom dither-box pattern using POS-TARGs. Location 3 of 4 different POST TARGS for each of the 4 F814W-related visits. Small ORIENT range dictated by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. For VLSB-D, the eklongated nature of this galaxy necessitates a smaller ORIENT range (very schedule-able) to maximize TRGB stars in the WFC1 chip. V=11.3 star located about 1'; from ACS field; can shift field slightly further N if problematic.

Fixed Targets

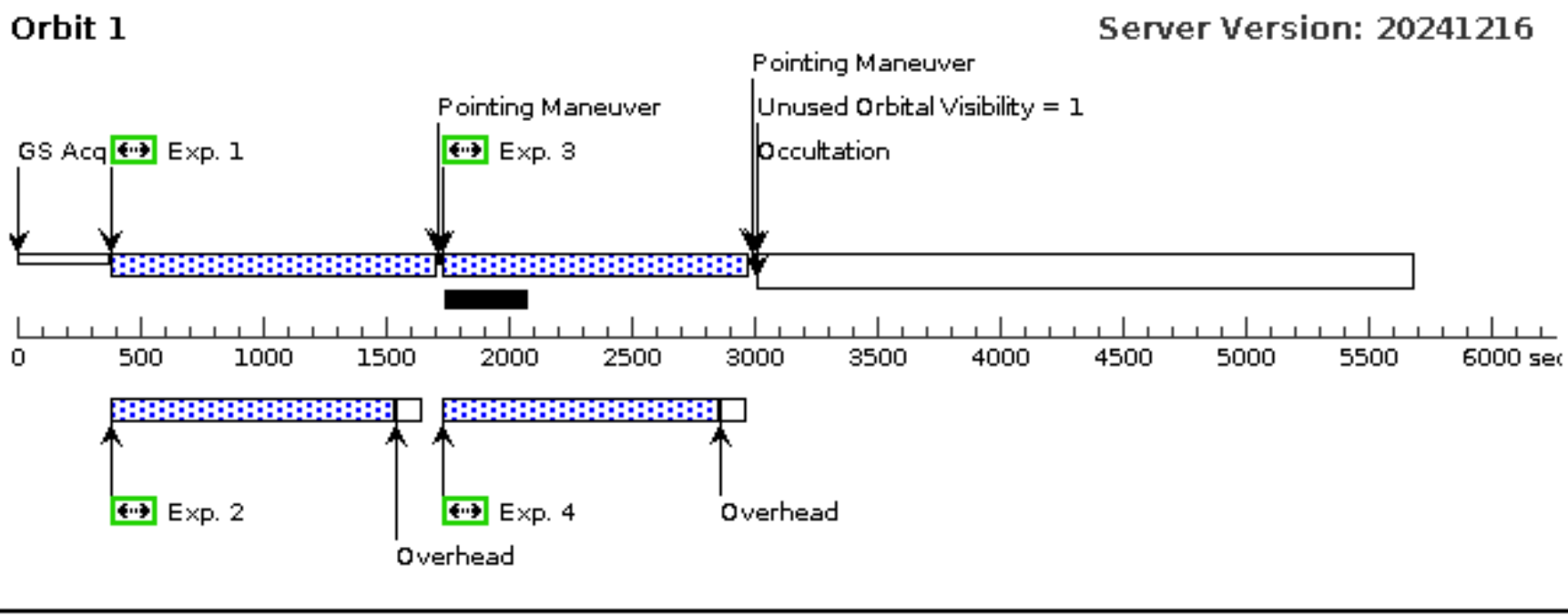
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	VLSB-D	RA: 12 24 41.6597 (186.1735821d) Dec: +13 31 15.04 (13.52084d) Equinox: J2000		V=29	Reference Frame: ICRS

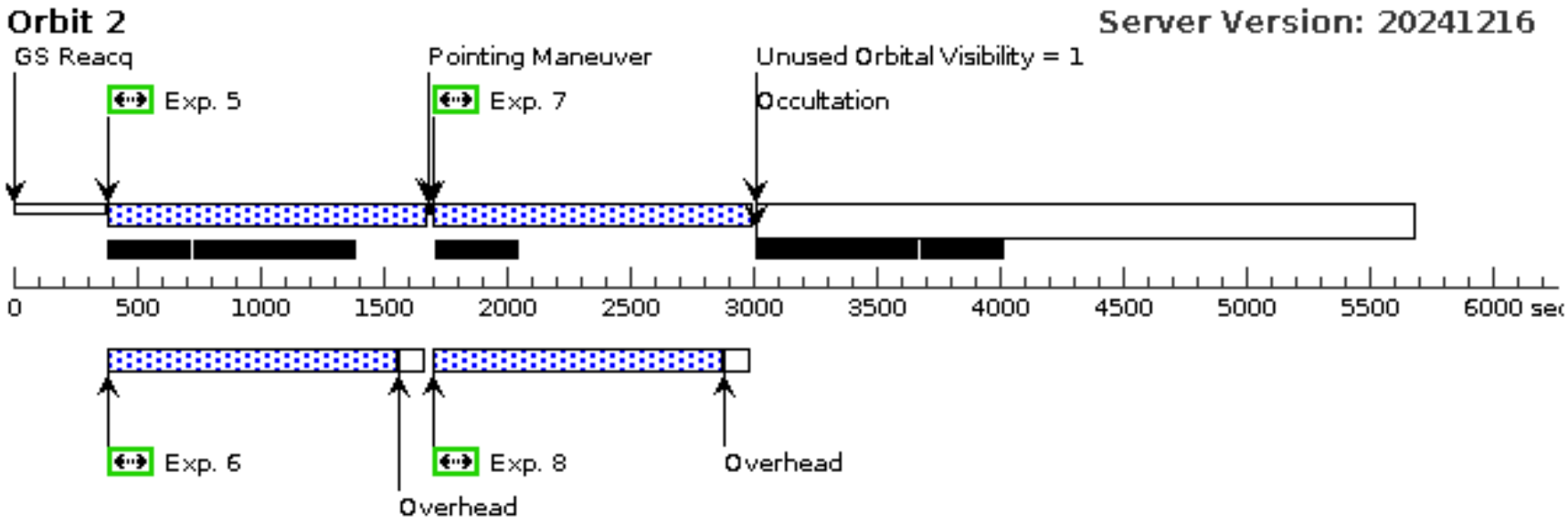
Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.98,-0.98	Prime + Parallel Group 1-2 in VLSB-D - F814W location 3 (15)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VLSB-D - F814W location 3 (15)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
3	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.8319,-0.89376	Prime + Parallel Group 3-4 in VLSB-D - F814W location 3 (15)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VLSB-D - F814W location 3 (15)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
5	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.7579,-1.0987	Prime + Parallel Group 5-6 in VLSB-D - F814W location 3 (15)	1169 Secs (1169 Secs) *[==>]*	 ***[2]***
6	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 5-6 in VLSB-D - F814W location 3 (15)	1169 Secs (1169 Secs) *[==>]*	 ***[2]***
7	VLSB-DB	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.9060,-1.1849	Prime + Parallel Group 7-8 in VLSB-D - F814W location 3 (15)	1169 Secs (1169 Secs) *[==>]*	 ***[2]***
8	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 7-8 in VLSB-D - F814W location 3 (15)	1169 Secs (1169 Secs) *[==>]*	 ***[2]***

Orbit Structure





Visit

Proposal 17528, VLSB-D - F814W/F475W location 4 (16), failed Tue Mar 04 20:00:37 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 13; BETWEEN 01-JAN-2025:00:00:00 AND 01-JUL-2025:00:00:00

Comments: F814W image, 2 exposures in first orbit in box pattern using POS-TARGS pattern. Location 4 of 4 different 20 pixel dithers). Small ORIENT range dictated by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. For VLSB-D, the elongated nature of this galaxy necessitates a smaller ORIENT range (very schedule-able) to maximize TRGB stars in the WFC1 chip. V=11.3 star located about 1'; from ACS field; can shift field slightly further N if problematic.
Second orbit has three shorter F475W images (again, using a custom POS-TARG pattern) to be used for studies of brighter objects (globular clusters). FLASH will be required on the F475W CPAR WFC3 images to reach the 20 e- level required to reduce CTE effects.

