



16262 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Cycle: 28, Proposal Category: SNAP

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

| <i>Visit</i> | <i>Targets used in Visit</i> | <i>Configurations used in Visit</i> | <i>Orbits Used</i> | <i>Last Orbit Planner Run</i> | <i>OP Current with Visit?</i> |
|--------------|------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------------|
| 01 | (1) NGC-0050 | WFC3/IR | 1 | 01-Jul-2020 02:00:21.0 | yes |
| 02 | (2) NGC-0080 | WFC3/IR | 1 | 01-Jul-2020 02:00:22.0 | yes |
| 03 | (3) NGC-0083 | WFC3/IR | 1 | 01-Jul-2020 02:00:22.0 | yes |
| 04 | (4) NGC-0194 | WFC3/IR | 1 | 01-Jul-2020 02:00:23.0 | yes |
| 05 | (5) NGC-0193 | WFC3/IR | 1 | 01-Jul-2020 02:00:23.0 | yes |
| 06 | (6) NGC-0311 | WFC3/IR | 1 | 01-Jul-2020 02:00:24.0 | yes |
| 07 | (7) NGC-0380 | WFC3/IR | 1 | 01-Jul-2020 02:00:24.0 | yes |
| 08 | (8) NGC-0439 | WFC3/IR | 1 | 01-Jul-2020 02:00:25.0 | yes |
| 09 | (9) NGC-0499 | WFC3/IR | 1 | 01-Jul-2020 02:00:25.0 | yes |
| 10 | (10) NGC-0508 | WFC3/IR | 1 | 01-Jul-2020 02:00:26.0 | yes |

Proposal 16262 (STScI Edit Number: 0, Created: Wednesday, July 1, 2020 at 1:01:37 AM Eastern Standard Time) - Overview

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|--------------|------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------------|
| 11 | (11) NGC-0529 | WFC3/IR | 1 | 01-Jul-2020 02:00:26.0 | yes |
| 12 | (12) NGC-0541 | WFC3/IR | 1 | 01-Jul-2020 02:00:27.0 | yes |
| 13 | (13) NGC-0564 | WFC3/IR | 1 | 01-Jul-2020 02:00:28.0 | yes |
| 14 | (14) NGC-0679 | WFC3/IR | 1 | 01-Jul-2020 02:00:28.0 | yes |
| 15 | (15) NGC-0750 | WFC3/IR | 1 | 01-Jul-2020 02:00:29.0 | yes |
| 16 | (16) NGC-0759 | WFC3/IR | 1 | 01-Jul-2020 02:00:29.0 | yes |
| 17 | (17) ESO-197-G021 | WFC3/IR | 1 | 01-Jul-2020 02:00:30.0 | yes |
| 18 | (18) NGC-0883 | WFC3/IR | 1 | 01-Jul-2020 02:00:30.0 | yes |
| 19 | (19) UGC-01859 | WFC3/IR | 1 | 01-Jul-2020 02:00:31.0 | yes |
| 20 | (20) NGC-1057 | WFC3/IR | 1 | 01-Jul-2020 02:00:31.0 | yes |
| 21 | (21) NGC-1066 | WFC3/IR | 1 | 01-Jul-2020 02:00:32.0 | yes |
| 22 | (22) IC-0265 | WFC3/IR | 1 | 01-Jul-2020 02:00:32.0 | yes |
| 23 | (23) CGCG-539-126 | WFC3/IR | 1 | 01-Jul-2020 02:00:33.0 | yes |
| 24 | (24) CGCG-540-079 | WFC3/IR | 1 | 01-Jul-2020 02:00:34.0 | yes |
| 25 | (25) NGC-1270 | WFC3/IR | 1 | 01-Jul-2020 02:00:34.0 | yes |
| 26 | (26) NGC-1490 | WFC3/IR | 1 | 01-Jul-2020 02:00:35.0 | yes |
| 27 | (27) NGC-1550 | WFC3/IR | 1 | 01-Jul-2020 02:00:35.0 | yes |
| 28 | (28) NGC-1609 | WFC3/IR | 1 | 01-Jul-2020 02:00:36.0 | yes |
| 29 | (29) CGCG-328-014 | WFC3/IR | 1 | 01-Jul-2020 02:00:36.0 | yes |
| 30 | (30) NGC-1682 | WFC3/IR | 1 | 01-Jul-2020 02:00:37.0 | yes |
| 31 | (31) UGC-03215 | WFC3/IR | 1 | 01-Jul-2020 02:00:37.0 | yes |
| 32 | (32) NGC-1713 | WFC3/IR | 1 | 01-Jul-2020 02:00:38.0 | yes |
| 33 | (33) UGC-03353 | WFC3/IR | 1 | 01-Jul-2020 02:00:38.0 | yes |
| 34 | (34) UGC-03396 | WFC3/IR | 1 | 01-Jul-2020 02:00:39.0 | yes |
| 35 | (35) NGC-2208 | WFC3/IR | 1 | 01-Jul-2020 02:00:39.0 | yes |

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|--------------|------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------------|
| 36 | (36) NGC-2256 | WFC3/IR | 1 | 01-Jul-2020 02:00:40.0 | yes |
| 37 | (37) NGC-2274 | WFC3/IR | 1 | 01-Jul-2020 02:00:40.0 | yes |
| 38 | (38) UGC-3683 | WFC3/IR | 1 | 01-Jul-2020 02:00:41.0 | yes |
| 39 | (39) NGC-2329 | WFC3/IR | 1 | 01-Jul-2020 02:00:41.0 | yes |
| 40 | (40) NGC-2418 | WFC3/IR | 1 | 01-Jul-2020 02:00:42.0 | yes |
| 41 | (41) NGC-2563 | WFC3/IR | 1 | 01-Jul-2020 02:00:42.0 | yes |
| 42 | (42) NGC-2569 | WFC3/IR | 1 | 01-Jul-2020 02:00:43.0 | yes |
| 43 | (43) NGC-2672 | WFC3/IR | 1 | 01-Jul-2020 02:00:43.0 | yes |
| 44 | (44) IC-2437 | WFC3/IR | 1 | 01-Jul-2020 02:00:44.0 | yes |
| 45 | (45) NGC-3070 | WFC3/IR | 1 | 01-Jul-2020 02:00:45.0 | yes |
| 46 | (46) NGC-3091 | WFC3/IR | 1 | 01-Jul-2020 02:00:45.0 | yes |
| 47 | (47) NGC-3250 | WFC3/IR | 1 | 01-Jul-2020 02:00:46.0 | yes |
| 48 | (48) NGC-3258 | WFC3/IR | 1 | 01-Jul-2020 02:00:46.0 | yes |
| 49 | (49) NGC-3260 | WFC3/IR | 1 | 01-Jul-2020 02:00:47.0 | yes |
| 50 | (50) NGC-3268 | WFC3/IR | 1 | 01-Jul-2020 02:00:47.0 | yes |
| 51 | (51) NGC-3283 | WFC3/IR | 1 | 01-Jul-2020 02:00:48.0 | yes |
| 52 | (52) ESO-436-G045 | WFC3/IR | 1 | 01-Jul-2020 02:00:48.0 | yes |
| 53 | (53) NGC-3308 | WFC3/IR | 1 | 01-Jul-2020 02:00:49.0 | yes |
| 54 | (54) NGC-3311 | WFC3/IR | 1 | 01-Jul-2020 02:00:49.0 | yes |
| 55 | (55) NGC-3402 | WFC3/IR | 1 | 01-Jul-2020 02:00:50.0 | yes |
| 56 | (56) NGC-3557 | WFC3/IR | 1 | 01-Jul-2020 02:00:50.0 | yes |
| 57 | (57) NGC-3923 | WFC3/IR | 1 | 01-Jul-2020 02:00:51.0 | yes |
| 58 | (58) NGC-4373 | WFC3/IR | 1 | 01-Jul-2020 02:00:51.0 | yes |
| 59 | (59) IC-3370 | WFC3/IR | 1 | 01-Jul-2020 02:00:52.0 | yes |
| 60 | (60) NGC-4696 | WFC3/IR | 1 | 01-Jul-2020 02:00:52.0 | yes |

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|--------------|------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------------|
| 61 | (61) ESO-322-G094 | WFC3/IR | 1 | 01-Jul-2020 02:00:53.0 | yes |
| 62 | (62) PGC-170207 | WFC3/IR | 1 | 01-Jul-2020 02:00:53.0 | yes |
| 63 | (63) NGC-4709 | WFC3/IR | 1 | 01-Jul-2020 02:00:54.0 | yes |
| 64 | (64) 2MASX-J12501152-4113155 | WFC3/IR | 1 | 01-Jul-2020 02:00:55.0 | yes |
| 65 | (65) ESO-507-G021 | WFC3/IR | 1 | 01-Jul-2020 02:00:55.0 | yes |
| 66 | (66) PGC-43506 | WFC3/IR | 1 | 01-Jul-2020 02:00:56.0 | yes |
| 67 | (67) ESO-507-G025 | WFC3/IR | 1 | 01-Jul-2020 02:00:56.0 | yes |
| 68 | (68) NGC-4739 | WFC3/IR | 1 | 01-Jul-2020 02:00:57.0 | yes |
| 69 | (69) NGC-4729 | WFC3/IR | 1 | 01-Jul-2020 02:00:57.0 | yes |
| 70 | (70) ESO-507-G032 | WFC3/IR | 1 | 01-Jul-2020 02:00:58.0 | yes |
| 71 | (71) NGC-4759 | WFC3/IR | 1 | 01-Jul-2020 02:00:58.0 | yes |
| 72 | (72) NGC-4760 | WFC3/IR | 1 | 01-Jul-2020 02:00:59.0 | yes |
| 73 | (73) ESO-323-G034 | WFC3/IR | 1 | 01-Jul-2020 02:00:59.0 | yes |
| 74 | (74) NGC-4767 | WFC3/IR | 1 | 01-Jul-2020 02:01:00.0 | yes |
| 75 | (75) NGC-4782 | WFC3/IR | 1 | 01-Jul-2020 02:01:00.0 | yes |
| 76 | (76) ESO-507-G045 | WFC3/IR | 1 | 01-Jul-2020 02:01:01.0 | yes |
| 77 | (77) PGC-158229 | WFC3/IR | 1 | 01-Jul-2020 02:01:01.0 | yes |
| 78 | (78) NGC-4825 | WFC3/IR | 1 | 01-Jul-2020 02:01:02.0 | yes |
| 79 | (79) NGC-4914 | WFC3/IR | 1 | 01-Jul-2020 02:01:03.0 | yes |
| 80 | (80) ESO-443-G024 | WFC3/IR | 1 | 01-Jul-2020 02:01:03.0 | yes |
| 81 | (81) IC-3986 | WFC3/IR | 1 | 01-Jul-2020 02:01:04.0 | yes |
| 82 | (82) ESO-382-G002 | WFC3/IR | 1 | 01-Jul-2020 02:01:04.0 | yes |
| 83 | (83) NGC-4936 | WFC3/IR | 1 | 01-Jul-2020 02:01:05.0 | yes |
| 84 | (84) NGC-4955 | WFC3/IR | 1 | 01-Jul-2020 02:01:05.0 | yes |
| 85 | (85) NGC-5011 | WFC3/IR | 1 | 01-Jul-2020 02:01:06.0 | yes |

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|--------------|------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------------|
| 86 | (86) ESO-269-G072 | WFC3/IR | 1 | 01-Jul-2020 02:01:06.0 | yes |
| 87 | (87) NGC-5090 | WFC3/IR | 1 | 01-Jul-2020 02:01:07.0 | yes |
| 88 | (88) NGC-5140 | WFC3/IR | 1 | 01-Jul-2020 02:01:07.0 | yes |
| 89 | (89) ESO-576-G066 | WFC3/IR | 1 | 01-Jul-2020 02:01:08.0 | yes |
| 90 | (90) NGC-5193 | WFC3/IR | 1 | 01-Jul-2020 02:01:08.0 | yes |
| 91 | (91) IC-4296 | WFC3/IR | 1 | 01-Jul-2020 02:01:09.0 | yes |
| 92 | (92) ESO-445-G002 | WFC3/IR | 1 | 01-Jul-2020 02:01:09.0 | yes |
| 93 | (93) ESO-445-G028 | WFC3/IR | 1 | 01-Jul-2020 02:01:10.0 | yes |
| 94 | (94) NGC-5328 | WFC3/IR | 1 | 01-Jul-2020 02:01:11.0 | yes |
| 95 | (95) ESO-384-G013 | WFC3/IR | 1 | 01-Jul-2020 02:01:11.0 | yes |
| 96 | (96) NGC-5357 | WFC3/IR | 1 | 01-Jul-2020 02:01:12.0 | yes |
| 97 | (97) NGC-5397 | WFC3/IR | 1 | 01-Jul-2020 02:01:12.0 | yes |
| 98 | (98) NGC-5419 | WFC3/IR | 1 | 01-Jul-2020 02:01:13.0 | yes |
| 99 | (99) NGC-5516 | WFC3/IR | 1 | 01-Jul-2020 02:01:13.0 | yes |
| 0A | (100) ESO-137-G006 | WFC3/IR | 1 | 01-Jul-2020 02:01:14.0 | yes |
| 0B | (101) ESO-137-G007 | WFC3/IR | 1 | 01-Jul-2020 02:01:14.0 | yes |
| 0C | (102) ESO-137-G008 | WFC3/IR | 1 | 01-Jul-2020 02:01:15.0 | yes |
| 0D | (103) ESO-137-G010 | WFC3/IR | 1 | 01-Jul-2020 02:01:15.0 | yes |
| 0E | (104) WKK-6479 | WFC3/IR | 1 | 01-Jul-2020 02:01:16.0 | yes |
| 0F | (105) ESO-137-G024 | WFC3/IR | 1 | 01-Jul-2020 02:01:16.0 | yes |
| 0G | (106) NGC-6223 | WFC3/IR | 1 | 01-Jul-2020 02:01:17.0 | yes |
| 0H | (107) NGC-6407 | WFC3/IR | 1 | 01-Jul-2020 02:01:18.0 | yes |
| 0I | (108) NGC-6502 | WFC3/IR | 1 | 01-Jul-2020 02:01:18.0 | yes |
| 0J | (109) NGC-6577 | WFC3/IR | 1 | 01-Jul-2020 02:01:19.0 | yes |
| 0K | (110) IC-4727 | WFC3/IR | 1 | 01-Jul-2020 02:01:19.0 | yes |

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|--------------|-------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------------|
| 0L | (111) NGC-6688 | WFC3/IR | 1 | 01-Jul-2020 02:01:20.0 | yes |
| 0M | (112) NGC-6653 | WFC3/IR | 1 | 01-Jul-2020 02:01:20.0 | yes |
| 0N | (113) IC-4794 | WFC3/IR | 1 | 01-Jul-2020 02:01:21.0 | yes |
| 0O | (114) IC-4798 | WFC3/IR | 1 | 01-Jul-2020 02:01:21.0 | yes |
| 0P | (115) NGC-6739 | WFC3/IR | 1 | 01-Jul-2020 02:01:22.0 | yes |
| 0Q | (116) NGC-6768 | WFC3/IR | 1 | 01-Jul-2020 02:01:22.0 | yes |
| 0R | (117) IC-4842 | WFC3/IR | 1 | 01-Jul-2020 02:01:23.0 | yes |
| 0S | (118) 2MASS-J19215490-6003146 | WFC3/IR | 1 | 01-Jul-2020 02:01:23.0 | yes |
| 0T | (119) NGC-6841 | WFC3/IR | 1 | 01-Jul-2020 02:01:24.0 | yes |
| 0U | (120) ESO-399-G010 | WFC3/IR | 1 | 01-Jul-2020 02:01:24.0 | yes |
| 0V | (121) PGC-63905 | WFC3/IR | 1 | 01-Jul-2020 02:01:25.0 | yes |
| 0W | (122) IC-4926 | WFC3/IR | 1 | 01-Jul-2020 02:01:26.0 | yes |
| 0X | (123) IC-4931 | WFC3/IR | 1 | 01-Jul-2020 02:01:26.0 | yes |
| 0Y | (124) ESO-185-G054 | WFC3/IR | 1 | 01-Jul-2020 02:01:27.0 | yes |
| 0Z | (125) NGC-6868 | WFC3/IR | 1 | 01-Jul-2020 02:01:27.0 | yes |
| 1A | (126) IC-4956 | WFC3/IR | 1 | 01-Jul-2020 02:01:28.0 | yes |
| 1B | (127) NGC-6876 | WFC3/IR | 1 | 01-Jul-2020 02:01:28.0 | yes |
| 1C | (128) IC-4991 | WFC3/IR | 1 | 01-Jul-2020 02:01:29.0 | yes |
| 1D | (129) ESO-462-G015 | WFC3/IR | 1 | 01-Jul-2020 02:01:29.0 | yes |
| 1E | (130) NGC-6968 | WFC3/IR | 1 | 01-Jul-2020 02:01:30.0 | yes |
| 1F | (131) ESO-235-G049 | WFC3/IR | 1 | 01-Jul-2020 02:01:30.0 | yes |
| 1G | (132) NGC-7014 | WFC3/IR | 1 | 01-Jul-2020 02:01:31.0 | yes |
| 1H | (133) IC-5105 | WFC3/IR | 1 | 01-Jul-2020 02:01:32.0 | yes |
| 1I | (134) NGC-7242 | WFC3/IR | 1 | 01-Jul-2020 02:01:32.0 | yes |
| 1J | (135) IC-5193 | WFC3/IR | 1 | 01-Jul-2020 02:01:33.0 | yes |

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|--------------|------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------------|
| 1K | (136) UGC-11990 | WFC3/IR | 1 | 01-Jul-2020 02:01:34.0 | yes |
| 1L | (137) NGC-7265 | WFC3/IR | 1 | 01-Jul-2020 02:01:34.0 | yes |
| 1M | (138) NGC-7274 | WFC3/IR | 1 | 01-Jul-2020 02:01:35.0 | yes |
| 1N | (139) NGC-7426 | WFC3/IR | 1 | 01-Jul-2020 02:01:35.0 | yes |
| 1O | (140) NGC-7618 | WFC3/IR | 1 | 01-Jul-2020 02:01:36.0 | yes |
| 1P | (141) UGC-12517 | WFC3/IR | 1 | 01-Jul-2020 02:01:36.0 | yes |

141 Total Orbits Used

ABSTRACT

Surface brightness fluctuations in E/S0 galaxies are sufficiently bright in the infrared that they can be recorded with high signal-to-noise in galaxies within 80 Mpc in a single HST orbit. The SBF luminosity dependence on metallicity and age tracked by color is well established, permitting measurements of individual distances accurate to 5%. This outstanding capability will be used to determine distances for SNAP targets drawn from every massive cluster and the most important E/S0 galaxies outside of massive clusters within 80 Mpc. Galaxy-galaxy and galaxy-cluster comparisons with elliptical fundamental plane, spiral luminosity-linewidth and, especially, supernova distances will be made wherever possible in order to evaluate random and systematic uncertainties. SBF can provide distance measures for the cosmological measurement of H0 comparable in accuracy to those of SNIa. SBF anchored by the tip of the red giant branch zero point offers a competitive and independent alternative to the Cepheid/SNIa route to H0.

The most massive clusters at 40-80 Mpc lie within either the so-called Great Attractor region or the Perseus-Pisces filament. This range is the sweet spot for HST IR SBF studies - distances too great to be reliably measured from the ground but comfortably accessible with HST in single orbits. The dynamics in these two complexes are in the strongly non-linear regime with clusters collapsing toward each other. Numerical action methods will permit the recovery of physical orbits and the determination of masses. The 3D information on positions and motions affords a unique window into the construction of rich clusters.

OBSERVING DESCRIPTION

REDUCED GYRO IMPACT: The impact of reduced gyros is minimal for this SNAP program. We have included more targets than will likely be observed, covering all RA, so we can easily accommodate reduced or limited observing windows. Our observations do not have any observing constraints (ORIENT, CVZ, etc.), as required for SNAP programs.

SAMPLE SELECTION: To achieve the goals of this project, we have carefully selected a sample of 141 massive elliptical and S0 galaxies in 84 groups and clusters within 80 Mpc. We chose three target fields in 60 of the groups for redundancy and ultimately to improve the precision of the distance measurements. It is critical that systematic errors be minimized to accurately measure the peculiar velocity field. Additional targets can be supplied if needed.

EXPOSURE TIMES: We would like the maximum integration time on a given target that can fit within a particular SNAP window. We recognize that the requested time herein will sometimes exceed the time available and will require that exposure times be shortened for some targets. We will adjust NSAMP to fit within an observing window as needed.

DISTANCE CALIBRATION: The surface brightness fluctuation (SBF) technique, calibrated using Cepheid variable stars, has been demonstrated at both optical and IR wavelengths using WFC3 (Blakeslee et al. 2009; Jensen et al. 2015), and has half the scatter of distance indicators like fundamental plane and velocity-linewidth often used at similar distances (Colless et al. 2001; Tully et al. 2013, 2016). The calibration and procedure for measuring F110W SBF using WFC3/IR was established using high-S/N observations of Fornax and Virgo cluster galaxies (GO-11712: Mei et al. 2008; Blakeslee et al. 2009, 2010; Jensen et al. 2013, 2015). The extensive SBF studies of Virgo and Fornax shows an intrinsic scatter of 0.06 mag at optical wavelengths, where the effects of metallicity and age are nearly degenerate (Blakeslee et al. 2009). The scatter in the near-IR SBF is somewhat larger (0.08 mag), but the fluctuations are as much as ten times brighter and the extinction due to dust is significantly reduced. These factors make single orbit IR SBF measurements feasible out to ~100 Mpc, which is particularly important given that many of the most important groups in our sample are located beyond 50 Mpc and at low galactic latitude where optical extinction is significant. The F110W SBF distance uncertainty is ~5% per galaxy out to 70 Mpc, not including a 0.1 mag systematic uncertainty in the Cepheid calibration (Blakeslee 2013; Jensen et al. 2015).

We have tested our SBF procedures on single and multi-orbit measurements of NGC 4874 in the Coma cluster at ~96 Mpc as a demonstration that the proposed exposure times will yield accurate distance measurements (Jensen et al. 2015). The F110W SBF S/N in one orbit is ~10 at 70 Mpc, sufficient to avoid systematic effects sometimes observed in lower S/N measurements. SBF distances are computed by measuring the fluctuation power in a Fourier spatial power spectrum of the galaxy with the smooth galaxy profile and background subtracted. The fluctuation power is usually

expressed as an apparent fluctuation magnitude, and the distance modulus is computed using the absolute fluctuation magnitude derived from the Cepheid calibration of the nearby galaxies in Virgo and Fornax (Jensen et al. 2015). Scatter is comparable with expectations from the depths of the clusters. Uncertainty in the distances to the calibrator clusters remains a dominant source of systematic error.

GLOBULAR CLUSTER CONTAMINATION: Fluctuations arise from the Poisson statistics of the most luminous stars in a stellar population, primarily red giant branch stars, even though individual stars are not resolved. Distant galaxies appear smooth compared to nearby ones because the number of stars per resolution element is much larger, making the Poisson fluctuations a smaller fraction of the total luminosity. To ensure that the fluctuations being measured arise solely from the stars, it is important to remove or correct for other contaminating sources of variance, including globular clusters and background galaxies. This is the primary source of uncertainty beyond 70 Mpc. Several hundred globular clusters (GC) will be detected in each observation. We will fit and study the globular cluster luminosity function (GCLF) as part of the ancillary science mission of this proposal. For SBF measurements, the GCLF is used to calculate the estimated residual variance due to GCs fainter than the completeness limit. We have chosen F110W to maximize our sensitivity to GCs so that the residual correction will be as small as possible. In one orbit we will reach the peak of the GCLF at 70 Mpc. We have demonstrated that exposures in a single orbit are sufficient at even greater distances using the NGC 4874 data as a test case. The expected correction for undetected GCs is $\sim 10\%$ or less at 70 Mpc and the distance uncertainty that results from the correction is $< 2\%$.

INTEGER PIXEL OFFSETS: To avoid correlated noise between pixels, which adversely affects the Fourier spatial power spectrum, we use integer pixel offsets between dither positions instead of the fractional pixel offsets typically used for HST observations.

OPTICAL COLORS: Color is an important input to the SBF distance measurement to account for stellar population variations between galaxies. Most giant ellipticals have old, metal-rich populations, so the correction to the fluctuation magnitude for stellar population can be done reliably with minimal additional uncertainty. To ensure that our targets are within the reliable range of the SBF calibration, we have imposed a requirement that all target galaxies have $(J-H) > 0.62$ (Vega) or 0.20 (AB), or $(g-z) > 1.2$ (AB). Within this color range, the absolute fluctuation magnitude is a tight function of the optical color $g-z$. We therefore require optical measurements for each galaxy in our sample. Optical colors for the entire sample above a galactic latitude of -30 degrees (about $2/3$ of the targets) will be extracted from PanSTARRS imaging, which provides high-resolution g , r , i , and z photometry with superb photometric integrity (Magnier et al. 2013) and has been thoroughly calibrated for SBF (Jensen et al. 2020). Equivalent information is expected to be available for the southern quarter of the sky from surveys such as DECam or Skymapper or, if necessary, with a modest ground-based observing program. Measuring optical colors is not part of this SNAP proposal.

Proposal 16262 - Visit 01 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:37 GMT 2020

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|---|---|---|--|---------------------------------|--------------------------------|--------------------------------|----------------------|-------------------------------------|---|--------------|
| Visit | Proposal 16262, Visit 01 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | | | | | | | | | | |
| Patterns | # | Primary Pattern | Secondary Pattern | Exposures | | | | | | |
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | | (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (1) | NGC-0050 Alt Name1: PGC-983 | RA: 00 14 44.6000 (3.6858333d) Dec: -07 20 42.60 (-7.34517d) Equinox: J2000 | Radial Velocity: 5495.0 km/sec | V=(?) K=8.56, (J-H)=0.69 | Reference Frame: ICRS | | | | |
| <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (1) NGC-0050 | (1) NGC-0050 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 01 (1) | 502.936801 Secs (2011.747 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |
| Orbit Structure | Server Version: 20200619 | | | | | | | | | |
| | <p>The diagram shows a timeline from 0 to 6000 seconds. Key events include: GS Acq at ~100s, Exp. 1 at ~400s, Pointing Maneuver at ~1000s, Exp. 1 at ~1400s, Pointing Maneuver at ~1800s, Exp. 1 at ~2100s, Pointing Maneuver at ~2400s, Reconfig at ~2600s, and Occultation at ~3100s. A green bar indicates a period of 'Unused Orbital Visibility = 522' seconds between 2600s and 3100s. The timeline is marked with ticks every 500 seconds.</p> | | | | | | | | | |

Proposal 16262 - Visit 02 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:37 GMT 2020

| | | | | | | | | | | |
|------------------------|---|---------------------------------|---|--|-----------------------------------|-----------------------|---------------|---|--|-------|
| Visit | Proposal 16262, Visit 02 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (2) | NGC-0080 Alt Name1: PGC-1351 | RA: 00 21 10.9000 (5.2954167d) Dec: +22 21 26.10 (22.35725d) Equinox: J2000 | Radial Velocity: 5736.0 km/sec | V=(?) K=8.9, (J-H)=0.65 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (2) NGC-0080 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 i n Visit 02 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram shows a timeline from 0 to 6000 seconds. Key events include: GS Acq at ~100s, Exp. 1 at ~400s, Pointing Maneuver at ~1000s, Exp. 1 at ~1400s, Pointing Maneuver at ~1800s, Exp. 1 at ~2100s, Pointing Maneuver at ~2400s, Reconfig at ~2600s, and Occultation at ~3100s. A green bar indicates 'Unused Orbital Visibility = 534' between 2600s and 3100s. A blue checkered bar highlights the exposure periods.</p> | | | | | | | | | |

Proposal 16262 - Visit 03 - 5% Distances to Galaxies using Surface Brightness Fluctuations

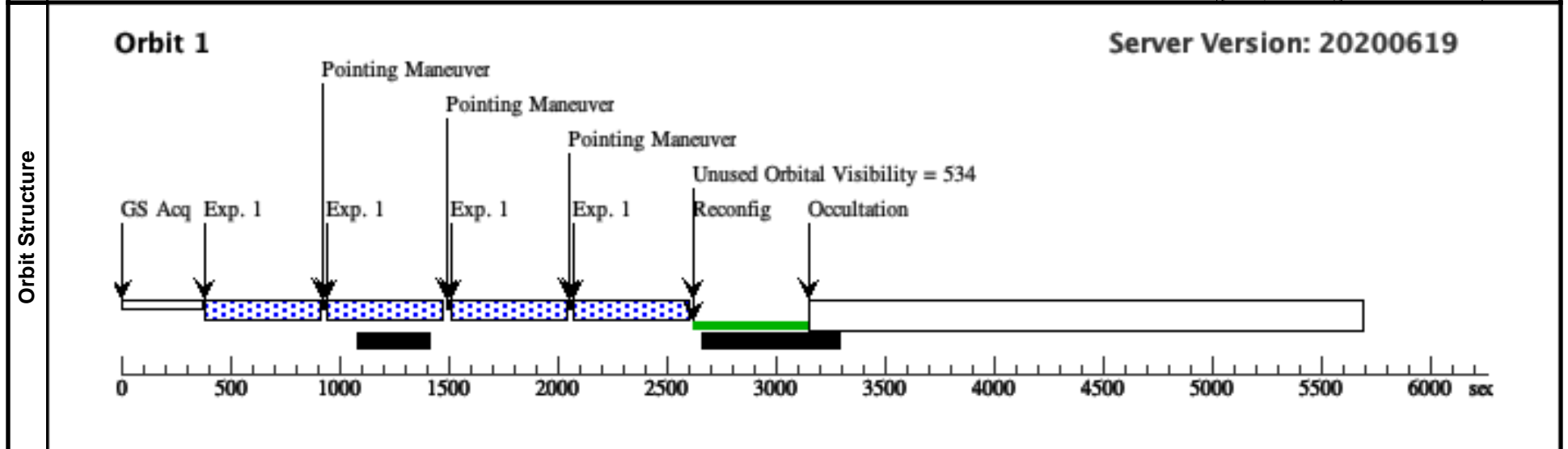
Wed Jul 01 06:01:37 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 03 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (3) | NGC-0083 Alt Name1: PGC-1371 | RA: 00 21 22.5000 (5.3437500d) Dec: +22 26 0.80 (22.43356d) Equinox: J2000 | Radial Velocity: 6227.0 km/sec | V=(?) K=9.27, (J-H)=0.69 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|--------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (3) NGC-0083 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 03 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 04 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:37 GMT 2020

| | | | | | | | | | | |
|------------------------|---|---------------------------------|---|--|-----------------------------------|-----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 04 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (4) | NGC-0194 Alt Name1: PGC-2362 | RA: 00 39 18.4000 (9.8266667d) Dec: +03 02 14.80 (3.03744d) Equinox: J2000 | Radial Velocity: 5184.0 km/sec | V=(?) K=9.2, (J-H)=0.72 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (4) NGC-0194 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 04 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram shows a timeline from 0 to 6000 seconds. Key events include: GS Acq at ~100s, Exp. 1 at ~400s, Pointing Maneuver at ~1000s, Exp. 1 at ~1400s, Pointing Maneuver at ~1800s, Exp. 1 at ~2200s, Pointing Maneuver at ~2600s, Reconfig at ~2700s, and Occultation at ~3200s. A green bar indicates a period of 'Unused Orbital Visibility = 519' seconds between 2700s and 3200s. A blue checkered bar highlights the exposure periods. Black bars below the axis indicate other activities or constraints.</p> | | | | | | | | | |

