17073 - AGN variability at cosmic dawn: a census of the youngest supermassive black holes

Cycle: 30, 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) HUDF-DEEP-WFC3 ANY	ACS/WFC WFC3/IR	2	15-Aug-2023 10:00:37.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
02	(1) HUDF-DEEP-WFC3 ANY	ACS/WFC WFC3/IR	2	15-Aug-2023 10:00:38.0	yes
03	(1) HUDF-DEEP-WFC3 ANY	ACS/WFC WFC3/IR	2	15-Aug-2023 10:00:39.0	yes
04	(1) HUDF-DEEP-WFC3 ANY	ACS/WFC WFC3/IR	2	15-Aug-2023 10:00:40.0	yes
05	(1) HUDF-DEEP-WFC3 ANY	ACS/WFC WFC3/IR	2	15-Aug-2023 10:00:41.0	yes
06	(1) HUDF-DEEP-WFC3 ANY	ACS/WFC WFC3/IR	2	15-Aug-2023 10:00:41.0	yes
07	(1) HUDF-DEEP-WFC3 ANY	ACS/WFC WFC3/IR	2	15-Aug-2023 10:00:42.0	yes
08	(1) HUDF-DEEP-WFC3 ANY	ACS/WFC WFC3/IR	2	15-Aug-2023 10:00:43.0	yes
09	(1) HUDF-DEEP-WFC3 ANY	ACS/WFC WFC3/IR	2	15-Aug-2023 10:00:44.0	yes
10	(1) HUDF-DEEP-WFC3 ANY	ACS/WFC WFC3/IR	2	15-Aug-2023 10:00:45.0	yes
11	(1) HUDF-DEEP-WFC3 ANY	ACS/WFC WFC3/IR	2	15-Aug-2023 10:00:46.0	yes
12	(1) HUDF-DEEP-WFC3 ANY	ACS/WFC WFC3/IR	2	15-Aug-2023 10:00:47.0	yes
13	(1) HUDF-DEEP-WFC3 ANY	ACS/WFC WFC3/IR	2	15-Aug-2023 10:00:48.0	yes
14	(1) HUDF-DEEP-WFC3 ANY	ACS/WFC WFC3/IR	2	15-Aug-2023 10:00:49.0	yes
15	(1) HUDF-DEEP-WFC3 ANY	ACS/WFC WFC3/IR	2	15-Aug-2023 10:00:50.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
Z1	(1) HUDF-DEEP-WFC3 ANY	ACS/WFC WFC3/IR	2	15-Aug-2023 10:00:51.0	yes

32 Total Orbits Used

ABSTRACT

The origin and growth of the first supermassive black holes (SMBH) has become one of the most pressing unsolved problems in astrophysics. SMBHs are present in the nuclei of most massive galaxies and impact many aspects of galaxy evolution, including feedback, morphological transformations, and cosmic reionization. Several scenarios can explain how the seeds of SMBHs may have been planted, but without accurate and direct observational estimates of their comoving number density, it is hard to distinguish between them.

Under popular formation scenarios, SMBHs undergo their period of most rapid growth at high-redshift, beyond z=6. However, at this distance only the most luminous quasars have been identified, which reveal a very biased picture of the universe. AGN at intermediate luminosities (M_UV=-21 to -18, hereafter IL-AGN) must also be present, and are probably growing rapidly at z~6-10. These objects go undetected in current deep NIR imaging surveys, where they masquerade instead as star-forming galaxies. We argue here that the most reliable, yet unexplored, way to test all these highest-redshift systems for AGN activity is through variability. We therefore request 30 orbits to re-image the Hubble Ultra Deep Field with WFC3/IR/F140W, a decade after the first epoch was taken. This time delay, redshift, target restframe wavelength, and luminosity regime are all optimal for identifying AGN variability. We will make the first estimate of the comoving number density of SMBHs in the early universe, with target numbers sufficient to discriminate between black hole seeding scenarios.

OBSERVING DESCRIPTION

This is a 30-orbit imaging program. The goals are to obtain:

1. a single deep image of the Hubble Ultradeep Field with WFC3/IR/F140W
2. in parallel obtain a deep ACS/F814W image of the the HUDF05-P2 field.

The scientific objective is to test for variability of sources in both fields. Alignment with the previous campaign (UDF12; GO 12498) and acquisition of the parallel field demand an orient constraint of 264 degrees.

There are 15 visits, each of two orbits.

Each visit contains four primary exposures and four parallel, each of approximately 1/2 orbit duration. Primary (WFC3/F140W imaging) uses a SPARS100 sequence with 13 (first per orbit) and 14 (second per orbit) samples. ACS/F814W exposure times are then tuned to the maximum duration of the orbit.

We use a 4-point dither pattern within each visit, specified at the exposure level by POS-TARGs. This aims to improve the sampling of the WFC3/IR PSF and mitigate the effects of its large pixel size. The pattern is also offset by a sufficiently large amount to move persistent pixels to different locations on the sky in each exposure.

In addition, each of these 15 sets of 4-point dithers is also offset onto a larger-scale grid, where the offsets are ~3" along the +y ACS/WFC direction to cover the chip gap and other large defects on the WFC3/IR detector (such as the "death star" which has a diameter of 50 pixels, or ~6.4"). This also mitigates the effects of persistence further, by providing offset sufficiently large to move large-scale persistent structures to different locations on the sky. Both the small-scale 4-point dithers as well as the larger-scale grid are designed to build upon and complement the dither patterns that were used in a previous WFC3/IR UDF programs [11563; PI Illingworth and 12498; PI Ellis), thereby ensuring as much continuity as possible between 2012 and 2022 to deliver the most homogeneous data and optimized search for transient objects.

Visit

Proposal 17073, Visit 01, failed Tue Aug 15 14:00:51 GMT 2023

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SCHED 60%; ORIENT 264.0D TO 264.0 D

Diagnostics

(Visit 01) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

Fixed Targets

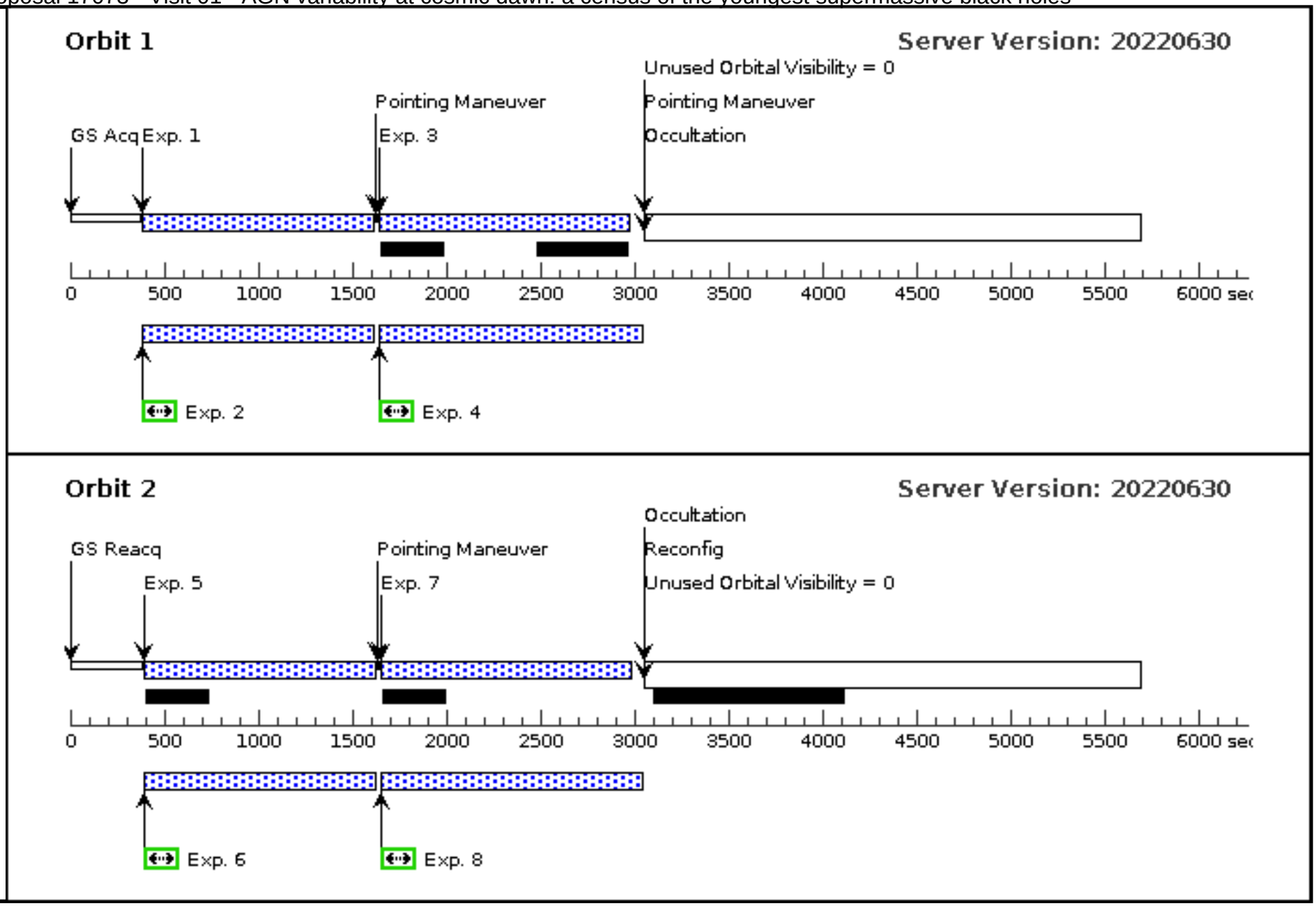
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HUDF-DEEP-WFC3	RA: 03 32 38.5000 (53.1604167d) Dec: -27 47 0.00 (-27.78333d) Equinox: J2000		V=25	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[HIGH REDSHIFT GALAXY, QUASAR, STARBURST]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -3.6767211,-2.8341989	Prime + Parallel Group 1-2 in Visit 01	1202.936167 Secs (1202.936 Secs) *[==>]*	***[1]***
2		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2 in Visit 01	1025 Secs (1025 Secs) *[==>]*	***[1]***
3		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG -3.4817211,-2.4051989	Prime + Parallel Group 3-4 in Visit 01	1302.93649 Secs (1302.936 Secs) *[==>]*	***[1]***
4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 3-4 in Visit 01	1272 Secs (1272 Secs) *[==>]*	***[1]***
5		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -3.1567211,-2.6391989	Prime + Parallel Group 5-6 in Visit 01	1202.936167 Secs (1202.936 Secs) *[==>]*	***[2]***
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in Visit 01	1107 Secs (1107 Secs) *[==>]*	***[2]***
7		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG -2.9617211,-2.1581989	Prime + Parallel Group 7-8 in Visit 01	1302.93649 Secs (1302.936 Secs) *[==>]*	***[2]***
8		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 7-8 in Visit 01	1263 Secs (1263 Secs) *[==>]*	***[2]***

Orbit Structure



Visit

Proposal 17073, Visit 02, completed Tue Aug 15 14:00:51 GMT 2023

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SCHED 60%; ORIENT 264.0D TO 264.0 D