Fixed Targets

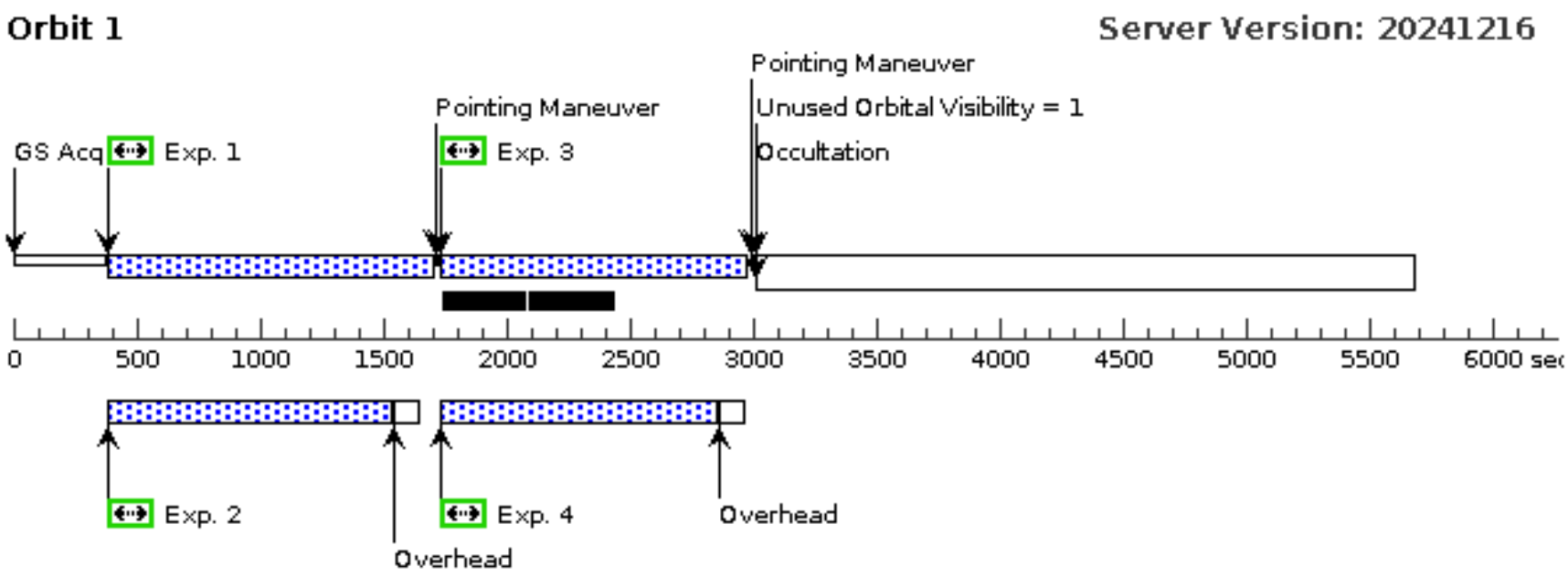
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	VLSB-D	RA: 12 24 41.6597 (186.1735821d) Dec: +13 31 15.04 (13.52084d) Equinox: J2000		V=29	Reference Frame: ICRS

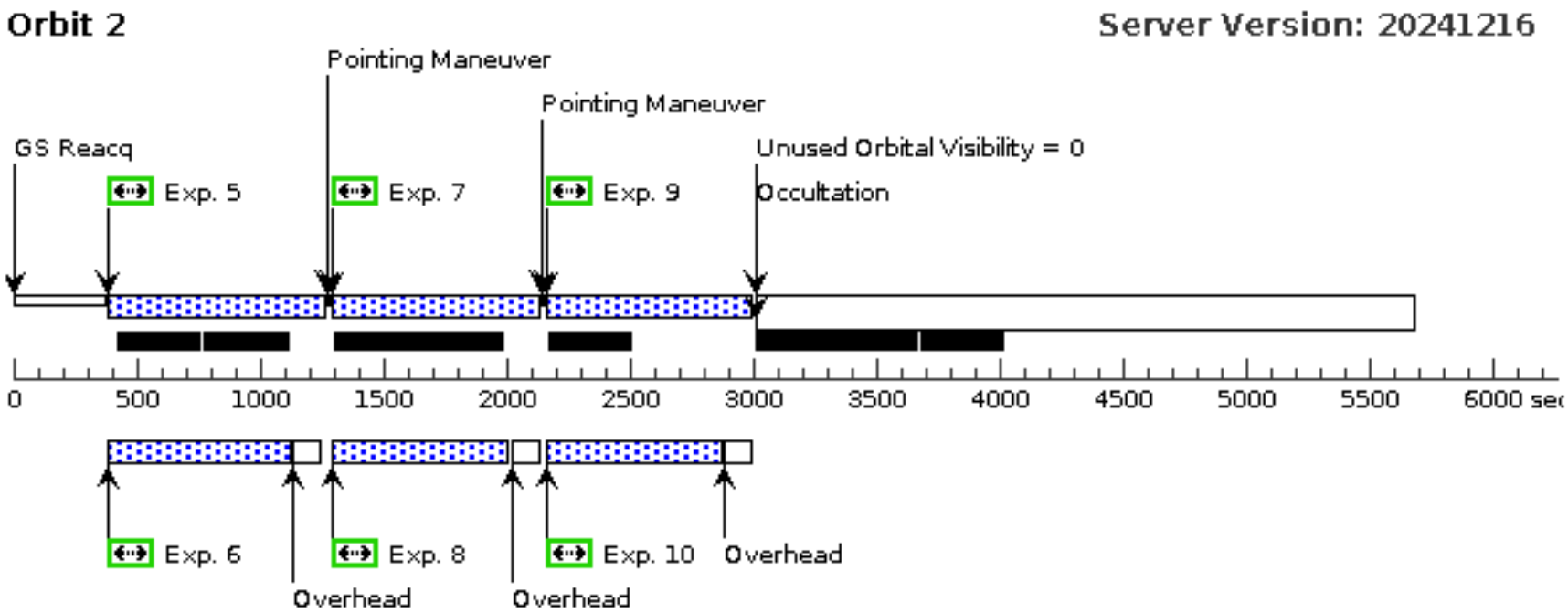
Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.00000, -0.98	Prime + Parallel Group 1-2 in VLSB-D - F814W/F475W location 4 (16)	1118 Secs (1118 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VLSB-D - F814W/F475W location 4 (16)	1118 Secs (1118 Secs) *[==>]*	***[1]***
3	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.14807, -0.89376	Prime + Parallel Group 3-4 in VLSB-D - F814W/F475W location 4 (16)	1118 Secs (1118 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VLSB-D - F814W/F475W location 4 (16)	1118 Secs (1118 Secs) *[==>]*	***[1]***
5	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F475W		POS TARG 0.00000, 0.00000	Prime + Parallel Group 5-6 in VLSB-D - F814W/F475W location 4 (16)	715 Secs (715 Secs) *[==>]*	***[2]***
6	WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F475W	FLASH=6		Prime + Parallel Group 5-6 in VLSB-D - F814W/F475W location 4 (16)	715 Secs (715 Secs) *[==>]*	***[2]***
7	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F475W		POS TARG 0.14807, 0.08624	Prime + Parallel Group 7-8 in VLSB-D - F814W/F475W location 4 (16)	715 Secs (715 Secs) *[==>]*	***[2]***
8	WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F475W	FLASH=6.		Prime + Parallel Group 7-8 in VLSB-D - F814W/F475W location 4 (16)	715 Secs (715 Secs) *[==>]*	***[2]***
9	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F475W		POS TARG 0.22215, -0.11866	Prime + Parallel Group 9-10 in VLSB-D - F814W/F475W location 4 (16)	711 Secs (711 Secs) *[==>]*	***[2]***
10	WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F475W	FLASH=6		Prime + Parallel Group 9-10 in VLSB-D - F814W/F475W location 4 (16)	711 Secs (711 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17528, VLSB-D - F814W location 3 (21), completed Tue Mar 04 20:00:37 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 13