Proposal 16262 - Visit 05 - 5% Distances to Galaxies using Surface Brightness Fluctuations

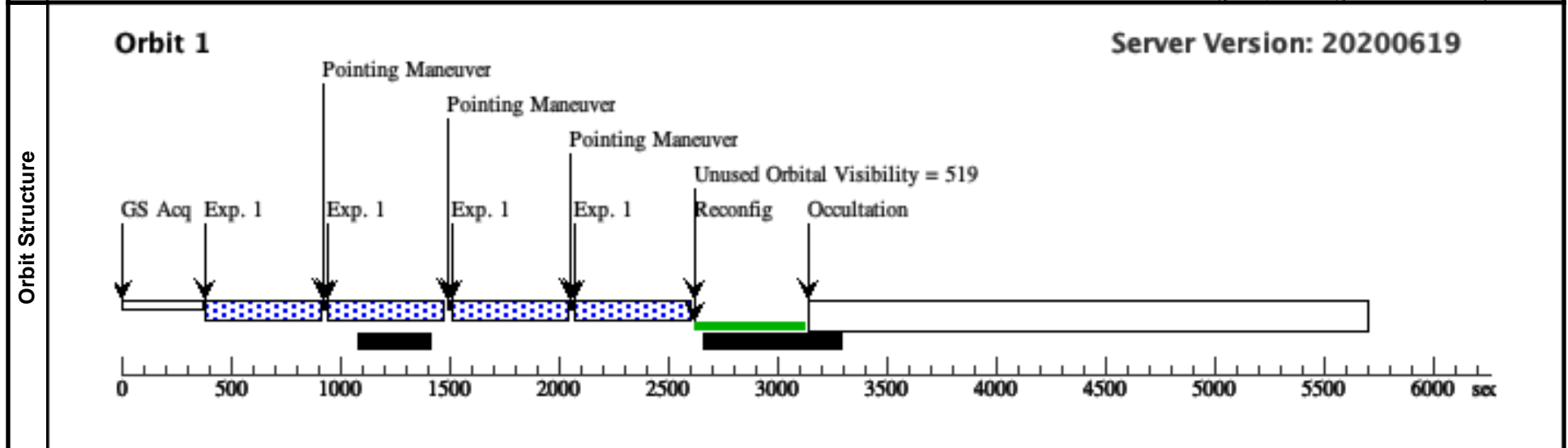
Wed Jul 01 06:01:37 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 05 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---------------------------------|--|--------------------------------|-------------------------------|-----------------------|
| | (5) | NGC-0193 Alt Name1: PGC-2359 | RA: 00 39 18.6000 (9.8275000d) Dec: +03 19 52.80 (3.33133d) Equinox: J2000 | Radial Velocity: 4394.0 km/sec | V=(?) K=9.2, (J-H)=0.67 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|--------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (5) NGC-0193 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 05 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 06 - 5% Distances to Galaxies using Surface Brightness Fluctuations

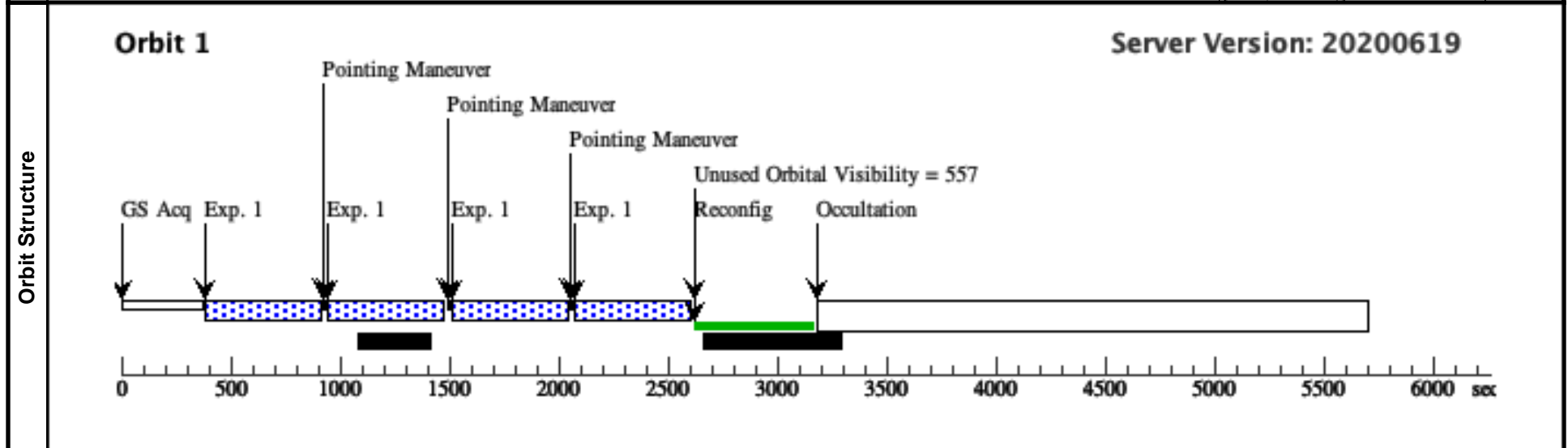
Wed Jul 01 06:01:37 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 06 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|-----|---------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (6) | NGC-0311 Alt Name1: PGC-3434 | RA: 00 57 32.6000 (14.3858333d) Dec: +30 16 50.90 (30.28081d) Equinox: J2000 | Radial Velocity: 5020.0 km/sec | V=(?) K=9.71, (J-H)=0.67 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|--------------|-------------------------|---------------|--------------------------------|---------------|--------|--|---------------------------------|
| | 1 | | (6) NGC-0311 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 06 (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 07 - 5% Distances to Galaxies using Surface Brightness Fluctuations

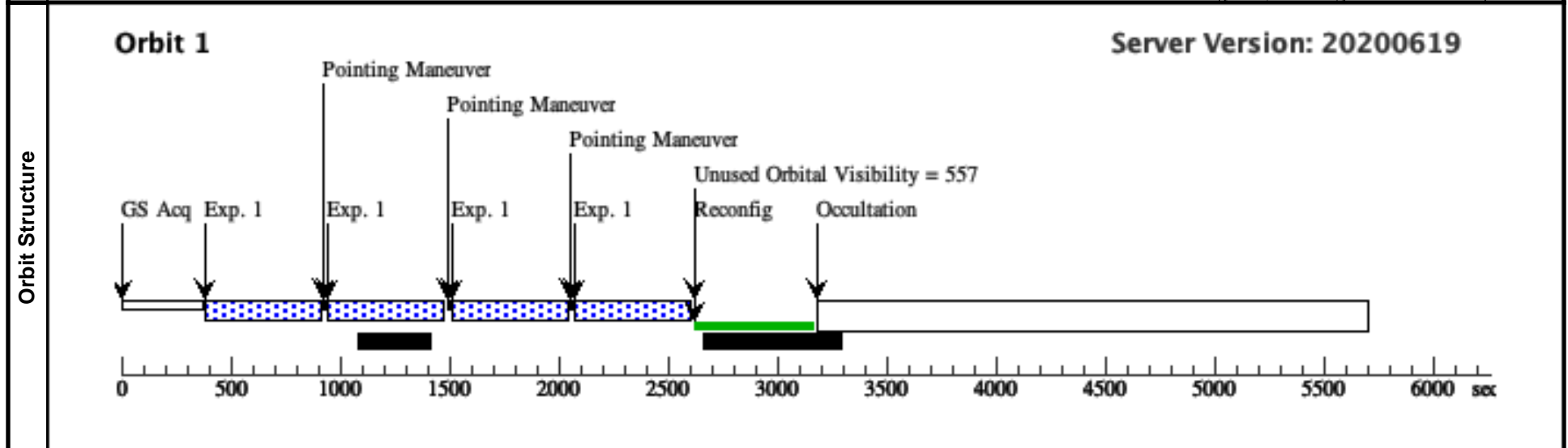
Wed Jul 01 06:01:37 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 07 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (7) | NGC-0380 Alt Name1: PGC-3969 | RA: 01 07 17.5000 (16.8229167d) Dec: +32 28 56.90 (32.48247d) Equinox: J2000 | Radial Velocity: 4423.0 km/sec | V=(?) K=9.24, (J-H)=0.74 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|--------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (7) NGC-0380 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 07 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 08 - 5% Distances to Galaxies using Surface Brightness Fluctuations

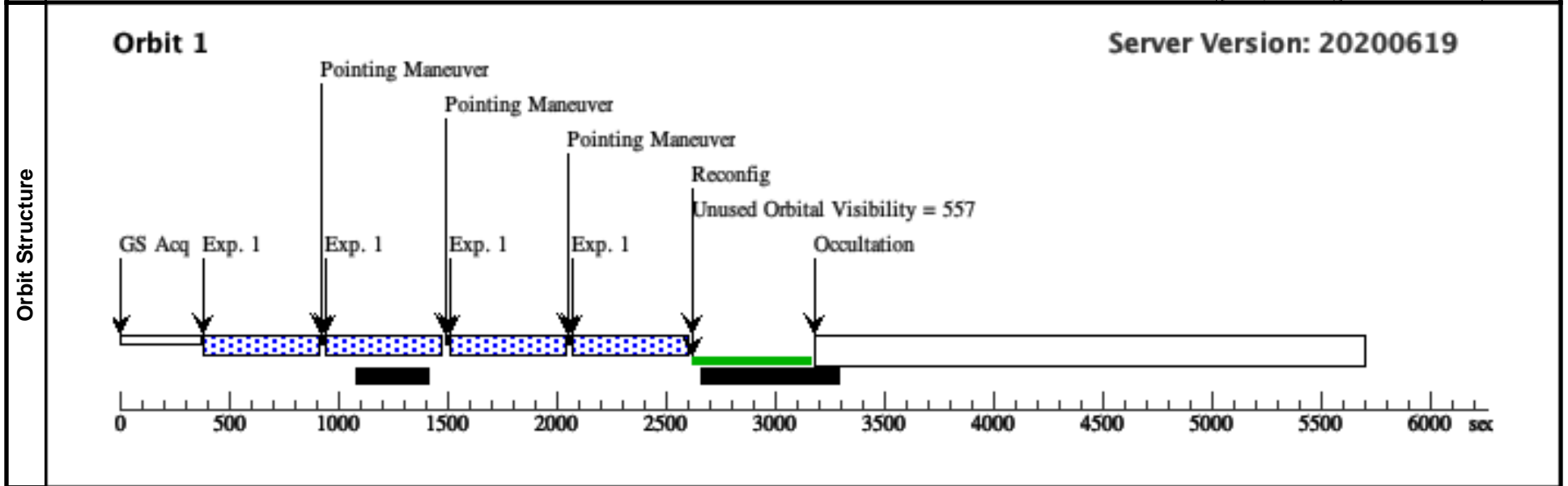
Wed Jul 01 06:01:37 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 08 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---------------------------------|---|--------------------------------|---------------------------------|-----------------------|
| | (8) | NGC-0439 Alt Name1: PGC-4423 | RA: 01 13 47.3000 (18.4470833d) Dec: -31 44 50.10 (-31.74725d) Equinox: J2000 | Radial Velocity: 5802.0 km/sec | V=(?) K=8.68, (J-H)=0.713 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|--------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (8) NGC-0439 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 08 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 09 - 5% Distances to Galaxies using Surface Brightness Fluctuations

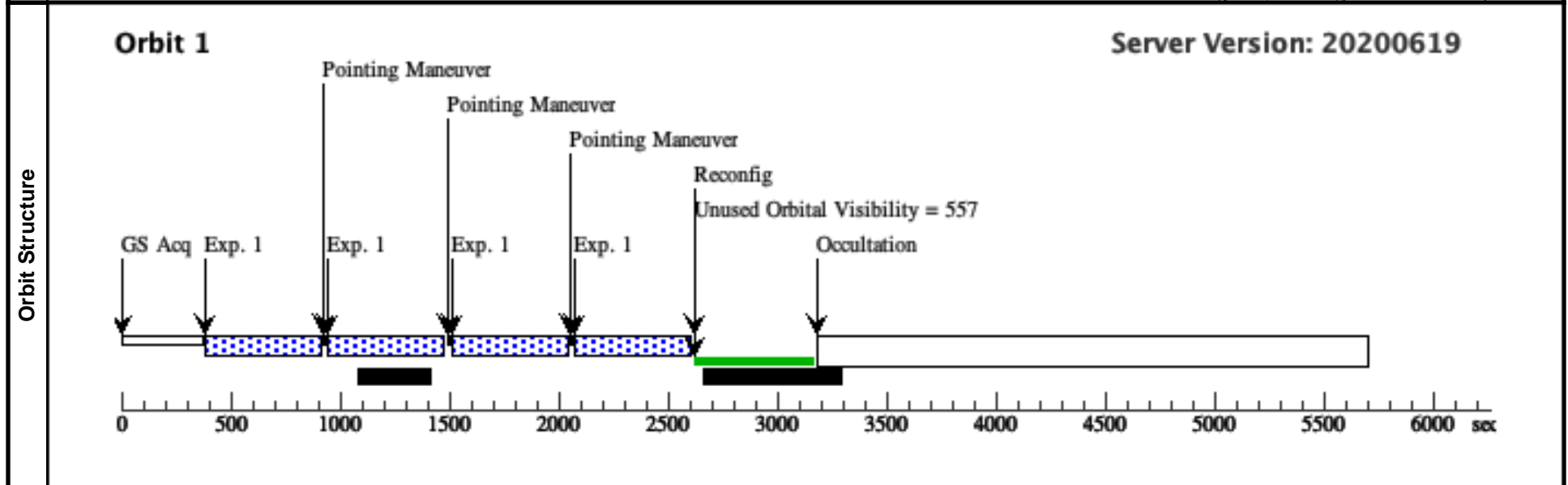
Wed Jul 01 06:01:37 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 09 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (9) | NGC-0499 Alt Name1: PGC-5060 | RA: 01 23 11.5000 (20.7979167d) Dec: +33 27 37.50 (33.46042d) Equinox: J2000 | Radial Velocity: 4360.0 km/sec | V=(?) K=8.71, (J-H)=0.67 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|--------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (9) NGC-0499 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 09 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 10 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:37 GMT 2020

| | | | | | | | | | | |
|------------------------|--|---------------------------------|---|--|-----------------------------------|-------------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 10 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Secondary Pattern | Exposures (1) | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (10) | NGC-0508 Alt Name1: PGC-5099 | RA: 01 23 40.7000 (20.9195833d) Dec: +33 16 51.10 (33.28086d) Equinox: J2000 | Radial Velocity: 5494.0 km/sec | V=(?) K=9.7, (J-H)=0.65 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (10) NGC-0508 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 10 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram illustrates the timeline for Orbit 1, spanning from 0 to 6000 seconds. Key events include:</p> <ul style="list-style-type: none"> GS Acq: Ground Station Acquisition at approximately 100 seconds. Exp. 1: Four exposure periods, each lasting about 100 seconds, occurring at approximately 400, 900, 1400, and 1900 seconds. Pointing Maneuver: Three maneuvers, each lasting about 100 seconds, occurring at approximately 1000, 1500, and 2000 seconds. Reconfig: A reconfiguration period lasting about 100 seconds, occurring at approximately 2600 seconds. Occultation: A period of occultation lasting about 100 seconds, occurring at approximately 3200 seconds. Unused Orbital Visibility = 557: A period of unused orbital visibility lasting 557 seconds, occurring from approximately 2600 to 3157 seconds. <p>The timeline is marked with a scale from 0 to 6000 seconds in increments of 500.</p> | | | | | | | | | |

Proposal 16262 - Visit 11 - 5% Distances to Galaxies using Surface Brightness Fluctuations

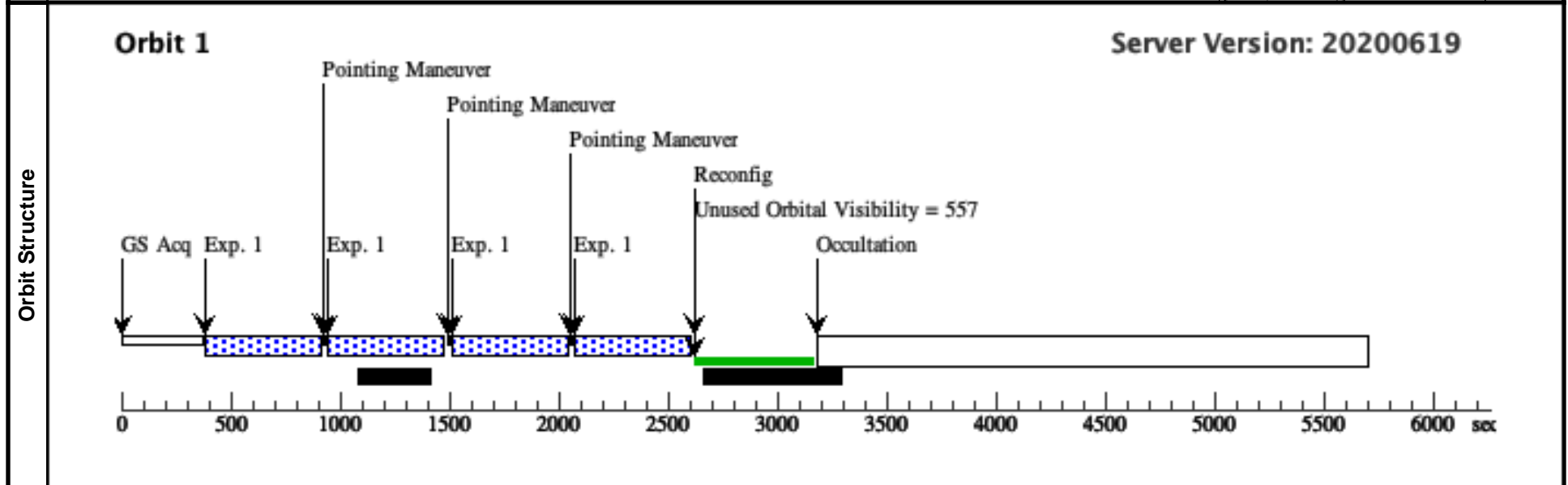
Wed Jul 01 06:01:37 GMT 2020

| | | | |
|--------------|---|--|--|
| Visit | Proposal 16262, Visit 11 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (11) | NGC-0529 Alt Name1: PGC-5299 | RA: 01 25 40.3000 (21.4179167d) Dec: +34 42 46.50 (34.71292d) Equinox: J2000 | Radial Velocity: 4795.0 km/sec | V=(?) K=9.09, (J-H)=0.73 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (11) NGC-0529 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 11 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 12 - 5% Distances to Galaxies using Surface Brightness Fluctuations

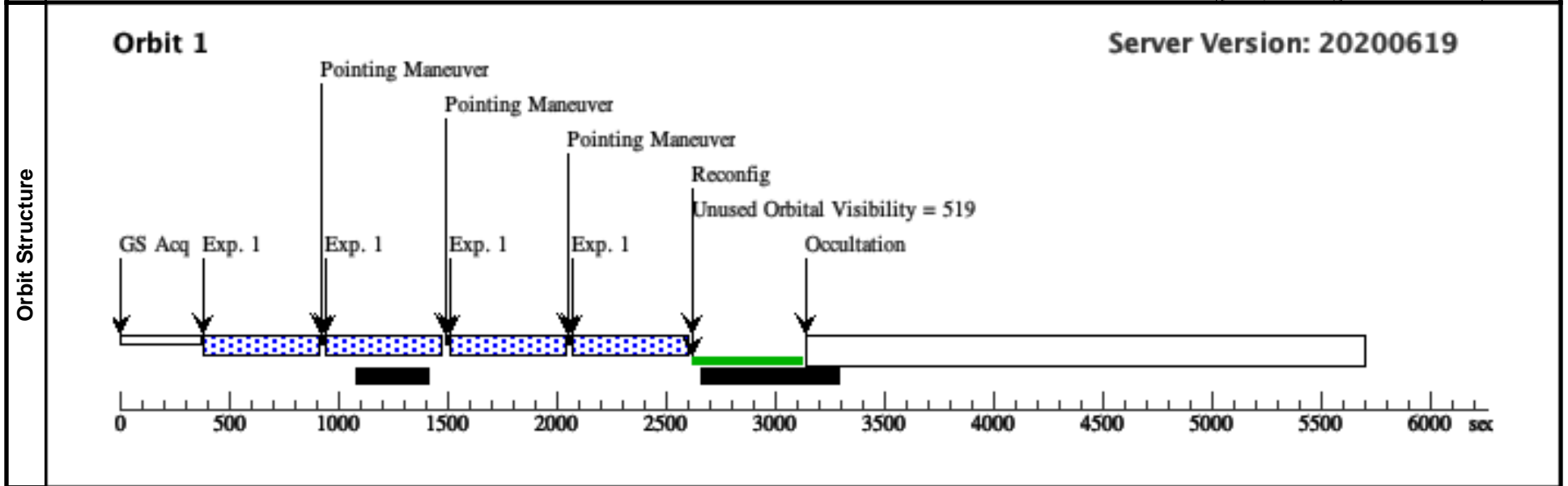
Wed Jul 01 06:01:37 GMT 2020

| | | | |
|--------------|---|--|--|
| Visit | Proposal 16262, Visit 12 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (12) | NGC-0541 Alt Name1: PGC-5305 | RA: 01 25 44.3000 (21.4345833d) Dec: -01 22 46.20 (-1.37950d) Equinox: J2000 | Radial Velocity: 5384.0 km/sec | V=(?) K=9.28, (J-H)=0.69 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (12) NGC-0541 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 12 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 13 - 5% Distances to Galaxies using Surface Brightness Fluctuations

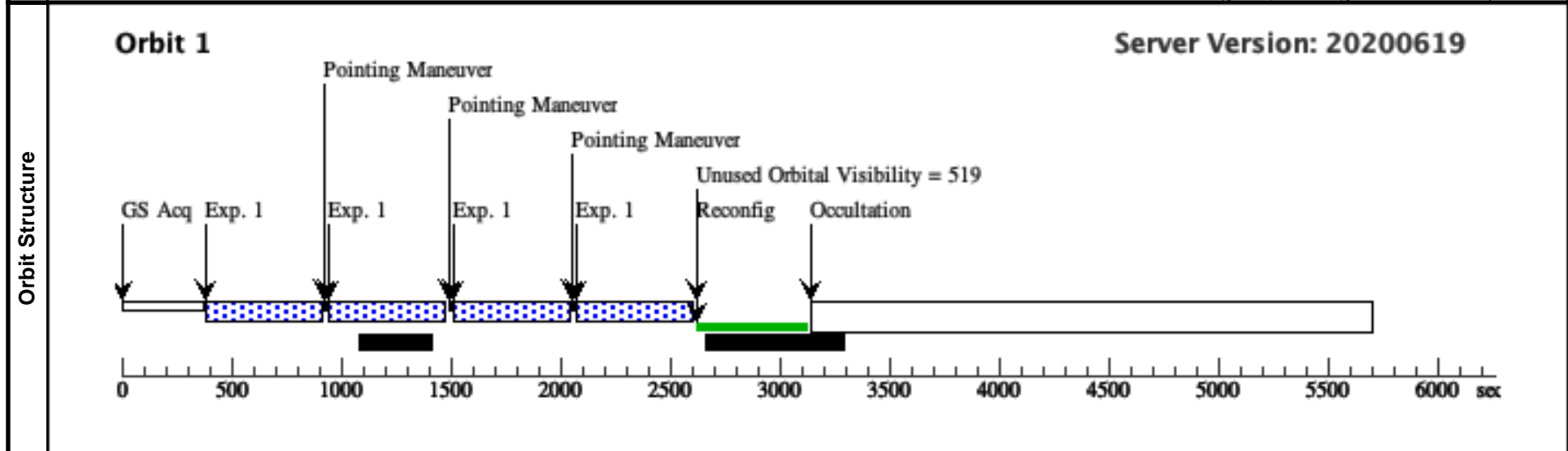
Wed Jul 01 06:01:37 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 13 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (13) | NGC-0564 Alt Name1: PGC-5455 | RA: 01 27 48.2000 (21.9508333d) Dec: -01 52 46.00 (-1.87944d) Equinox: J2000 | Radial Velocity: 5832.0 km/sec | V=(?) K=9.59, (J-H)=0.64 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (13) NGC-0564 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 13 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 14 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:37 GMT 2020

| | | | | | | | | | | |
|---|---|---|--|---------------------------------|--------------------------------|-----------------------|----------------------|-------------------------------------|--|--------------|
| Visit | Proposal 16262, Visit 14 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | | | | | | | | | | |
| Patterns | # | Primary Pattern | Secondary Pattern | Exposures | | | | | | |
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | | (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (14) | NGC-0679 Alt Name1: PGC-6711 | RA: 01 49 43.8000 (27.4325000d) Dec: +35 47 8.30 (35.78564d) Equinox: J2000 | Radial Velocity: 5049.0 km/sec | V=(?) K=9.11, (J-H)=0.72 | Reference Frame: ICRS | | | | |
| <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (14) NGC-0679 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 14 (1) | 502.936801 Secs (2011.747 Secs) | [1] |
| | | | | | | | | | [=>(Pattern 1)] | |
| | | | | | | | | | [=>(Pattern 2)] | |
| | | | | | | | | | [=>(Pattern 3)] | |
| | | | | | | | | | [=>(Pattern 4)] | |
| Orbit Structure | Server Version: 20200619 | | | | | | | | | |
| | <p>The diagram illustrates the orbit structure over a 6000-second period. It shows the timing of various activities: GS Acq (at ~100s), four exposures (Exp. 1) at approximately 400s, 1000s, 1500s, and 2100s, each preceded by a Pointing Maneuver. A Reconfig event occurs at ~2600s, followed by a period of Unused Orbital Visibility (577s) and an Occultation event at ~3200s. The primary exposure period (blue checkered bar) spans from ~400s to ~2600s, and the secondary exposure period (green bar) spans from ~2600s to ~3200s.</p> | | | | | | | | | |

Proposal 16262 - Visit 15 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:37 GMT 2020

| | | | | | | | | | | |
|------------------------|---|---------------------------------|---|--|--------------------------------|----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 15 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (15) | NGC-0750 Alt Name1: PGC-7369 | RA: 01 57 32.7300 (29.3863750d) Dec: +33 12 33.40 (33.20928d) Equinox: J2000 | Radial Velocity: 5171.0 km/sec | V=(?) K=8.54, (J-H)=0.72 | Reference Frame: NED | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (15) NGC-0750 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 15 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram shows a timeline from 0 to 6000 seconds. Key events include:</p> <ul style="list-style-type: none"> GS Acq at approximately 100s. Exp. 1 (blue checkered bar) from approximately 400s to 2600s. Pointing Maneuver (vertical arrows) at approximately 1000s, 1500s, and 2100s. Reconfig (vertical arrow) at approximately 2600s. Unused Orbital Visibility = 557 (green bar) from approximately 2600s to 3150s. Occultation (vertical arrow) at approximately 3150s. | | | | | | | | | |

Proposal 16262 - Visit 16 - 5% Distances to Galaxies using Surface Brightness Fluctuations