Diagnostics

(Visit 02) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

Fixed Targets

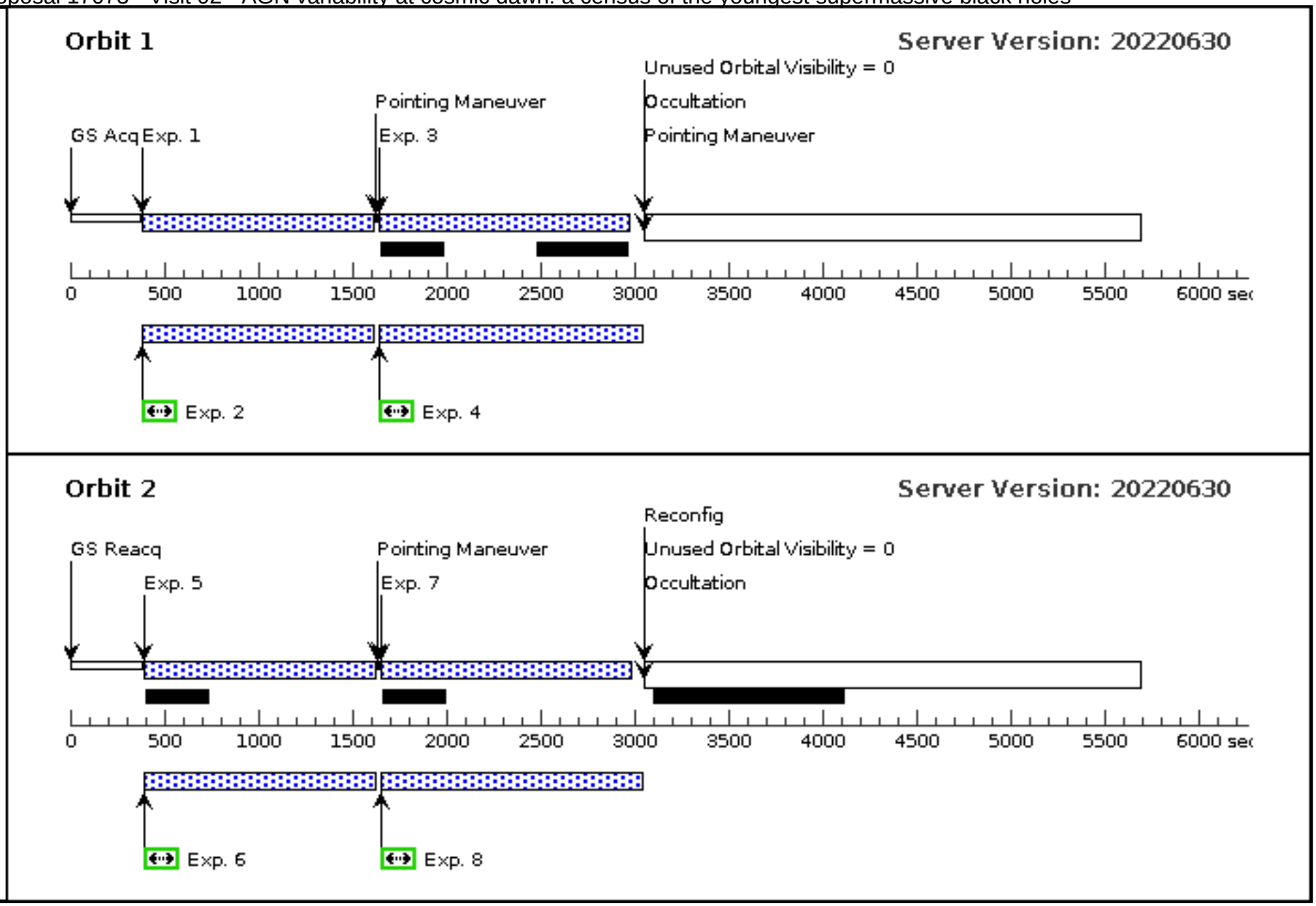
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HUDF-DEEP-WFC3	RA: 03 32 38.5000 (53.1604167d) Dec: -27 47 0.00 (-27.78333d) Equinox: J2000		V=25	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[HIGH REDSHIFT GALAXY, QUASAR, STARBURST]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -0.7257211,-0.1041989	Prime + Parallel Group 1-2 in Visit 02	1202.936167 Secs (1202.936 Secs) *[==>]*	***[1]***
2		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2 in Visit 02	1025 Secs (1025 Secs) *[==>]*	***[1]***
3		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG -0.5307211,0.3248011	Prime + Parallel Group 3-4 in Visit 02	1302.93649 Secs (1302.936 Secs) *[==>]*	***[1]***
4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 3-4 in Visit 02	1272 Secs (1272 Secs) *[==>]*	***[1]***
5		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -0.2057211,0.0908011	Prime + Parallel Group 5-6 in Visit 02	1202.936167 Secs (1202.936 Secs) *[==>]*	***[2]***
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in Visit 02	1107 Secs (1107 Secs) *[==>]*	***[2]***
7		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG -0.0107211,0.5718011	Prime + Parallel Group 7-8 in Visit 02	1302.93649 Secs (1302.936 Secs) *[==>]*	***[2]***
8		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 7-8 in Visit 02	1263 Secs (1263 Secs) *[==>]*	***[2]***

Orbit Structure



Visit

Proposal 17073, Visit 03, completed Tue Aug 15 14:00:51 GMT 2023

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SCHED 60%; ORIENT 264.0D TO 264.0 D

Diagnostics

(Visit 03) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

Fixed Targets

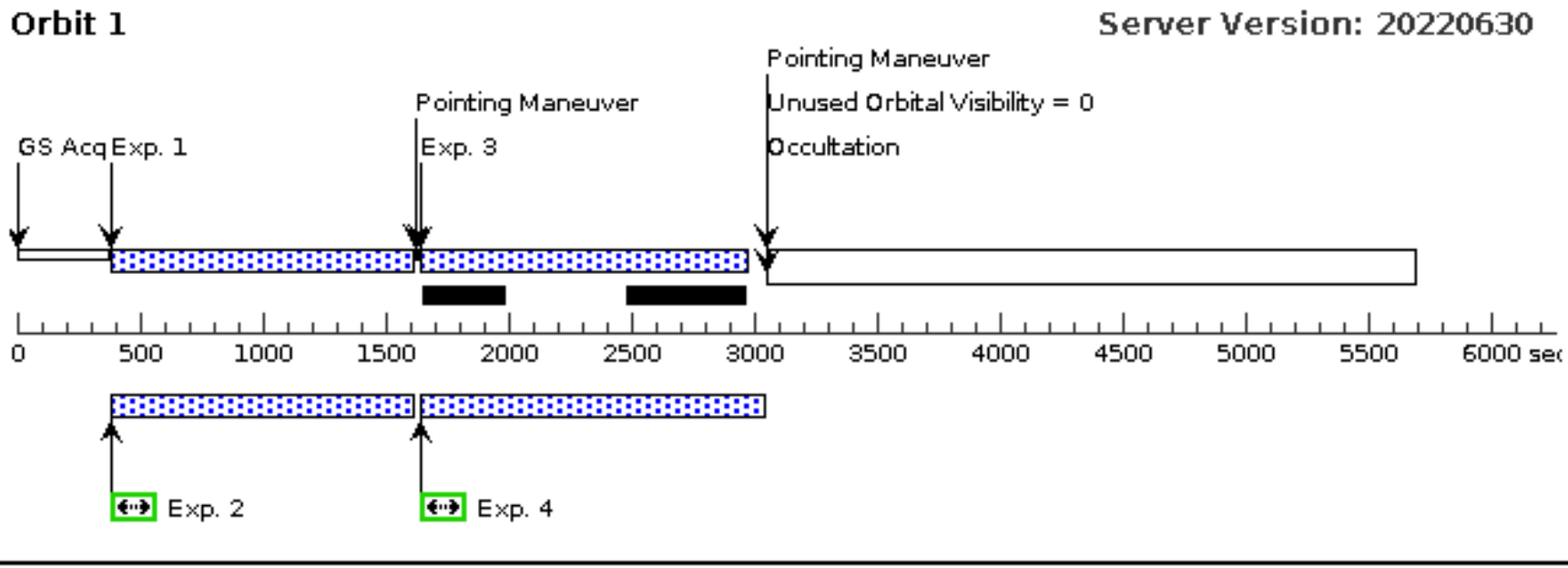
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HUDF-DEEP-WFC3	RA: 03 32 38.5000 (53.1604167d) Dec: -27 47 0.00 (-27.78333d) Equinox: J2000		V=25	Reference Frame: ICRS

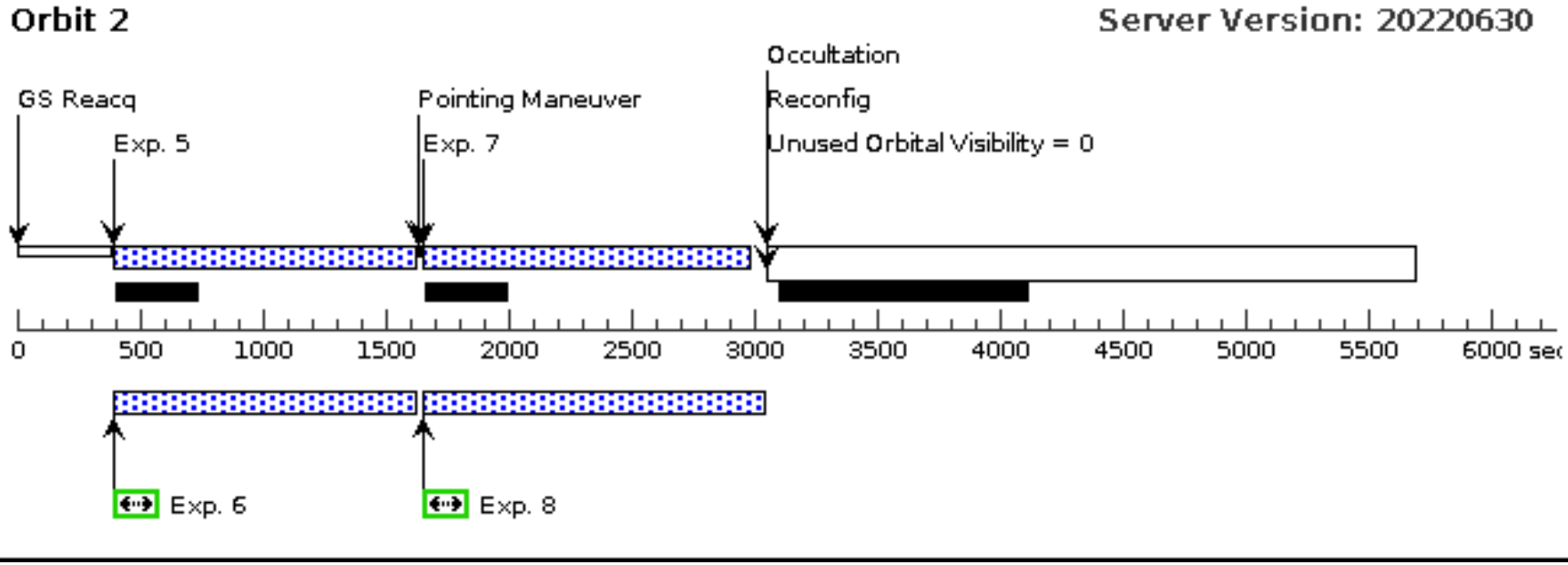
Comments:
Category=GALAXY
Description=[HIGH REDSHIFT GALAXY, QUASAR, STARBURST]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 0.93241 20,3.2686680	Prime + Parallel Group 1-2 in Visit 03	1202.936167 Secs (1202.936 Secs) *[==>]*	***[1]***
2		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2 in Visit 03	1025 Secs (1025 Secs) *[==>]*	***[1]***
3		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 0.73741 20,3.6976680	Prime + Parallel Group 3-4 in Visit 03	1302.93649 Secs (1302.936 Secs) *[==>]*	***[1]***
4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 3-4 in Visit 03	1272 Secs (1272 Secs) *[==>]*	***[1]***
5		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 0.41241 20,3.4636680	Prime + Parallel Group 5-6 in Visit 03	1202.936167 Secs (1202.936 Secs) *[==>]*	***[2]***
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in Visit 03	1107 Secs (1107 Secs) *[==>]*	***[2]***
7		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 0.21741 20,3.9511680	Prime + Parallel Group 7-8 in Visit 03	1302.93649 Secs (1302.936 Secs) *[==>]*	***[2]***
8		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 7-8 in Visit 03	1263 Secs (1263 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17073, Visit 04, completed Tue Aug 15 14:00:51 GMT 2023

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SCHED 60%; ORIENT 264.0D TO 264.0 D