Comments: F814W images, 2 exposures per orbit in custom dither-box pattern using POS-TARGs. Location 3 of 4 different POST TARGS for each of the 4 F814W-related visits. Small ORIENT range dictated by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. For VLSB-D, the eklongated nature of this galaxy necessitates a smaller ORIENT range (very schedule-able) to maximize TRGB stars in the WFC1 chip. V=11.3 star located about 1'; from ACS field; can shift field slightly further N if problematic.
Note- duplicate of Visit 15, which failed guidestar lock

Fixed Targets

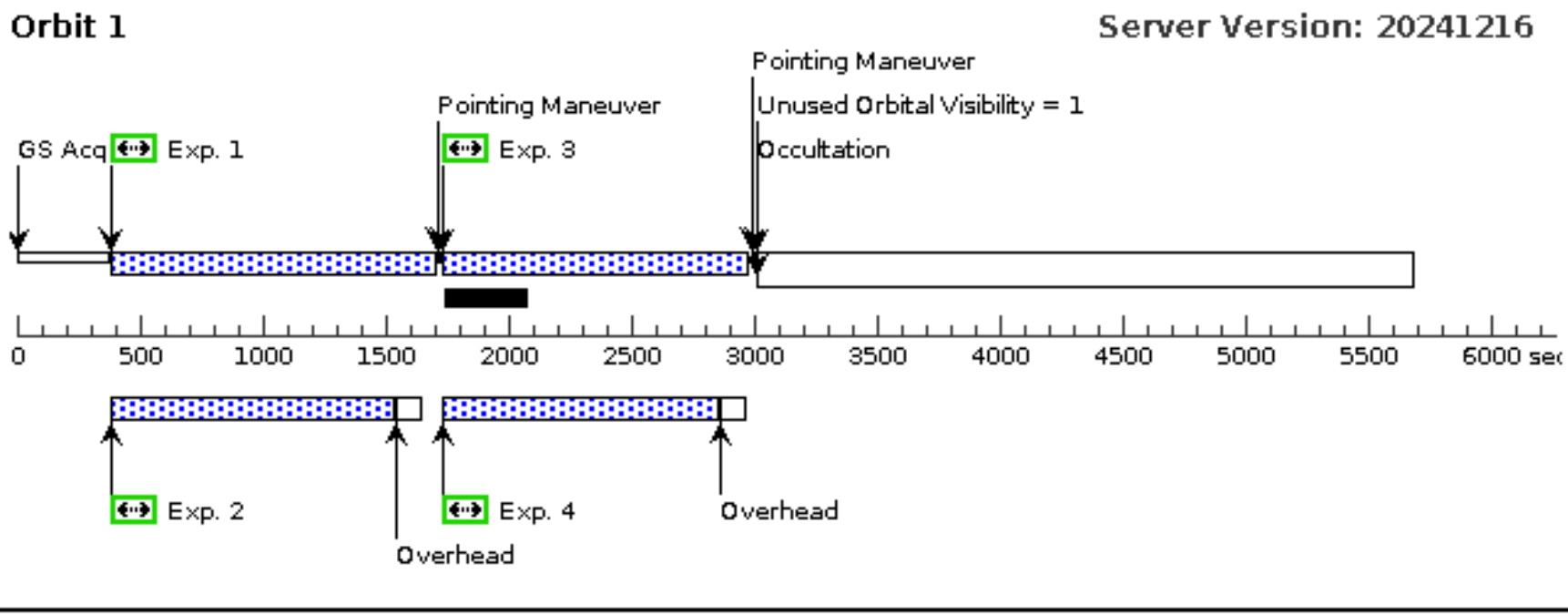
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	VLSB-D	RA: 12 24 41.6597 (186.1735821d) Dec: +13 31 15.04 (13.52084d) Equinox: J2000		V=29	Reference Frame: ICRS

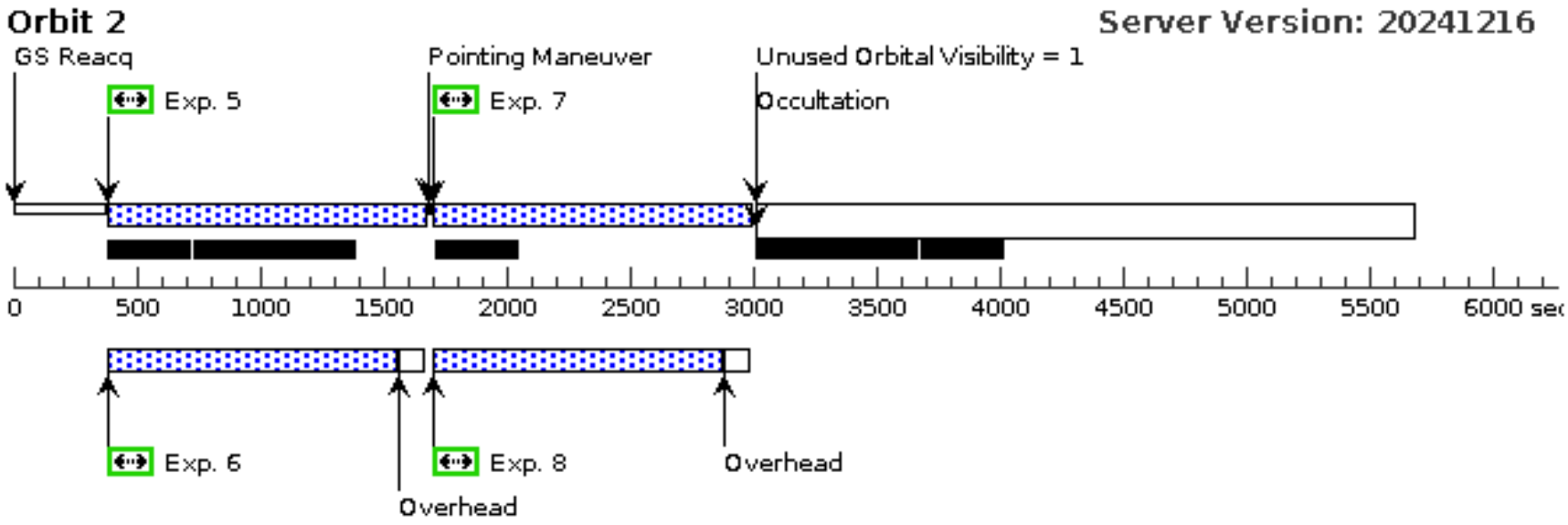
Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.98,-0.98	Prime + Parallel Group 1-2 in VLSB-D - F814W location 3 (21)	1118 Secs (1118 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VLSB-D - F814W location 3 (21)	1118 Secs (1118 Secs) *[==>]*	***[1]***
3	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.8319, -0.89376	Prime + Parallel Group 3-4 in VLSB-D - F814W location 3 (21)	1118 Secs (1118 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VLSB-D - F814W location 3 (21)	1118 Secs (1118 Secs) *[==>]*	***[1]***
5	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.7579, -1.0987	Prime + Parallel Group 5-6 in VLSB-D - F814W location 3 (21)	1169 Secs (1169 Secs) *[==>]*	***[2]***
6	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 5-6 in VLSB-D - F814W location 3 (21)	1169 Secs (1169 Secs) *[==>]*	***[2]***
7	VLSB-DB	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG -0.9060, -1.1849	Prime + Parallel Group 7-8 in VLSB-D - F814W location 3 (21)	1169 Secs (1169 Secs) *[==>]*	***[2]***
8	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 7-8 in VLSB-D - F814W location 3 (21)	1169 Secs (1169 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17528, VLSB-D - F814W/F475W location 4 (22), failed Tue Mar 04 20:00:37 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: ORIENT 275D TO 305 D