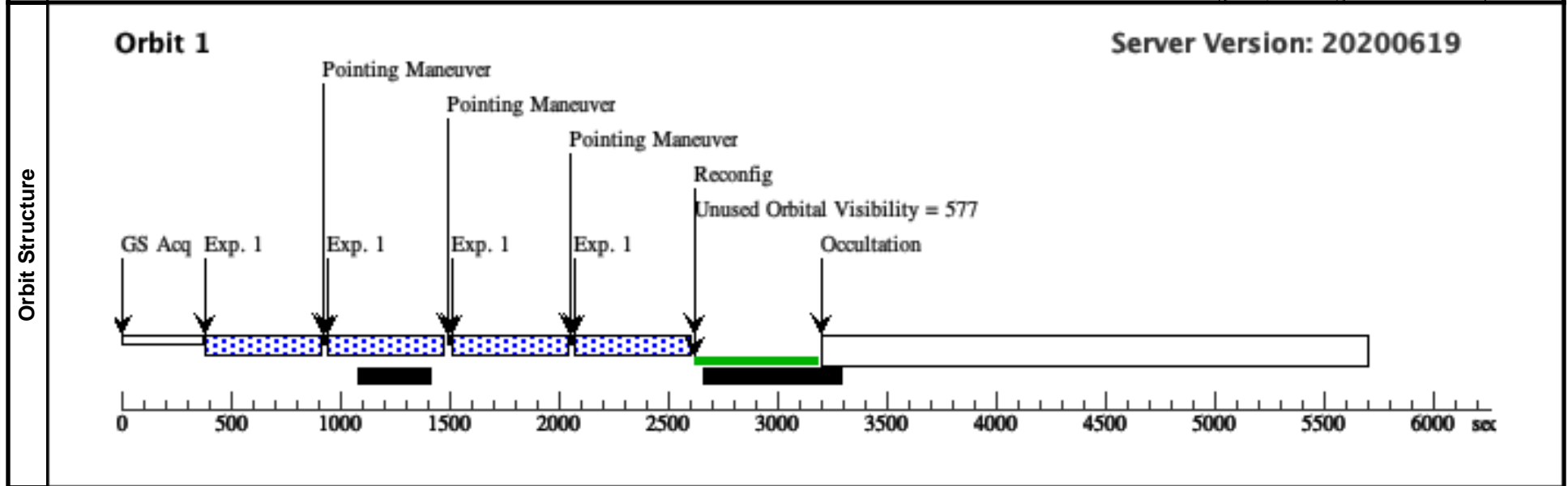
Wed Jul 01 06:01:37 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 16 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (16) | NGC-0759 Alt Name1: PGC-7397 | RA: 01 57 50.4000 (29.4600000d) Dec: +36 20 34.80 (36.34300d) Equinox: J2000 | Radial Velocity: 4647.0 km/sec | V=(?) K=9.11, (J-H)=0.72 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (16) NGC-0759 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 16 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 17 - 5% Distances to Galaxies using Surface Brightness Fluctuations

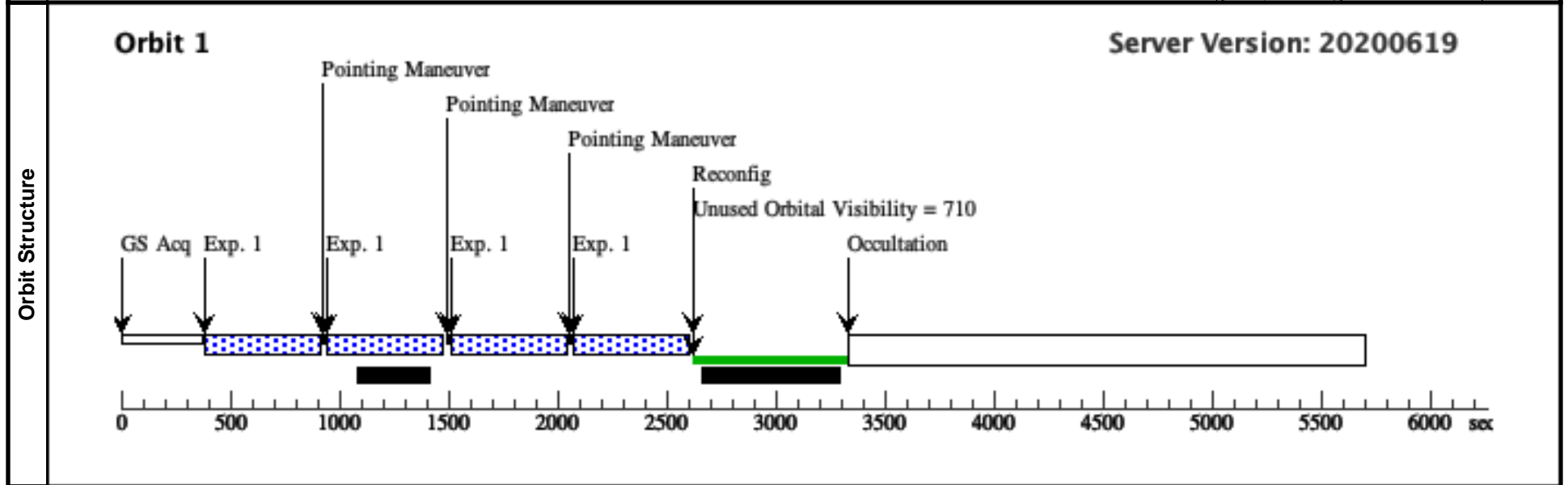
Wed Jul 01 06:01:38 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 17 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|-------------------------------------|---|--------------------------------|-------------------------------|----------------------|
| | (17) | ESO-197-G021 Alt Name1: PGC-7903 | RA: 02 04 32.5900 (31.1357917d) Dec: -52 10 19.80 (-52.17217d) Equinox: J2000 | Radial Velocity: 6000.0 km/sec | V=(?) K=9.09, (J-H)=0.7 | Reference Frame: NED |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-------------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (17) ESO-197-G021 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 17 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 18 - 5% Distances to Galaxies using Surface Brightness Fluctuations

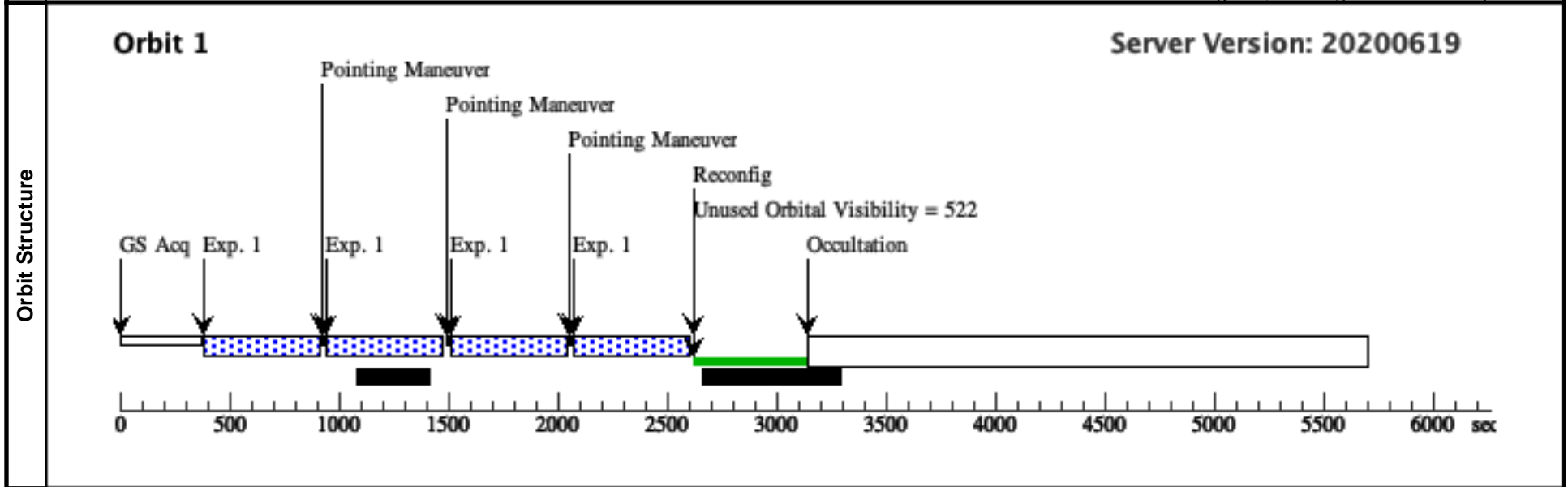
Wed Jul 01 06:01:38 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 18 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|---------------------------------|---|--------------------------------|--------------------------------|----------------------|
| | (18) | NGC-0883 Alt Name1: PGC-8841 | RA: 02 19 5.1800 (34.7715833d) Dec: -06 47 27.30 (-6.79092d) Equinox: J2000 | Radial Velocity: 5443.0 km/sec | V=(?) K=8.89, (J-H)=0.69 | Reference Frame: NED |
| <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|--------|--|---------------------------------|
| | 1 | | (18) NGC-0883 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 18 (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | |



Proposal 16262 - Visit 19 - 5% Distances to Galaxies using Surface Brightness Fluctuations

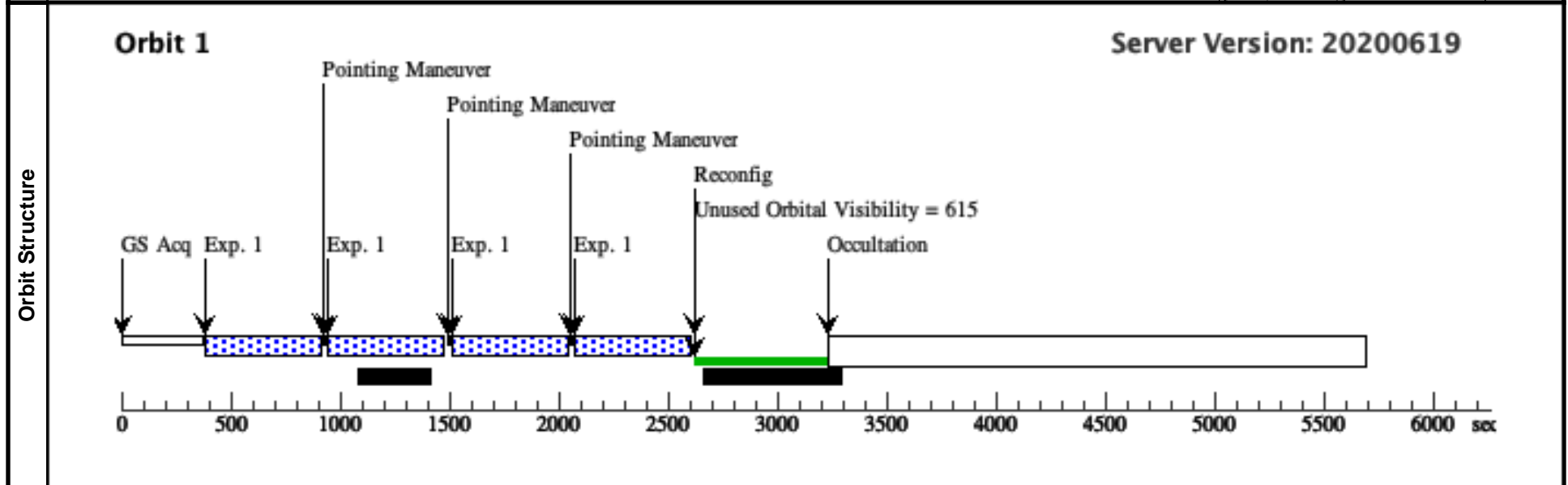
Wed Jul 01 06:01:38 GMT 2020

| | | | |
|--------------|---|--|--|
| Visit | Proposal 16262, Visit 19 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (19) | UGC-01859 Alt Name1: PGC-9150 | RA: 02 24 44.4000 (36.1850000d) Dec: +42 37 22.30 (42.62286d) Equinox: J2000 | Radial Velocity: 5917.0 km/sec | V=(?) K=9.75, (J-H)=0.67 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|----------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (19) UGC-01859 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 19 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 20 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:38 GMT 2020

| | | | | | | | | | | |
|------------------------|---|----------------------------------|---|--|---------------------------------|-----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 20 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (20) | NGC-1057 Alt Name1: PGC-10287 | RA: 02 43 2.9000 (40.7620833d) Dec: +32 29 28.30 (32.49119d) Equinox: J2000 | Radial Velocity: 5786.0 km/sec | V=(?) K=10.18, (J-H)=0.78 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (20) NGC-1057 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 20 (1) | 502.936801 Secs (2011.747 Secs) | [1] |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram shows a timeline from 0 to 6000 seconds. Key events include: GS Acq at ~100s, Exp. 1 at ~400s, Pointing Maneuver at ~1000s, Exp. 1 at ~1400s, Pointing Maneuver at ~1800s, Exp. 1 at ~2100s, Pointing Maneuver at ~2400s, Reconfig at ~2600s, and Occultation at ~3200s. A green bar indicates 'Unused Orbital Visibility = 557' between 2600s and 3200s. A blue checkered bar highlights the exposure periods.</p> | | | | | | | | | |

Proposal 16262 - Visit 21 - 5% Distances to Galaxies using Surface Brightness Fluctuations

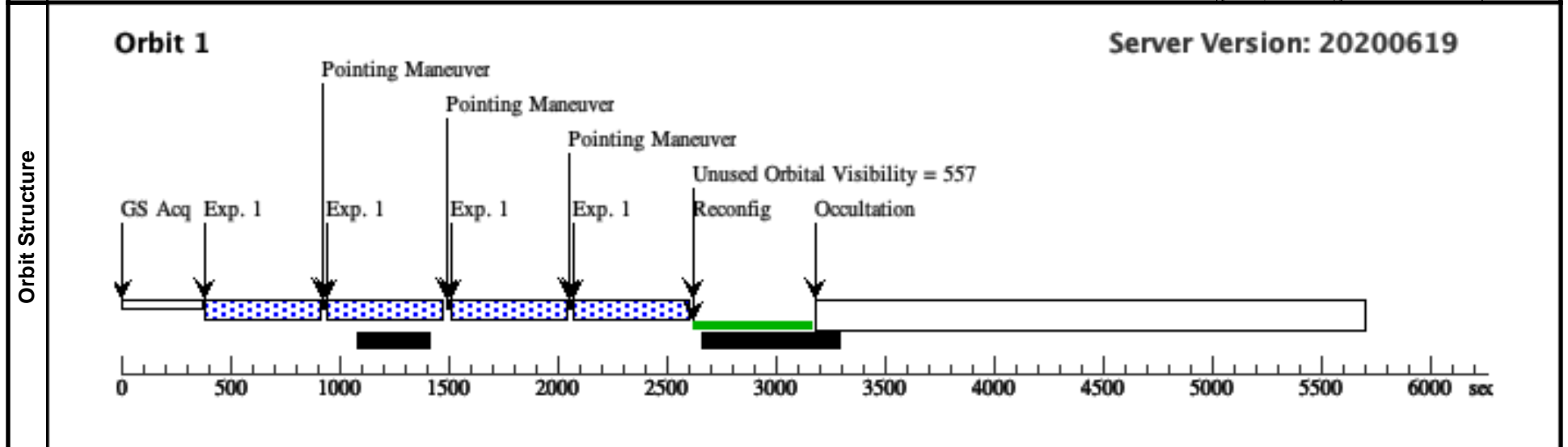
Wed Jul 01 06:01:38 GMT 2020

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|--------------|--|--|--|
| Visit | Proposal 16262, Visit 21 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------------------------------|--|--------------------------------|-------------------------------|-----------------------|
| | (21) | NGC-1066 Alt Name1: PGC-10338 | RA: 02 43 49.9000 (40.9579167d) Dec: +32 28 29.70 (32.47492d) Equinox: J2000 | Radial Velocity: 4349.0 km/sec | V=(?) K=8.82, (J-H)=0.7 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (21) NGC-1066 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 21 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 22 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:38 GMT 2020

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|------------------------|---|---------------------------------|---|--|---------------------------------|--------------------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 22 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (22) | IC-0265 Alt Name1: PGC-10978 | RA: 02 54 44.0000 (43.6833333d) Dec: +41 39 18.60 (41.65517d) Equinox: J2000 | Radial Velocity: 5374.0 km/sec | V=(?) K=10.47, (J-H)=0.65 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | | (22) IC-0265 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 22 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram illustrates the orbit structure for Orbit 1, spanning from 0 to 6000 seconds. Key events and durations are as follows:</p> <ul style="list-style-type: none"> GS Acq: Occurs at 0 seconds. Exp. 1: Occurs at 400 seconds. Pointing Maneuvers: Occur at 1000, 1500, and 2100 seconds. Reconfig: Occurs at 2600 seconds. Unused Orbital Visibility: A period of 615 seconds between 2600s and 3200s. Occultation: Occurs at 3200 seconds. Exposure Time: A green bar indicates exposure time from 2600s to 3200s. | | | | | | | | | |

Proposal 16262 - Visit 23 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:38 GMT 2020

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|------------------------|--|---|---|--|--|---|----------------------|--|---|---------------------|
| Visit | Proposal 16262, Visit 23 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # (23) | Name CGCG-539-126 Alt Name1: PGC-10980 | Target Coordinates RA: 02 54 44.6000 (43.6858333d) Dec: +41 31 42.10 (41.52836d) Equinox: J2000 | Targ. Coord. Corrections Radial Velocity: 4451.0 km/sec | Fluxes V=(?) K=9.91, (J-H)=0.68 | Miscellaneous Reference Frame: ICRS | | | | |
| Exposures | # 1 | Label (23) CGCG-539-126 | Target WFC3/IR, MULTIACCUM, IR | Config,Mode,Aperture F110W | Spectral Els. SAMP-SEQ=SPARS 50; NSAMP=11 | Opt. Params. SAMP-SEQ=SPARS 50; NSAMP=11 | Special Reqs. | Groups Pattern 1, Exps 1-1 in Visit 23 (1) | Exp. Time (Total)/[Actual Dur.] 502.936801 Secs (2011.747 Secs) | Orbit [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram illustrates the orbit structure for Orbit 1, spanning from 0 to 6000 seconds. Key events and durations are as follows:</p> <ul style="list-style-type: none"> GS Acq: Occurs at approximately 100 seconds. Exp. 1: The primary exposure period, highlighted with a blue checkered pattern, spans from approximately 400 seconds to 2600 seconds. Pointing Maneuvers: Three pointing maneuvers are scheduled at approximately 1000, 1500, and 2100 seconds. Reconfig: A reconfiguration event occurs at approximately 2600 seconds. Unused Orbital Visibility: A period of 615 seconds (from 2600s to 3200s) is marked as unused orbital visibility, shown in green. Occultation: An occultation event begins at approximately 3200 seconds and continues until the end of the orbit at 6000 seconds. | | | | | | | | | |

Proposal 16262 - Visit 24 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:38 GMT 2020

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|------------------------|--|--------------------------------------|---|--|-----------------------------------|----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 24 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (24) | CGCG-540-079 Alt Name1: PGC-12193 | RA: 03 17 3.6300 (49.2651250d) Dec: +41 38 1.10 (41.63364d) Equinox: J2000 | Radial Velocity: 7236.0 km/sec | V=(?) K=9.9, (J-H)=0.74 | Reference Frame: NED | | | | |
| | Comments: Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (24) CGCG-540-079 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 24 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> <div> <h3>Orbit 1</h3> <p>The diagram shows a timeline for Orbit 1 from 0 to 6000 seconds. Key events include: GS Acq at ~100s, four Exp. 1 exposures between 500s and 2500s, three Pointing Maneuvers at ~1000s, ~1500s, and ~2000s, a Reconfig phase at ~2600s, and an Occultation phase starting at ~3200s. A green bar indicates 'Unused Orbital Visibility = 615' between 2600s and 3200s. A black bar is present between 1000s and 1500s.</p> </div> <div> <p>Server Version: 20200619</p> </div> </div> | | | | | | | | | |

Proposal 16262 - Visit 25 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:38 GMT 2020

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|------------------------|--|----------------------------------|---|--|-----------------------------------|-----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 25 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (25) | NGC-1270 Alt Name1: PGC-12350 | RA: 03 18 58.2000 (49.7425000d) Dec: +41 28 12.00 (41.47000d) Equinox: J2000 | Radial Velocity: 4972.0 km/sec | V=(?) K=9.38, (J-H)=0.7 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (25) NGC-1270 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 25 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram illustrates the orbit structure for Orbit 1, spanning from 0 to 6000 seconds. Key events and durations are as follows:</p> <ul style="list-style-type: none"> GS Acq: Occurs at 0 seconds. Exp. 1: Occurs at 500 seconds. Pointing Maneuvers: Occur at 1000, 1500, and 2000 seconds. Reconfig: Occurs at 2500 seconds. Unused Orbital Visibility: A period of 615 seconds between 2500 and 3200 seconds. Occultation: Occurs at 3200 seconds. Exposure Time: A green bar indicates exposure from 2500 to 3200 seconds. | | | | | | | | | |

Proposal 16262 - Visit 26 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:38 GMT 2020

| | | | | | | | | | | |
|------------------------|--|----------------------------------|---|--|--------------------------------|----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 26 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (26) | NGC-1490 Alt Name1: PGC-14040 | RA: 03 53 34.2200 (58.3925833d) Dec: -66 01 5.00 (-66.01806d) Equinox: J2000 | Radial Velocity: 5365.0 km/sec | V=(?) K=9.07, (J-H)=0.68 | Reference Frame: NED | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (26) NGC-1490 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 26 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram shows a timeline from 0 to 6000 seconds. Key events include: GS Acq at ~100s, Exp. 1 at ~400s, Pointing Maneuver at ~1000s, Exp. 1 at ~1400s, Pointing Maneuver at ~1800s, Exp. 1 at ~2100s, Pointing Maneuver at ~2400s, Reconfig at ~2600s, Unused Orbital Visibility (863s) from ~2600s to ~3463s, and Occultation starting at ~3500s. A blue checkered bar represents exposure time, and a green bar represents the reconfig period.</p> | | | | | | | | | |

Proposal 16262 - Visit 27 - 5% Distances to Galaxies using Surface Brightness Fluctuations

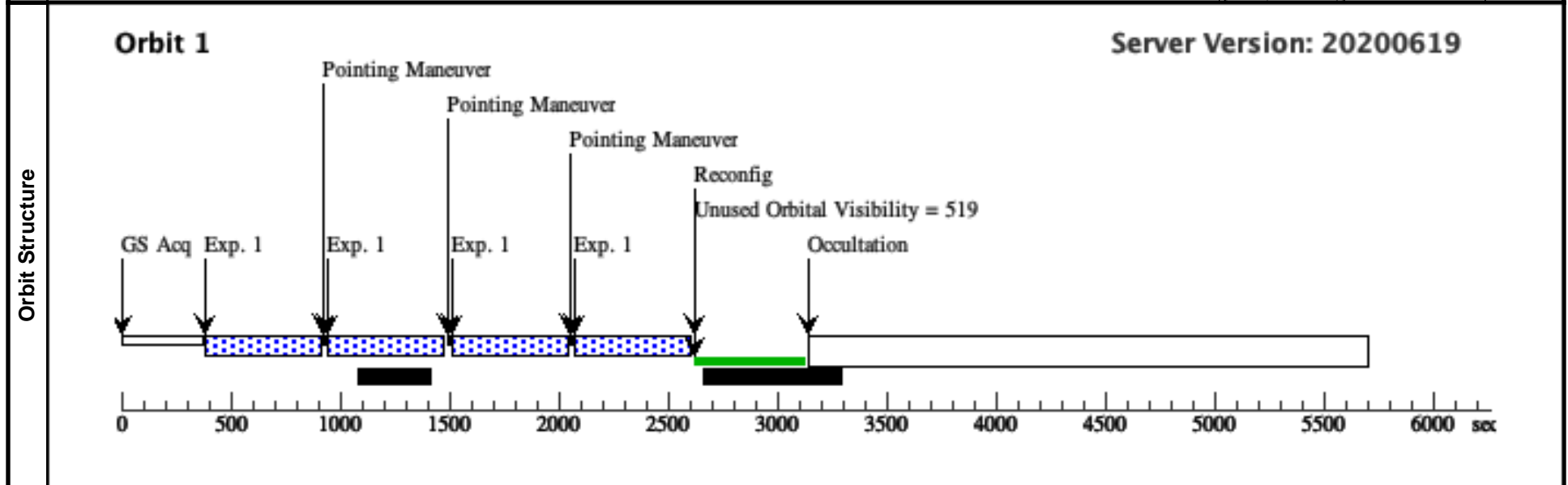
Wed Jul 01 06:01:38 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 27 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|----------------------------------|---|--------------------------------|--------------------------------|-----------------------|
| | (27) | NGC-1550 Alt Name1: PGC-14880 | RA: 04 19 37.9000 (64.9079167d) Dec: +02 24 35.50 (2.40986d) Equinox: J2000 | Radial Velocity: 3785.0 km/sec | V=(?) K=8.73, (J-H)=0.68 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|--------|--|---------------------------------|
| | 1 | | (27) NGC-1550 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 27 (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 28 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:38 GMT 2020

| | | | | | | | | | | |
|------------------------|---|----------------------------------|---|--|-----------------------------------|-----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 28 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (28) | NGC-1609 Alt Name1: PGC-15480 | RA: 04 32 45.1000 (68.1879167d) Dec: -04 22 20.60 (-4.37239d) Equinox: J2000 | Radial Velocity: 4324.0 km/sec | V=(?) K=9.62, (J-H)=0.69 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (28) NGC-1609 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 28 (1) | 502.936801 Secs (2011.747 Secs) | [1] |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram shows a timeline from 0 to 6000 seconds. Key events include: GS Acq at ~100s, Exp. 1 at ~400s, Pointing Maneuver at ~1000s, Exp. 1 at ~1400s, Pointing Maneuver at ~1800s, Exp. 1 at ~2100s, Pointing Maneuver at ~2400s, Reconfig at ~2600s, and Occultation at ~3100s. A green bar indicates a period of 'Unused Orbital Visibility = 519' seconds between 2600s and 3100s. A blue checkered bar highlights the exposure periods.</p> | | | | | | | | | |

Proposal 16262 - Visit 29 - 5% Distances to Galaxies using Surface Brightness Fluctuations

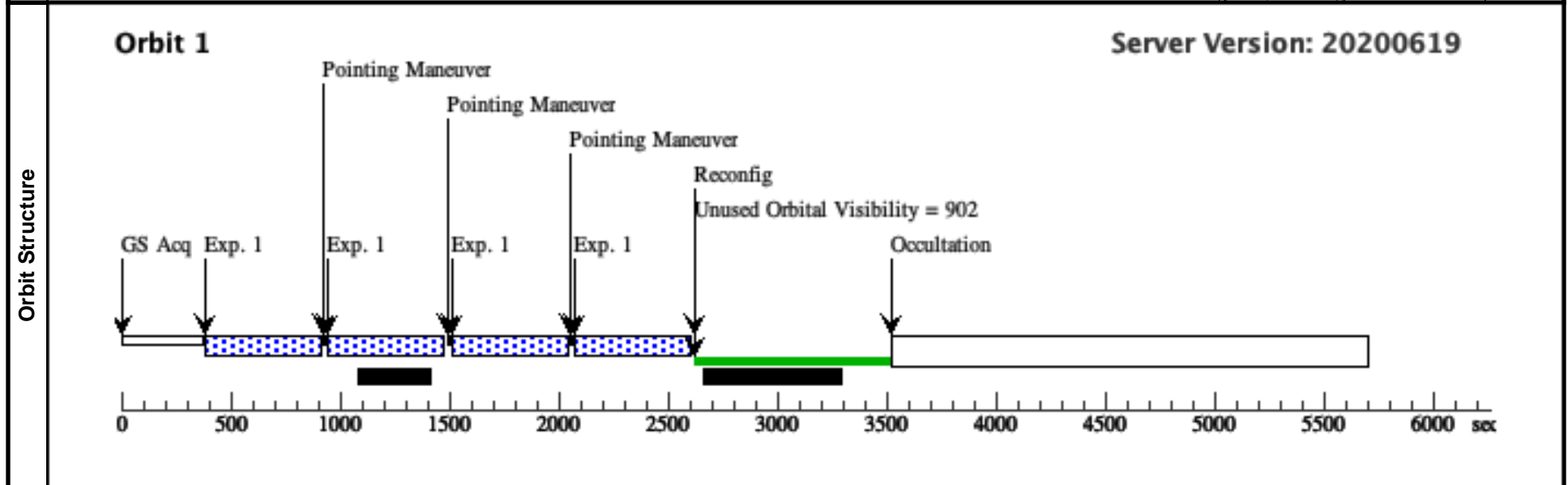
Wed Jul 01 06:01:38 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 29 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|--------------------------------------|--|--------------------------------|---------------------------------|-----------------------|
| | (29) | CGCG-328-014 Alt Name1: PGC-15730 | RA: 04 39 29.5000 (69.8729167d) Dec: +73 17 29.20 (73.29144d) Equinox: J2000 | Radial Velocity: 4931.0 km/sec | V=(?) K=10.16, (J-H)=0.64 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-------------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (29) CGCG-328-014 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 29 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 30 - 5% Distances to Galaxies using Surface Brightness Fluctuations

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| | | | | | | | | | | |
|------------------------|--|----------------------------------|---|--|-----------------------------------|-----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 30 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (30) | NGC-1682 Alt Name1: PGC-16211 | RA: 04 52 19.8000 (73.0825000d) Dec: -03 06 21.00 (-3.10583d) Equinox: J2000 | Radial Velocity: 4394.0 km/sec | V=(?) K=9.88, (J-H)=0.71 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (30) NGC-1682 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 30 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram shows a timeline from 0 to 6000 seconds. Key events include: GS Acq at ~100s, Exp. 1 at ~400s, Pointing Maneuver at ~1000s, Exp. 1 at ~1400s, Pointing Maneuver at ~1800s, Exp. 1 at ~2100s, Pointing Maneuver at ~2400s, Reconfig at ~2600s, and Occultation at ~3100s. A green bar indicates a period of 'Unused Orbital Visibility = 519' seconds between 2600s and 3100s. A blue checkered bar highlights the exposure periods. Black bars below the timeline indicate pointing maneuvers.</p> | | | | | | | | | |

Proposal 16262 - Visit 31 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:38 GMT 2020

| | | | | | | | | | | |
|------------------------|---|-----------------------------------|---|--|-------------------------------|--------------------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 31 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (31) | UGC-03215 Alt Name1: PGC-16439 | RA: 04 58 19.4000 (74.5808333d) Dec: +00 44 32.00 (.74222d) Equinox: J2000 | Radial Velocity: 4149.0 km/sec | V=(?) K=9.63, (J-H)=0.7 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (31) UGC-03215 | UGC-03215 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 31 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> <div> <h3>Orbit 1</h3> <p>The diagram shows a timeline for Orbit 1 from 0 to 6000 seconds. Key events include: GS Acq at ~200s, four Exp. 1 exposures between 400s and 2600s, three Pointing Maneuvers at ~1000s, ~1500s, and ~2100s, a Reconfig phase at ~2700s, and an Occultation phase at ~3200s. A green bar indicates unused orbital visibility from ~2700s to ~3200s. A total of 519 seconds of unused orbital visibility is noted.</p> </div> <div> <p>Server Version: 20200619</p> </div> </div> | | | | | | | | | |