Diagnostics

(Visit 04) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

Fixed Targets

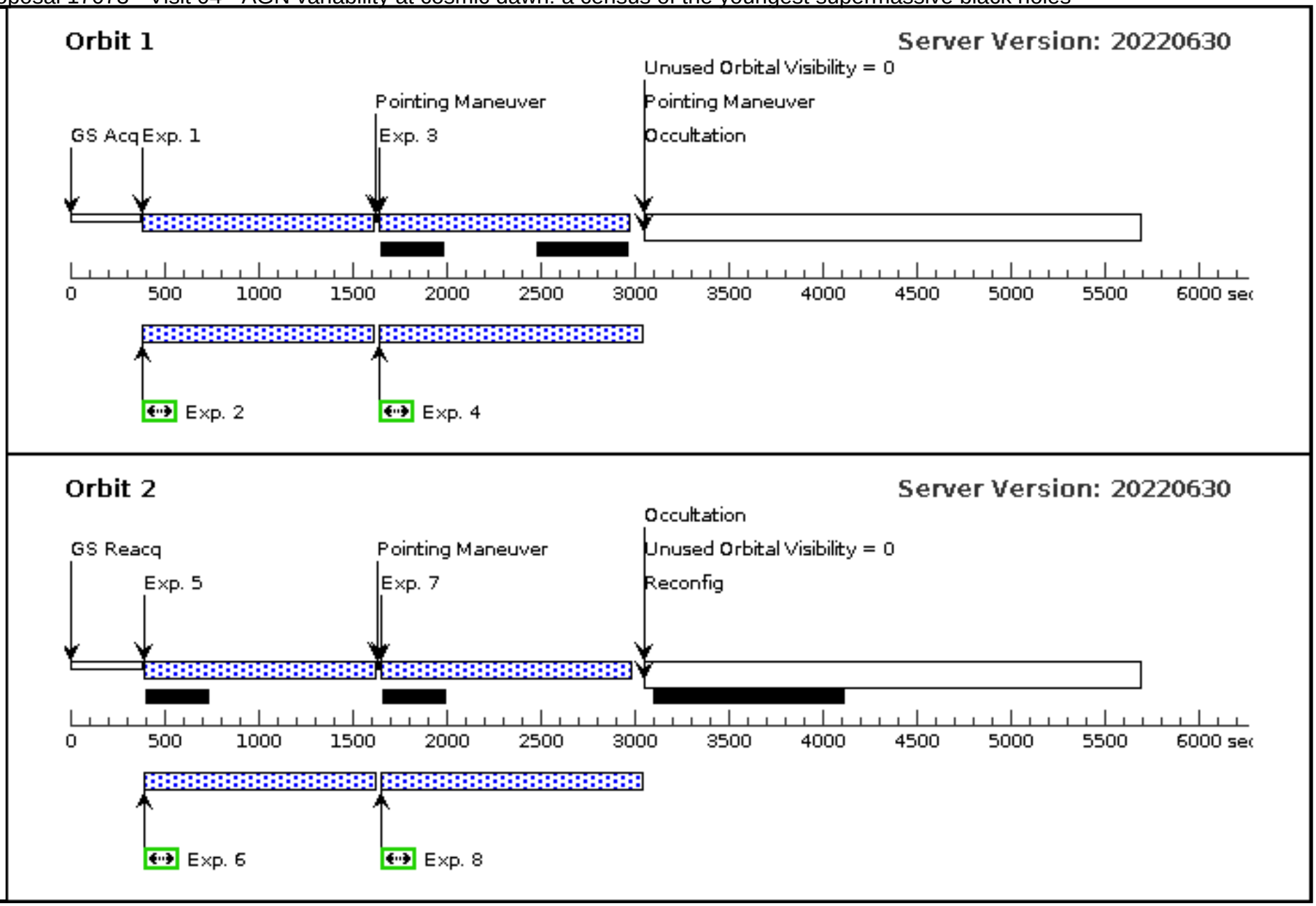
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HUDF-DEEP-WFC3	RA: 03 32 38.5000 (53.1604167d) Dec: -27 47 0.00 (-27.78333d) Equinox: J2000		V=25	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[HIGH REDSHIFT GALAXY, QUASAR, STARBURST]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -2.9956680,-1.3094120	Prime + Parallel Group 1-2 in Visit 04	1202.936167 Secs (1202.936 Secs) *[==>]*	***[1]***
2		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2 in Visit 04	1025 Secs (1025 Secs) *[==>]*	***[1]***
3		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG -2.8006680,-0.8804120	Prime + Parallel Group 3-4 in Visit 04	1302.93649 Secs (1302.936 Secs) *[==>]*	***[1]***
4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 3-4 in Visit 04	1272 Secs (1272 Secs) *[==>]*	***[1]***
5		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -2.4756680,-1.1144120	Prime + Parallel Group 5-6 in Visit 04	1202.936167 Secs (1202.936 Secs) *[==>]*	***[2]***
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in Visit 04	1107 Secs (1107 Secs) *[==>]*	***[2]***
7		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG -2.2806680,-0.6334120	Prime + Parallel Group 7-8 in Visit 04	1302.93649 Secs (1302.936 Secs) *[==>]*	***[2]***
8		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 7-8 in Visit 04	1263 Secs (1263 Secs) *[==>]*	***[2]***

Orbit Structure



Visit

Proposal 17073, Visit 05, completed Tue Aug 15 14:00:52 GMT 2023

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SCHED 60%; ORIENT 264.0D TO 264.0 D

Diagnostics

(Visit 05) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

Fixed Targets

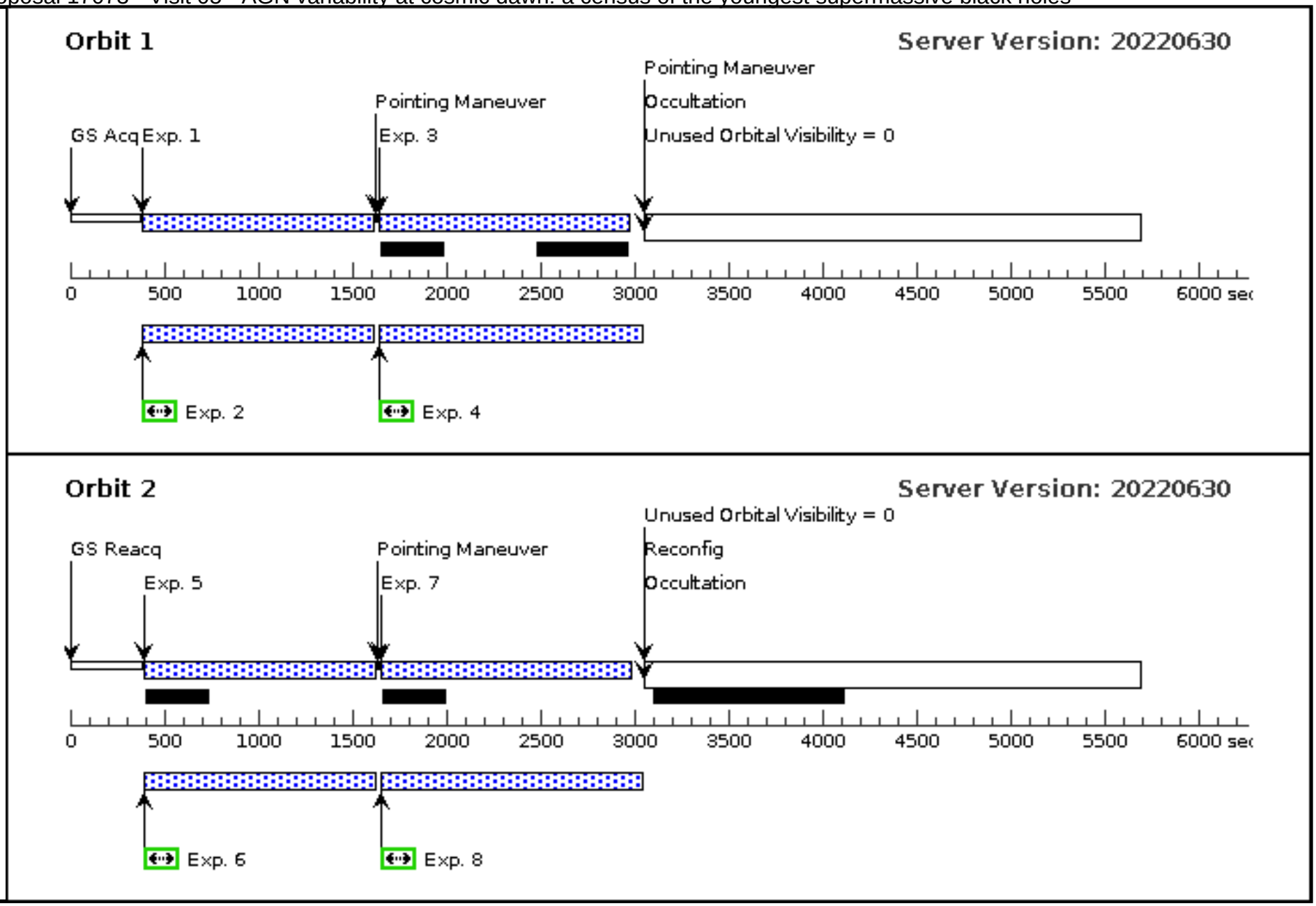
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HUDF-DEEP-WFC3	RA: 03 32 38.5000 (53.1604167d) Dec: -27 47 0.00 (-27.78333d) Equinox: J2000		V=25	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[HIGH REDSHIFT GALAXY, QUASAR, STARBURST]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -0.0446680,1.4205880	Prime + Parallel Group 1-2 in Visit 05	1202.936167 Secs (1202.936 Secs) *[==>]*	***[1]***
2		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2 in Visit 05	1025 Secs (1025 Secs) *[==>]*	***[1]***
3		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 0.1503320,1.8495880	Prime + Parallel Group 3-4 in Visit 05	1302.93649 Secs (1302.936 Secs) *[==>]*	***[1]***
4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 3-4 in Visit 05	1272 Secs (1272 Secs) *[==>]*	***[1]***
5		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 0.4753320,1.6155880	Prime + Parallel Group 5-6 in Visit 05	1202.936167 Secs (1202.936 Secs) *[==>]*	***[2]***
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in Visit 05	1107 Secs (1107 Secs) *[==>]*	***[2]***
7		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 0.6703320,2.0965880	Prime + Parallel Group 7-8 in Visit 05	1302.93649 Secs (1302.936 Secs) *[==>]*	***[2]***
8		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 7-8 in Visit 05	1263 Secs (1263 Secs) *[==>]*	***[2]***

Orbit Structure



Visit

Proposal 17073, Visit 06, completed Tue Aug 15 14:00:52 GMT 2023

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SCHED 60%; ORIENT 264.0D TO 264.0 D