Comments: F814W image, 2 exposures in first orbit in box pattern using POS-TARGS pattern. Location 4 of 4 different 20 pixel dithers). Small ORIENT range dictated by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. For VLSB-D, the elongated nature of this galaxy necessitates a smaller ORIENT range (very schedule-able) to maximize TRGB stars in the WFC1 chip. V=11.3 star located about 1'; from ACS field; can shift field slightly further N if problematic.
Second orbit has three shorter F475W images (again, using a custom POS-TARG pattern) to be used for studies of brighter objects (globular clusters). FLASH will be required on the F475W CPAR WFC3 images to reach the 20 e- level required to reduce CTE effects.
NOTE: Visit 22 is a duplicate of the failed VIsit 16 - in order to aid rescheduling schedule, expanded ORIENT range to 275-305

Fixed Targets

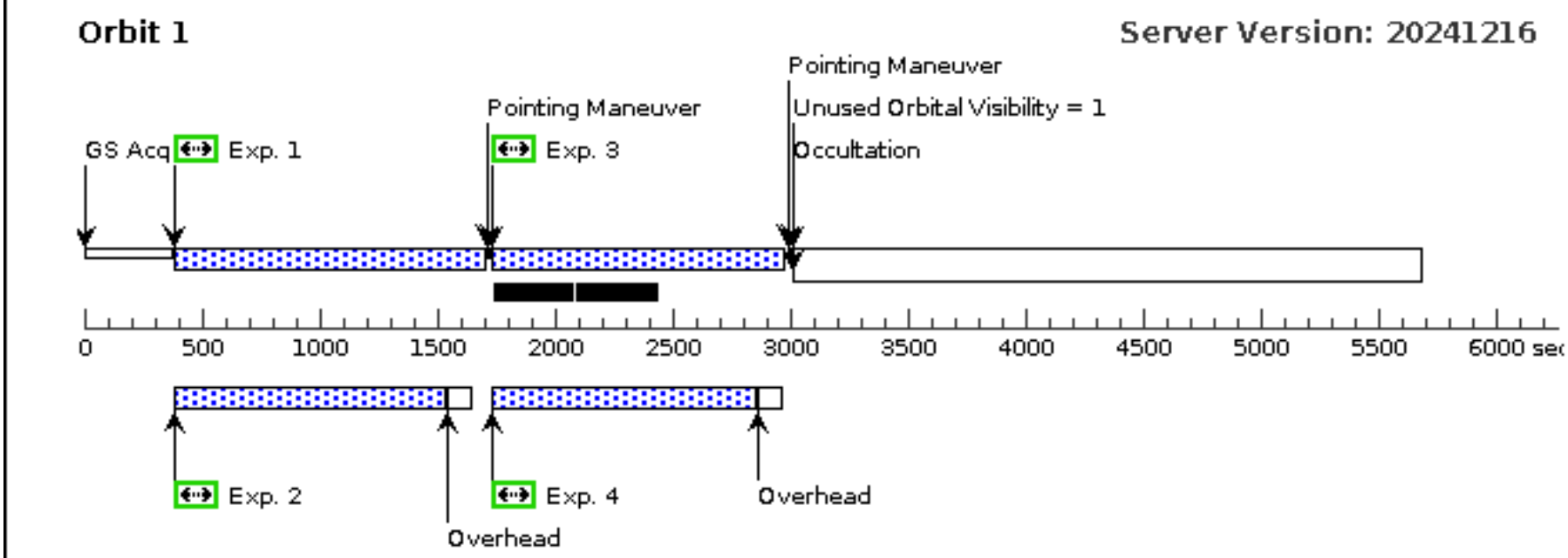
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	VLSB-D	RA: 12 24 41.6597 (186.1735821d) Dec: +13 31 15.04 (13.52084d) Equinox: J2000		V=29	Reference Frame: ICRS

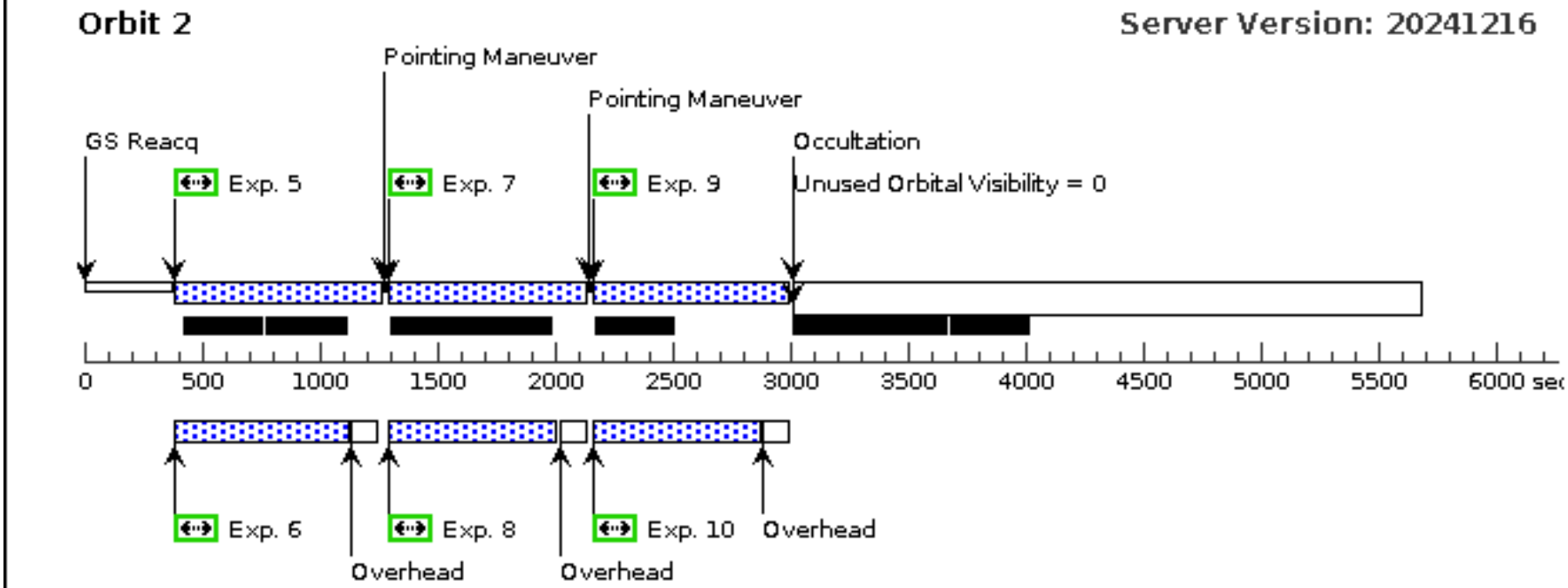
Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.00000, -0.98	Prime + Parallel Group 1-2 in VLSB-D - F814W/F475W location 4 (22)	1118 Secs (1118 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VLSB-D - F814W/F475W location 4 (22)	1118 Secs (1118 Secs) *[==>]*	***[1]***
3	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.14807, -0.89376	Prime + Parallel Group 3-4 in VLSB-D - F814W/F475W location 4 (22)	1118 Secs (1118 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VLSB-D - F814W/F475W location 4 (22)	1118 Secs (1118 Secs) *[==>]*	***[1]***
5	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F475W		POS TARG 0.00000, 0.00000	Prime + Parallel Group 5-6 in VLSB-D - F814W/F475W location 4 (22)	715 Secs (715 Secs) *[==>]*	***[2]***
6	WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F475W	FLASH=6		Prime + Parallel Group 5-6 in VLSB-D - F814W/F475W location 4 (22)	715 Secs (715 Secs) *[==>]*	***[2]***
7	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F475W		POS TARG 0.14807, 0.08624	Prime + Parallel Group 7-8 in VLSB-D - F814W/F475W location 4 (22)	715 Secs (715 Secs) *[==>]*	***[2]***
8	WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F475W	FLASH=6.		Prime + Parallel Group 7-8 in VLSB-D - F814W/F475W location 4 (22)	715 Secs (715 Secs) *[==>]*	***[2]***
9	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F475W		POS TARG 0.22215, -0.11866	Prime + Parallel Group 9-10 in VLSB-D - F814W/F475W location 4 (22)	711 Secs (711 Secs) *[==>]*	***[2]***
10	WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F475W	FLASH=6		Prime + Parallel Group 9-10 in VLSB-D - F814W/F475W location 4 (22)	711 Secs (711 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17528, VLSB-D - F814W location 4 (24) Tue Mar 04 20:00:37 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: ORIENT 160D TO 169 D

Comments: F814W image, 2 exposures in first orbit in box pattern using POS-TARGS pattern. Location 4 of 4 different 20 pixel dithers). Small ORIENT range dictated by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. For VLSB-D, the elongated nature of this galaxy necessitates a smaller ORIENT range (very schedule-able) to maximize TRGB stars in the WFC1 chip.
NOTE: V=11.3 star located less than 1' from ACS field.\ -- if any issue we may need to consider a different ORIENT.