Proposal 16262 - Visit 32 - 5% Distances to Galaxies using Surface Brightness Fluctuations

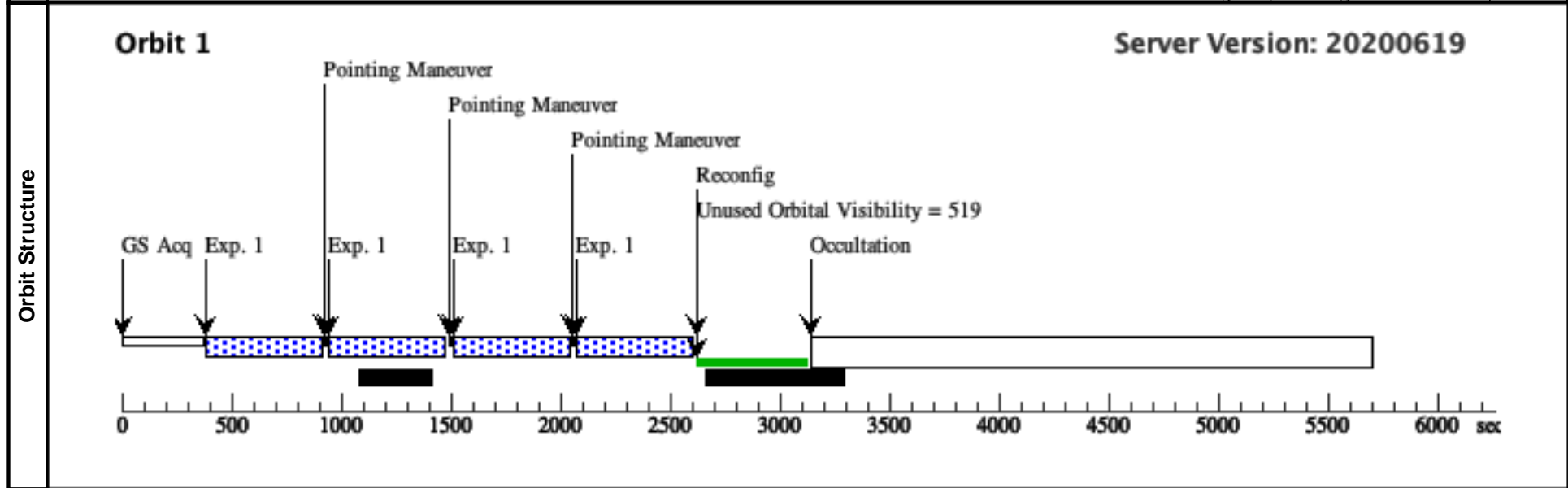
Wed Jul 01 06:01:38 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 32 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------------------------------|---|--------------------------------|--------------------------------|-----------------------|
| | (32) | NGC-1713 Alt Name1: PGC-16471 | RA: 04 58 54.6000 (74.7275000d) Dec: -00 29 19.70 (-.48881d) Equinox: J2000 | Radial Velocity: 4433.0 km/sec | V=(?) K=9.08, (J-H)=0.67 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|---|--|-------|
| | 1 | | (32) NGC-1713 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 i n Visit 32 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 33 - 5% Distances to Galaxies using Surface Brightness Fluctuations

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| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 33 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

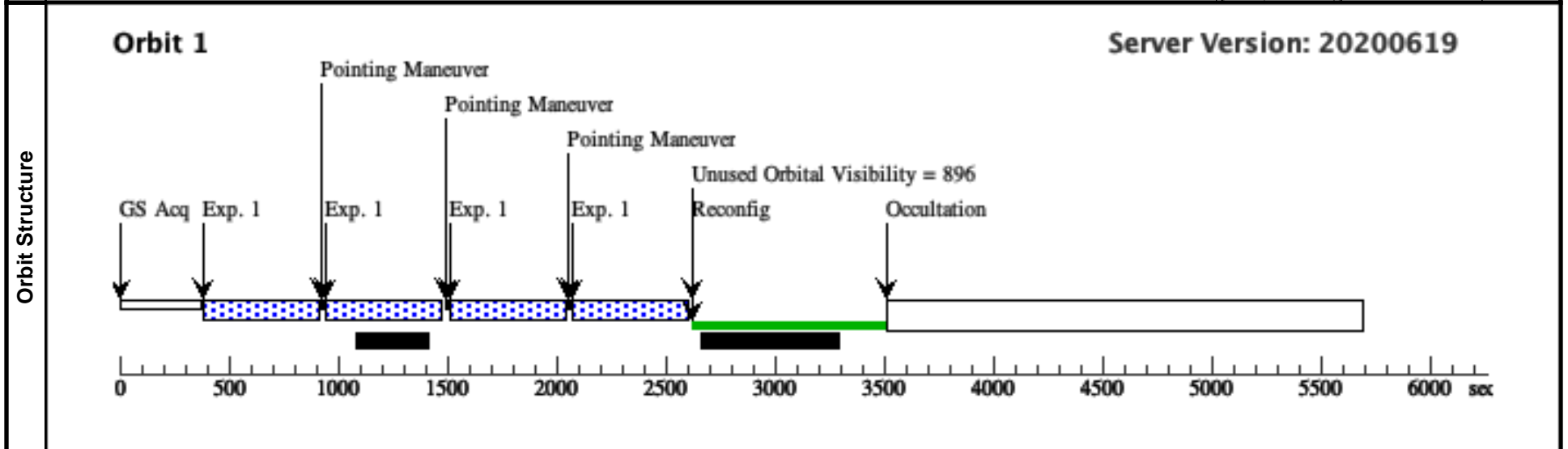
| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|------|-----------------------------------|--|--------------------------------|-------------------------------|-----------------------|
| | (33) | UGC-03353 Alt Name1: PGC-18004 | RA: 05 51 17.9000 (87.8245833d) Dec: +79 41 46.20 (79.69617d) Equinox: J2000 | Radial Velocity: 4245.0 km/sec | V=(?) K=9.3, (J-H)=0.76 | Reference Frame: ICRS |

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

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|----------------|-------------------------|---------------|--------------------------------|---------------|--------|-------------------------------------|---------------------------------|
| | 1 | | (33) UGC-03353 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 33 (1) | 502.936801 Secs (2011.747 Secs) |

[=>(Pattern 1)]
 [=>(Pattern 2)]
 [=>(Pattern 3)]
 [=>(Pattern 4)]



Proposal 16262 - Visit 34 - 5% Distances to Galaxies using Surface Brightness Fluctuations

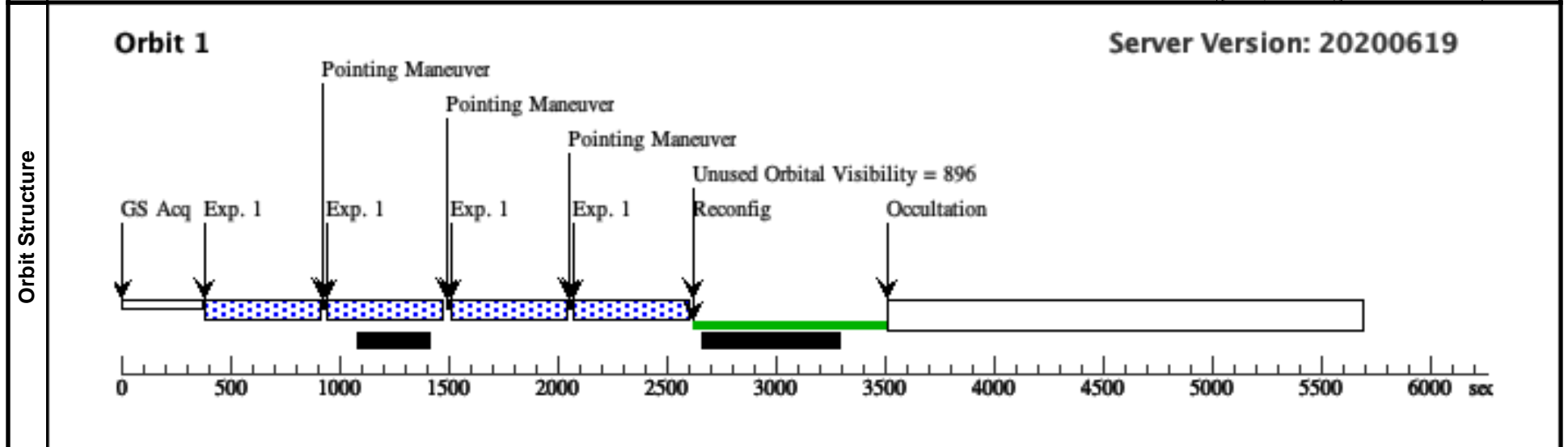
Wed Jul 01 06:01:38 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 34 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|-----------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (34) | UGC-03396 Alt Name1: PGC-18535 | RA: 06 09 57.9000 (92.4912500d) Dec: +79 55 33.50 (79.92597d) Equinox: J2000 | Radial Velocity: 4408.0 km/sec | V=(?) K=9.79, (J-H)=0.64 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|----------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (34) UGC-03396 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 34 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 35 - 5% Distances to Galaxies using Surface Brightness Fluctuations

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| | | | | | | | | | | |
|------------------------|---|----------------------------------|---|--|-----------------------------------|----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 35 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (35) | NGC-2208 Alt Name1: PGC-18911 | RA: 06 22 34.6760 (95.6444833d) Dec: +51 54 34.09 (51.90947d) Equinox: J2000 | Radial Velocity: 5816.0 km/sec | V=(?) K=8.98, (J-H)=0.69 | Reference Frame: NED | | | | |
| | Comments: Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (35) NGC-2208 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 35 (1) | 502.936801 Secs (2011.747 Secs) | [1] |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram illustrates the timeline for Orbit 1, starting at 0 seconds and ending at approximately 5700 seconds. Key events include:</p> <ul style="list-style-type: none"> GS Acq: Ground Station Acquisition at approximately 200 seconds. Exp. 1: Four exposure periods, each lasting about 100 seconds, occurring between 400 and 2500 seconds. Pointing Maneuver: Three maneuver periods, each lasting about 100 seconds, occurring between 1000 and 2000 seconds. Reconfig: A reconfiguration period lasting about 100 seconds, occurring between 2600 and 2700 seconds. Unused Orbital Visibility = 710: A period of 710 seconds of unused visibility, occurring between 2700 and 3410 seconds. Occultation: An occultation period starting at approximately 3410 seconds and lasting until the end of the orbit at 5700 seconds. | | | | | | | | | |

Proposal 16262 - Visit 36 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:38 GMT 2020

| | | | | | | | | | | |
|------------------------|--|----------------------------------|---|--|-----------------------------------|-----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 36 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (36) | NGC-2256 Alt Name1: PGC-19602 | RA: 06 47 14.0000 (101.8083333d) Dec: +74 14 11.40 (74.23650d) Equinox: J2000 | Radial Velocity: 5066.0 km/sec | V=(?) K=8.62, (J-H)=0.73 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (36) NGC-2256 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 36 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram illustrates the timeline for Orbit 1, spanning from 0 to 6000 seconds. Key events include:</p> <ul style="list-style-type: none"> GS Acq: Ground Station Acquisition at approximately 100 seconds. Exp. 1: Four exposure periods, each lasting approximately 100 seconds, occurring at roughly 400, 1000, 1500, and 2100 seconds. Pointing Maneuver: Three maneuvers are indicated by vertical arrows at approximately 1000, 1500, and 2100 seconds. Reconfig: A reconfiguration event occurs at approximately 2600 seconds. Unused Orbital Visibility = 902: A period of 902 seconds of unused visibility is shown as a green bar starting at approximately 2600 seconds and ending at 3500 seconds. Occultation: An occultation event is marked at approximately 3500 seconds. <p>The timeline is marked with a scale from 0 to 6000 seconds in increments of 500.</p> | | | | | | | | | |

Proposal 16262 - Visit 37 - 5% Distances to Galaxies using Surface Brightness Fluctuations

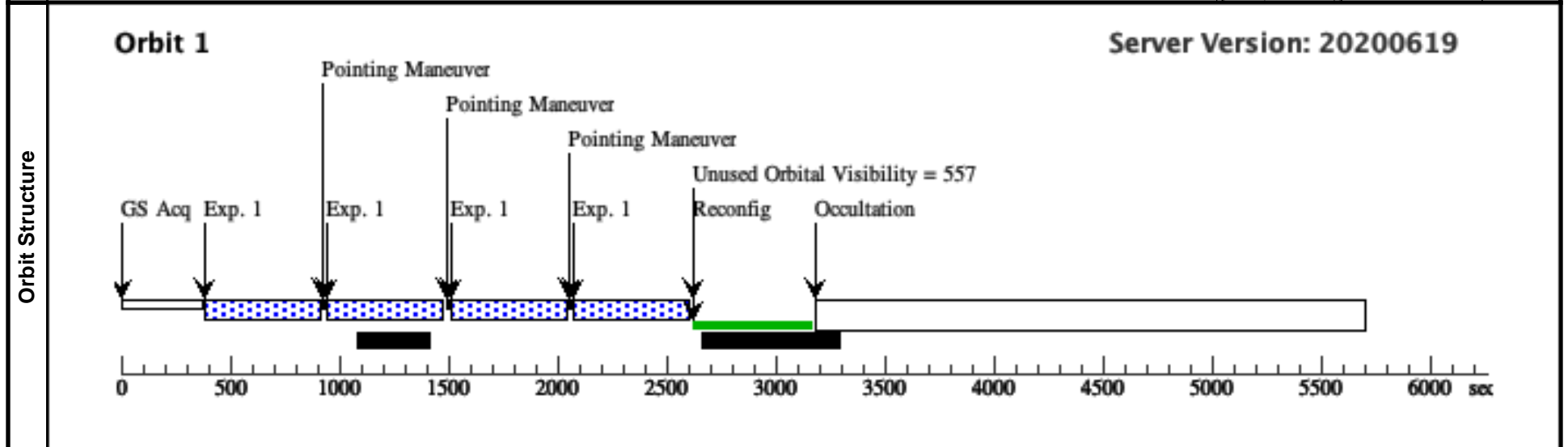
Wed Jul 01 06:01:38 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 37 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------------------------------|--|--------------------------------|--------------------------------|----------------------|
| | (37) | NGC-2274 Alt Name1: PGC-19603 | RA: 06 47 17.3700 (101.8223750d) Dec: +33 34 1.90 (33.56719d) Equinox: J2000 | Radial Velocity: 5072.0 km/sec | V=(?) K=8.65, (J-H)=0.68 | Reference Frame: NED |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (37) NGC-2274 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 37 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 38 - 5% Distances to Galaxies using Surface Brightness Fluctuations

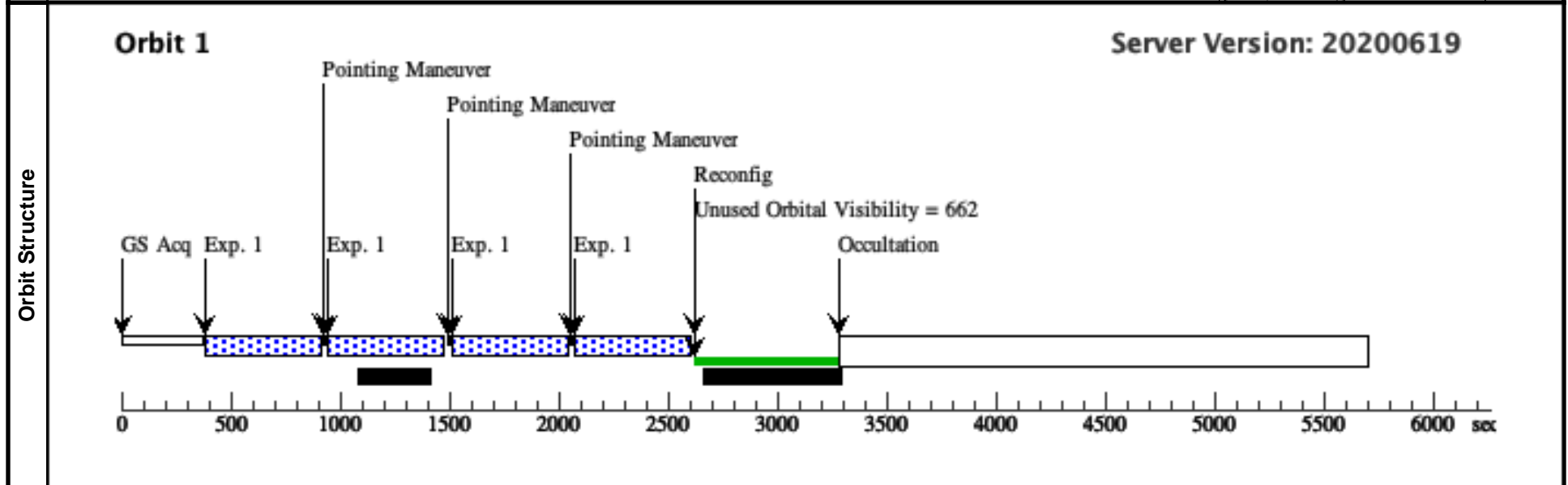
Wed Jul 01 06:01:38 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 38 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------------------------------|---|--------------------------------|--------------------------------|----------------------|
| | (38) | UGC-3683 Alt Name1: PGC-20220 | RA: 07 08 13.9700 (107.0582083d) Dec: +46 06 57.10 (46.11586d) Equinox: J2000 | Radial Velocity: 5719.0 km/sec | V=(?) K=9.12, (J-H)=0.69 | Reference Frame: NED |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (38) UGC-3683 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 38 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 39 - 5% Distances to Galaxies using Surface Brightness Fluctuations

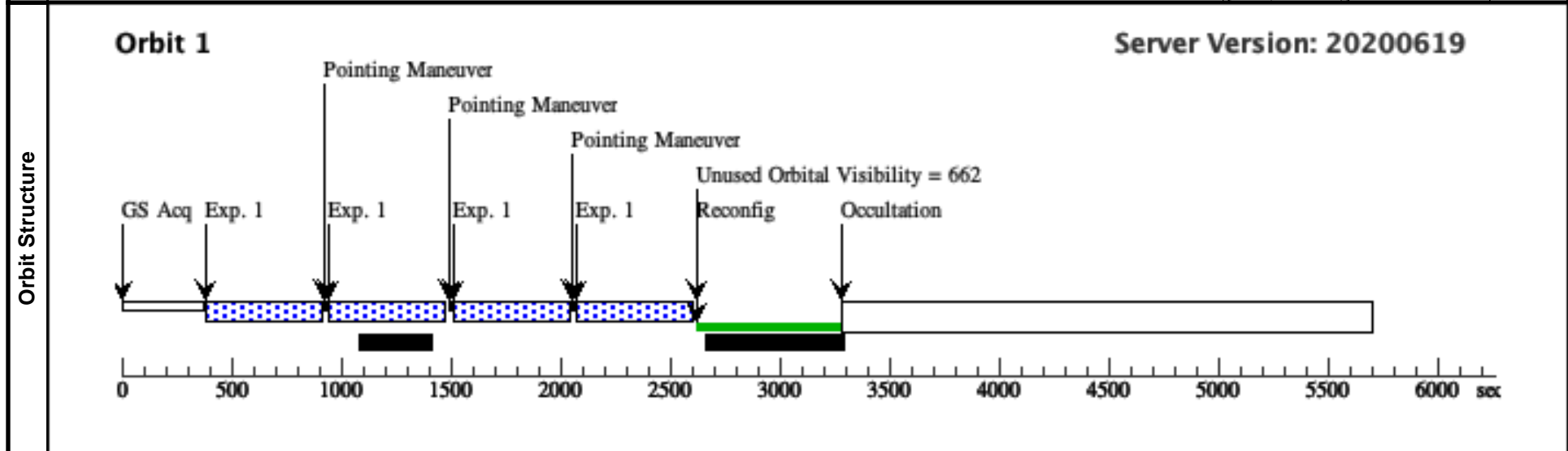
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|--------------|--|--|--|
| Visit | Proposal 16262, Visit 39 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------|--|--------------------------------|--------------------------------|-----------------------|
| | (39) | NGC-2329 | RA: 07 09 8.0000 (107.2833333d) Dec: +48 36 56.20 (48.61561d) Equinox: J2000 | Radial Velocity: 5793.0 km/sec | V=(?) K=9.38, (J-H)=0.76 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (39) NGC-2329 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 39 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 40 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:38 GMT 2020

| | | | | | | | | | | |
|------------------------|--|----------------------------------|---|--|--------------------------------|----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 40 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (40) | NGC-2418 Alt Name1: PGC-21382 | RA: 07 36 37.5100 (114.1562917d) Dec: +17 53 2.10 (17.88392d) Equinox: J2000 | Radial Velocity: 5037.0 km/sec | V=(?) K=8.93, (J-H)=0.7 | Reference Frame: NED | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (40) NGC-2418 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 40 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram illustrates the timeline for Orbit 1, starting at 0 seconds and ending at approximately 5700 seconds. Key events include:</p> <ul style="list-style-type: none"> GS Acq: Ground Station Acquisition at approximately 200 seconds. Exp. 1: Four exposure periods, each lasting about 100 seconds, occurring at approximately 400, 1000, 1500, and 2100 seconds. Pointing Maneuver: Three maneuver periods, each lasting about 100 seconds, occurring at approximately 900, 1400, and 2000 seconds. Reconfig: A reconfiguration period lasting about 100 seconds at approximately 2600 seconds. Occultation: An occultation period lasting about 100 seconds at approximately 3100 seconds. Unused Orbital Visibility = 533: A period of 533 seconds of unused visibility starting at approximately 2600 seconds. <p>The x-axis is labeled 'sec' and ranges from 0 to 6000 with major ticks every 500 seconds.</p> | | | | | | | | | |

Proposal 16262 - Visit 41 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:38 GMT 2020

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|------------------------|--|----------------------------------|---|--|-----------------------------------|-----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 41 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (41) | NGC-2563 Alt Name1: PGC-23404 | RA: 08 20 35.7000 (125.1487500d) Dec: +21 04 4.30 (21.06786d) Equinox: J2000 | Radial Velocity: 4509.0 km/sec | V=(?) K=8.99, (J-H)=0.67 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (41) NGC-2563 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 41 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram shows a timeline from 0 to 6000 seconds. Key events include: GS Acq at ~100s, Exp. 1 at ~400s, Pointing Maneuver at ~1000s, Exp. 1 at ~1500s, Pointing Maneuver at ~1800s, Exp. 1 at ~2100s, Pointing Maneuver at ~2400s, Reconfig at ~2700s, and Occultation at ~3200s. A green bar indicates 'Unused Orbital Visibility = 534' between 2700s and 3200s. A blue checkered bar covers the exposure periods. Black bars below the timeline indicate pointing maneuvers.</p> | | | | | | | | | |

Proposal 16262 - Visit 42 - 5% Distances to Galaxies using Surface Brightness Fluctuations

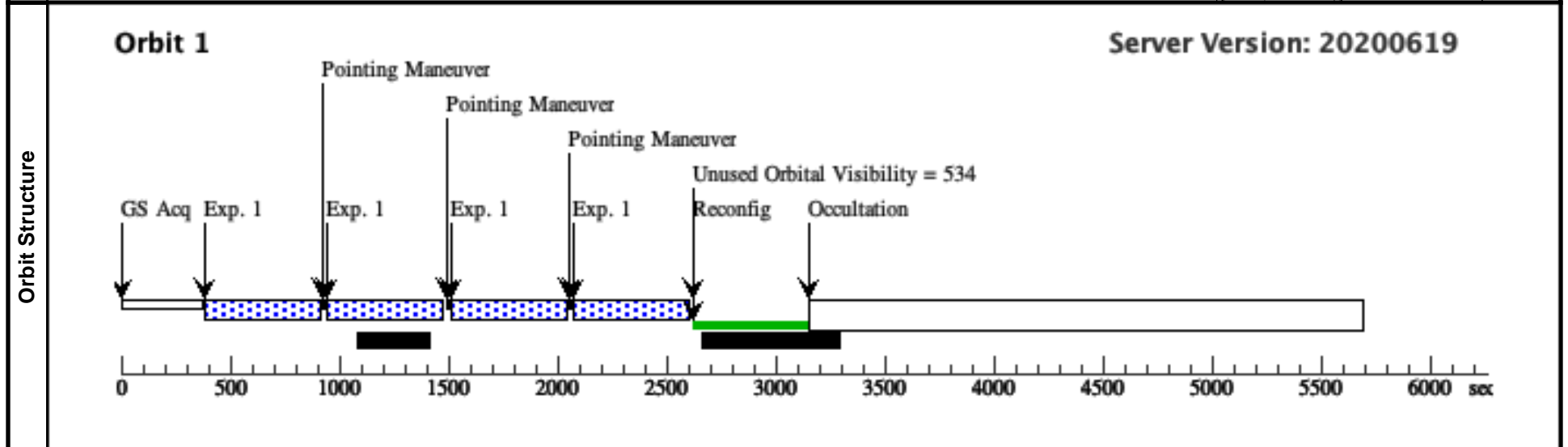
Wed Jul 01 06:01:38 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 42 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|----------------------------------|--|--------------------------------|---------------------------------|-----------------------|
| | (42) | NGC-2569 Alt Name1: PGC-23442 | RA: 08 21 21.2000 (125.3383333d) Dec: +20 52 2.60 (20.86739d) Equinox: J2000 | Radial Velocity: 5122.0 km/sec | V=(?) K=10.78, (J-H)=0.67 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|---------------|-------------------------|----------------------|--------------------------------|--------------|---------------|-------------------------------------|--|-------|
| | 1 | (42) NGC-2569 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 42 (1) | 502.936801 Secs (2011.747 Secs) | [1] |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | |



Proposal 16262 - Visit 43 - 5% Distances to Galaxies using Surface Brightness Fluctuations

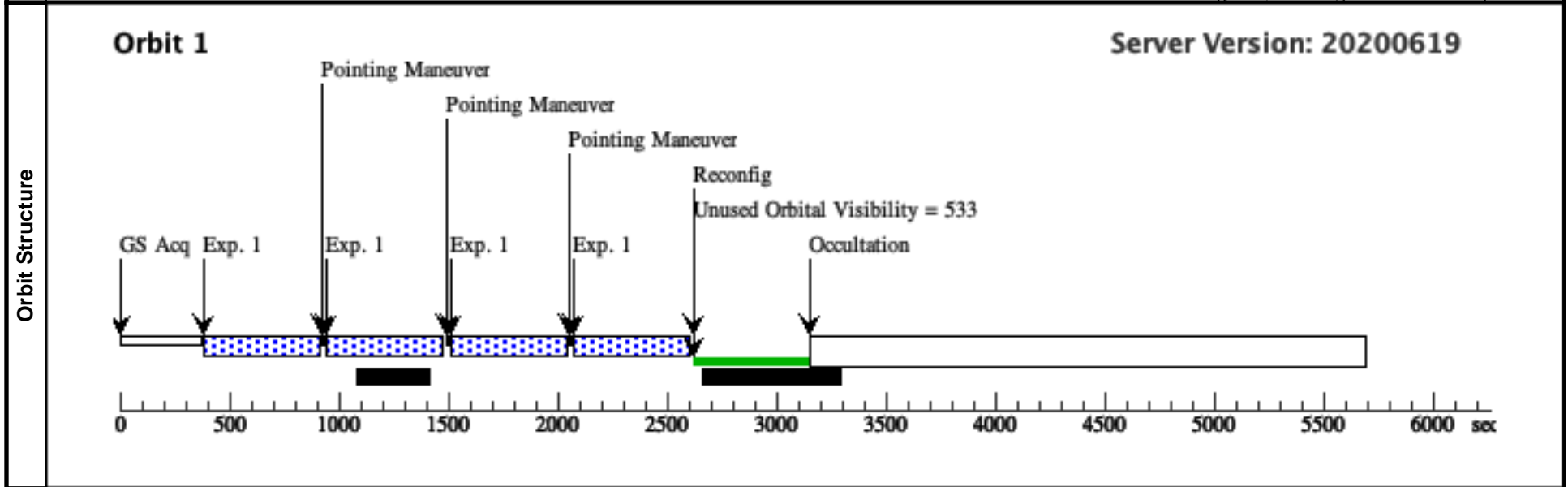
Wed Jul 01 06:01:38 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 43 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|----------------------------------|---|--------------------------------|--------------------------------|----------------------|
| | (43) | NGC-2672 Alt Name1: PGC-24790 | RA: 08 49 21.8900 (132.3412083d) Dec: +19 04 29.90 (19.07497d) Equinox: J2000 | Radial Velocity: 4343.0 km/sec | V=(?) K=8.34, (J-H)=0.74 | Reference Frame: NED |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|--------|--|---------------------------------|
| | 1 | | (43) NGC-2672 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 43 (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 44 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:38 GMT 2020

| | | | | | | | | | | |
|------------------------|--|---------------------------------|---|--|--------------------------------|----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 44 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (44) | IC-2437 Alt Name1: PGC-25518 | RA: 09 05 33.1070 (136.3879458d) Dec: -19 12 25.57 (-19.20710d) Equinox: J2000 | Radial Velocity: 5272.0 km/sec | V=(?) K=9.34, (J-H)=0.69 | Reference Frame: NED | | | | |
| | Comments: Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (44) IC-2437 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 44 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram illustrates the timeline for Orbit 1, starting at 0 seconds and ending at approximately 5700 seconds. Key events include:</p> <ul style="list-style-type: none"> GS Acq: Ground Station Acquisition at approximately 100 seconds. Exp. 1: Four exposure periods, each lasting about 100 seconds, occurring at approximately 400, 900, 1400, and 1900 seconds. Pointing Maneuver: Three pointing maneuvers, each lasting about 100 seconds, occurring at approximately 1000, 1500, and 2000 seconds. Reconfig: A reconfiguration period lasting about 100 seconds, occurring at approximately 2600 seconds. Occultation: An occultation period lasting about 100 seconds, occurring at approximately 3100 seconds. Unused Orbital Visibility = 533: A period of 533 seconds of unused orbital visibility, occurring from approximately 2600 to 3133 seconds. <p>The x-axis is labeled 'sec' and ranges from 0 to 6000 with major ticks every 500 seconds.</p> | | | | | | | | | |