Diagnostics

(Visit 06) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

Fixed Targets

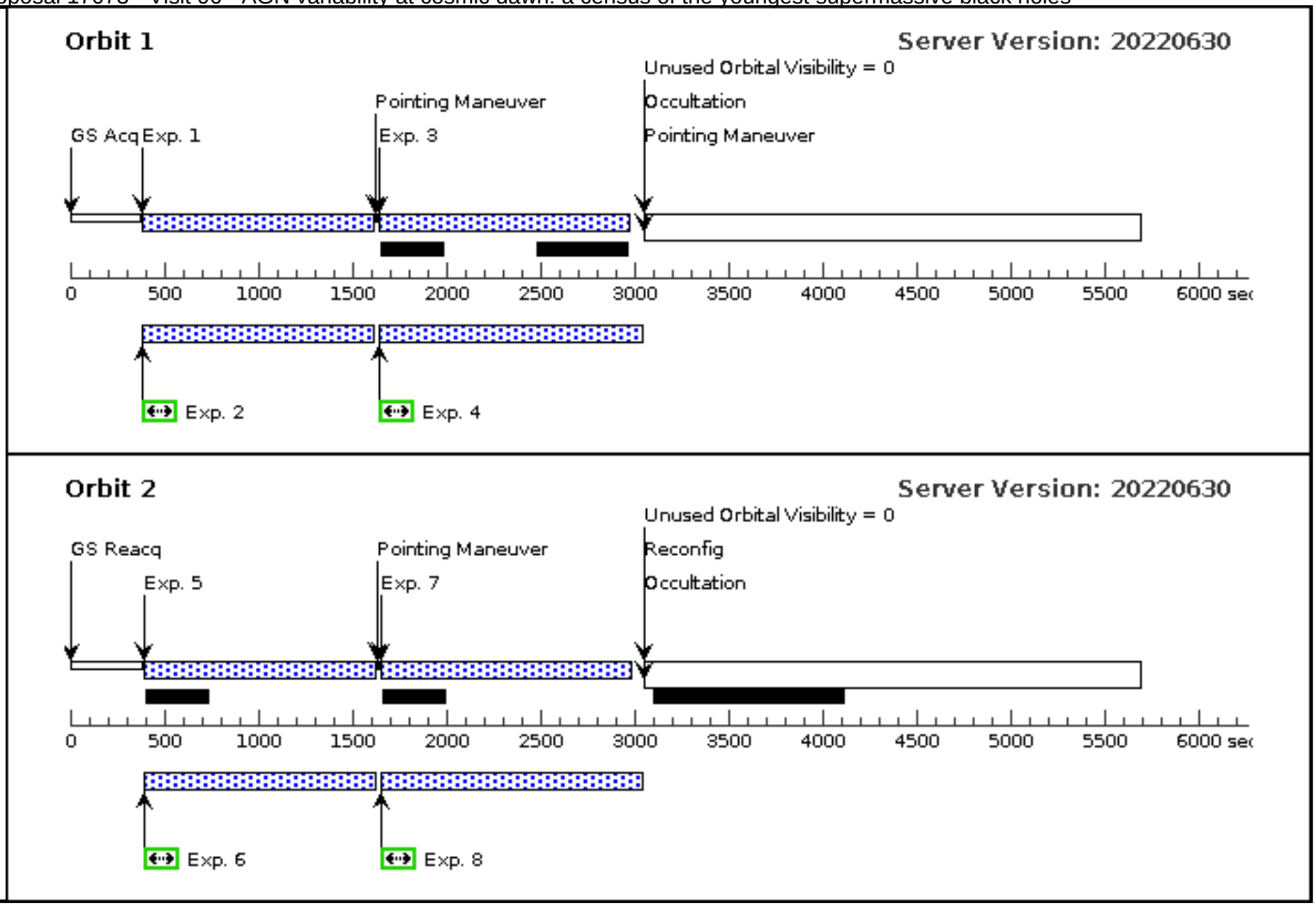
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HUDF-DEEP-WFC3	RA: 03 32 38.5000 (53.1604167d) Dec: -27 47 0.00 (-27.78333d) Equinox: J2000		V=25	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[HIGH REDSHIFT GALAXY, QUASAR, STARBURST]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 2.4571989,3.9497211	Prime + Parallel Group 1-2 in Visit 06	1202.936167 Secs (1202.936 Secs) *[==>]*	***[1]***
2		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2 in Visit 06	1025 Secs (1025 Secs) *[==>]*	***[1]***
3		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 2.2621989,4.3787211	Prime + Parallel Group 3-4 in Visit 06	1302.93649 Secs (1302.936 Secs) *[==>]*	***[1]***
4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 3-4 in Visit 06	1272 Secs (1272 Secs) *[==>]*	***[1]***
5		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 1.9371989,4.1447211	Prime + Parallel Group 5-6 in Visit 06	1202.936167 Secs (1202.936 Secs) *[==>]*	***[2]***
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in Visit 06	1107 Secs (1107 Secs) *[==>]*	***[2]***
7		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 1.7421989,4.6322211	Prime + Parallel Group 7-8 in Visit 06	1302.93649 Secs (1302.936 Secs) *[==>]*	***[2]***
8		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 7-8 in Visit 06	1263 Secs (1263 Secs) *[==>]*	***[2]***

Orbit Structure



Visit

Proposal 17073, Visit 07, failed Tue Aug 15 14:00:52 GMT 2023

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SCHED 60%; ORIENT 264.0D TO 264.0 D

Diagnostics

(Visit 07) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

Fixed Targets

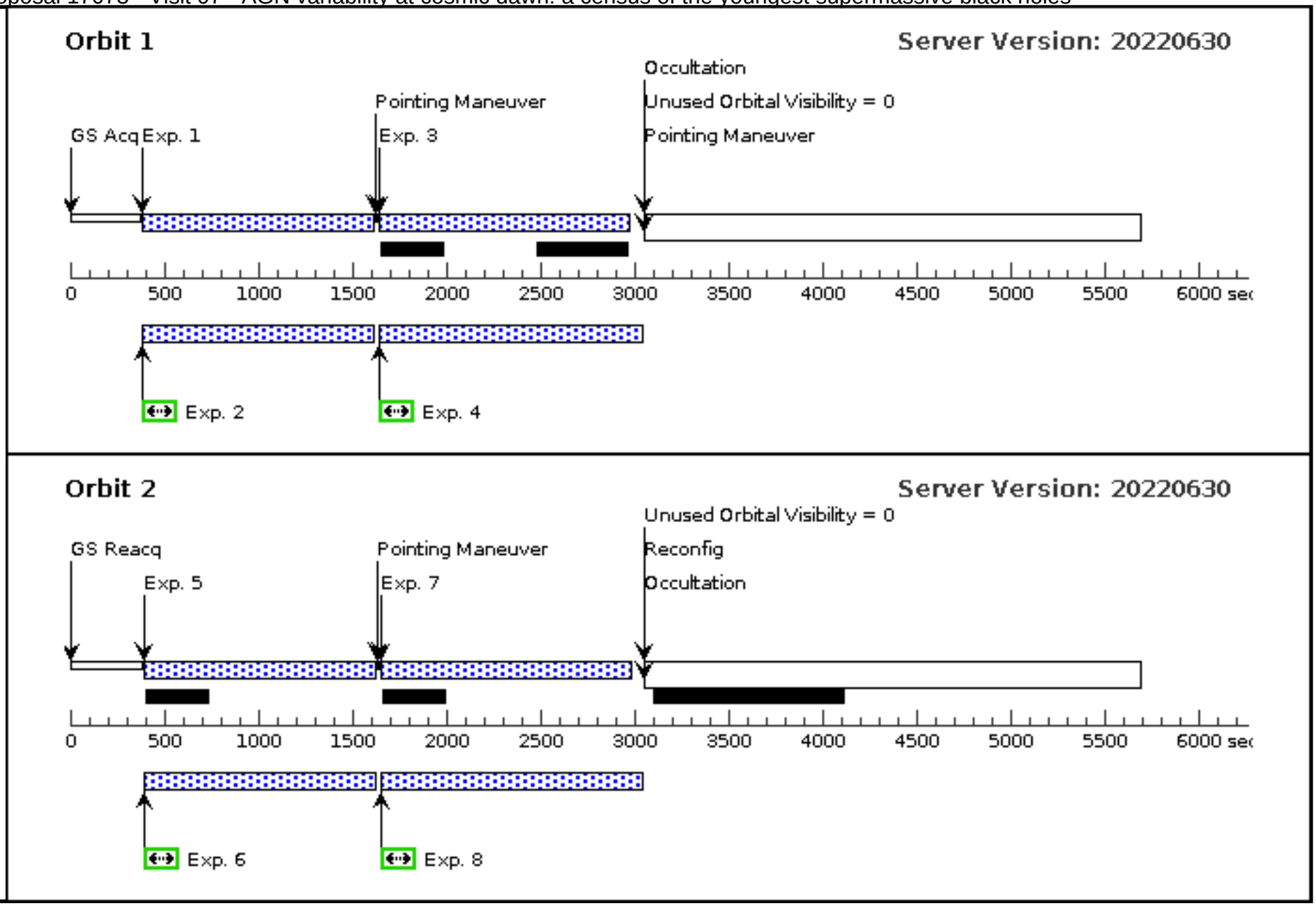
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HUDF-DEEP-WFC3	RA: 03 32 38.5000 (53.1604167d) Dec: -27 47 0.00 (-27.78333d) Equinox: J2000		V=25	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[HIGH REDSHIFT GALAXY, QUASAR, STARBURST]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -2.4828102,-2.4840218	Prime + Parallel Group 1-2 in Visit 07	1202.936167 Secs (1202.936 Secs) *[==>]*	*[1]*
2		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2 in Visit 07	1025 Secs (1025 Secs) *[==>]*	*[1]*
3		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG -2.2878102,-2.0550218	Prime + Parallel Group 3-4 in Visit 07	1302.93649 Secs (1302.936 Secs) *[==>]*	*[1]*
4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 3-4 in Visit 07	1272 Secs (1272 Secs) *[==>]*	*[1]*
5		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -1.9628102,-2.2890218	Prime + Parallel Group 5-6 in Visit 07	1202.936167 Secs (1202.936 Secs) *[==>]*	*[2]*
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in Visit 07	1107 Secs (1107 Secs) *[==>]*	*[2]*
7		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG -1.7678102,-1.8080218	Prime + Parallel Group 7-8 in Visit 07	1302.93649 Secs (1302.936 Secs) *[==>]*	*[2]*
8		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 7-8 in Visit 07	1263 Secs (1263 Secs) *[==>]*	*[2]*

Orbit Structure



Visit

Proposal 17073, Visit 08, completed Tue Aug 15 14:00:52 GMT 2023

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SCHED 60%; ORIENT 264.0D TO 264.0 D

Diagnostics

(Visit 08) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

Fixed Targets

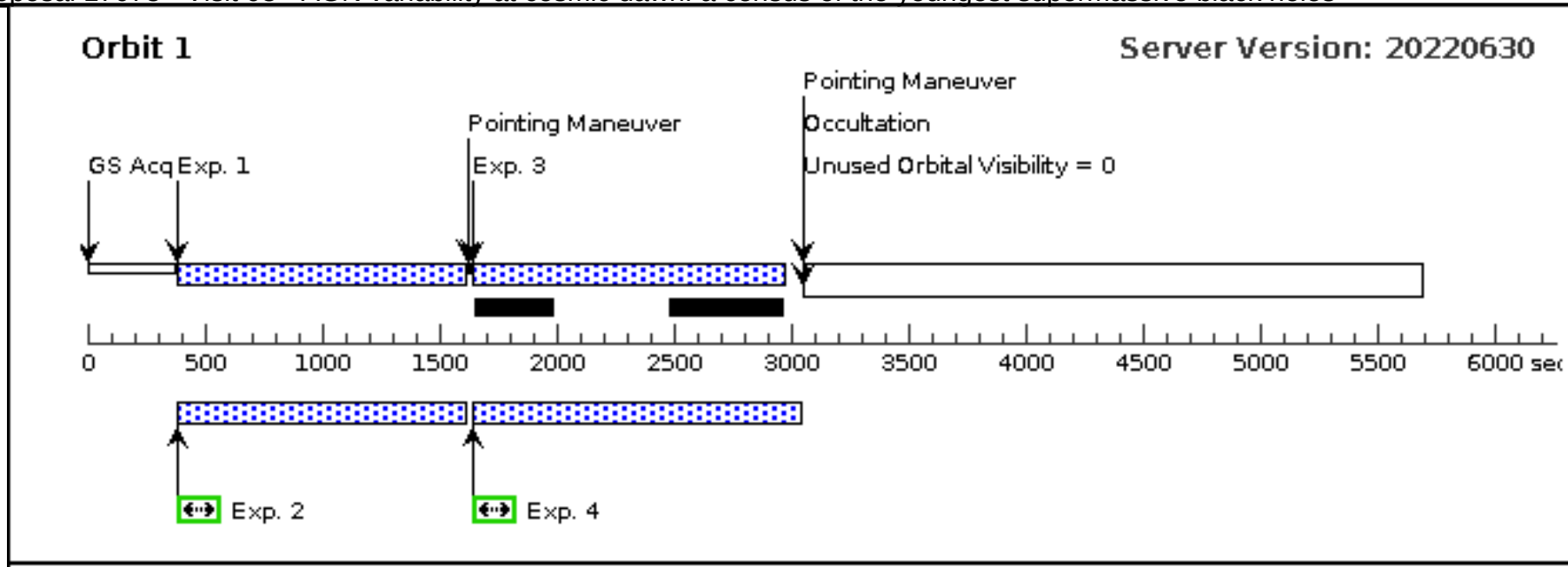
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HUDF-DEEP-WFC3	RA: 03 32 38.5000 (53.1604167d) Dec: -27 47 0.00 (-27.78333d) Equinox: J2000		V=25	Reference Frame: ICRS