NOTE: Visit 24 is a duplicate of the failed F814W orbit (2 exposures= first orbit) from Visit 22 - in order to aid rescheduling, changed ORIENT range based on availability for mid April 2025 observationsi Maintains center of galaxy at some location/chip as previous observations.

Fixed Targets

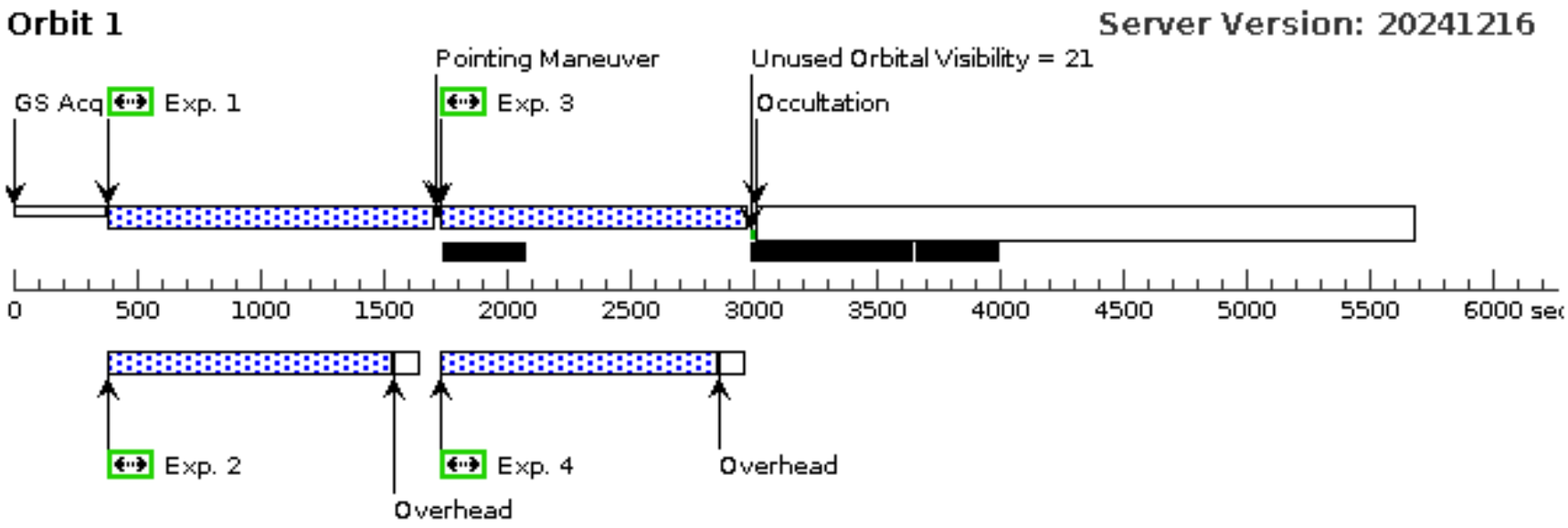
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	VLSB-D	RA: 12 24 41.6597 (186.1735821d) Dec: +13 31 15.04 (13.52084d) Equinox: J2000		V=29	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.00000, -0.98	Prime + Parallel Group 1-2 in VLSB-D - F814W location 4 (24)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VLSB-D - F814W location 4 (24)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
3	VLSB-D	(4) VLSB-D	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.14807, -0.89376	Prime + Parallel Group 3-4 in VLSB-D - F814W location 4 (24)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VLSB-D - F814W location 4 (24)	1118 Secs (1118 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 17528, VCC1448 - F814W location 1 (17), completed Tue Mar 04 20:00:37 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: ORIENT 260D TO 285 D

Comments: F814W images, 2 exposures per orbit in custom dither-box pattern using POS-TARGs. Location 1 of 4 different POST TARGS for each of the 4 F814W-related visits. Small ORIENT range dictated by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars (some V=15 stars near ACS FOV), and (c) placement of parallel WFC3 field to maximize scientific yield.VCC 1448 is one of the largest galaxies in our sample; we have offset the center of the galaxy slightly W of the WFC aperture center to maximize the amount of the galaxy in the ACS FOV, whilst still keeping the nucleus and the inner ~20" from the chip gap. We have chosen a restricted ORIENT to be sure the galaxy core does not approach the chip gap, but this restricted range does NOT compromise scheduleability, which remained unchanged. All scheduleable dates within requested ORIENT range fall with zodiacal light values MU_V>22.2 (using the ACS ETC to calculate), which will maximize the S/N of faint sources on the deep images.

Fixed Targets

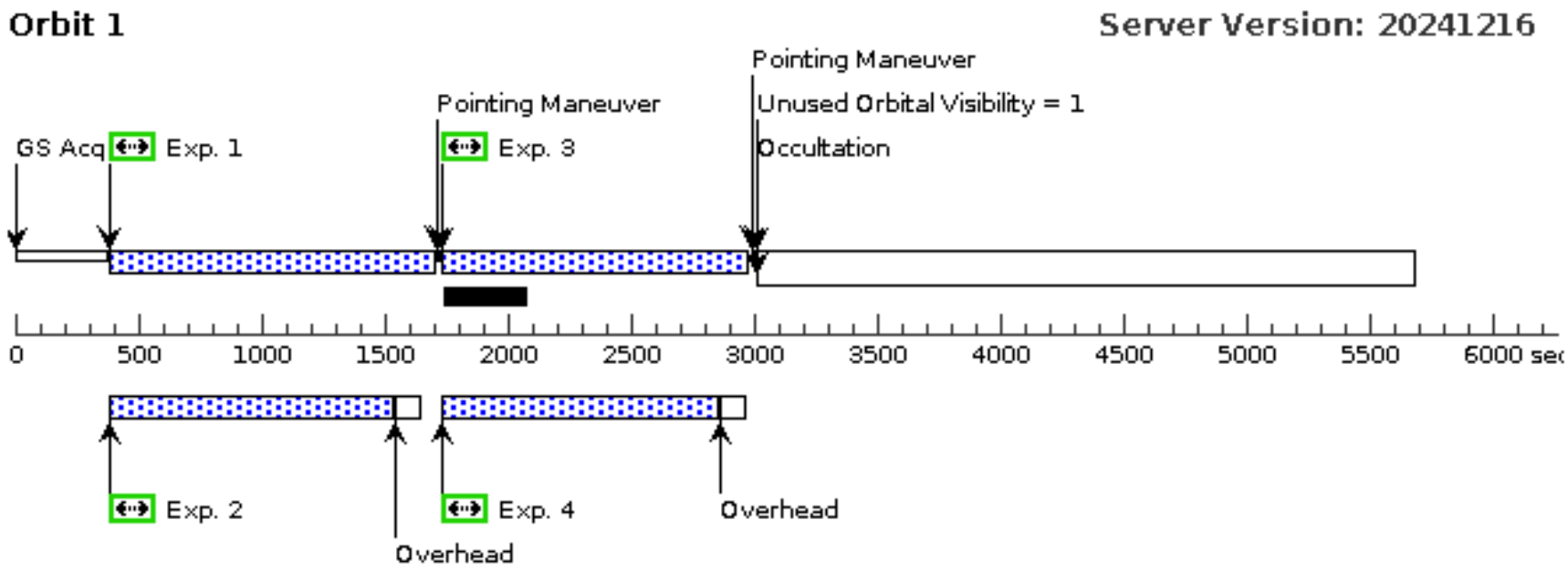
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	VCC1448	RA: 12 32 40.5524 (188.1689683d) Dec: +12 46 16.12 (12.77114d) Equinox: J2000		V=29	Reference Frame: ICRS