Proposal 16262 - Visit 45 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:38 GMT 2020

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|------------------------|--|----------------------------------|---|--|--------------------------------|-------------------------|---------------|-------------------------------------|---|-------|
| Visit | Proposal 16262, Visit 45 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Secondary Pattern | Exposures (1) | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (45) | NGC-3070 Alt Name1: PGC-28796 | RA: 09 58 6.9450 (149.5289375d) Dec: +10 21 35.21 (10.35978d) Equinox: J2000 | Radial Velocity: 5368.0 km/sec | V=(?) K=9.25, (J-H)=0.7 | Reference Frame: NED | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (45) NGC-3070 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 45 (1) | 502.936801 Secs (2011.747 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> <div> <h3>Orbit 1</h3> <p>The diagram shows a timeline for Orbit 1 from 0 to 6000 seconds. Key events include: GS Acq at ~200s, four Exp. 1 exposures between 400s and 2600s, three Pointing Maneuvers at ~1000s, ~1500s, and ~2100s, a Reconfig phase at ~2700s, and an Occultation phase starting at ~3200s. A green bar indicates unused orbital visibility from 2700s to 3200s. A total of 526 seconds of unused orbital visibility is noted.</p> </div> <div> <p>Server Version: 20200619</p> </div> </div> | | | | | | | | | |

Proposal 16262 - Visit 46 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:38 GMT 2020

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|------------------------|---|----------------------------------|---|--|-----------------------------------|-----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 46 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (46) | NGC-3091 Alt Name1: PGC-28927 | RA: 10 00 14.2000 (150.0591667d) Dec: -19 38 10.80 (-19.63633d) Equinox: J2000 | Radial Velocity: 3809.0 km/sec | V=(?) K=8.08, (J-H)=0.69 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (46) NGC-3091 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 46 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> <div> <h3>Orbit 1</h3> <p>The diagram shows a timeline for Orbit 1 from 0 to 6000 seconds. Key events include: GS Acq at ~100s, four exposures (Exp. 1) at ~400s, ~1000s, ~1500s, and ~2100s, each preceded by a Pointing Maneuver. A Reconfig phase occurs at ~2600s, followed by an Occultation phase at ~3200s. A green bar indicates unused orbital visibility from ~2600s to ~3100s, totaling 533 seconds. The total exposure time is 502.936801 seconds.</p> </div> <div> <p>Server Version: 20200619</p> </div> </div> | | | | | | | | | |

Proposal 16262 - Visit 47 - 5% Distances to Galaxies using Surface Brightness Fluctuations

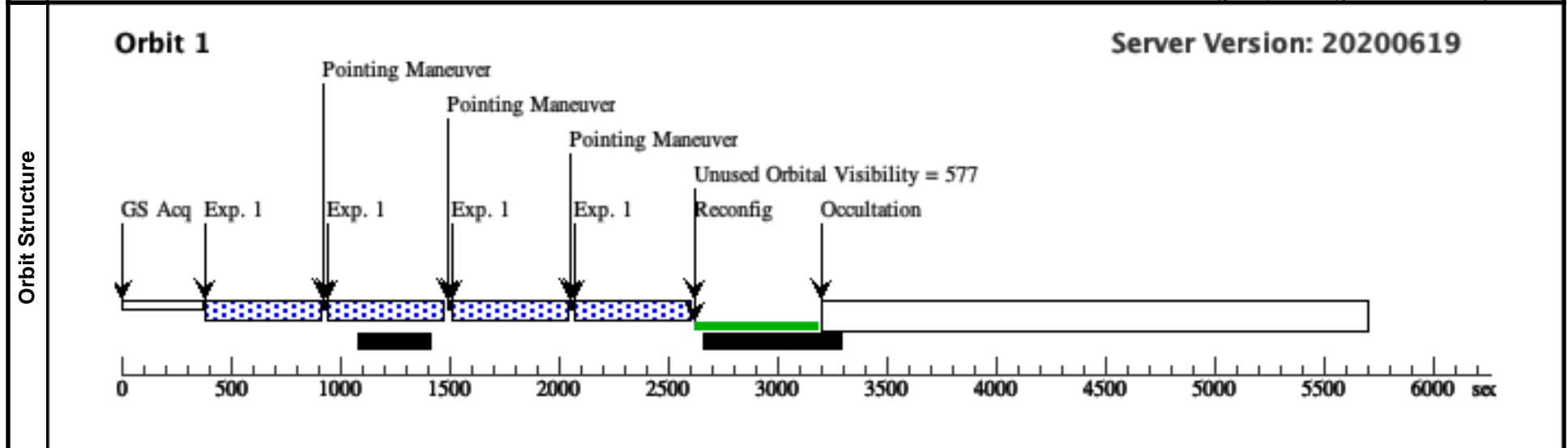
Wed Jul 01 06:01:38 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 47 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|----------------------------------|--|--------------------------------|--------------------------------|----------------------|
| | (47) | NGC-3250 Alt Name1: PGC-30671 | RA: 10 26 32.2800 (156.6345000d) Dec: -39 56 38.20 (-39.94394d) Equinox: J2000 | Radial Velocity: 2824.0 km/sec | V=(?) K=7.67, (J-H)=0.69 | Reference Frame: NED |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|--------|--|---------------------------------|
| | 1 | | (47) NGC-3250 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 47 (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 48 - 5% Distances to Galaxies using Surface Brightness Fluctuations

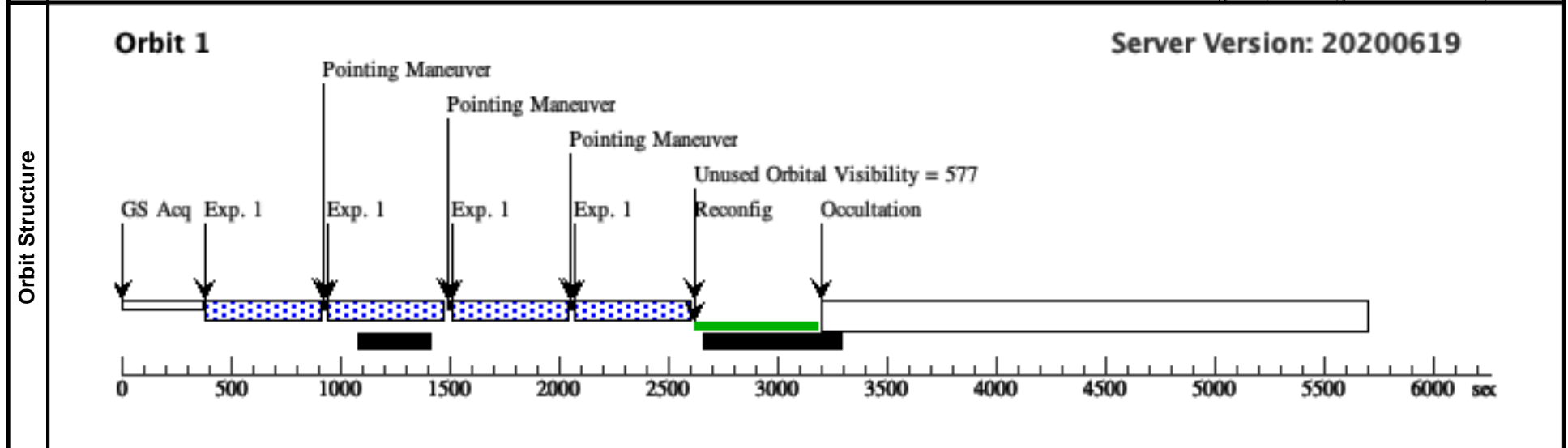
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 48 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|---|-----------------|---|--|
| | | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|------|----------------------------------|--|--------------------------------|--------------------------------|
| | | (48) | NGC-3258 Alt Name1: PGC-30859 | RA: 10 28 53.6000 (157.2233333d) Dec: -35 36 19.40 (-35.60539d) Equinox: J2000 | Radial Velocity: 2800.0 km/sec | V=(?) K=8.28, (J-H)=0.67 |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|--------|----------------------|-------------------------|--------------|--------------------------------|--------|--|---------------------------------|
| | | 1 | | (48) NGC-3258 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 48 (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 49 - 5% Distances to Galaxies using Surface Brightness Fluctuations

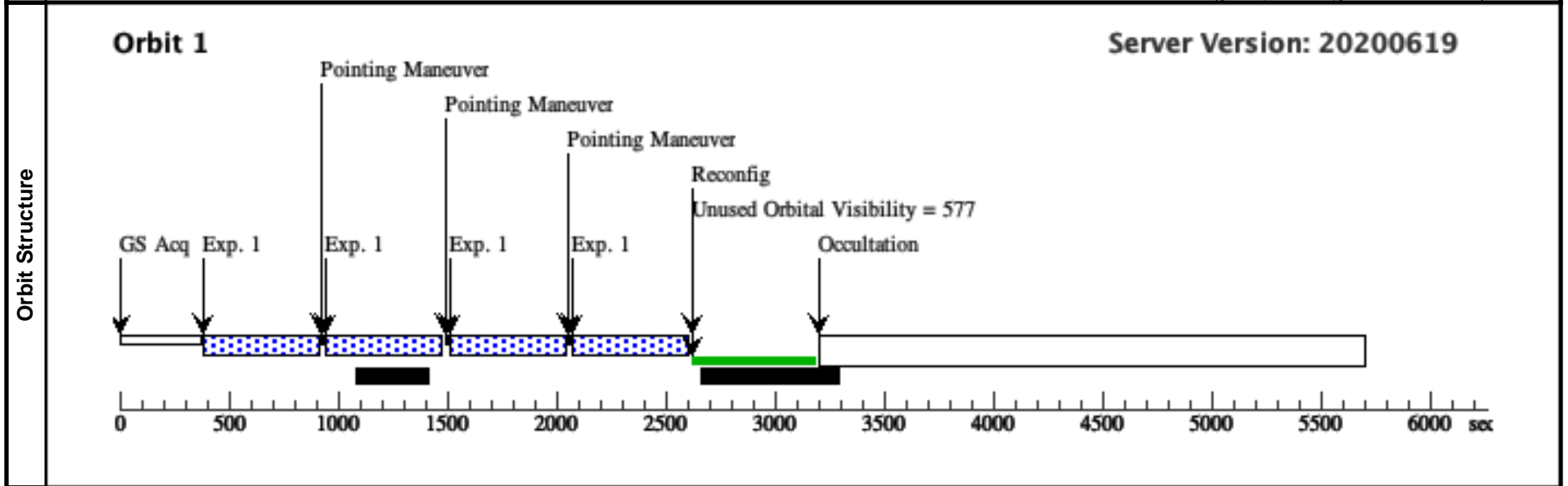
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 49 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------------------------------|---|--------------------------------|--------------------------------|-----------------------|
| | (49) | NGC-3260 Alt Name1: PGC-30875 | RA: 10 29 6.5000 (157.2770833d) Dec: -35 35 42.50 (-35.59514d) Equinox: J2000 | Radial Velocity: 2424.0 km/sec | V=(?) K=9.39, (J-H)=0.67 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (49) NGC-3260 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 49 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 50 - 5% Distances to Galaxies using Surface Brightness Fluctuations

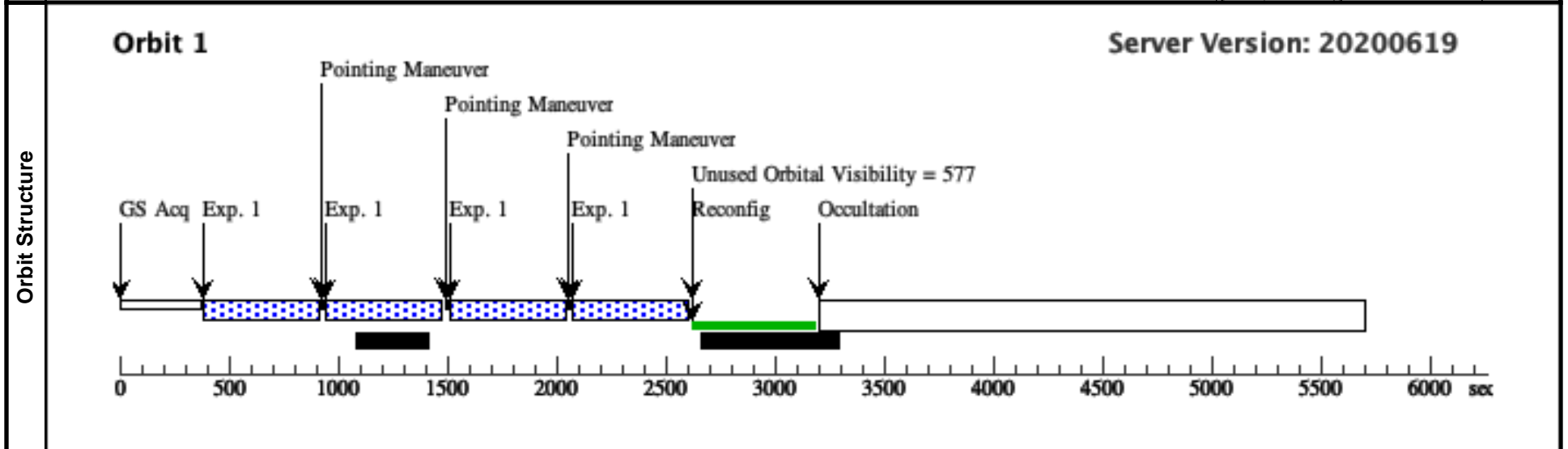
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 50 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|----------------------------------|---|--------------------------------|--------------------------------|-----------------------|
| | (50) | NGC-3268 Alt Name1: PGC-30949 | RA: 10 30 0.7000 (157.5029167d) Dec: -35 19 32.00 (-35.32556d) Equinox: J2000 | Radial Velocity: 2799.0 km/sec | V=(?) K=8.12, (J-H)=0.71 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|--------|--|---------------------------------|
| | 1 | | (50) NGC-3268 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 50 (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 51 - 5% Distances to Galaxies using Surface Brightness Fluctuations

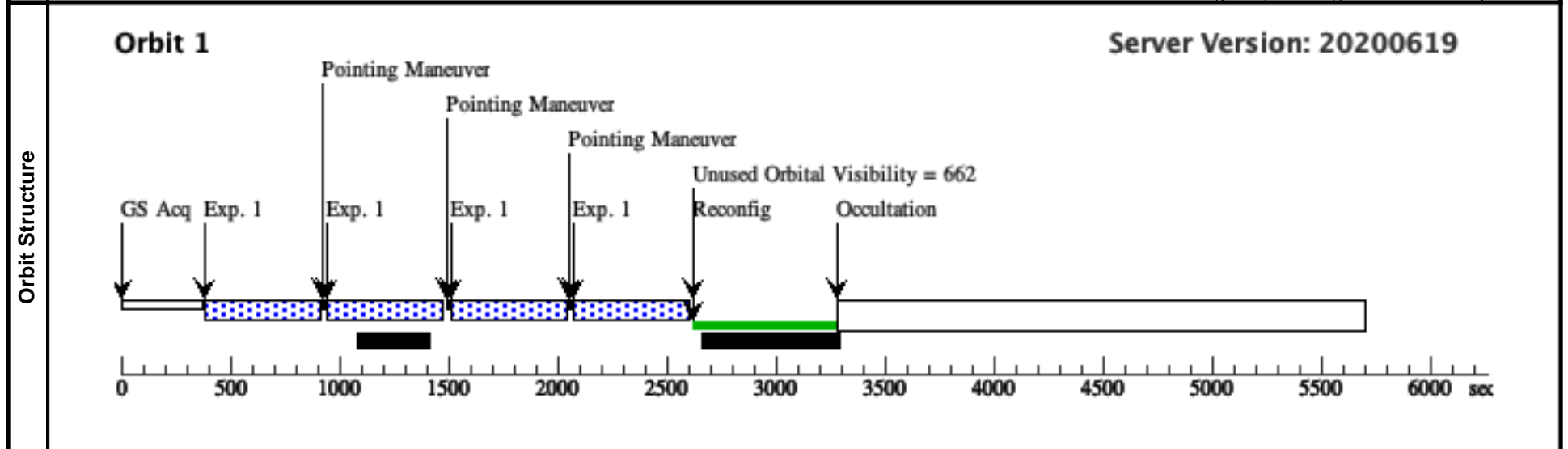
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 51 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|----------------------------------|---|--------------------------------|--------------------------------|----------------------|
| | (51) | NGC-3283 Alt Name1: PGC-31035 | RA: 10 31 11.6000 (157.7983333d) Dec: -46 15 4.60 (-46.25128d) Equinox: J2000 | Radial Velocity: 2899.0 km/sec | V=(?) K=7.88, (J-H)=0.72 | Reference Frame: NED |
| <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|---------------|-------------------------|----------------------|--------------------------------|--------------|---------------|-------------------------------------|--|-------|
| | 1 | (51) NGC-3283 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 51 (1) | 502.936801 Secs (2011.747 Secs) | [1] |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | |



Proposal 16262 - Visit 52 - 5% Distances to Galaxies using Surface Brightness Fluctuations

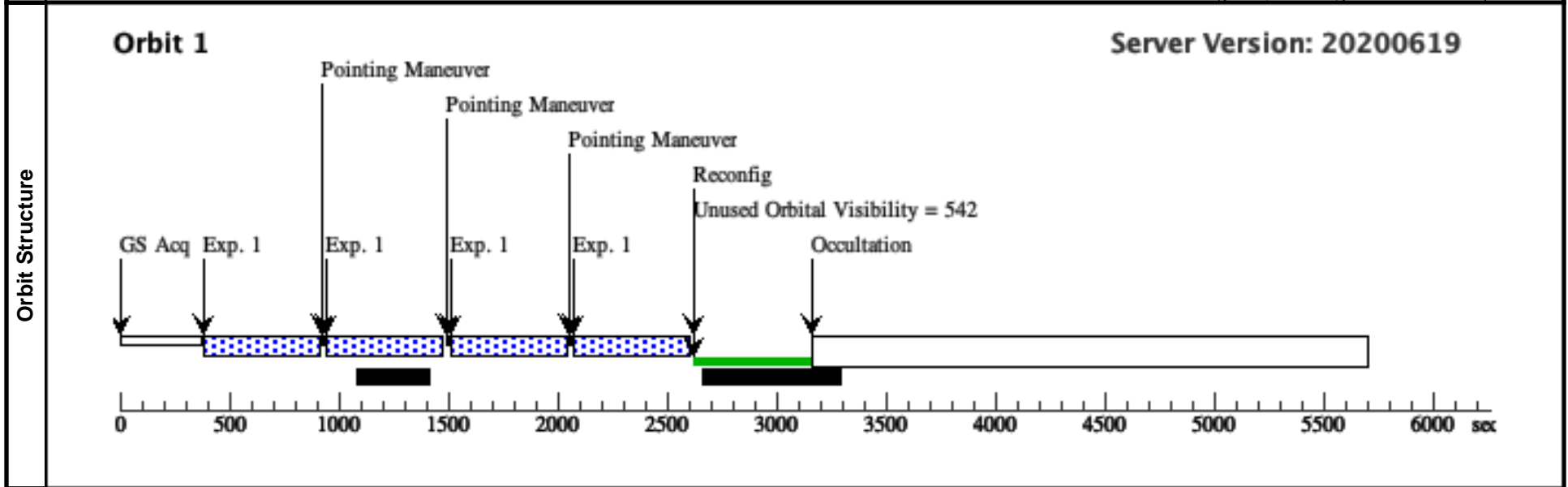
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 52 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|-------------------|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|--------------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (52) | ESO-436-G045 Alt Name1: PGC-31317 | RA: 10 34 50.8000 (158.7116667d) Dec: -28 30 45.50 (-28.51264d) Equinox: J2000 | Radial Velocity: 3235.0 km/sec | V=(?) K=11.1, (J-H)=0.76 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-------------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (52) ESO-436-G045 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 52 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 53 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:39 GMT 2020

| | | | | | | | | | | |
|------------------------|---|---|---|--|---|---|----------------------|--|---|---------------------|
| Visit | Proposal 16262, Visit 53 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # (53) | Name NGC-3308 Alt Name1: PGC-31438 | Target Coordinates RA: 10 36 22.4000 (159.0933333d) Dec: -27 26 16.30 (-27.43786d) Equinox: J2000 | Targ. Coord. Corrections Radial Velocity: 3555.0 km/sec | Fluxes V=(?) K=8.95, (J-H)=0.71 | Miscellaneous Reference Frame: ICRS | | | | |
| Exposures | # 1 | Label (53) NGC-3308 | Target (53) NGC-3308 | Config,Mode,Aperture WFC3/IR, MULTIACCUM, IR | Spectral Els. F110W | Opt. Params. SAMP-SEQ=SPARS 50; NSAMP=11 | Special Reqs. | Groups Pattern 1, Exps 1-1 in Visit 53 (1) | Exp. Time (Total)/[Actual Dur.] 502.936801 Secs (2011.747 Secs) | Orbit [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram shows a timeline from 0 to 6000 seconds. Key events include: GS Acq at ~100s, Exp. 1 at ~400s, Pointing Maneuver at ~900s, Exp. 1 at ~1400s, Pointing Maneuver at ~1900s, Exp. 1 at ~2400s, Pointing Maneuver at ~2900s, Reconfig at ~3100s, and Occultation at ~3200s. A green bar indicates a period of 'Unused Orbital Visibility = 542' seconds between 2600s and 3100s. The exposure times are shown as blue checkered bars.</p> | | | | | | | | | |

Proposal 16262 - Visit 54 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:39 GMT 2020

| | | | | | | | | |
|--|---|---|---|--|--|--|--|--|
| Visit | Proposal 16262, Visit 54 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | |
| | Patterns | # (1) Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | |
| Fixed Targets | # (54) | Name: NGC-3311 Alt Name1: PGC-31478 | Target Coordinates RA: 10 36 42.8000 (159.1783333d) Dec: -27 31 40.40 (-27.52789d) Equinox: J2000 | Targ. Coord. Corrections Radial Velocity: 3836.0 km/sec | Fluxes V=(?) K=8.07, (J-H)=0.767 | Miscellaneous Reference Frame: ICRS | | |
| Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | |
| Exposures | # 1 | Label (54) NGC-3311 | Target WFC3/IR, MULTIACCUM, IR | Config,Mode,Aperture F110W | Spectral Els. SAMP-SEQ=SPARS 50; NSAMP=11 | Opt. Params. Special Reqs. Groups | Exp. Time (Total)/[Actual Dur.] 502.936801 Secs (2011.747 Secs) | Orbit Pattern 1, Exps 1-1 in Visit 54 (1) |
| | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram shows a timeline from 0 to 6000 seconds. Key events include: GS Acq at ~100s, Exp. 1 at ~400s, Pointing Maneuver at ~1000s, Exp. 1 at ~1400s, Pointing Maneuver at ~1800s, Exp. 1 at ~2100s, Pointing Maneuver at ~2400s, Reconfig at ~2600s, and Occultation at ~3100s. A green bar indicates a period of 'Unused Orbital Visibility = 542' seconds between 2600s and 3100s. A blue checkered bar highlights the exposure periods.</p> | | | | | | | |

Proposal 16262 - Visit 55 - 5% Distances to Galaxies using Surface Brightness Fluctuations

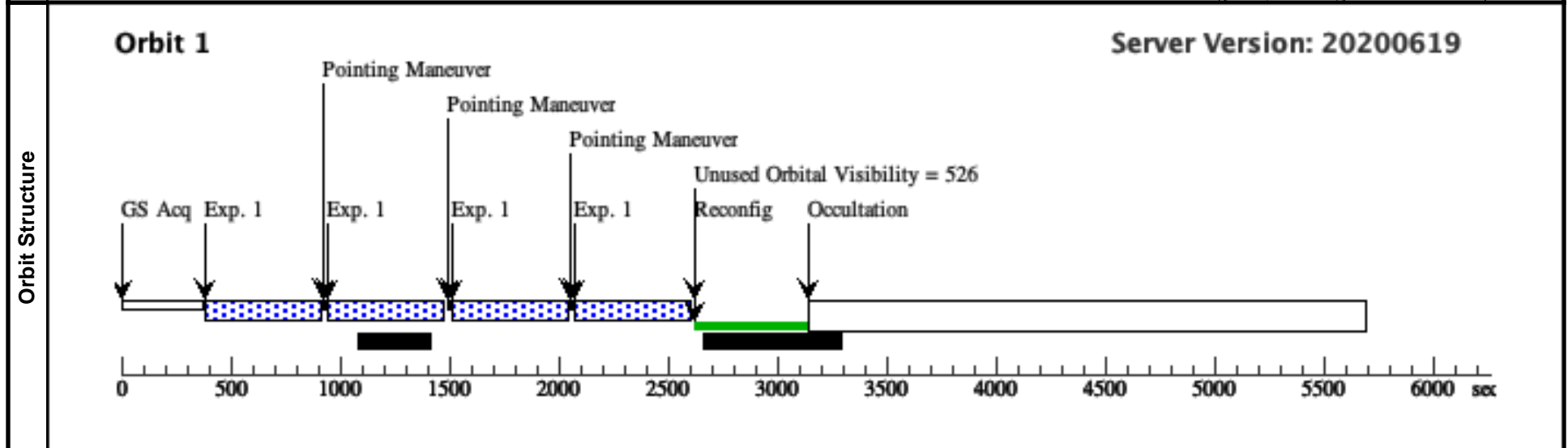
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 55 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|----------------------------------|--|--------------------------------|-------------------------------|----------------------|
| | (55) | NGC-3402 Alt Name1: PGC-32479 | RA: 10 50 26.4700 (162.6102917d) Dec: -12 50 40.60 (-12.84461d) Equinox: J2000 | Radial Velocity: 4579.0 km/sec | V=(?) K=8.9, (J-H)=0.68 | Reference Frame: NED |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|--------|--|---------------------------------|
| | 1 | | (55) NGC-3402 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 55 (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 56 - 5% Distances to Galaxies using Surface Brightness Fluctuations

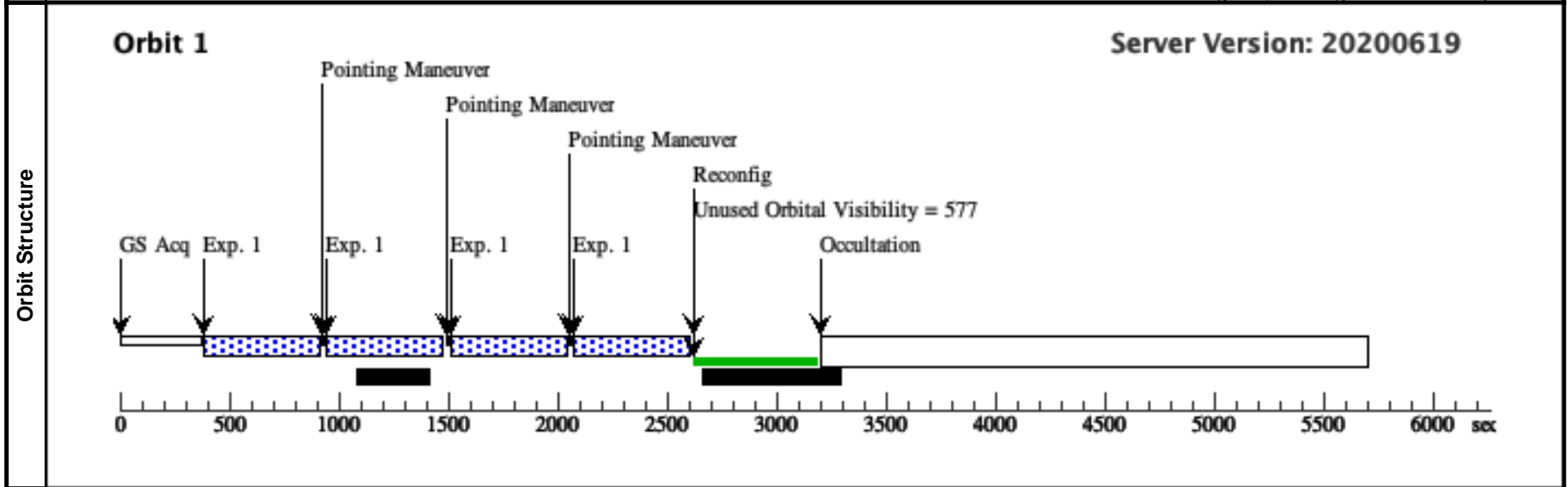
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 56 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (56) | NGC-3557 Alt Name1: PGC-33871 | RA: 11 09 57.7000 (167.4904167d) Dec: -37 32 21.30 (-37.53925d) Equinox: J2000 | Radial Velocity: 3057.0 km/sec | V=(?) K=7.15, (J-H)=0.62 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (56) NGC-3557 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 56 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 57 - 5% Distances to Galaxies using Surface Brightness Fluctuations