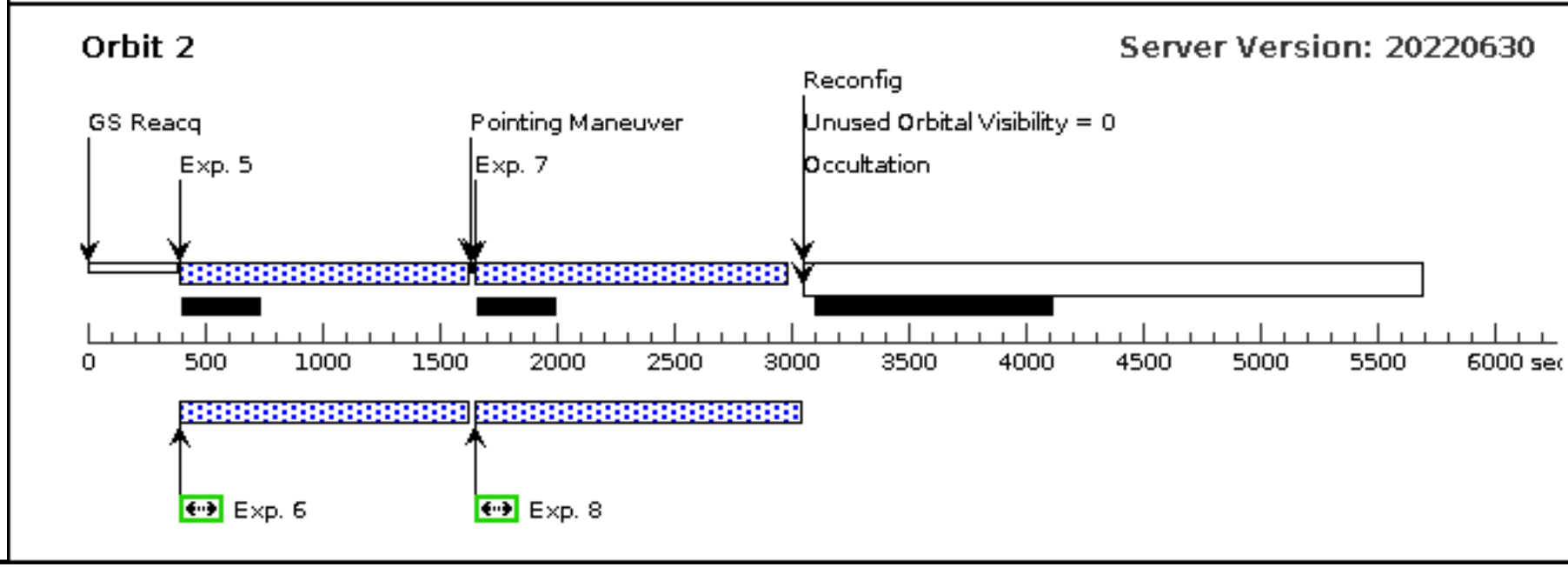
Comments:
Category=GALAXY
Description=[HIGH REDSHIFT GALAXY, QUASAR, STARBURST]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 0.4681898,0.2459782	Prime + Parallel Group 1-2 in Visit 08	1202.936167 Secs (1202.936 Secs) *[==>]*	***[1]***
2		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2 in Visit 08	1025 Secs (1025 Secs) *[==>]*	***[1]***
3		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 0.6631898,0.6749782	Prime + Parallel Group 3-4 in Visit 08	1302.93649 Secs (1302.936 Secs) *[==>]*	***[1]***
4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 3-4 in Visit 08	1272 Secs (1272 Secs) *[==>]*	***[1]***
5		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 0.9881898,0.4409782	Prime + Parallel Group 5-6 in Visit 08	1202.936167 Secs (1202.936 Secs) *[==>]*	***[2]***
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in Visit 08	1107 Secs (1107 Secs) *[==>]*	***[2]***
7		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 1.1831898,0.9219782	Prime + Parallel Group 7-8 in Visit 08	1302.93649 Secs (1302.936 Secs) *[==>]*	***[2]***
8		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 7-8 in Visit 08	1263 Secs (1263 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17073, Visit 09, completed Tue Aug 15 14:00:52 GMT 2023

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SCHED 60%; ORIENT 264.0D TO 264.0 D

Diagnostics

(Visit 09) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

Fixed Targets

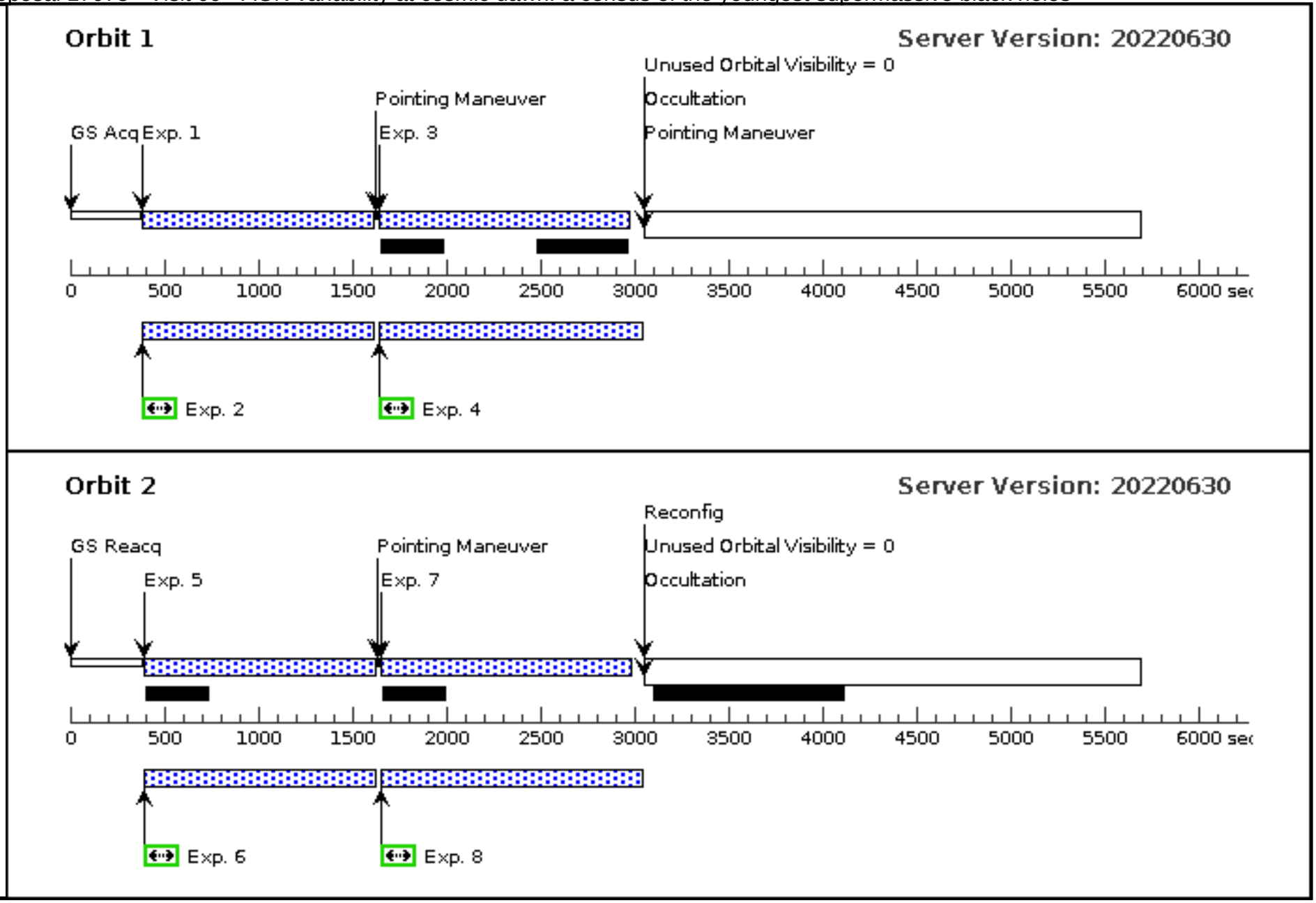
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HUDF-DEEP-WFC3	RA: 03 32 38.5000 (53.1604167d) Dec: -27 47 0.00 (-27.78333d) Equinox: J2000		V=25	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[HIGH REDSHIFT GALAXY, QUASAR, STARBURST]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 2.10702 18,2.7558102	Prime + Parallel Group 1-2 in Visit 09	1202.936167 Secs (1202.936 Secs) *[==>]*	***[1]***
2		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2 in Visit 09	1025 Secs (1025 Secs) *[==>]*	***[1]***
3		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 1.91202 18,3.1848102	Prime + Parallel Group 3-4 in Visit 09	1302.93649 Secs (1302.936 Secs) *[==>]*	***[1]***
4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 3-4 in Visit 09	1272 Secs (1272 Secs) *[==>]*	***[1]***
5		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 1.58702 18,2.9508102	Prime + Parallel Group 5-6 in Visit 09	1202.936167 Secs (1202.936 Secs) *[==>]*	***[2]***
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in Visit 09	1107 Secs (1107 Secs) *[==>]*	***[2]***
7		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 1.39202 18,3.4383102	Prime + Parallel Group 7-8 in Visit 09	1302.93649 Secs (1302.936 Secs) *[==>]*	***[2]***
8		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 7-8 in Visit 09	1263 Secs (1263 Secs) *[==>]*	***[2]***

Orbit Structure



Visit

Proposal 17073, Visit 10, completed Tue Aug 15 14:00:52 GMT 2023

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SCHED 60%; ORIENT 264.0D TO 264.0 D