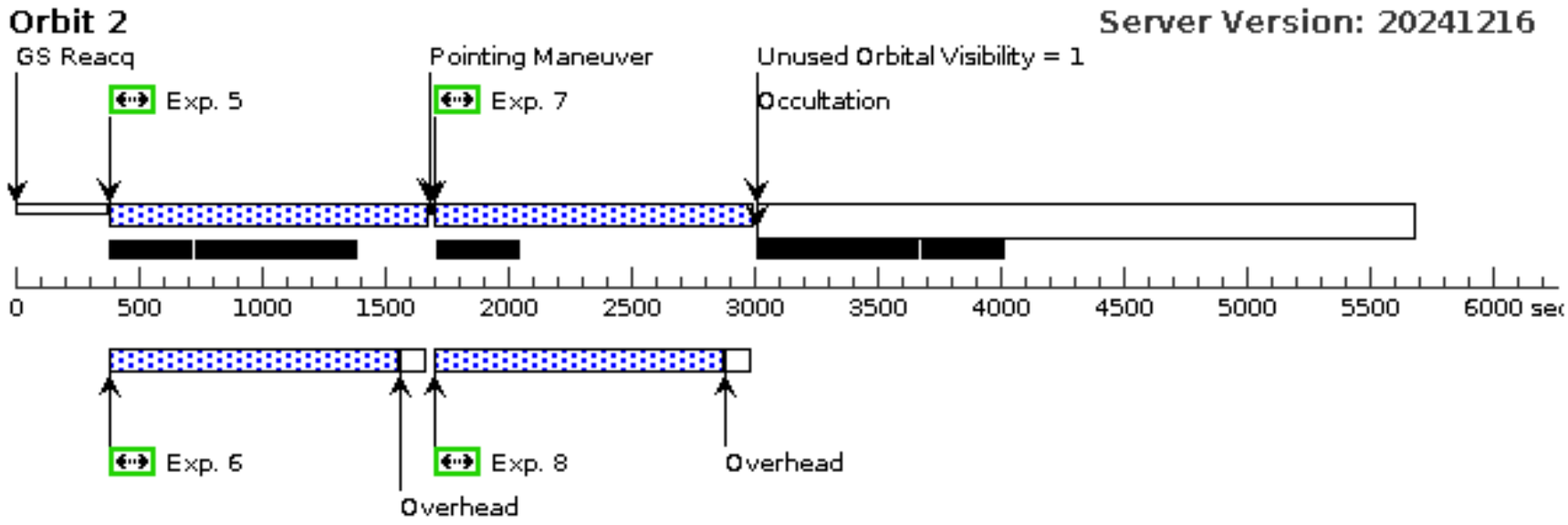
Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VCC1448	(5) VCC1448	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.00,0.00	Prime + Parallel Group 1-2 in VCC1448 - F814W location 1 (17)	1118 Secs (1118 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VCC1448 - F814W location 1 (17)	1118 Secs (1118 Secs) *[==>]*	***[1]***
3	VCC1448	(5) VCC1448	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.14807, 0.08624	Prime + Parallel Group 3-4 in VCC1448 - F814W location 1 (17)	1118 Secs (1118 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VCC1448 - F814W location 1 (17)	1118 Secs (1118 Secs) *[==>]*	***[1]***
5	VCC1448	(5) VCC1448	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.22215, -0.11866	Prime + Parallel Group 5-6 in VCC1448 - F814W location 1 (17)	1169 Secs (1169 Secs) *[==>]*	***[2]***
6	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 5-6 in VCC1448 - F814W location 1 (17)	1169 Secs (1169 Secs) *[==>]*	***[2]***
7	VCC1448	(5) VCC1448	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.07405, -0.20489	Prime + Parallel Group 7-8 in VCC1448 - F814W location 1 (17)	1169 Secs (1169 Secs) *[==>]*	***[2]***
8	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 7-8 in VCC1448 - F814W location 1 (17)	1169 Secs (1169 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17528, VCC1448 - F814W location 3 (19), completed Tue Mar 04 20:00:37 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 17

Comments: F814W images, 2 exposures per orbit in custom dither-box pattern using POS-TARGs. Location 1 of 4 different POST TARGS for each of the 4 F814W-related visits. Small ORIENT range dictated by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield.VCC 1448 is one of the largesst galaxies in our sample; we have offset the center of the galaxy slightly E of the WFC aperture center to maximize the amount of the galaxy in the ACS FOV, whilst still keeping the nucleus and the inner ~20" from the chip gap. We have chosen a restricted ORIENT to be sure the galaxy core does not approach the chip gap, but this restricted range does NOT compromise scheduleability, which remained unchanged. All scheduleable dates within requested ORIENT range fall with zodiacal light values MU_V>22.2 (using the ACS ETC to calculate), which will maximize the S/N of faint sources on the deep images.

Fixed Targets

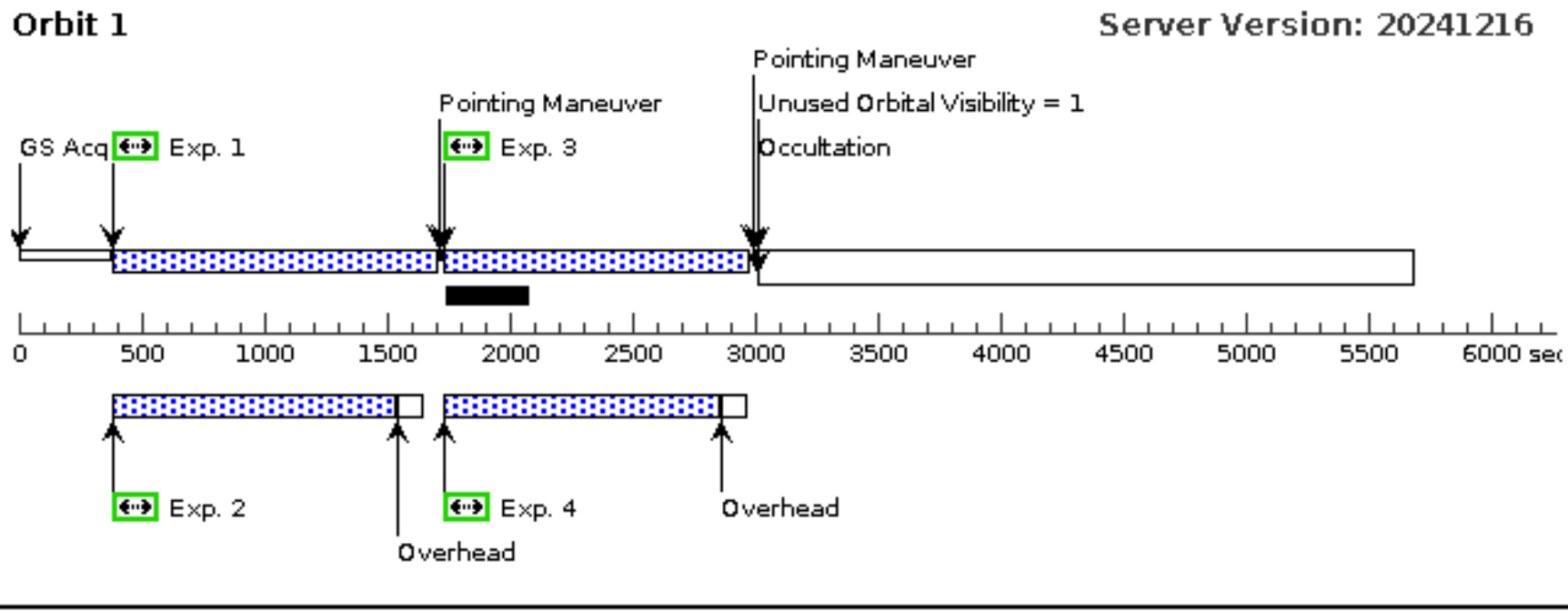
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	VCC1448	RA: 12 32 40.5524 (188.1689683d) Dec: +12 46 16.12 (12.77114d) Equinox: J2000		V=29	Reference Frame: ICRS