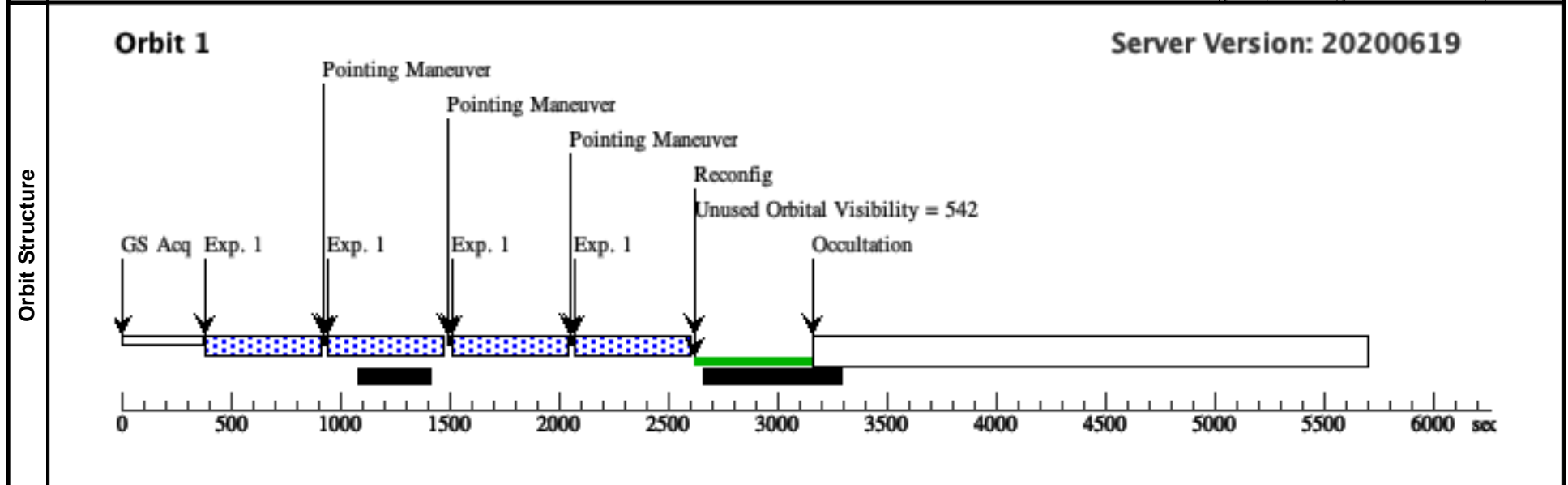
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 57 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|----------------------------------|---|--------------------------------|--------------------------------|----------------------|
| | (57) | NGC-3923 Alt Name1: PGC-37061 | RA: 11 51 1.6940 (177.7570583d) Dec: -28 48 21.66 (-28.80602d) Equinox: J2000 | Radial Velocity: 1739.0 km/sec | V=(?) K=6.47, (J-H)=0.64 | Reference Frame: NED |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|--------|--|---------------------------------|
| | 1 | | (57) NGC-3923 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 57 (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 58 - 5% Distances to Galaxies using Surface Brightness Fluctuations

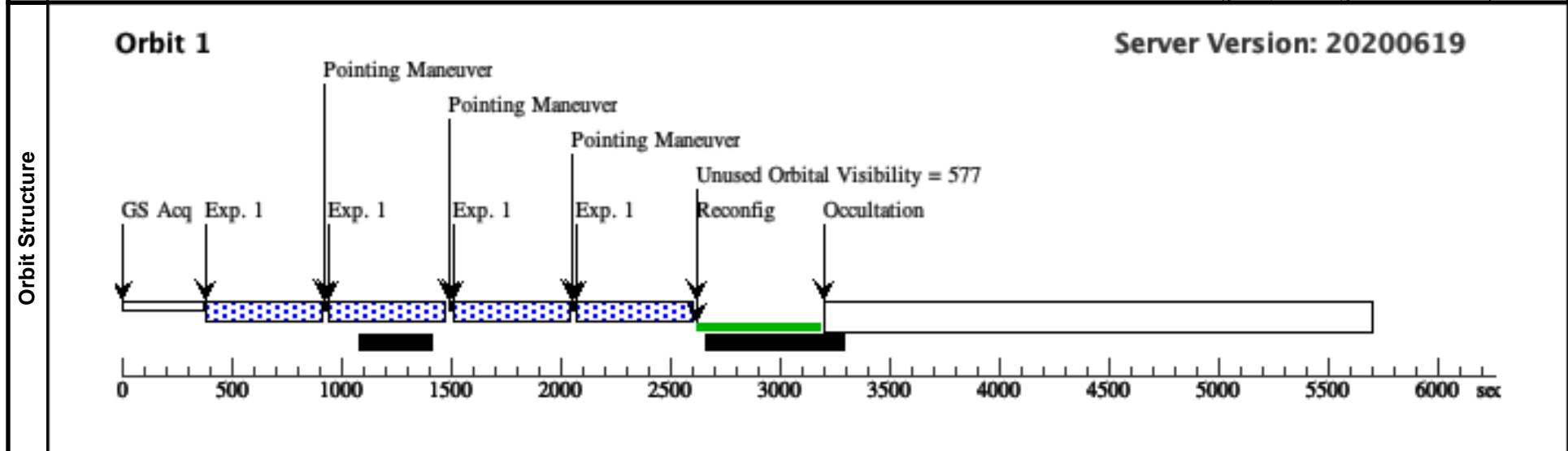
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 58 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|----------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (58) | NGC-4373 Alt Name1: PGC-40498 | RA: 12 25 17.9000 (186.3245833d) Dec: -39 45 34.80 (-39.75967d) Equinox: J2000 | Radial Velocity: 3422.0 km/sec | V=(?) K=7.62, (J-H)=0.64 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|---------------|-------------------------|----------------------|--------------------------------|--------------|---------------|-------------------------------------|--|-------|
| | 1 | (58) NGC-4373 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 58 (1) | 502.936801 Secs (2011.747 Secs) | [1] |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | |



Proposal 16262 - Visit 59 - 5% Distances to Galaxies using Surface Brightness Fluctuations

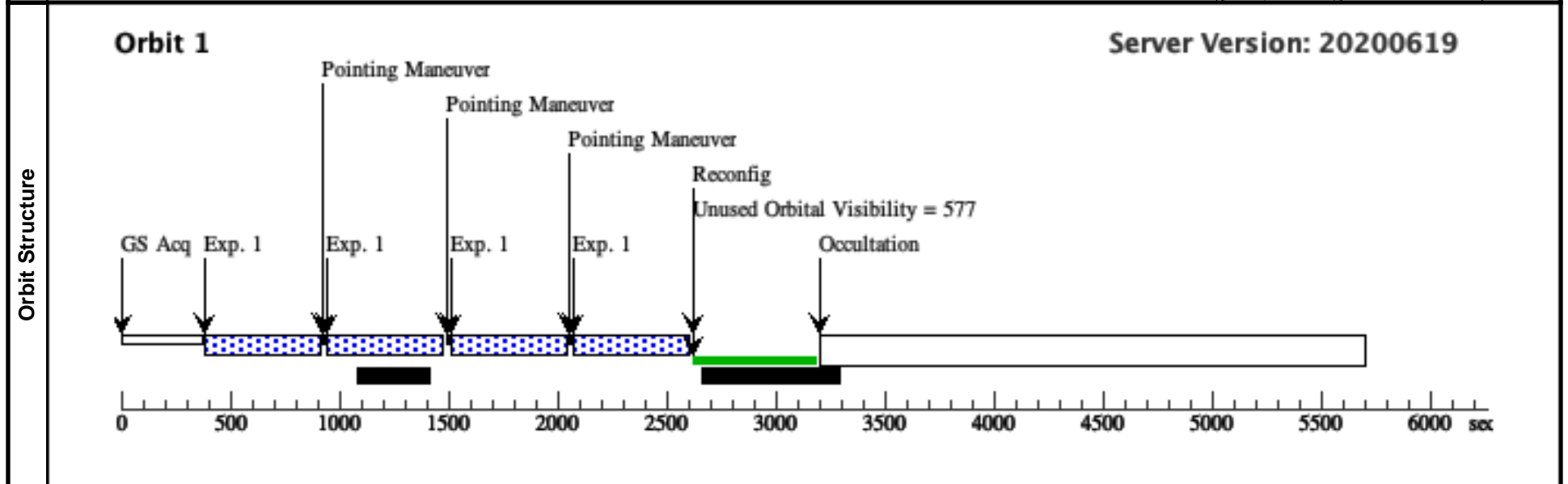
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 59 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (59) | IC-3370 Alt Name1: PGC-40887 | RA: 12 27 37.1000 (186.9045833d) Dec: -39 20 16.50 (-39.33792d) Equinox: J2000 | Radial Velocity: 2938.0 km/sec | V=(?) K=7.82, (J-H)=0.69 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|--------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (59) IC-3370 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 59 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 60 - 5% Distances to Galaxies using Surface Brightness Fluctuations

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| | | | | | | | | | | |
|------------------------|---|----------------------------------|---|--|-----------------------------------|----------------------|---------------|---|--|-------|
| Visit | Proposal 16262, Visit 60 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (60) | NGC-4696 Alt Name1: PGC-43296 | RA: 12 48 49.2504 (192.2052100d) Dec: -41 18 38.99 (-41.31083d) Equinox: J2000 | Radial Velocity: 2958.0 km/sec | V=(?) K=7.1, (J-H)=0.69 | Reference Frame: NED | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (60) NGC-4696 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 i n Visit 60 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> <div> <h3>Orbit 1</h3> <p>The diagram shows a timeline for Orbit 1 from 0 to 6000 seconds. Key events include: GS Acq at ~200s, four Exp. 1 exposures (each ~100s) at ~400s, ~1000s, ~1500s, and ~2000s, three Pointing Maneuvers at ~1000s, ~1500s, and ~2000s, a Reconfig phase at ~2600s, and an Occultation phase starting at ~3200s. A green bar indicates 'Unused Orbital Visibility = 615' between 2600s and 3200s. A long white bar represents the total orbit duration from ~3200s to ~5700s.</p> </div> <div> <p>Server Version: 20200619</p> </div> </div> | | | | | | | | | |

Proposal 16262 - Visit 61 - 5% Distances to Galaxies using Surface Brightness Fluctuations

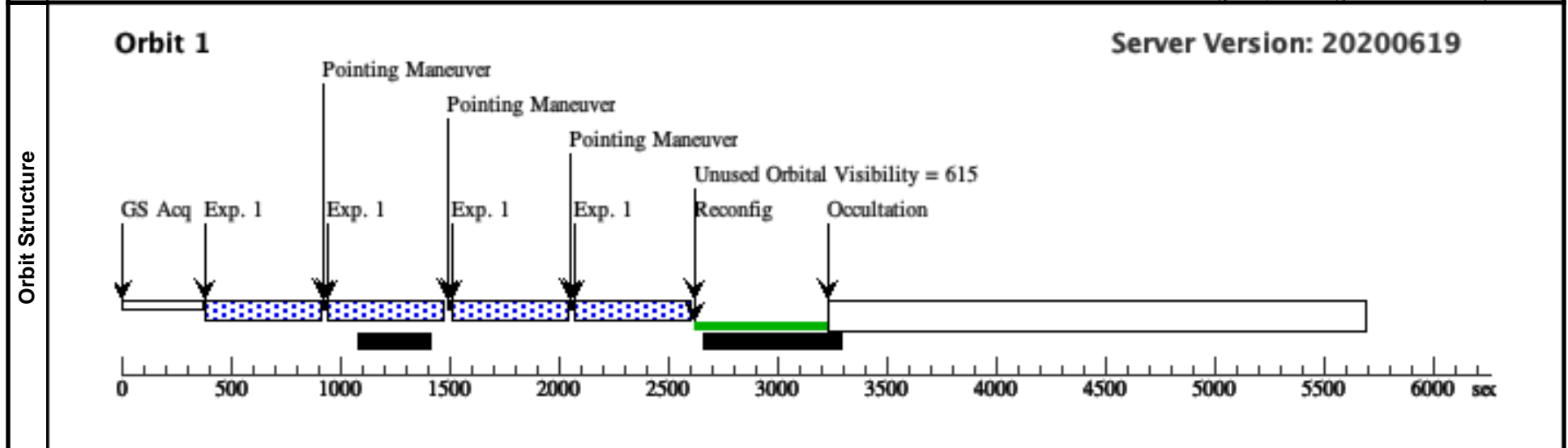
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 61 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|--------------------------------------|---|--------------------------------|---------------------------------|-----------------------|
| | (61) | ESO-322-G094 Alt Name1: PGC-43326 | RA: 12 49 6.4000 (192.2766667d) Dec: -41 49 56.20 (-41.83228d) Equinox: J2000 | Radial Velocity: 4423.0 km/sec | V=(?) K=10.16, (J-H)=0.76 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------------------|-------------------------|----------------------|--------------------------------|--------------|---------------|-------------------------------------|--|-------|
| | 1 | (61) ESO-322-G094 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 61 (1) | 502.936801 Secs (2011.747 Secs) | [1] |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | |



Proposal 16262 - Visit 62 - 5% Distances to Galaxies using Surface Brightness Fluctuations

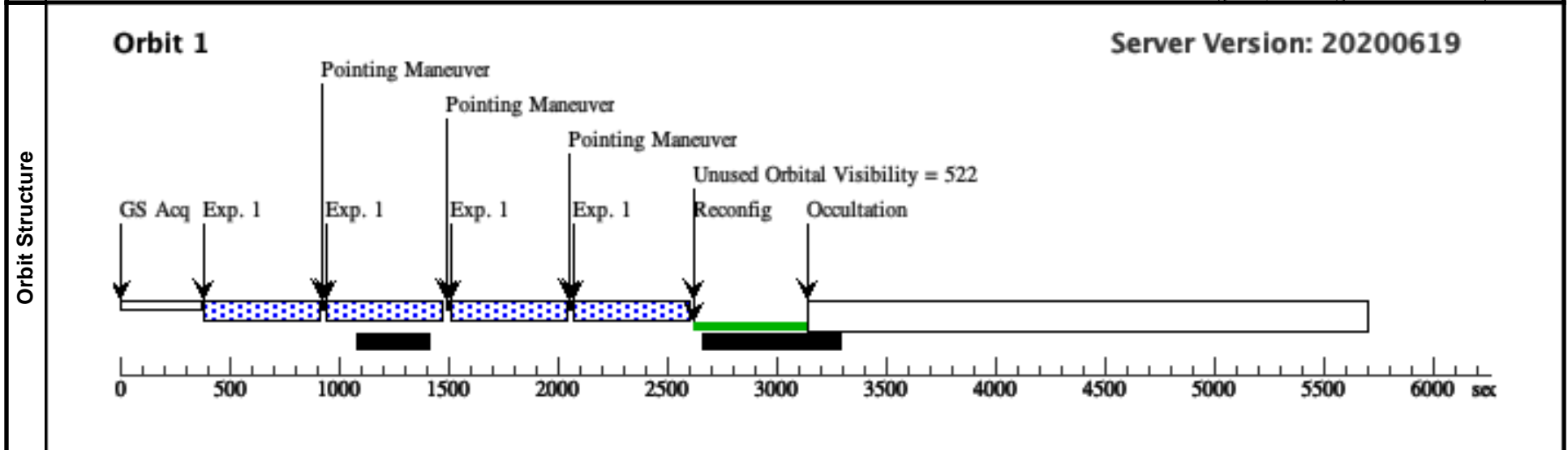
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 62 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|------------|--|--------------------------------|--------------------------------|-----------------------|
| | (62) | PGC-170207 | RA: 12 49 29.0000 (192.3708333d) Dec: -08 51 2.00 (-8.85056d) Equinox: J2000 | Radial Velocity: 4171.0 km/sec | V=(?) K=10.91, (J-H)=0.8 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-----------------|-------------------------|---------------|--------------------------------|---------------|--------|--|---------------------------------|
| | 1 | | (62) PGC-170207 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 62 (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 63 - 5% Distances to Galaxies using Surface Brightness Fluctuations

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| | | | | | | | | | | |
|------------------------|---|---|---|--|---|--|--|---|-----------|--|
| Visit | Proposal 16262, Visit 63 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | | |
| Fixed Targets | # (63) | Name: NGC-4709 Alt Name1: PGC-43423 | Target Coordinates RA: 12 50 3.9000 (192.5162500d) Dec: -41 22 55.30 (-41.38203d) Equinox: J2000 | Targ. Coord. Corrections Radial Velocity: 4673.0 km/sec | Fluxes V=(?) K=7.97, (J-H)=0.68 | Miscellaneous Reference Frame: ICRS | | | | |
| Exposures | # 1 | Label (63) NGC-4709 | Config,Mode,Aperture WFC3/IR, MULTIACCUM, IR | Spectral Els. F110W | Opt. Params. SAMP-SEQ=SPARS 50; NSAMP=11 | Special Reqs. | Groups Pattern 1, Exps 1-1 in Visit 63 (1) | Exp. Time (Total)/[Actual Dur.] 502.936801 Secs (2011.747 Secs) | Orbit [1] | |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram shows a timeline from 0 to 6000 seconds. Key events include: GS Acq at ~100s, Exp. 1 at ~400s, Pointing Maneuver at ~900s, Exp. 1 at ~1400s, Pointing Maneuver at ~1900s, Exp. 1 at ~2400s, Pointing Maneuver at ~2900s, Reconfig at ~3000s, Unused Orbital Visibility = 615s (from ~3000s to ~3615s), and Occultation at ~3615s. A blue checkered bar represents exposure time, and a green bar represents the reconfiguration period.</p> | | | | | | | | | |

Proposal 16262 - Visit 64 - 5% Distances to Galaxies using Surface Brightness Fluctuations

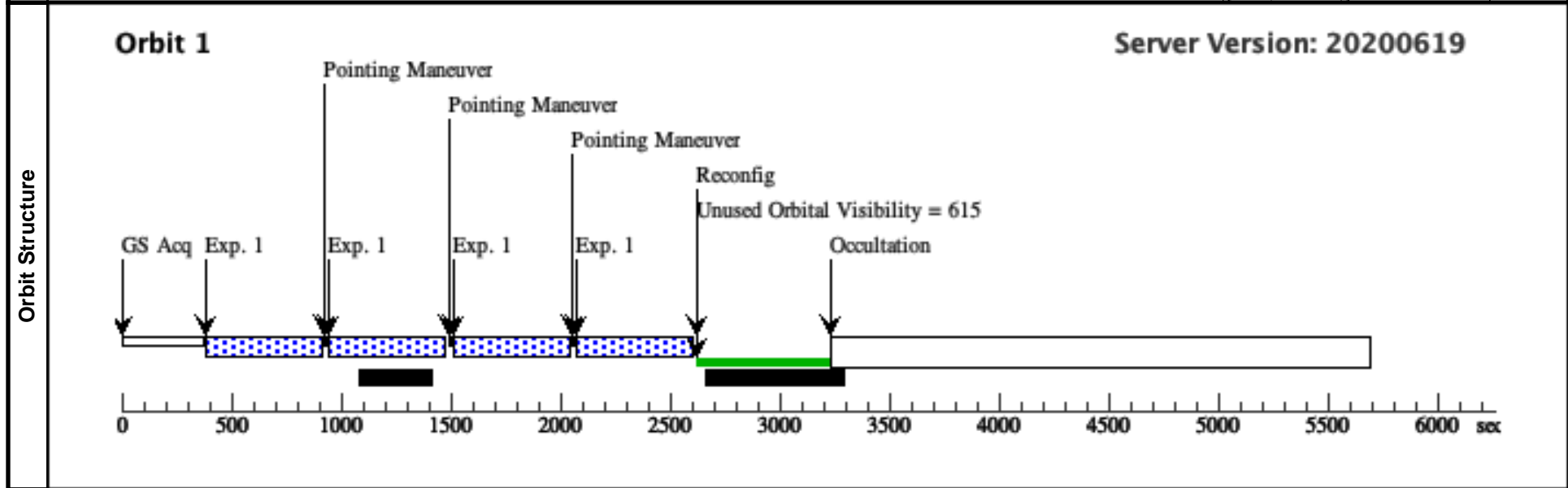
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 64 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---|--|--------------------------------|---------------------------------|-----------------------|
| | (64) | 2MASX-J12501152-4113155 Alt Name1: PGC-43433 | RA: 12 50 11.5000 (192.5479167d) Dec: -41 13 15.50 (-41.22097d) Equinox: J2000 | Radial Velocity: 2956.0 km/sec | V=(?) K=10.83, (J-H)=0.75 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|------------------------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (64) 2MASX-J12501152-4113155 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 64 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 65 - 5% Distances to Galaxies using Surface Brightness Fluctuations

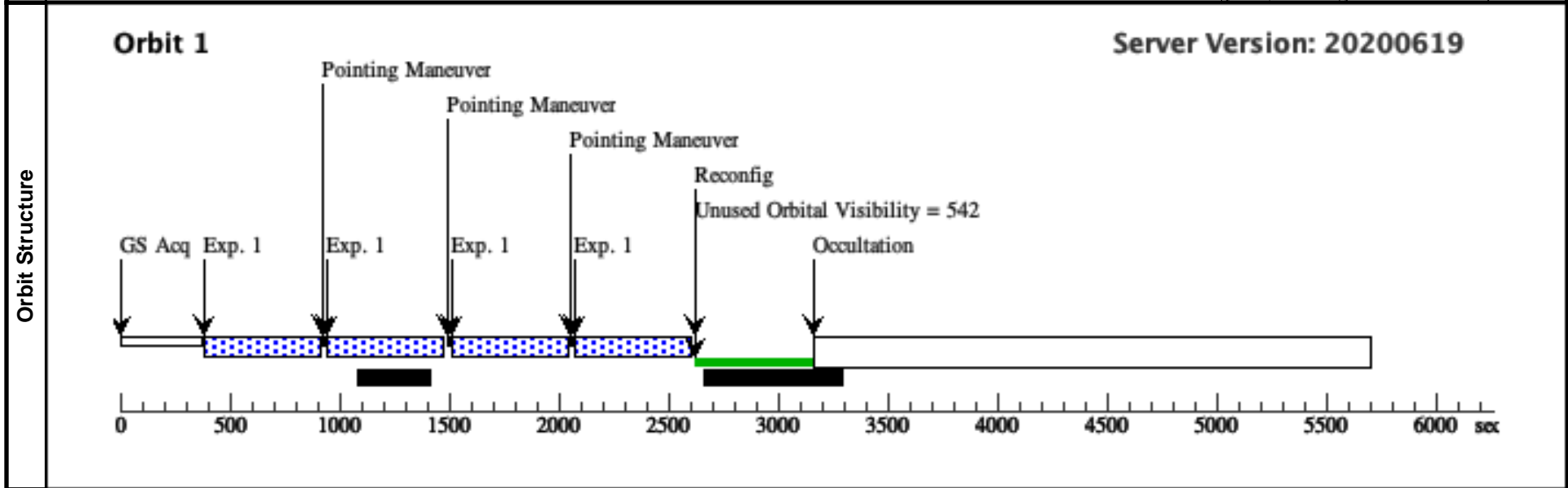
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 65 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|--------------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (65) | ESO-507-G021 Alt Name1: PGC-43456 | RA: 12 50 28.6000 (192.6191667d) Dec: -26 50 33.20 (-26.84256d) Equinox: J2000 | Radial Velocity: 3168.0 km/sec | V=(?) K=9.27, (J-H)=0.68 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-------------------|-------------------------|---------------|--------------------------------|---------------|--------|--|---------------------------------|
| | 1 | | (65) ESO-507-G021 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 65 (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 66 - 5% Distances to Galaxies using Surface Brightness Fluctuations

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| | | | | | | | | | | |
|------------------------|--|----------------|---|--|---------------------------------|-----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 66 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (66) | PGC-43506 | RA: 12 51 0.9000 (192.7537500d) Dec: -41 43 20.80 (-41.72244d) Equinox: J2000 | Radial Velocity: 2468.0 km/sec | V=(?) K=10.48, (J-H)=0.85 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (66) PGC-43506 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 66 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram illustrates the timeline for Orbit 1, spanning from 0 to 6000 seconds. Key events include:</p> <ul style="list-style-type: none"> GS Acq: Ground Station Acquisition at approximately 100 seconds. Exp. 1: Four exposure periods, each lasting approximately 100 seconds, occurring at roughly 400, 1000, 1500, and 2100 seconds. Pointing Maneuver: Three maneuver periods, each lasting approximately 100 seconds, occurring at roughly 900, 1400, and 2000 seconds. Reconfig: A reconfiguration period lasting approximately 100 seconds at roughly 2600 seconds. Unused Orbital Visibility = 615: A period of 615 seconds of unused visibility starting at approximately 2700 seconds. Occultation: An occultation period starting at approximately 3200 seconds and lasting until the end of the orbit at 6000 seconds. | | | | | | | | | |

Proposal 16262 - Visit 67 - 5% Distances to Galaxies using Surface Brightness Fluctuations

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| | | | | | | | | | | |
|------------------------|--|--------------------------------------|---|--|--------------------------------|-----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 67 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (67) | ESO-507-G025 Alt Name1: PGC-43557 | RA: 12 51 31.9000 (192.8829167d) Dec: -26 27 7.60 (-26.45211d) Equinox: J2000 | Radial Velocity: 3235.0 km/sec | V=(?) K=8.28, (J-H)=0.65 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (67) ESO-507-G025 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 67 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram shows a timeline from 0 to 6000 seconds. Key events include: GS Acq at ~100s, Exp. 1 at ~400s, Pointing Maneuver at ~1000s, Exp. 1 at ~1400s, Pointing Maneuver at ~1800s, Exp. 1 at ~2100s, Pointing Maneuver at ~2400s, Reconfig at ~2600s, and Occultation at ~3100s. A green bar indicates a period of 'Unused Orbital Visibility = 542' seconds between 2600s and 3100s. A blue checkered bar highlights the exposure periods. Black bars below the timeline indicate pointing maneuvers.</p> | | | | | | | | | |

Proposal 16262 - Visit 68 - 5% Distances to Galaxies using Surface Brightness Fluctuations

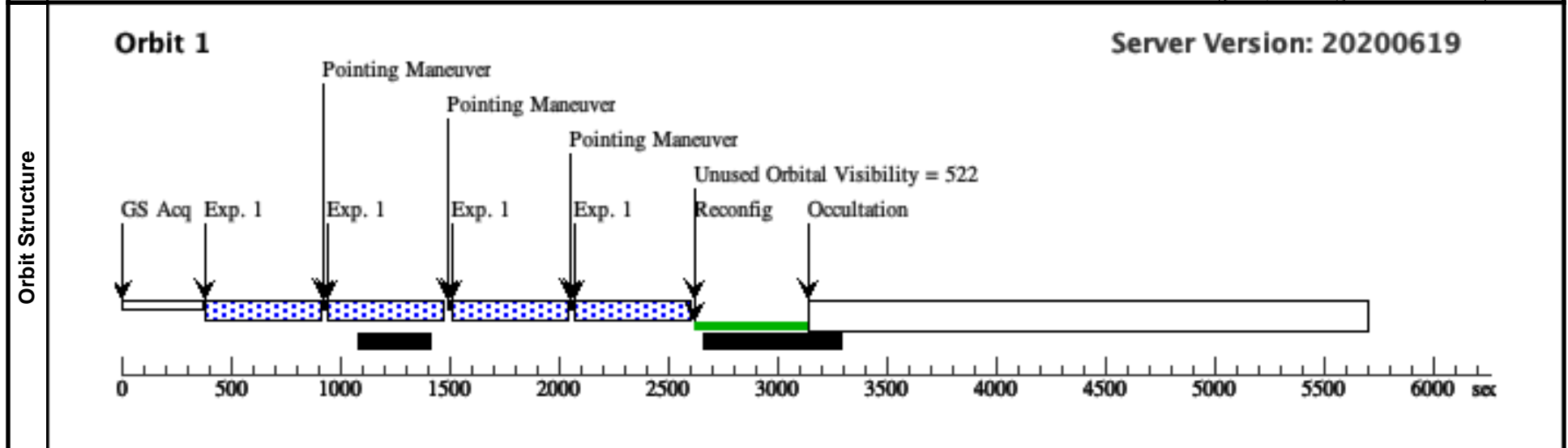
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 68 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|----------------------------------|---|--------------------------------|-------------------------------|-----------------------|
| | (68) | NGC-4739 Alt Name1: PGC-43571 | RA: 12 51 37.1000 (192.9045833d) Dec: -08 24 37.00 (-8.41028d) Equinox: J2000 | Radial Velocity: 3782.0 km/sec | V=(?) K=9.2, (J-H)=0.71 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|--------|--|---------------------------------|
| | 1 | | (68) NGC-4739 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 68 (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 69 - 5% Distances to Galaxies using Surface Brightness Fluctuations

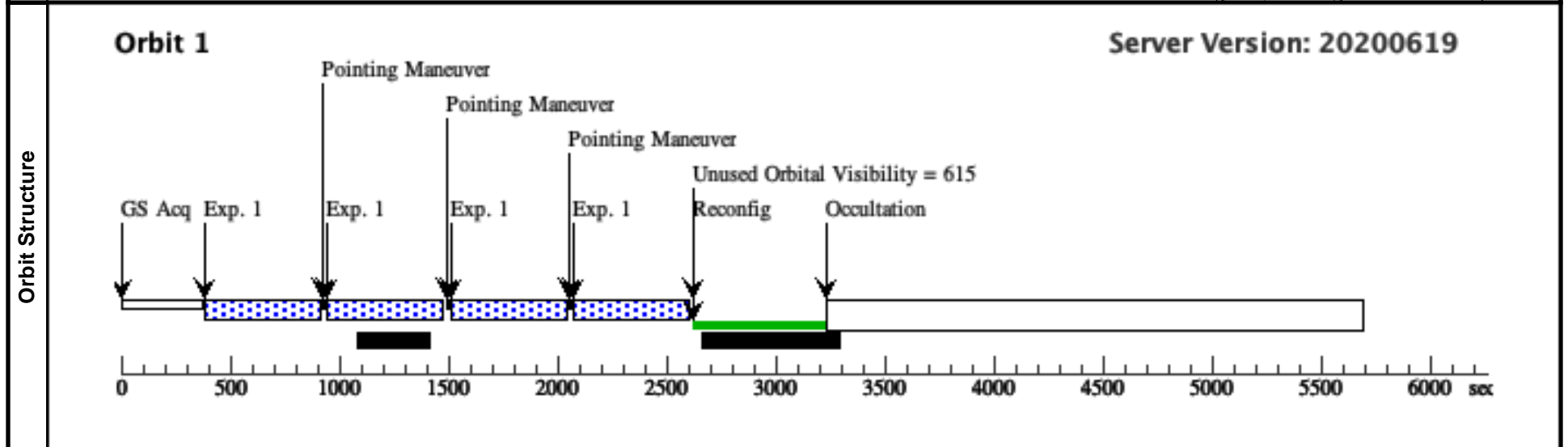
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 69 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------------------------------|--|--------------------------------|-------------------------------|-----------------------|
| | (69) | NGC-4729 Alt Name1: PGC-43591 | RA: 12 51 46.3000 (192.9429167d) Dec: -41 07 56.10 (-41.13225d) Equinox: J2000 | Radial Velocity: 3338.0 km/sec | V=(?) K=8.9, (J-H)=0.67 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (69) NGC-4729 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 69 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 70 - 5% Distances to Galaxies using Surface Brightness Fluctuations