Diagnostics

(Visit 10) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

Fixed Targets

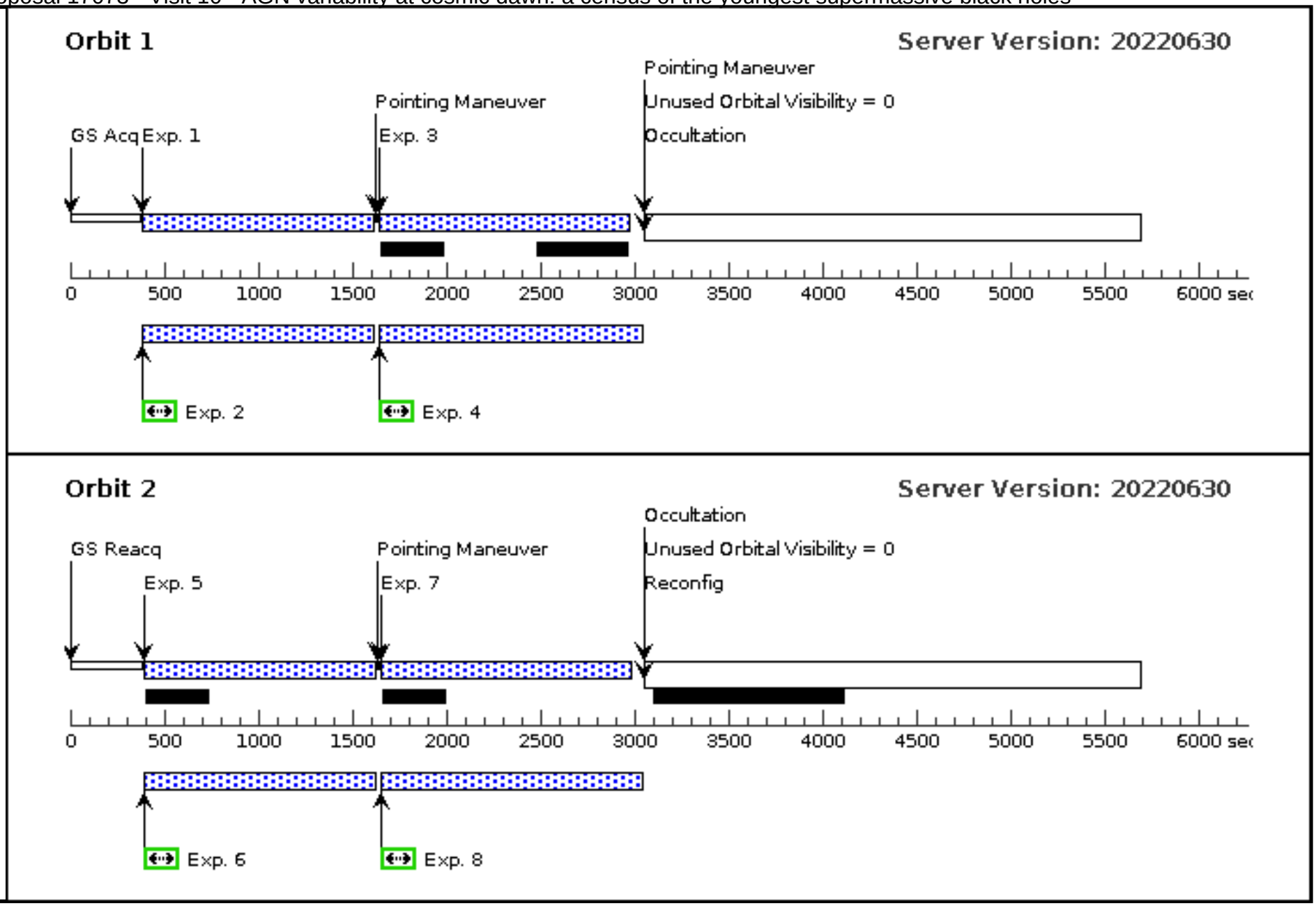
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HUDF-DEEP-WFC3	RA: 03 32 38.5000 (53.1604167d) Dec: -27 47 0.00 (-27.78333d) Equinox: J2000		V=25	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[HIGH REDSHIFT GALAXY, QUASAR, STARBURST]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -1.8596604,-3.5483396	Prime + Parallel Group 1-2 in Visit 10	1202.936167 Secs (1202.936 Secs) *[==>]*	***[1]***
2		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2 in Visit 10	1025 Secs (1025 Secs) *[==>]*	***[1]***
3		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG -1.6646604,-3.1193396	Prime + Parallel Group 3-4 in Visit 10	1302.93649 Secs (1302.936 Secs) *[==>]*	***[1]***
4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 3-4 in Visit 10	1272 Secs (1272 Secs) *[==>]*	***[1]***
5		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -1.3396604,-3.3533396	Prime + Parallel Group 5-6 in Visit 10	1202.936167 Secs (1202.936 Secs) *[==>]*	***[2]***
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in Visit 10	1107 Secs (1107 Secs) *[==>]*	***[2]***
7		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG -1.1446604,-2.8723396	Prime + Parallel Group 7-8 in Visit 10	1302.93649 Secs (1302.936 Secs) *[==>]*	***[2]***
8		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 7-8 in Visit 10	1263 Secs (1263 Secs) *[==>]*	***[2]***

Orbit Structure



Visit

Proposal 17073, Visit 11, completed Tue Aug 15 14:00:52 GMT 2023

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SCHED 60%; ORIENT 264.0D TO 264.0 D

Diagnostics

(Visit 11) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

Fixed Targets

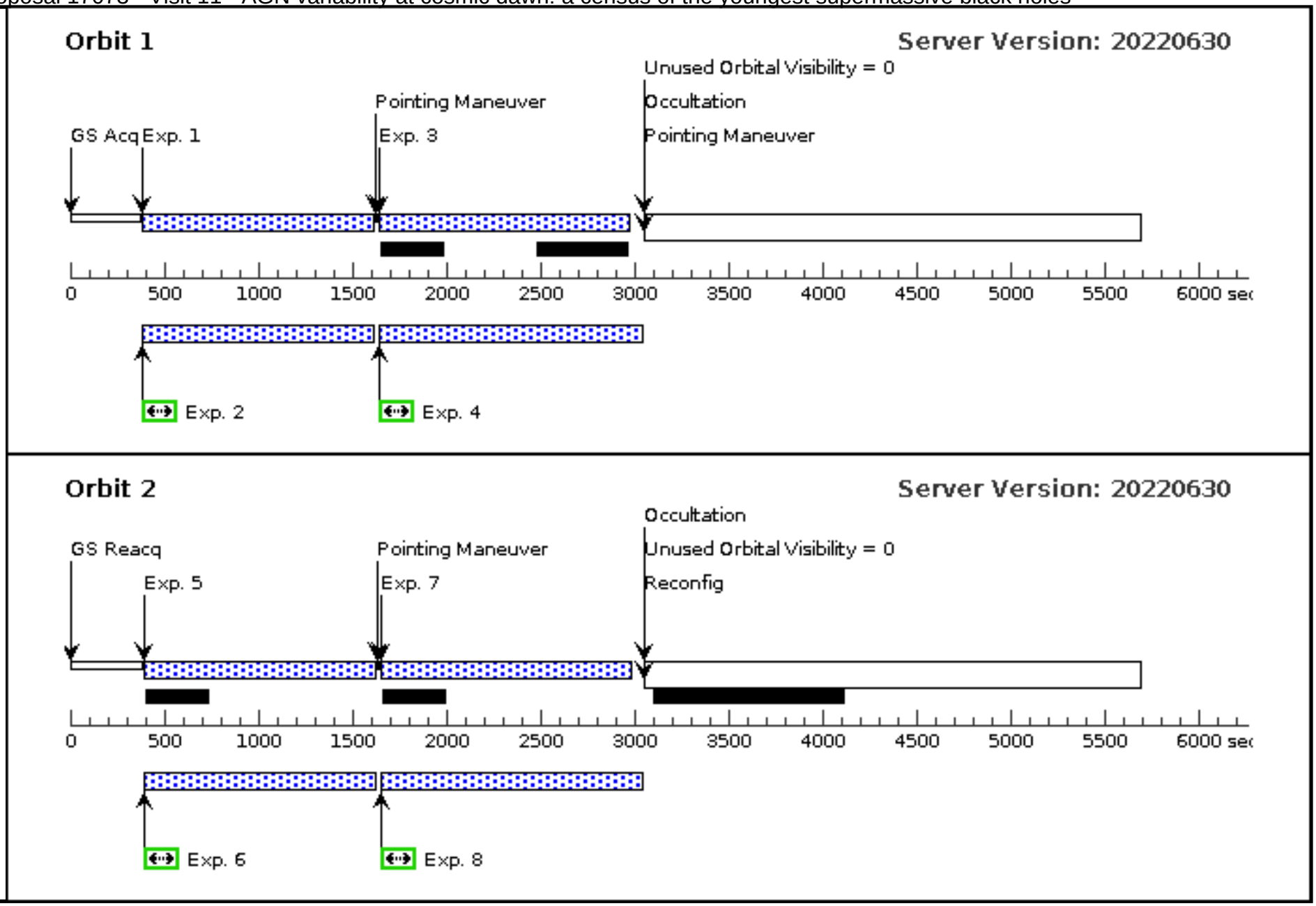
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HUDF-DEEP-WFC3	RA: 03 32 38.5000 (53.1604167d) Dec: -27 47 0.00 (-27.78333d) Equinox: J2000		V=25	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[HIGH REDSHIFT GALAXY, QUASAR, STARBURST]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 0.43969 77,-0.6262477	Prime + Parallel Group 1-2 in Visit 11	1202.936167 Secs (1202.936 Secs) *[==>]*	*[1]*
2		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2 in Visit 11	1025 Secs (1025 Secs) *[==>]*	*[1]*
3		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 0.63469 77,-0.1972477	Prime + Parallel Group 3-4 in Visit 11	1302.93649 Secs (1302.936 Secs) *[==>]*	*[1]*
4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 3-4 in Visit 11	1272 Secs (1272 Secs) *[==>]*	*[1]*
5		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 0.95969 77,-0.4312477	Prime + Parallel Group 5-6 in Visit 11	1202.936167 Secs (1202.936 Secs) *[==>]*	*[2]*
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in Visit 11	1107 Secs (1107 Secs) *[==>]*	*[2]*
7		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 1.15469 77,0.0497523	Prime + Parallel Group 7-8 in Visit 11	1302.93649 Secs (1302.936 Secs) *[==>]*	*[2]*
8		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 7-8 in Visit 11	1263 Secs (1263 Secs) *[==>]*	*[2]*

Orbit Structure



Visit

Proposal 17073, Visit 12, completed Tue Aug 15 14:00:52 GMT 2023

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SCHED 60%; ORIENT 264.0D TO 264.0 D

Diagnostics

(Visit 12) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

Fixed Targets

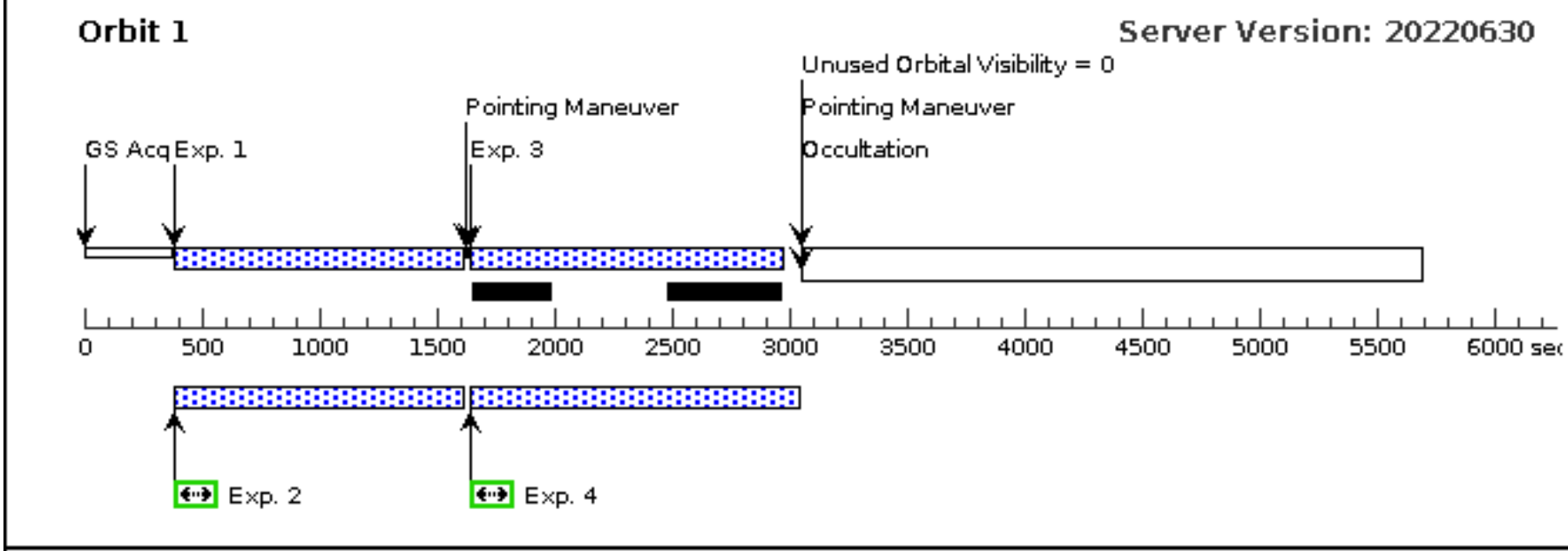
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HUDF-DEEP-WFC3	RA: 03 32 38.5000 (53.1604167d) Dec: -27 47 0.00 (-27.78333d) Equinox: J2000		V=25	Reference Frame: ICRS