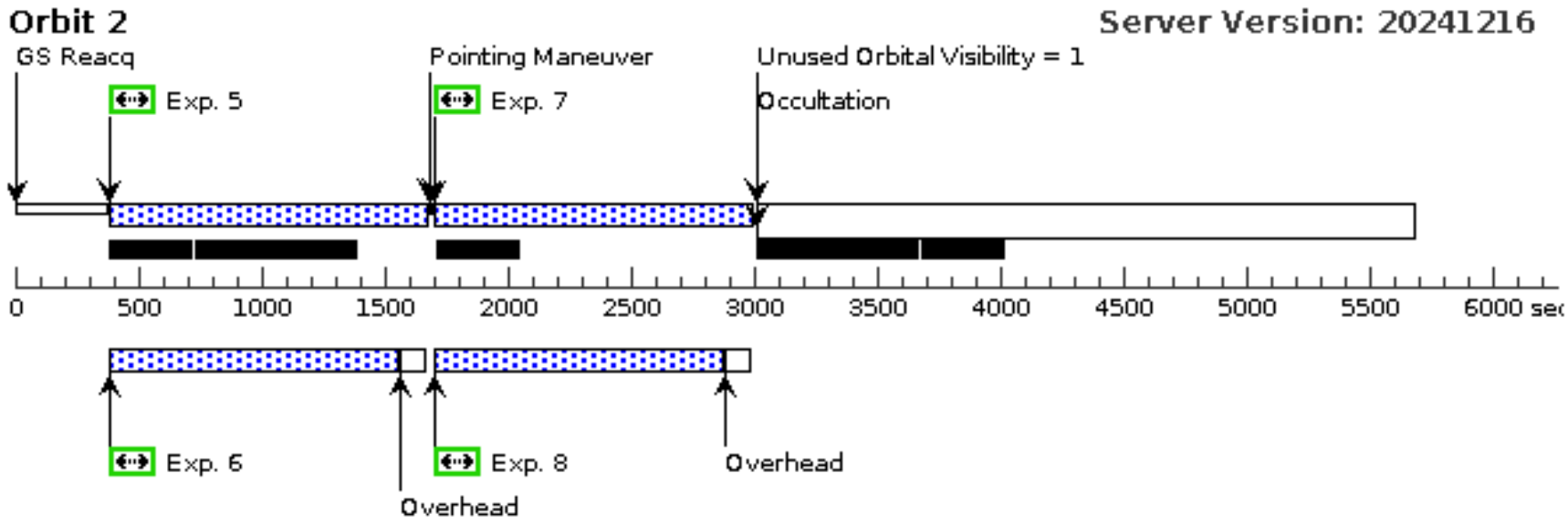
Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VCC1448	(5) VCC1448	ACS/WFC, ACCUM, WFC	F814W		POS TARG -0.98,-0.98	Prime + Parallel Group 1-2 in VCC1448 - F814W location 3 (19)	1118 Secs (1118 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VCC1448 - F814W location 3 (19)	1118 Secs (1118 Secs) *[==>]*	***[1]***
3	VCC1448	(5) VCC1448	ACS/WFC, ACCUM, WFC	F814W		POS TARG -0.8319,-0.89376	Prime + Parallel Group 3-4 in VCC1448 - F814W location 3 (19)	1118 Secs (1118 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VCC1448 - F814W location 3 (19)	1118 Secs (1118 Secs) *[==>]*	***[1]***
5	VCC1448	(5) VCC1448	ACS/WFC, ACCUM, WFC	F814W		POS TARG -0.7579,-1.0987	Prime + Parallel Group 5-6 in VCC1448 - F814W location 3 (19)	1169 Secs (1169 Secs) *[==>]*	***[2]***
6	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 5-6 in VCC1448 - F814W location 3 (19)	1169 Secs (1169 Secs) *[==>]*	***[2]***
7	VCC1448	(5) VCC1448	ACS/WFC, ACCUM, WFC	F814W		POS TARG -0.9060,-1.1849	Prime + Parallel Group 7-8 in VCC1448 - F814W location 3 (19)	1169 Secs (1169 Secs) *[==>]*	***[2]***
8	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 7-8 in VCC1448 - F814W location 3 (19)	1169 Secs (1169 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17528, VCC1448 - F814W location 2 (18), completed Tue Mar 04 20:00:37 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 17

Comments: F814W images, 2 exposures per orbit in custom dither-box pattern using POS-TARGs. Location 1 of 4 different POST TARGS for each of the 4 F814W-related visits. Small ORIENT range dictated by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. VCC 1448 is one of the largesst galaxies in our sample; we have offset the center of the galaxy slightly E of the WFC aperture center to maximize the amount of the galaxy in the ACS FOV, whilst still keeping the nucleus and the inner ~20" from the chip gap. We have chosen a restricted ORIENT to be sure the gtalaxy core does not approach the chip gap, but this restricted range does NOT compromise scheduleability, which remained unchanged. All scheduleable dates within requested ORIENT range fall with zodiacal light values MU_V>22.2 (using the ACS ETC to calculate), which will maximize the S/N of faint sources on the deep images.

Fixed Targets

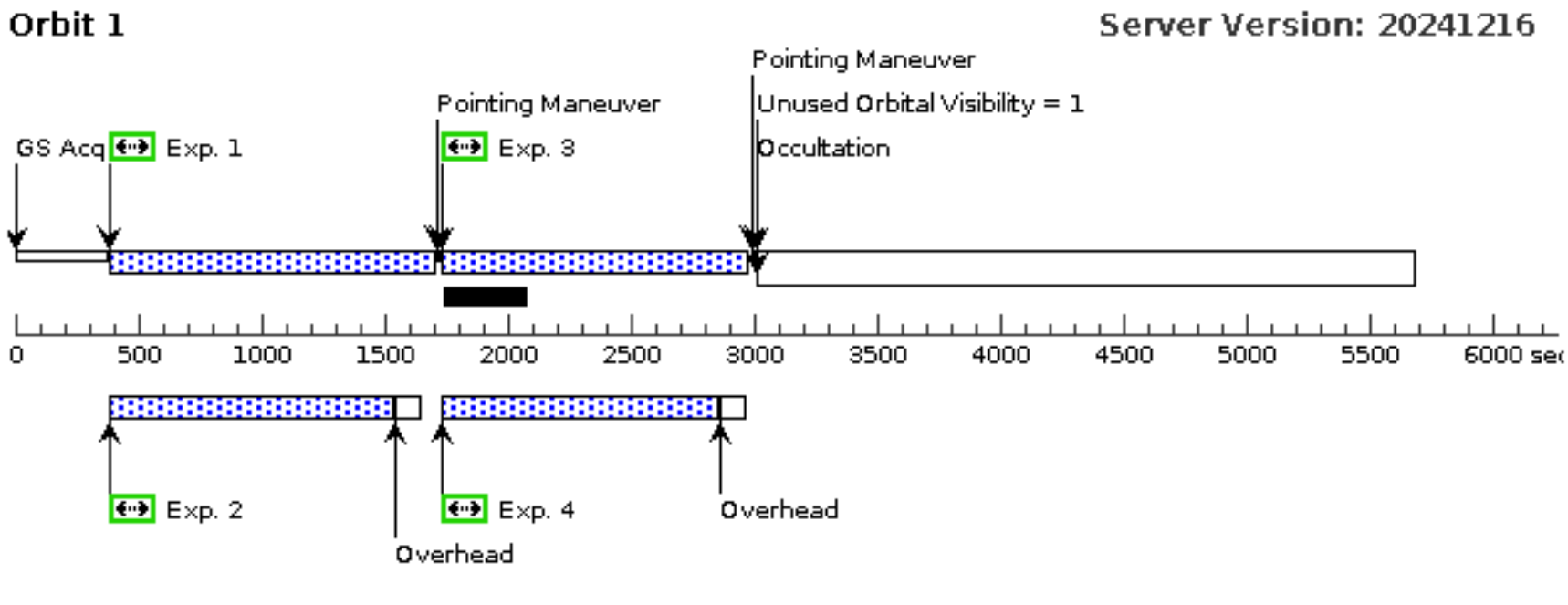
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	VCC1448	RA: 12 32 40.5524 (188.1689683d) Dec: +12 46 16.12 (12.77114d) Equinox: J2000		V=29	Reference Frame: ICRS