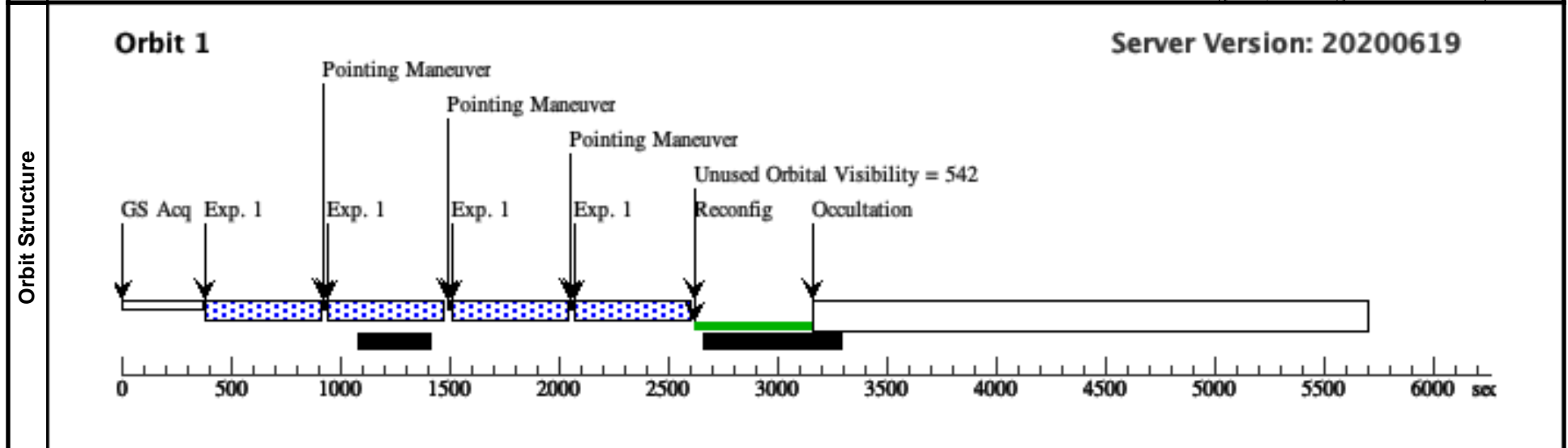
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 70 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|--------------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (70) | ESO-507-G032 Alt Name1: PGC-43649 | RA: 12 52 14.8000 (193.0616667d) Dec: -26 18 13.80 (-26.30383d) Equinox: J2000 | Radial Velocity: 3467.0 km/sec | V=(?) K=9.26, (J-H)=0.68 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-------------------|-------------------------|---------------|--------------------------------|---------------|--------|-------------------------------------|---|
| | 1 | | (70) ESO-507-G032 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 70 (1) | 502.936801 Secs (2011.747 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] |



Proposal 16262 - Visit 71 - 5% Distances to Galaxies using Surface Brightness Fluctuations

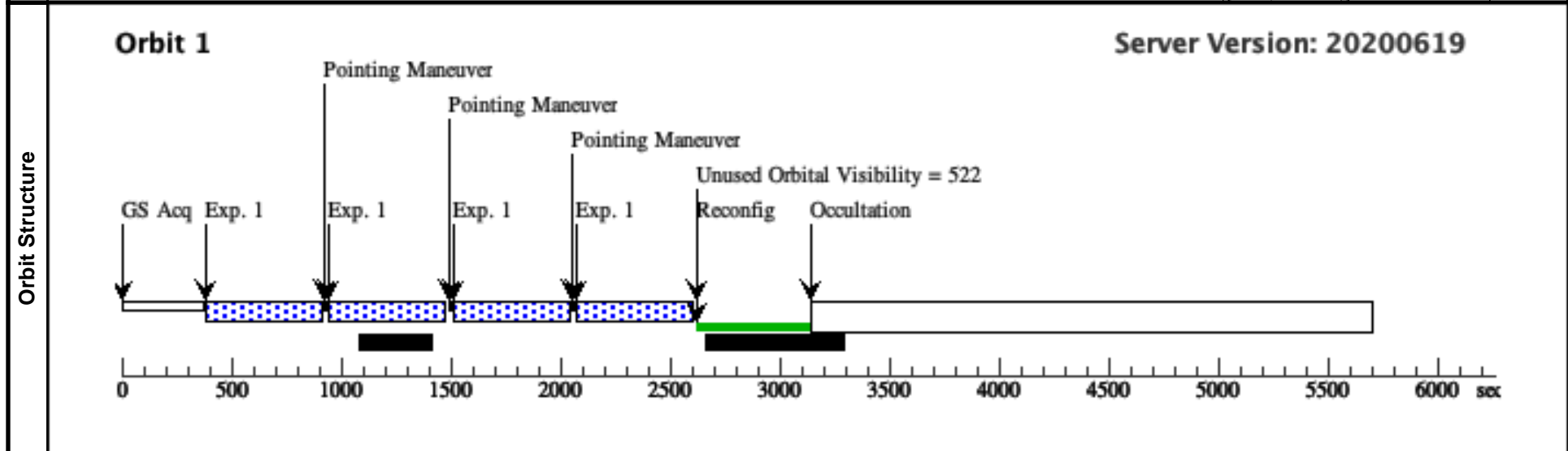
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 71 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------------------------------|---|--------------------------|--------------------------------|----------------------|
| | (71) | NGC-4759 Alt Name1: PGC-43757 | RA: 12 53 5.2000 (193.2716667d) Dec: -09 12 8.00 (-9.20222d) Equinox: J2000 | | V=(?) K=8.62, (J-H)=0.68 | Reference Frame: NED |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (71) NGC-4759 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 71 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 72 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:39 GMT 2020

| | | | | | | | | | |
|------------------------|--|---|---|--|---|--|--|---|-----------|
| Visit | Proposal 16262, Visit 72 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | |
| | Patterns | # (1) Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # (72) | Name: NGC-4760 Alt Name1: PGC-43763 | Target Coordinates RA: 12 53 7.2000 (193.2800000d) Dec: -10 29 39.00 (-10.49417d) Equinox: J2000 | Targ. Coord. Corrections Radial Velocity: 4720.0 km/sec | Fluxes V=(?) K=8.54, (J-H)=0.67 | Miscellaneous Reference Frame: ICRS | | | |
| Exposures | # 1 | Label (72) NGC-4760 | Config,Mode,Aperture WFC3/IR, MULTIACCUM, IR | Spectral Els. F110W | Opt. Params. SAMP-SEQ=SPARS 50; NSAMP=11 | Special Reqs. | Groups Pattern 1, Exps 1-1 in Visit 72 (1) | Exp. Time (Total)/[Actual Dur.] 502.936801 Secs (2011.747 Secs) | Orbit [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram shows a timeline from 0 to 6000 seconds. Key events include: GS Acq at ~100s, Exp. 1 at ~400s, Pointing Maneuver at ~1000s, Exp. 1 at ~1400s, Pointing Maneuver at ~1800s, Exp. 1 at ~2100s, Pointing Maneuver at ~2400s, Reconfig at ~2600s, and Occultation at ~3100s. A green bar indicates a period of 'Unused Orbital Visibility = 526' seconds between 2600s and 3100s. A blue checkered bar highlights the exposure periods. A long white bar represents the total orbit duration from 0 to ~5700s.</p> | | | | | | | | |

Proposal 16262 - Visit 73 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 73 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

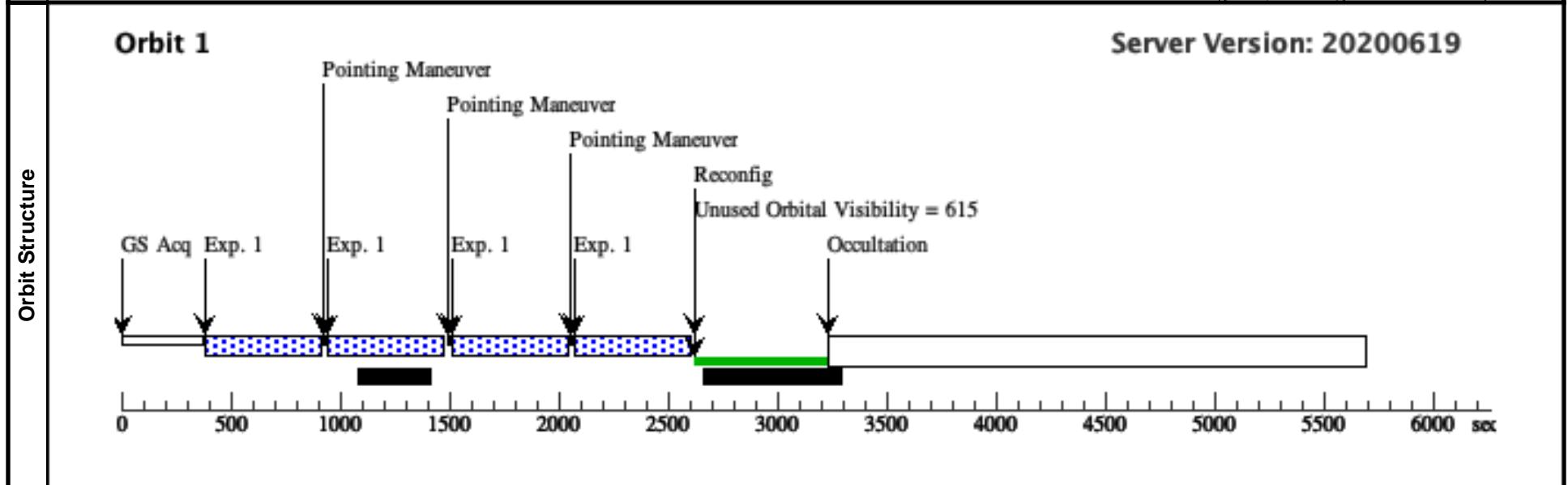
| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|------|--------------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (73) | ESO-323-G034 Alt Name1: PGC-43790 | RA: 12 53 25.9000 (193.3579167d) Dec: -41 12 10.00 (-41.20278d) Equinox: J2000 | Radial Velocity: 4316.0 km/sec | V=(?) K=8.45, (J-H)=0.69 | Reference Frame: ICRS |

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

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-------------------|-------------------------|---------------|--------------------------------|---------------|--------|-------------------------------------|---------------------------------|
| | 1 | | (73) ESO-323-G034 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 73 (1) | 502.936801 Secs (2011.747 Secs) |

[=>(Pattern 1)]
 [=>(Pattern 2)]
 [=>(Pattern 3)]
 [=>(Pattern 4)]



Proposal 16262 - Visit 74 - 5% Distances to Galaxies using Surface Brightness Fluctuations

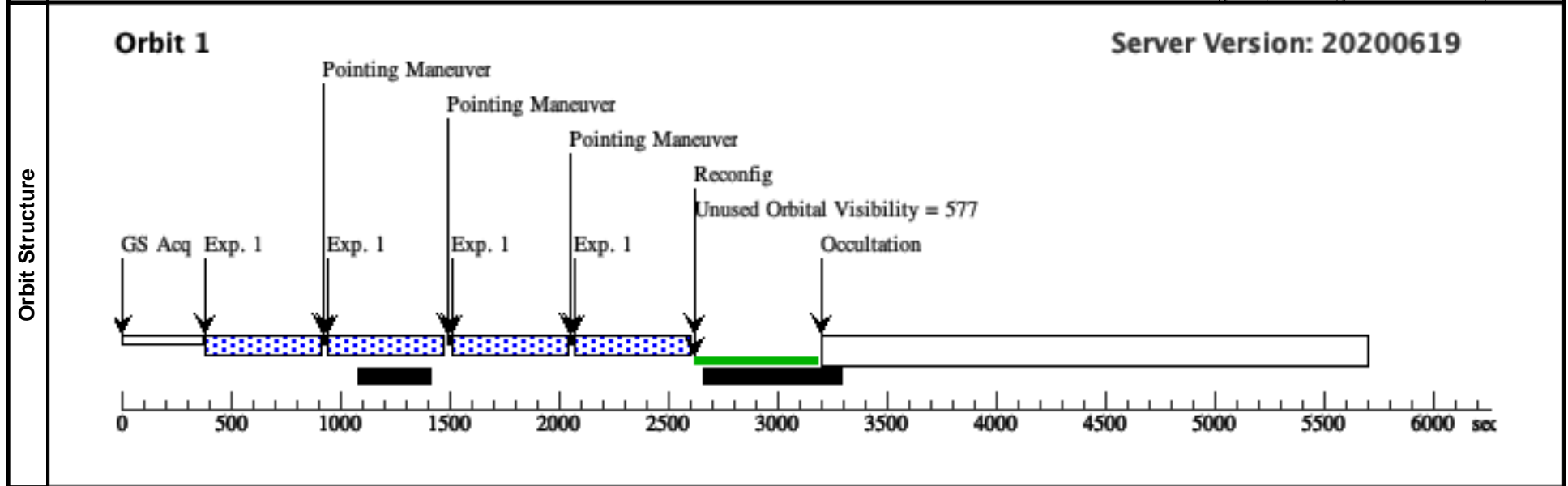
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 74 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|----------------------------------|--|--------------------------------|--------------------------------|----------------------|
| | (74) | NGC-4767 Alt Name1: PGC-43845 | RA: 12 53 52.9500 (193.4706250d) Dec: -39 42 51.50 (-39.71431d) Equinox: J2000 | Radial Velocity: 2995.0 km/sec | V=(?) K=8.19, (J-H)=0.65 | Reference Frame: NED |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|--------|--|---------------------------------|
| | 1 | | (74) NGC-4767 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 74 (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 75 - 5% Distances to Galaxies using Surface Brightness Fluctuations

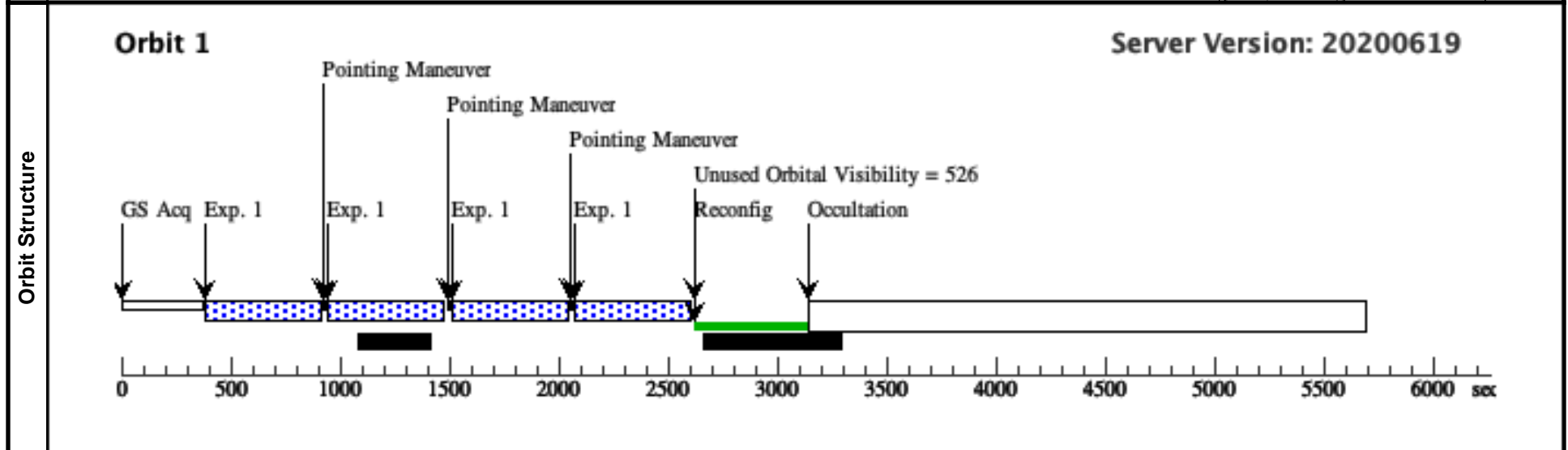
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 75 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|----------|--|--------------------------------|--------------------------------|----------------------|
| | (75) | NGC-4782 | RA: 12 54 36.1000 (193.6504167d) Dec: -12 33 47.40 (-12.56317d) Equinox: J2000 | Radial Velocity: 4542.0 km/sec | V=(?) K=8.06, (J-H)=0.71 | Reference Frame: NED |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|---------------|-------------------------|----------------------|--------------------------------|--------------|---------------|-------------------------------------|--|-------|
| | 1 | (75) NGC-4782 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 75 (1) | 502.936801 Secs (2011.747 Secs) | [1] |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | |



Proposal 16262 - Visit 76 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 76 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

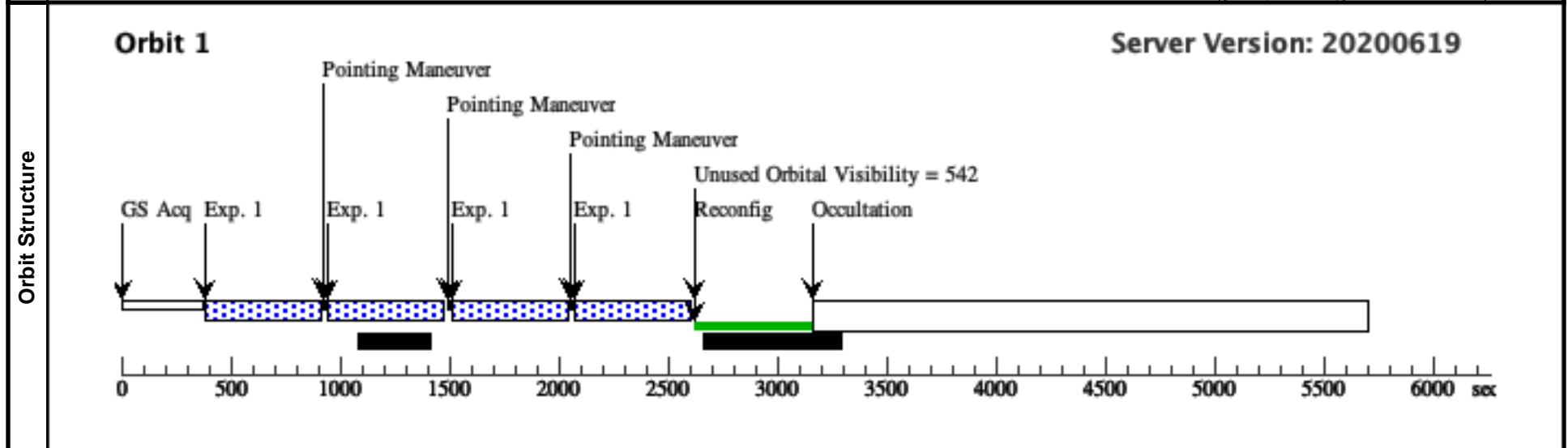
| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|------|--------------------------------------|--|--------------------------------|-------------------------------|----------------------|
| | (76) | ESO-507-G045 Alt Name1: PGC-44057 | RA: 12 55 35.6900 (193.8987083d) Dec: -26 49 30.20 (-26.82506d) Equinox: J2000 | Radial Velocity: 4875.0 km/sec | V=(?) K=8.86, (J-H)=0.7 | Reference Frame: NED |

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

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-------------------|-------------------------|---------------|--------------------------------|---------------|--------|-------------------------------------|---------------------------------|
| | 1 | | (76) ESO-507-G045 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 76 (1) | 502.936801 Secs (2011.747 Secs) |

[=>(Pattern 1)]
 [=>(Pattern 2)]
 [=>(Pattern 3)]
 [=>(Pattern 4)]



Proposal 16262 - Visit 77 - 5% Distances to Galaxies using Surface Brightness Fluctuations

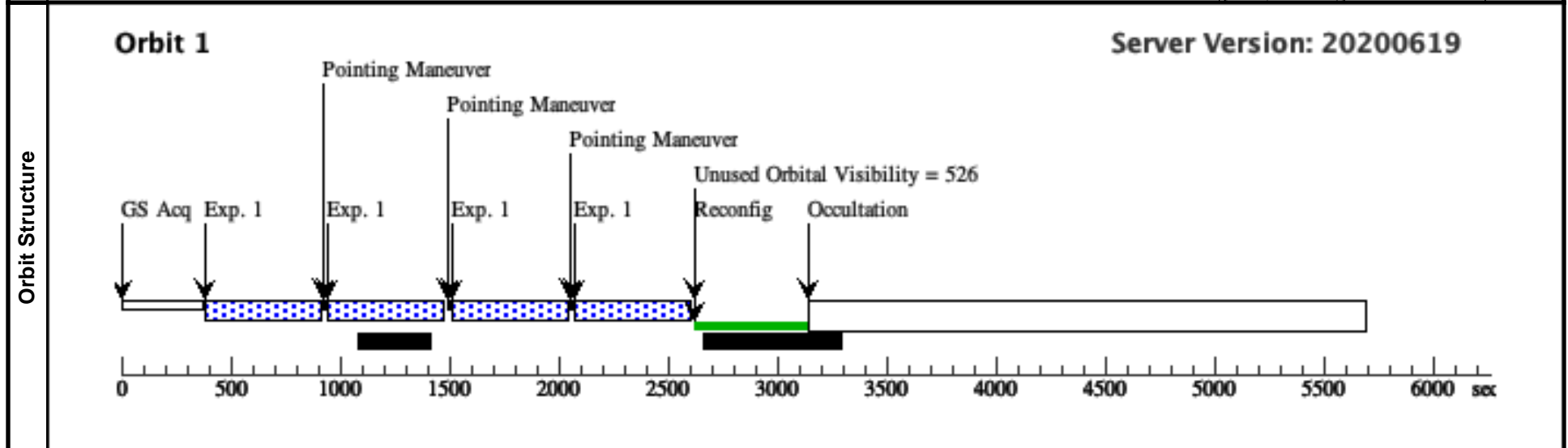
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 77 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|------------|--|--------------------------------|---------------------------------|-----------------------|
| | (77) | PGC-158229 | RA: 12 55 37.1000 (193.9045833d) Dec: -13 23 46.70 (-13.39631d) Equinox: J2000 | Radial Velocity: 4373.0 km/sec | V=(?) K=10.57, (J-H)=0.81 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-----------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (77) PGC-158229 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 77 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 78 - 5% Distances to Galaxies using Surface Brightness Fluctuations

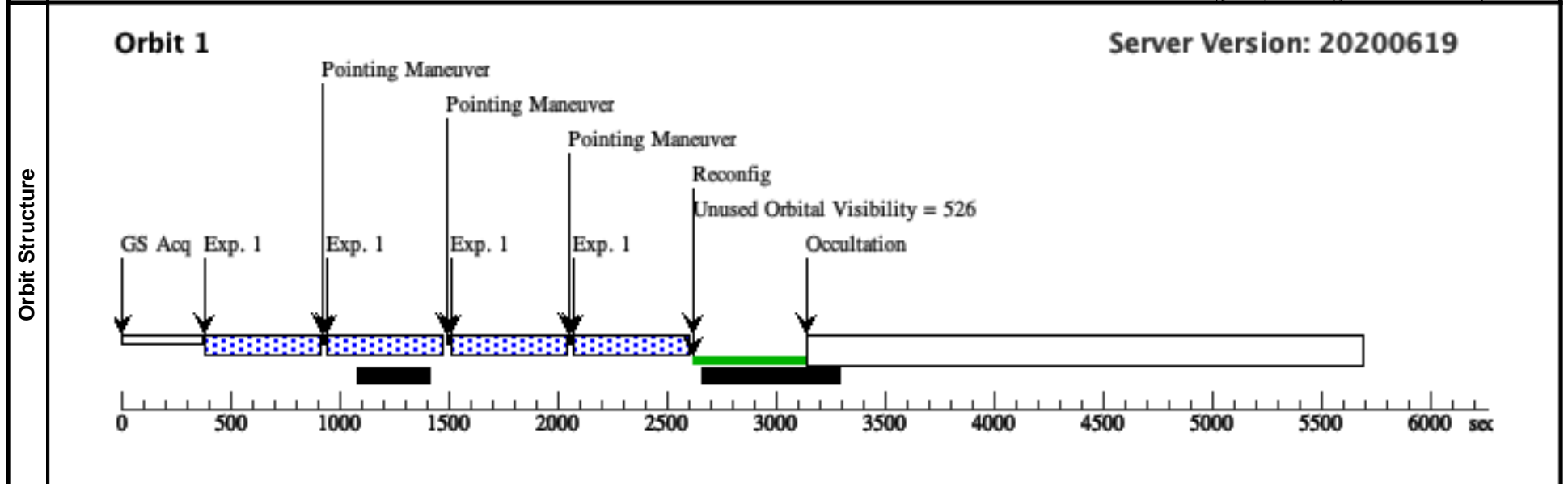
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 78 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (78) | NGC-4825 Alt Name1: PGC-44261 | RA: 12 57 12.2000 (194.3008333d) Dec: -13 39 52.50 (-13.66458d) Equinox: J2000 | Radial Velocity: 4414.0 km/sec | V=(?) K=8.49, (J-H)=0.69 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (78) NGC-4825 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 78 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 79 - 5% Distances to Galaxies using Surface Brightness Fluctuations

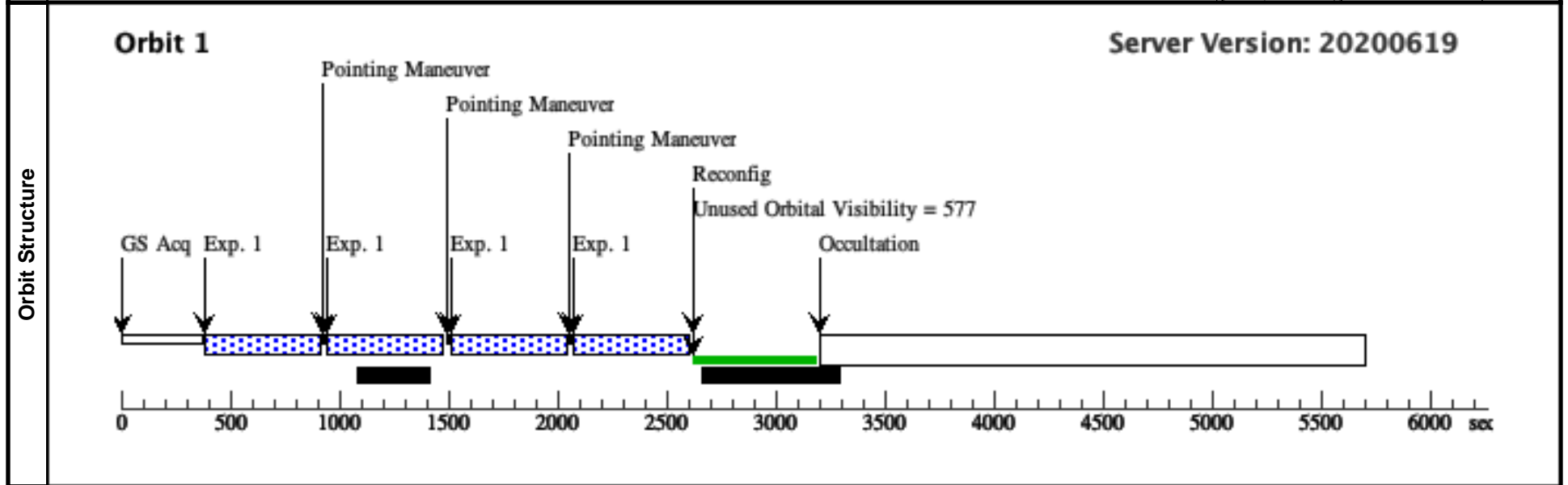
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 79 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------------------------------|---|------------------------------|--------------------------------|----------------------|
| | (79) | NGC-4914 Alt Name1: PCG-44807 | RA: 13 00 42.9500 (195.1789583d) Dec: +37 18 55.00 (37.31528d) Equinox: J2000 | Radial Velocity: 4663 km/sec | V=(?) K=8.64, (J-H)=0.68 | Reference Frame: NED |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (79) NGC-4914 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 79 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 80 - 5% Distances to Galaxies using Surface Brightness Fluctuations

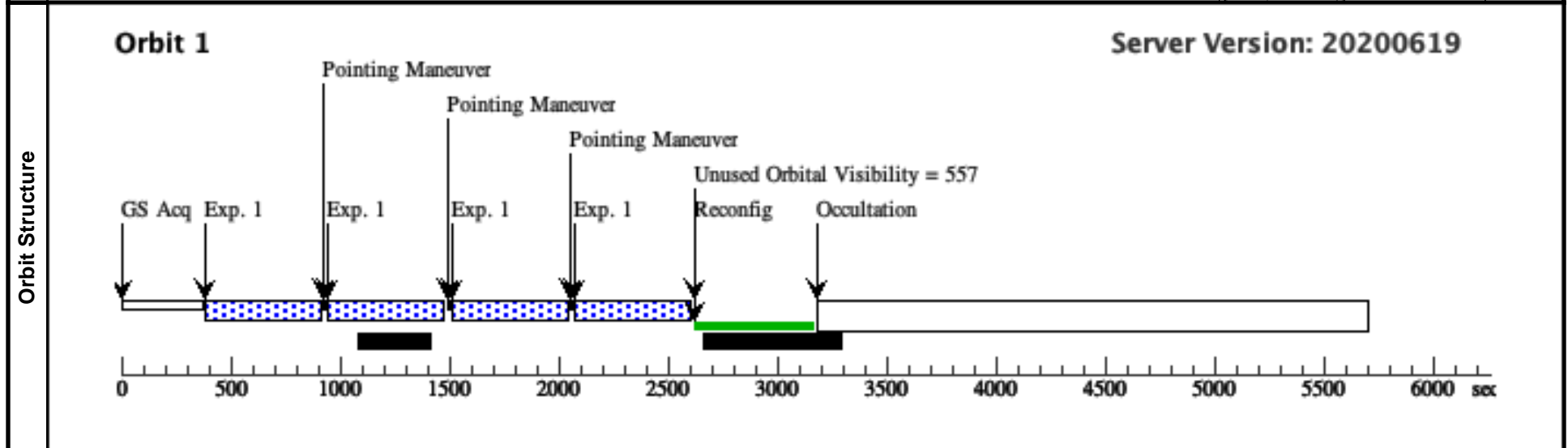
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 80 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|--------------------------------------|---|--------------------------------|--------------------------------|-----------------------|
| | (80) | ESO-443-G024 Alt Name1: PGC-44852 | RA: 13 01 0.8000 (195.2533333d) Dec: -32 26 28.90 (-32.44136d) Equinox: J2000 | Radial Velocity: 5115.0 km/sec | V=(?) K=8.48, (J-H)=0.69 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-------------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (80) ESO-443-G024 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 80 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 81 - 5% Distances to Galaxies using Surface Brightness Fluctuations