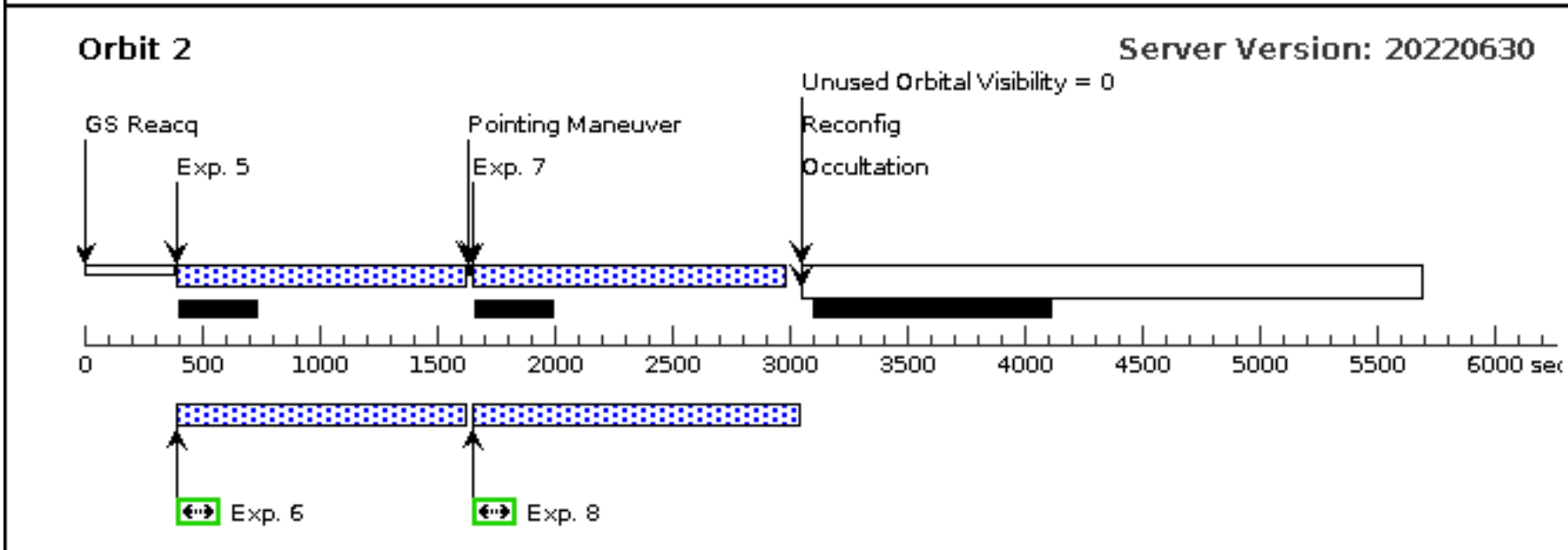
Comments:
Category=GALAXY
Description=[HIGH REDSHIFT GALAXY, QUASAR, STARBURST]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 3.04174 65,1.1593335	Prime + Parallel Group 1-2 in Visit 12	1202.936167 Secs (1202.936 Secs) *[==>]*	***[1]***
2		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2 in Visit 12	1025 Secs (1025 Secs) *[==>]*	***[1]***
3		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 2.84674 65,1.5883335	Prime + Parallel Group 3-4 in Visit 12	1302.93649 Secs (1302.936 Secs) *[==>]*	***[1]***
4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 3-4 in Visit 12	1272 Secs (1272 Secs) *[==>]*	***[1]***
5		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 2.52174 65,1.3543335	Prime + Parallel Group 5-6 in Visit 12	1202.936167 Secs (1202.936 Secs) *[==>]*	***[2]***
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in Visit 12	1107 Secs (1107 Secs) *[==>]*	***[2]***
7		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 2.32674 65,1.8418335	Prime + Parallel Group 7-8 in Visit 12	1302.93649 Secs (1302.936 Secs) *[==>]*	***[2]***
8		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 7-8 in Visit 12	1263 Secs (1263 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17073, Visit 13, completed Tue Aug 15 14:00:52 GMT 2023

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SCHED 60%; ORIENT 264.0D TO 264.0 D

Diagnostics

(Visit 13) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

Fixed Targets

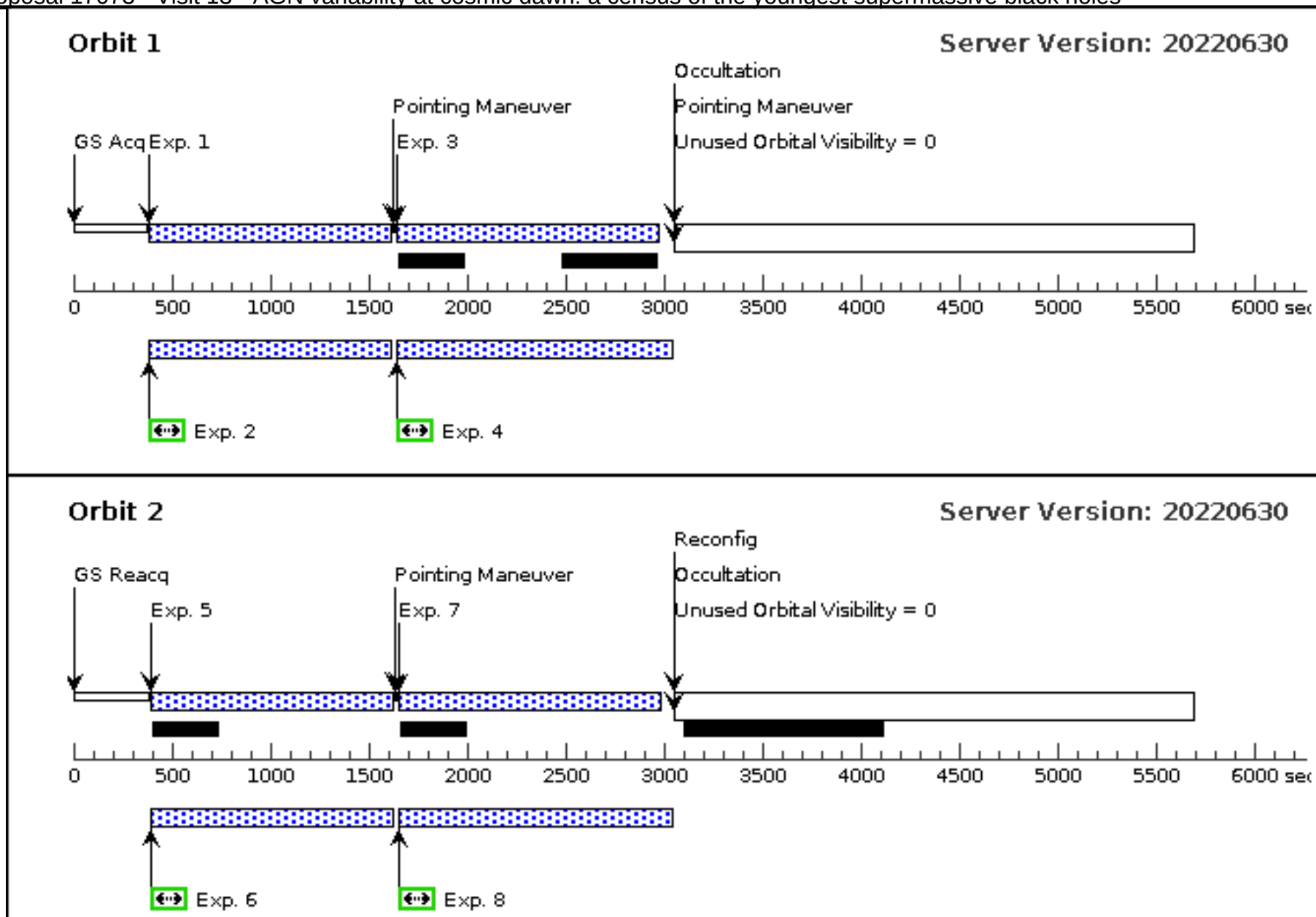
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HUDF-DEEP-WFC3	RA: 03 32 38.5000 (53.1604167d) Dec: -27 47 0.00 (-27.78333d) Equinox: J2000		V=25	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[HIGH REDSHIFT GALAXY, QUASAR, STARBURST]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -0.8863335,-3.4187465	Prime + Parallel Group 1-2 in Visit 13	1202.936167 Secs (1202.936 Secs) *[==>]*	***[1]***
2		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2 in Visit 13	1025 Secs (1025 Secs) *[==>]*	***[1]***
3		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG -0.6913335,-2.9897465	Prime + Parallel Group 3-4 in Visit 13	1302.93649 Secs (1302.936 Secs) *[==>]*	***[1]***
4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 3-4 in Visit 13	1272 Secs (1272 Secs) *[==>]*	***[1]***
5		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -0.3663335,-3.2237465	Prime + Parallel Group 5-6 in Visit 13	1202.936167 Secs (1202.936 Secs) *[==>]*	***[2]***
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in Visit 13	1107 Secs (1107 Secs) *[==>]*	***[2]***
7		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG -0.1713335,-2.7427465	Prime + Parallel Group 7-8 in Visit 13	1302.93649 Secs (1302.936 Secs) *[==>]*	***[2]***
8		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 7-8 in Visit 13	1263 Secs (1263 Secs) *[==>]*	***[2]***

Orbit Structure



Visit

Proposal 17073, Visit 14, completed Tue Aug 15 14:00:52 GMT 2023

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SCHED 60%; ORIENT 264.0D TO 264.0 D