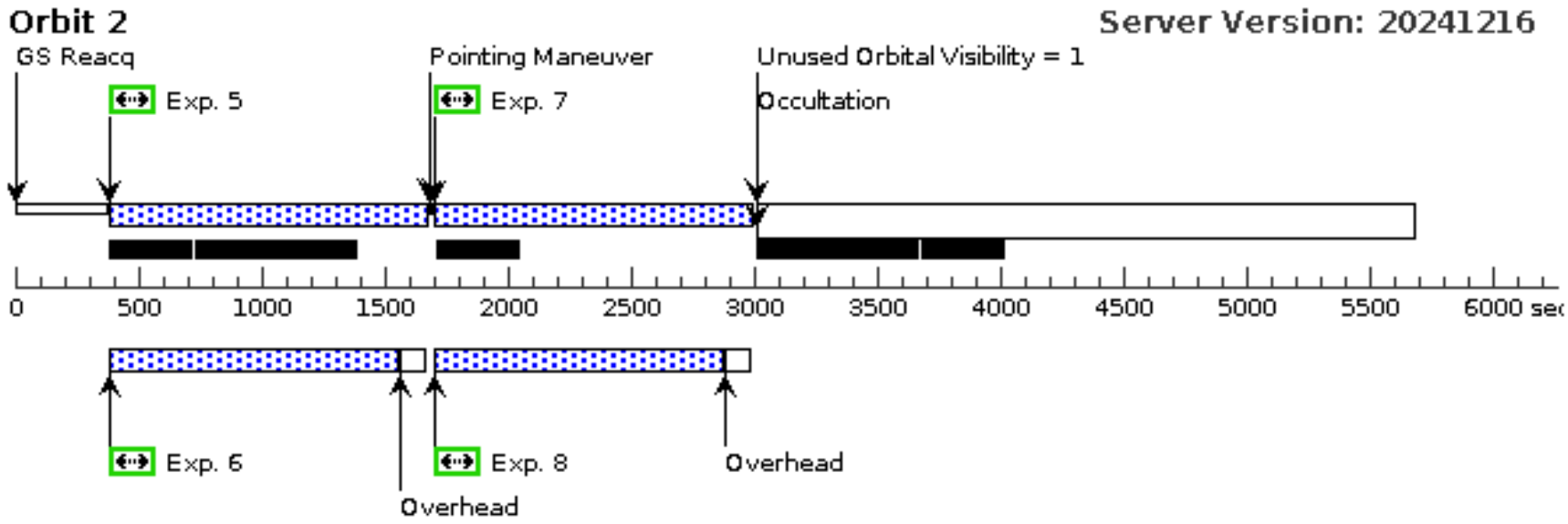
Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VCC1448	(5) VCC1448	ACS/WFC, ACCUM, WFC	F814W		POS TARG -0.98,0.00	Prime + Parallel Group 1-2 in VCC1448 - F814W location 2 (18)	1118 Secs (1118 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VCC1448 - F814W location 2 (18)	1118 Secs (1118 Secs) *[==>]*	***[1]***
3	VCC1448	(5) VCC1448	ACS/WFC, ACCUM, WFC	F814W		POS TARG -0.8319,0.08624	Prime + Parallel Group 3-4 in VCC1448 - F814W location 2 (18)	1118 Secs (1118 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VCC1448 - F814W location 2 (18)	1118 Secs (1118 Secs) *[==>]*	***[1]***
5	VCC1448	(5) VCC1448	ACS/WFC, ACCUM, WFC	F814W		POS TARG -0.7579,-0.11866	Prime + Parallel Group 5-6 in VCC1448 - F814W location 2 (18)	1169 Secs (1169 Secs) *[==>]*	***[2]***
6	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 5-6 in VCC1448 - F814W location 2 (18)	1169 Secs (1169 Secs) *[==>]*	***[2]***
7	VCC1448D	(5) VCC1448	ACS/WFC, ACCUM, WFC	F814W		POS TARG -0.9060,-0.20489	Prime + Parallel Group 7-8 in VCC1448 - F814W location 2 (18)	1169 Secs (1169 Secs) *[==>]*	***[2]***
8	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 7-8 in VCC1448 - F814W location 2 (18)	1169 Secs (1169 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17528, VCC1448 - F814W/F475W location 4 (20), completed Tue Mar 04 20:00:37 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SAME ORIENT AS 17

Comments: F814W image, 2 exposures in first orbit in box pattern using POS-TARGS pattern. Location 4 of 4 different 20 pixel dithers). Small ORIENT range dictated by (a) maximizing schedule-able roll angles, (b) avoidance of bright stars, and (c) placement of parallel WFC3 field to maximize scientific yield. VCC 1448 is one of the largest galaxies in our sample; we have offset the center of the galaxy slightly E of the WFC aperture center to maximize the amount of the galaxy in the ACS FOV, whilst still keeping the nucleus and the inner ~20" from the chip gap. We have chosen a restricted ORIENT to be sure the galaxy core does not approach the chip gap. Small ORIENT range does not significantly change schedulability.
Second orbit has three shorter F475W images (again, using a custom POS-TARG pattern) to be used for studies of brighter objects (globular clusters). FLASH will be required on the F475W CPAR WFC3 images to reach the 20 e- level required to reduce CTE effects.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	VCC1448	RA: 12 32 40.5524 (188.1689683d) Dec: +12 46 16.12 (12.77114d) Equinox: J2000		V=29	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[LSB]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	VCC1448	(5) VCC1448	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.00000, -0.98	Prime + Parallel Group 1-2 in VCC1448 - F814W/F475W location 4 (20)	1118 Secs (1118 Secs) *[==>]*	***[1]***
2	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 1-2 in VCC1448 - F814W/F475W location 4 (20)	1118 Secs (1118 Secs) *[==>]*	***[1]***
3	VCC1448	(5) VCC1448	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.14807, -0.89376	Prime + Parallel Group 3-4 in VCC1448 - F814W/F475W location 4 (20)	1118 Secs (1118 Secs) *[==>]*	***[1]***
4	Parallel WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F814W			Prime + Parallel Group 3-4 in VCC1448 - F814W/F475W location 4 (20)	1118 Secs (1118 Secs) *[==>]*	***[1]***
5	VCC1448	(5) VCC1448	ACS/WFC, ACCUM, WFC	F475W		POS TARG 0.00000, 0.00000	Prime + Parallel Group 5-6 in VCC1448 - F814W/F475W location 4 (20)	715 Secs (715 Secs) *[==>]*	***[2]***
6	WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F475W	FLASH=6.		Prime + Parallel Group 5-6 in VCC1448 - F814W/F475W location 4 (20)	715 Secs (715 Secs) *[==>]*	***[2]***
7	VCC1448	(5) VCC1448	ACS/WFC, ACCUM, WFC	F475W		POS TARG 0.14807, 0.08624	Prime + Parallel Group 7-8 in VCC1448 - F814W/F475W location 4 (20)	715 Secs (715 Secs) *[==>]*	***[2]***
8	WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F475W	FLASH=6.		Prime + Parallel Group 7-8 in VCC1448 - F814W/F475W location 4 (20)	715 Secs (715 Secs) *[==>]*	***[2]***
9	VCC1448	(5) VCC1448	ACS/WFC, ACCUM, WFC	F475W		POS TARG 0.22215, -0.11866	Prime + Parallel Group 9-10 in VCC1448 - F814W/F475W location 4 (20)	711 Secs (711 Secs) *[==>]*	***[2]***
10	WFC3 background	ANY	WFC3/UVIS, ACCUM, UVIS	F475W	FLASH=6.		Prime + Parallel Group 9-10 in VCC1448 - F814W/F475W location 4 (20)	711 Secs (711 Secs) *[==>]*	***[2]***

Orbit Structure