Diagnostics

(Visit 14) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

Fixed Targets

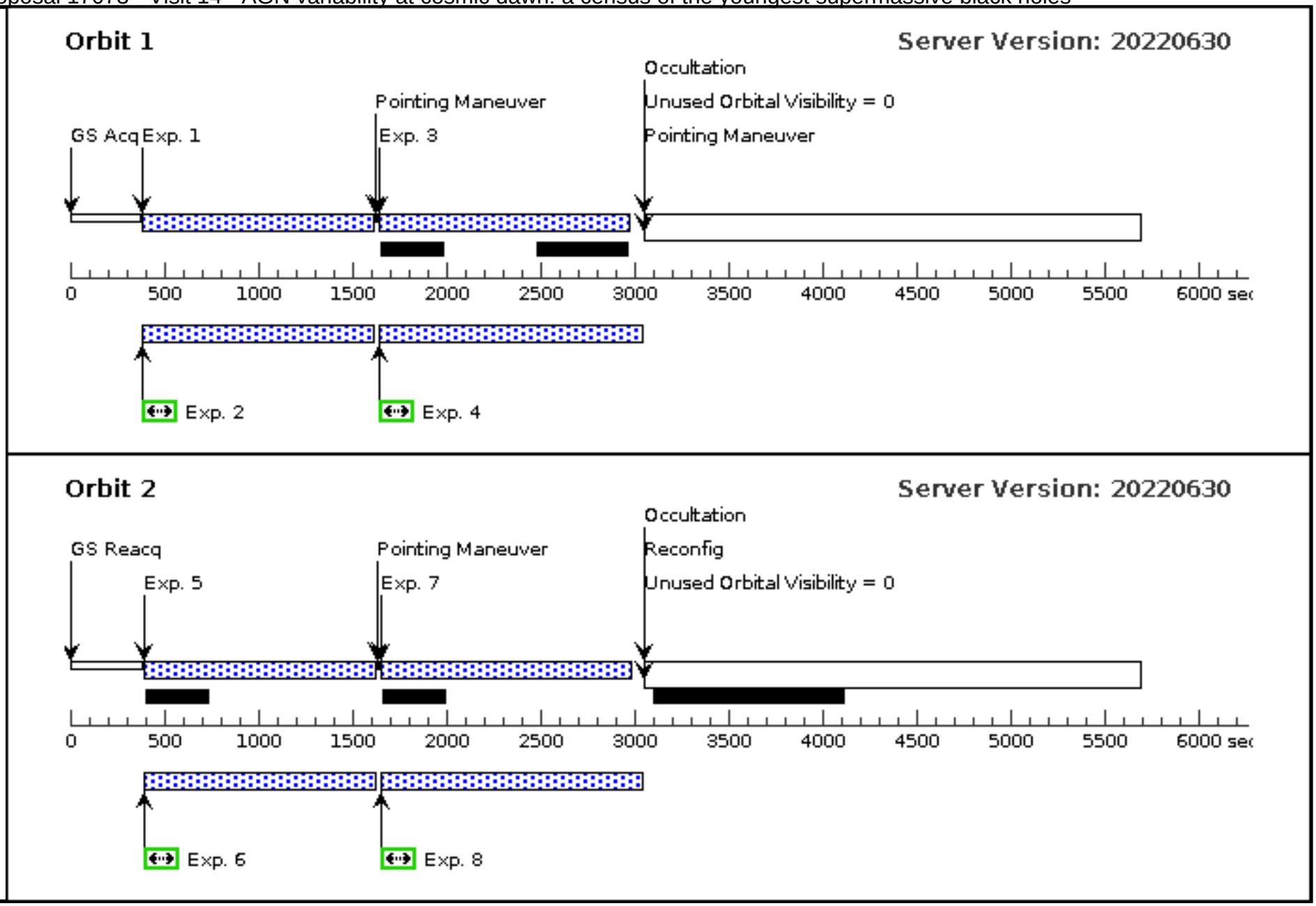
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HUDF-DEEP-WFC3	RA: 03 32 38.5000 (53.1604167d) Dec: -27 47 0.00 (-27.78333d) Equinox: J2000		V=25	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[HIGH REDSHIFT GALAXY, QUASAR, STARBURST]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 2.0646665,-0.6887465	Prime + Parallel Group 1-2 in Visit 14	1202.936167 Secs (1202.936 Secs) *[==>]*	***[1]***
2		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2 in Visit 14	1025 Secs (1025 Secs) *[==>]*	***[1]***
3		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 2.2596665,-0.2597465	Prime + Parallel Group 3-4 in Visit 14	1302.93649 Secs (1302.936 Secs) *[==>]*	***[1]***
4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 3-4 in Visit 14	1272 Secs (1272 Secs) *[==>]*	***[1]***
5		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 2.5846665,-0.4937465	Prime + Parallel Group 5-6 in Visit 14	1202.936167 Secs (1202.936 Secs) *[==>]*	***[2]***
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in Visit 14	1107 Secs (1107 Secs) *[==>]*	***[2]***
7		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 2.7796665,-0.0127465	Prime + Parallel Group 7-8 in Visit 14	1302.93649 Secs (1302.936 Secs) *[==>]*	***[2]***
8		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 7-8 in Visit 14	1263 Secs (1263 Secs) *[==>]*	***[2]***

Orbit Structure



Visit

Proposal 17073, Visit 15, completed Tue Aug 15 14:00:52 GMT 2023

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SCHED 60%; ORIENT 264.0D TO 264.0 D

Diagnostics

(Visit 15) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

Fixed Targets

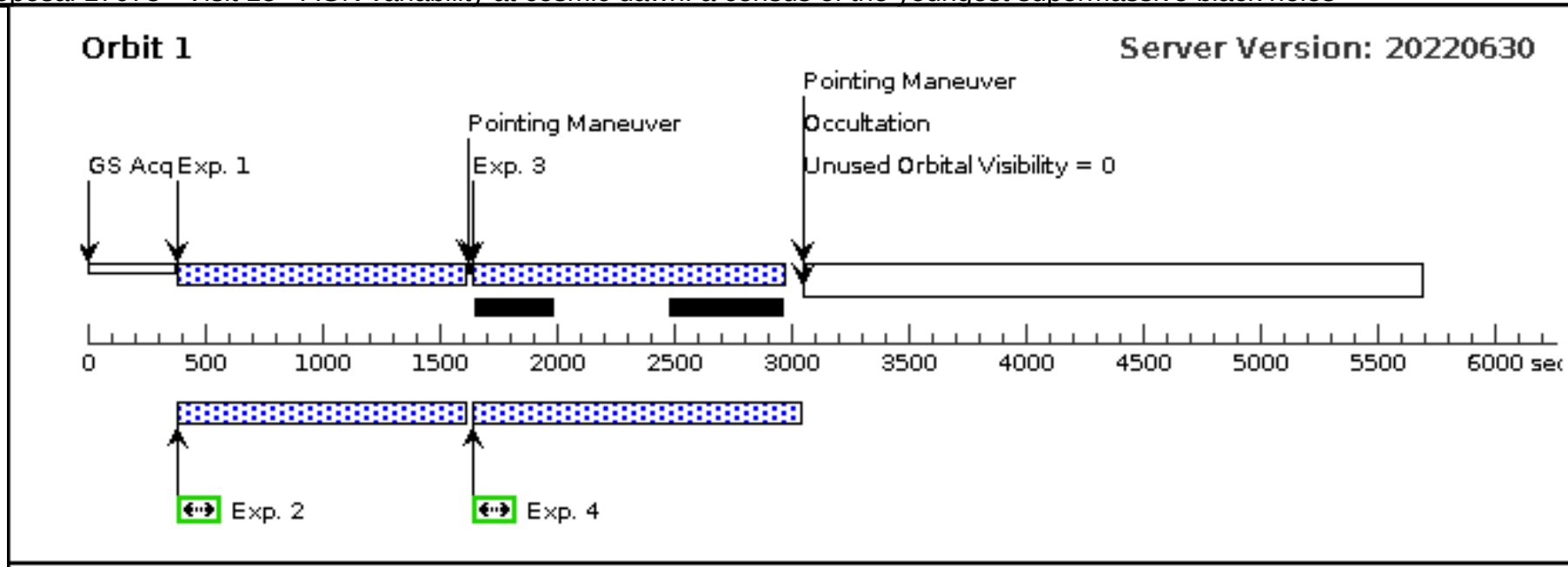
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HUDF-DEEP-WFC3	RA: 03 32 38.5000 (53.1604167d) Dec: -27 47 0.00 (-27.78333d) Equinox: J2000		V=25	Reference Frame: ICRS

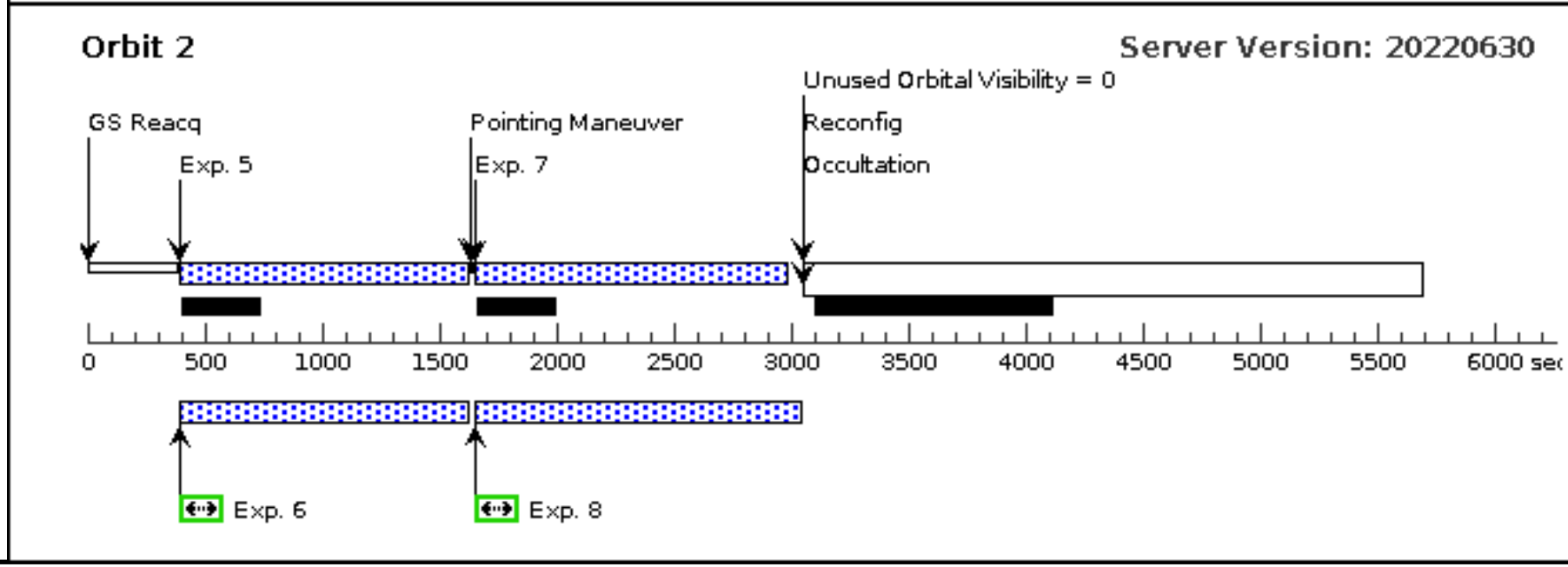
Comments:
Category=GALAXY
Description=[HIGH REDSHIFT GALAXY, QUASAR, STARBURST]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 3.62261 77,3.4276723	Prime + Parallel Group 1-2 in Visit 15	1202.936167 Secs (1202.936 Secs) *[==>]*	***[1]***
2		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2 in Visit 15	1025 Secs (1025 Secs) *[==>]*	***[1]***
3		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 3.42761 77,3.8566723	Prime + Parallel Group 3-4 in Visit 15	1302.93649 Secs (1302.936 Secs) *[==>]*	***[1]***
4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 3-4 in Visit 15	1272 Secs (1272 Secs) *[==>]*	***[1]***
5		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG 3.10261 77,3.6226723	Prime + Parallel Group 5-6 in Visit 15	1202.936167 Secs (1202.936 Secs) *[==>]*	***[2]***
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in Visit 15	1107 Secs (1107 Secs) *[==>]*	***[2]***
7		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG 2.90761 77,4.1101723	Prime + Parallel Group 7-8 in Visit 15	1302.93649 Secs (1302.936 Secs) *[==>]*	***[2]***
8		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 7-8 in Visit 15	1263 Secs (1263 Secs) *[==>]*	***[2]***

Orbit Structure





Visit

Proposal 17073, Visit Z1 Tue Aug 15 14:00:52 GMT 2023

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, ACS/WFC

Special Requirements: SCHED 60%; ORIENT 264.0D TO 264.0 D

Comments: Combination of Visit 01 and Visit 07 as HOPR 92593

Diagnostics

(Visit Z1) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HUDF-DEEP-WFC3	RA: 03 32 38.5000 (53.1604167d) Dec: -27 47 0.00 (-27.78333d) Equinox: J2000		V=25	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[HIGH REDSHIFT GALAXY, QUASAR, STARBURST]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -3.6767211,-2.8341989	Prime + Parallel Group 1-2 in Visit Z1	1202.936167 Secs (1202.936 Secs) *[==>]*	***[1]***
2		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2 in Visit Z1	1025 Secs (1025 Secs) *[==>]*	***[1]***
3		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG -3.4817211,-2.4051989	Prime + Parallel Group 3-4 in Visit Z1	1302.93649 Secs (1302.936 Secs) *[==>]*	***[1]***
4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 3-4 in Visit Z1	1272 Secs (1272 Secs) *[==>]*	***[1]***
5		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=13; SAMP-SEQ=SPARS100	POS TARG -2.4828102,-2.4840218	Prime + Parallel Group 5-6 in Visit Z1	1202.936167 Secs (1202.936 Secs) *[==>]*	***[2]***
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in Visit Z1	1107 Secs (1107 Secs) *[==>]*	***[2]***
7		(1) HUDF-DEEP-WFC3	WFC3/IR, MULTIACCUM, IR-FIX	F140W	NSAMP=14; SAMP-SEQ=SPARS100	POS TARG -2.2878102,-2.0550218	Prime + Parallel Group 7-8 in Visit Z1	1302.93649 Secs (1302.936 Secs) *[==>]*	***[2]***
8		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 7-8 in Visit Z1	1263 Secs (1263 Secs) *[==>]*	***[2]***

Orbit Structure