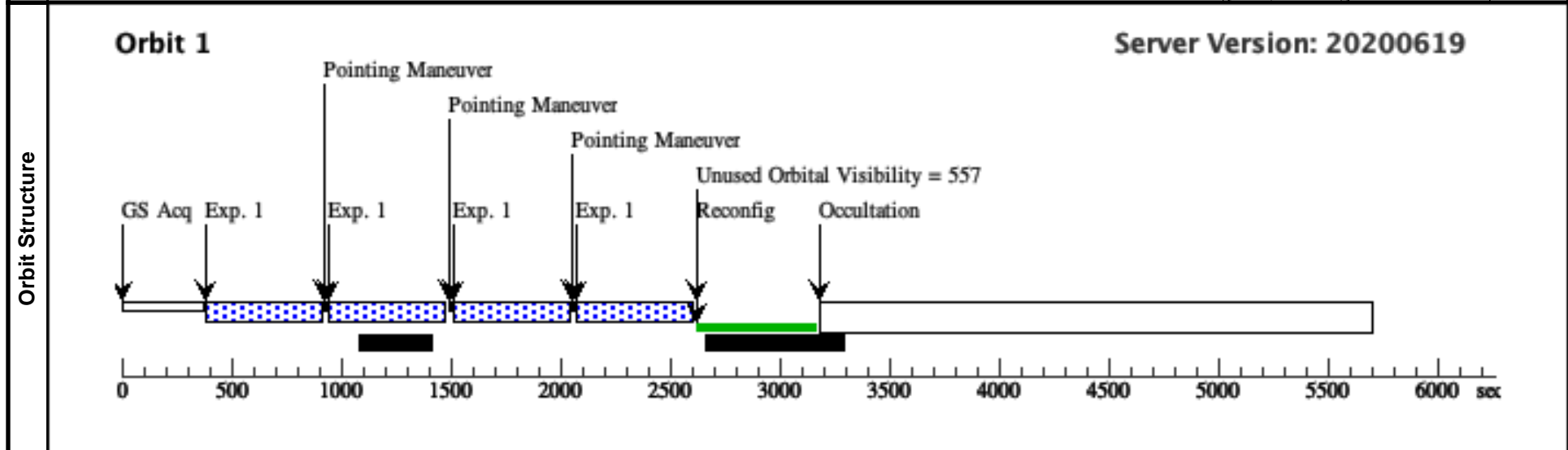
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 81 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|---------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (81) | IC-3986 Alt Name1: PGC-44905 | RA: 13 01 32.1000 (195.3837500d) Dec: -32 17 27.80 (-32.29106d) Equinox: J2000 | Radial Velocity: 4628.0 km/sec | V=(?) K=8.81, (J-H)=0.68 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|--------------|-------------------------|----------------------|--------------------------------|--------------|---------------|-------------------------------------|--|-------|
| | 1 | (81) IC-3986 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 81 (1) | 502.936801 Secs (2011.747 Secs) | [1] |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | |



Proposal 16262 - Visit 82 - 5% Distances to Galaxies using Surface Brightness Fluctuations

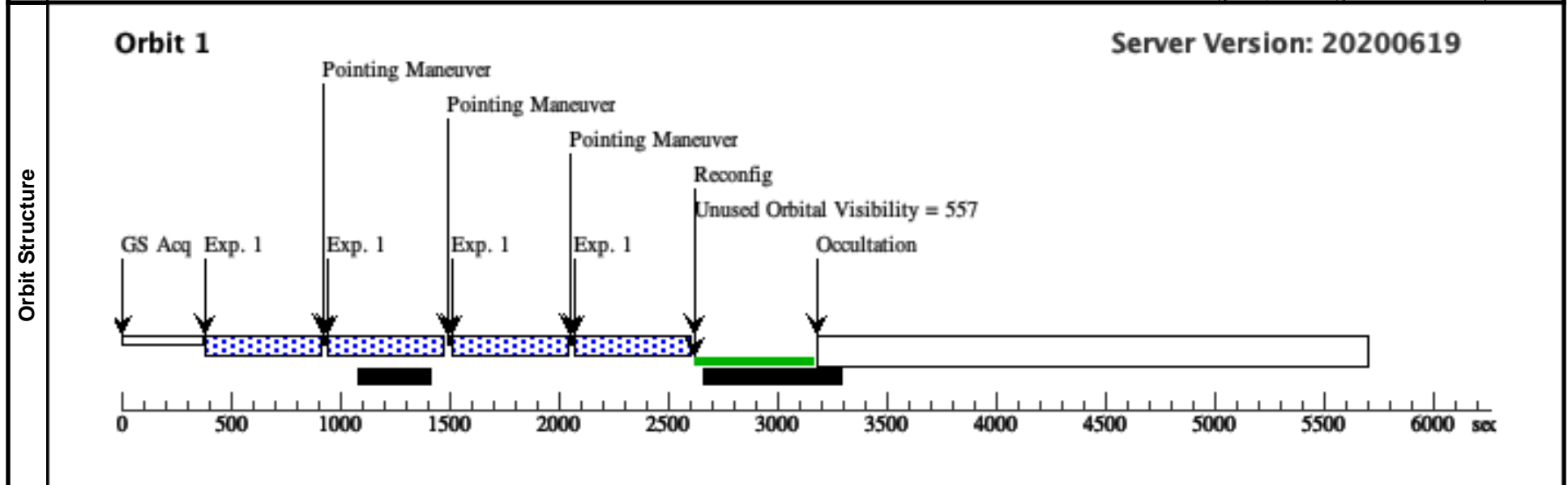
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 82 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|--------------------------------------|---|--------------------------------|--------------------------------|-----------------------|
| | (82) | ESO-382-G002 Alt Name1: PGC-45056 | RA: 13 03 1.2000 (195.7550000d) Dec: -32 50 27.00 (-32.84083d) Equinox: J2000 | Radial Velocity: 4834.0 km/sec | V=(?) K=9.97, (J-H)=0.68 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-------------------|-------------------------|---------------|--------------------------------|---------------|--------|--|---------------------------------|
| | 1 | | (82) ESO-382-G002 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 82 (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 83 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:39 GMT 2020

| | | | | | | | | | | |
|------------------------|--|----------------------------------|---|--|-----------------------------------|-----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 83 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (83) | NGC-4936 Alt Name1: PGC-45174 | RA: 13 04 17.0000 (196.0708333d) Dec: -30 31 34.40 (-30.52622d) Equinox: J2000 | Radial Velocity: 3095.0 km/sec | V=(?) K=7.7, (J-H)=0.68 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (83) NGC-4936 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 83 (1) | 502.936801 Secs (2011.747 Secs) | [1] |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> <div> <h3>Orbit 1</h3> <p>The diagram shows a timeline for Orbit 1 from 0 to 6000 seconds. Key events include: GS Acq at ~200s, four Exp. 1 exposures at ~400s, 1000s, 1500s, and 2100s, three Pointing Maneuvers at ~900s, 1400s, and 2000s, Reconfig at ~2600s, and Occultation at ~3200s. A green bar indicates unused orbital visibility from ~2600s to ~3100s, with a duration of 557 seconds.</p> </div> <div> <p>Server Version: 20200619</p> </div> </div> | | | | | | | | | |

Proposal 16262 - Visit 84 - 5% Distances to Galaxies using Surface Brightness Fluctuations

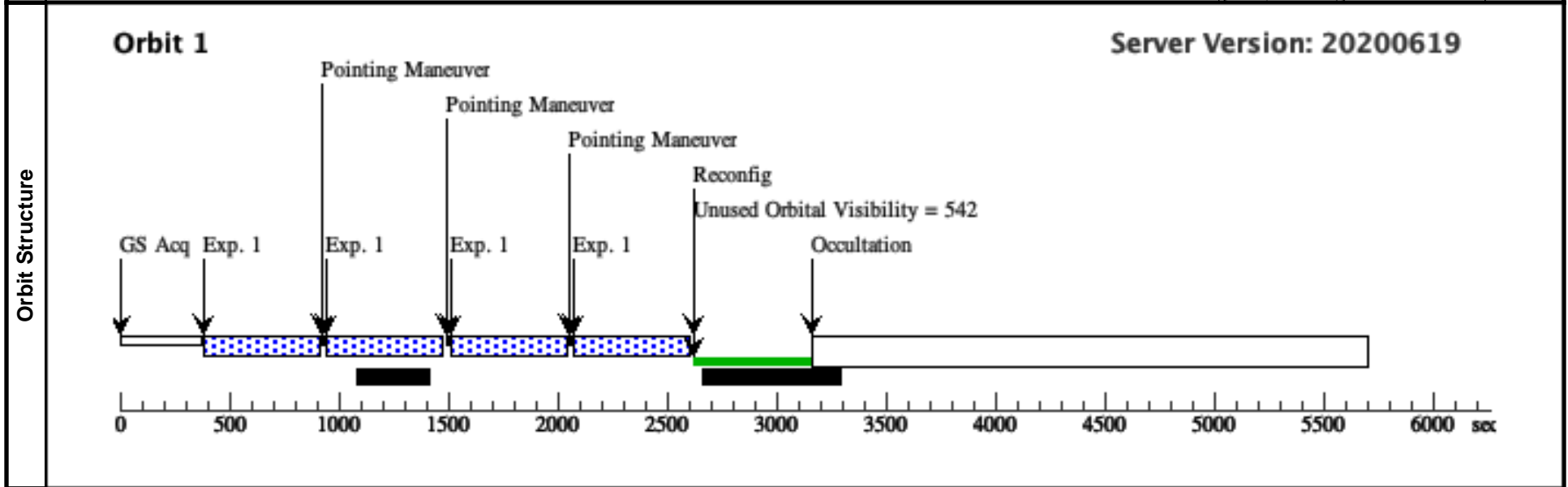
Wed Jul 01 06:01:39 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 84 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------------------------------|---|--------------------------------|--------------------------------|-----------------------|
| | (84) | NGC-4955 Alt Name1: PGC-45340 | RA: 13 06 4.8000 (196.5200000d) Dec: -29 45 15.00 (-29.75417d) Equinox: J2000 | Radial Velocity: 3447.0 km/sec | V=(?) K=8.87, (J-H)=0.62 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (84) NGC-4955 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 84 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 85 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:39 GMT 2020

| | | | | | | | | | | |
|------------------------|--|----------------------------------|---|--|-----------------------------------|-----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 85 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (85) | NGC-5011 Alt Name1: PGC-45898 | RA: 13 12 51.9000 (198.2162500d) Dec: -43 05 46.10 (-43.09614d) Equinox: J2000 | Radial Velocity: 3127.0 km/sec | V=(?) K=8.11, (J-H)=0.66 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (85) NGC-5011 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 85 (1) | 502.936801 Secs (2011.747 Secs) | [1] |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram illustrates the orbit structure over a 6000-second period. Key events include:</p> <ul style="list-style-type: none"> GS Acq: Occurs at approximately 100 seconds. Exp. 1: Four exposure periods are shown, each lasting approximately 100 seconds, occurring at roughly 400, 1000, 1500, and 2100 seconds. Pointing Maneuver: Three pointing maneuvers are indicated by vertical arrows at approximately 1000, 1500, and 2100 seconds. Reconfig: A reconfiguration event occurs at approximately 2600 seconds. Unused Orbital Visibility = 615: A period of 615 seconds of unused orbital visibility is shown between 2600 and 3215 seconds. Occultation: An occultation event is shown as a solid black bar starting at approximately 3215 seconds and ending at 3300 seconds. <p>The timeline is marked with a scale from 0 to 6000 seconds in increments of 500.</p> | | | | | | | | | |

Proposal 16262 - Visit 86 - 5% Distances to Galaxies using Surface Brightness Fluctuations

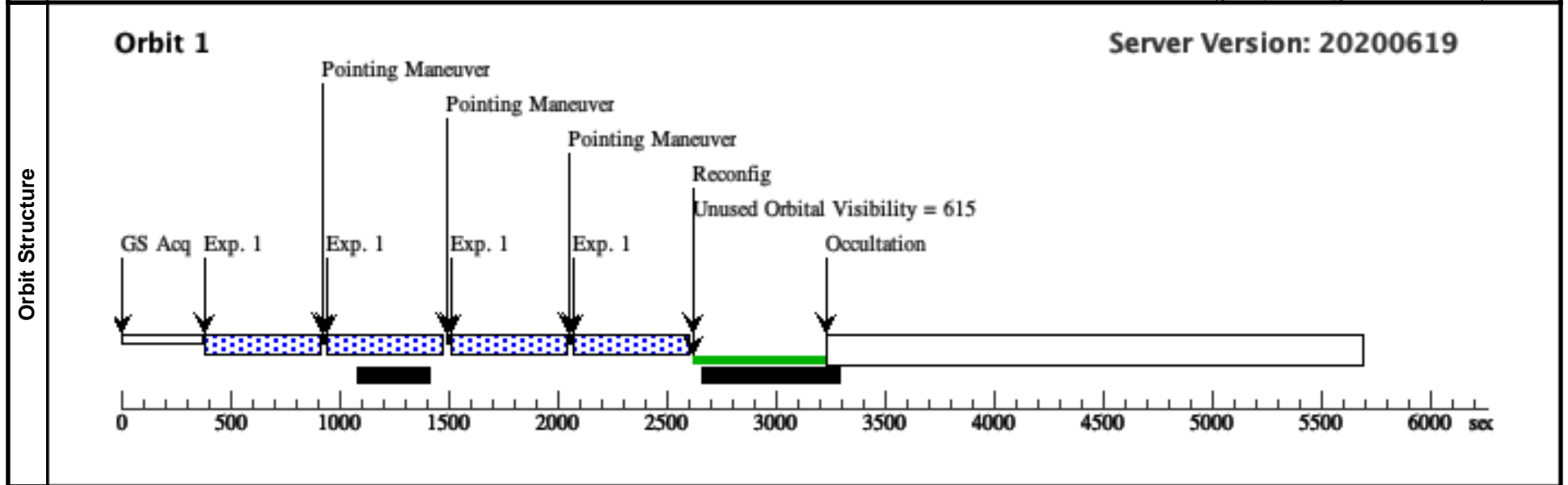
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 86 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|--------------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (86) | ESO-269-G072 Alt Name1: PGC-45960 | RA: 13 13 33.8000 (198.3908333d) Dec: -43 31 34.10 (-43.52614d) Equinox: J2000 | Radial Velocity: 3140.0 km/sec | V=(?) K=9.45, (J-H)=0.69 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-------------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (86) ESO-269-G072 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 86 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 87 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:40 GMT 2020

| | | | | | | | | | | |
|------------------------|---|----------------------------------|---|--|--------------------------------|-----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 87 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (87) | NGC-5090 Alt Name1: PGC-46618 | RA: 13 21 12.9000 (200.3037500d) Dec: -43 42 16.70 (-43.70464d) Equinox: J2000 | Radial Velocity: 2946.0 km/sec | V=(?) K=7.52, (J-H)=0.75 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (87) NGC-5090 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 87 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram illustrates the orbit structure for Orbit 1, spanning from 0 to 6000 seconds. Key events and phases are marked on the timeline:</p> <ul style="list-style-type: none"> GS Acq: Ground Station Acquisition at 0 seconds. Exp. 1: Exposure 1 starts at 400 seconds and continues through several pointing maneuvers. Pointing Maneuvers: Occur at 1000, 1500, and 2100 seconds. Reconfig: Reconfiguration occurs at 2600 seconds. Unused Orbital Visibility = 615: A period of 615 seconds of unused orbital visibility between 2600s and 3200s. Occultation: Occurs at 3200 seconds. <p>The exposure time for the primary pattern is shown as a green bar from 2600s to 3200s. The total exposure time is 502.936801 seconds, with an actual duration of 2011.747 seconds.</p> | | | | | | | | | |

Proposal 16262 - Visit 88 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:40 GMT 2020

| | | | | | | | | | |
|------------------------|--|---|---|--|---|--|--|---|-----------|
| Visit | Proposal 16262, Visit 88 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | |
| | Patterns | # (1) Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # (88) | Name: NGC-5140 Alt Name1: PGC-47031 | Target Coordinates RA: 13 26 21.7000 (201.5904167d) Dec: -33 52 6.70 (-33.86853d) Equinox: J2000 | Targ. Coord. Corrections Radial Velocity: 3867.0 km/sec | Fluxes V=(?) K=8.6, (J-H)=0.67 | Miscellaneous Reference Frame: ICRS | | | |
| Exposures | # 1 | Label (88) NGC-5140 | Config,Mode,Aperture WFC3/IR, MULTIACCUM, IR | Spectral Els. F110W | Opt. Params. SAMP-SEQ=SPARS 50; NSAMP=11 | Special Reqs. | Groups Pattern 1, Exps 1-1 in Visit 88 (1) | Exp. Time (Total)/[Actual Dur.] 502.936801 Secs (2011.747 Secs) | Orbit [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram shows a timeline from 0 to 6000 seconds. Key events include: GS Acq at ~100s, Exp. 1 at ~400s, Pointing Maneuver at ~1000s, Exp. 1 at ~1400s, Pointing Maneuver at ~1800s, Exp. 1 at ~2100s, Pointing Maneuver at ~2400s, Reconfig at ~2600s, Exp. 1 at ~2700s, Reconfig at ~2800s, Unused Orbital Visibility = 557s (green bar) from ~2800s to ~3357s, and Occultation at ~3200s. A blue checkered bar represents exposure time from ~400s to ~2700s.</p> | | | | | | | | |

Proposal 16262 - Visit 89 - 5% Distances to Galaxies using Surface Brightness Fluctuations

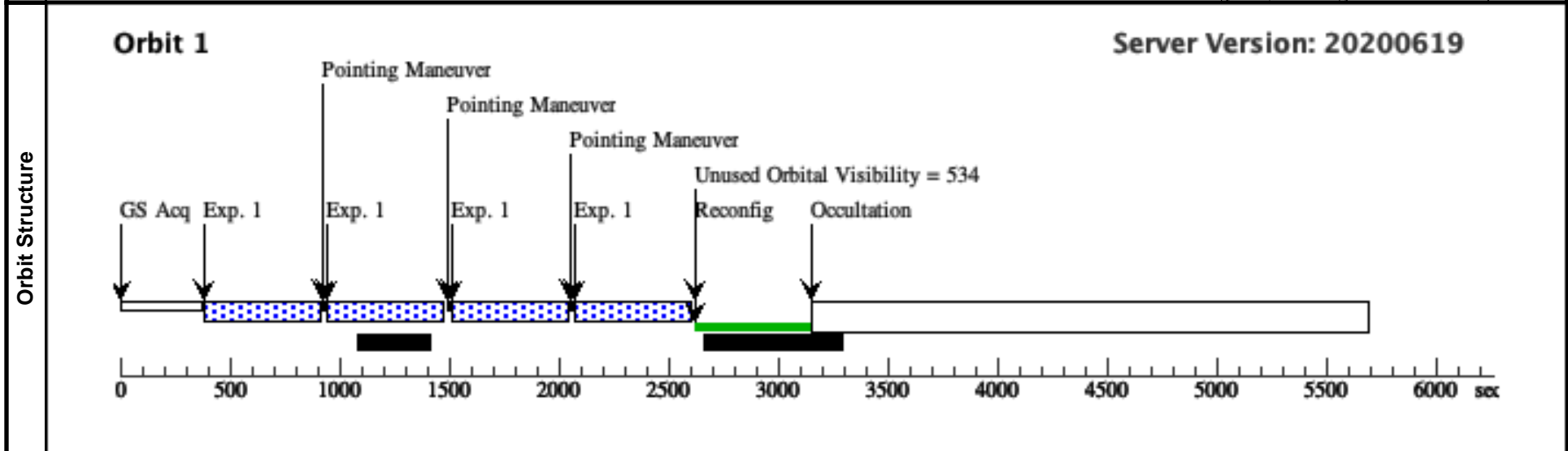
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 89 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|--------------------------------------|---|--------------------------------|--------------------------------|-----------------------|
| | (89) | ESO-576-G066 Alt Name1: PGC-47408 | RA: 13 29 55.8000 (202.4825000d) Dec: -20 41 4.40 (-20.68456d) Equinox: J2000 | Radial Velocity: 5279.0 km/sec | V=(?) K=9.64, (J-H)=0.73 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-------------------|-------------------------|---------------|--------------------------------|---------------|--------|--|---------------------------------|
| | 1 | | (89) ESO-576-G066 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 89 (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 90 - 5% Distances to Galaxies using Surface Brightness Fluctuations

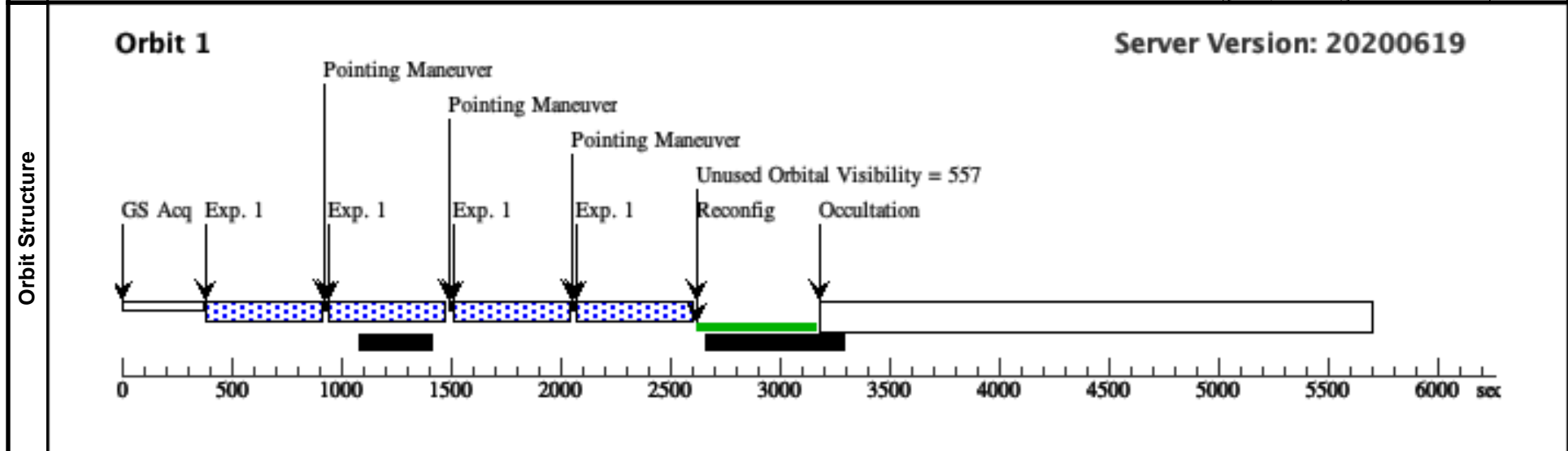
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 90 | | |
| | Diagnostic Status: No Diagnostics | | |
| | Scientific Instruments: WFC3/IR | | |
| | Special Requirements: (none) | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------------------------------|---|--------------------------------|--------------------------------|-----------------------|
| | (90) | NGC-5193 Alt Name1: PGC-47582 | RA: 13 31 53.5000 (202.9729167d) Dec: -33 14 2.10 (-33.23392d) Equinox: J2000 | Radial Velocity: 3734.0 km/sec | V=(?) K=8.66, (J-H)=0.69 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (90) NGC-5193 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 90 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 91 - 5% Distances to Galaxies using Surface Brightness Fluctuations

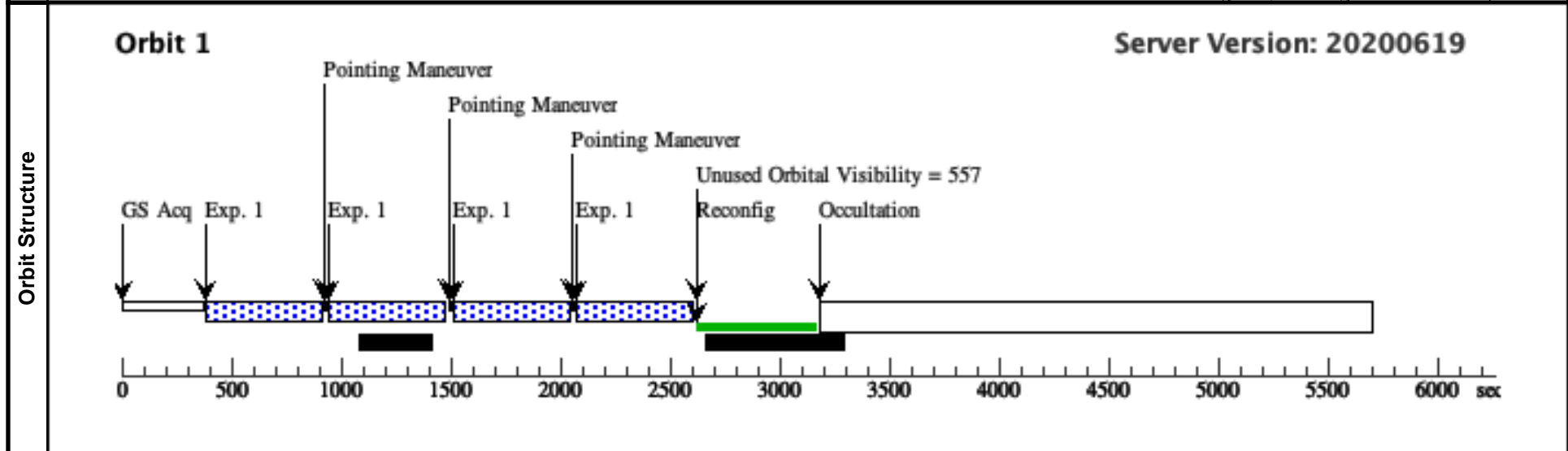
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 91 | | |
| | Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---------------------------------|--|--------------------------------|-------------------------------|-----------------------|
| | (91) | IC-4296 Alt Name1: PGC-48040 | RA: 13 36 39.1000 (204.1629167d) Dec: -33 57 57.00 (-33.96583d) Equinox: J2000 | Radial Velocity: 3781.0 km/sec | V=(?) K=7.48, (J-H)=0.7 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|--------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (91) IC-4296 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 91 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 92 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 92 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

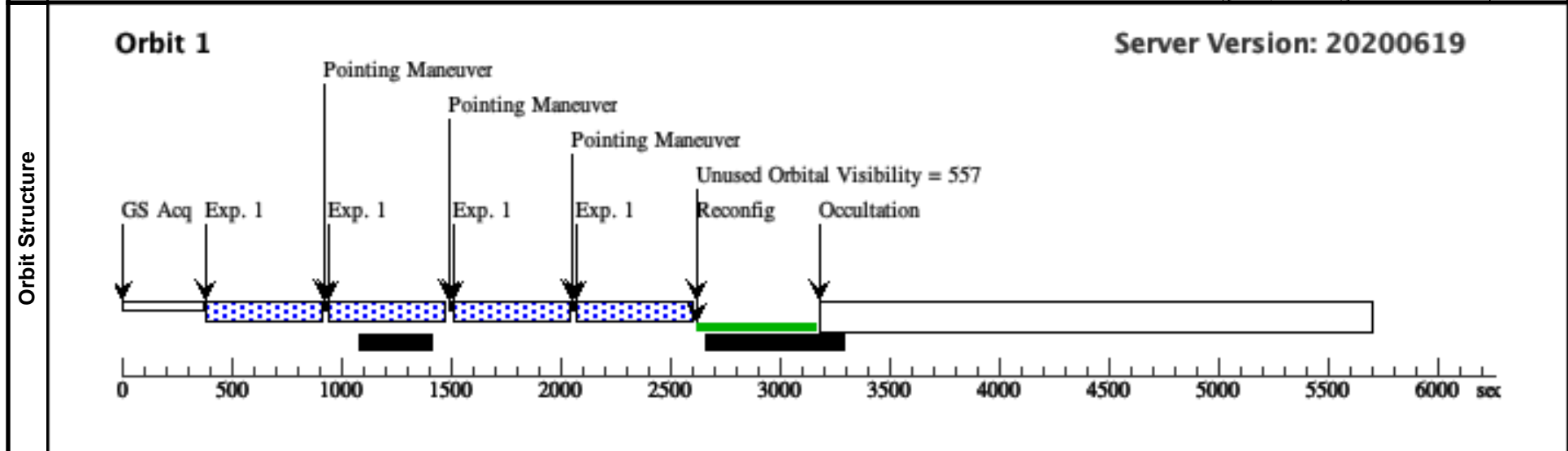
| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|------|--------------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (92) | ESO-445-G002 Alt Name1: PGC-48287 | RA: 13 39 23.5000 (204.8479167d) Dec: -30 46 27.20 (-30.77422d) Equinox: J2000 | Radial Velocity: 4342.0 km/sec | V=(?) K=8.39, (J-H)=0.66 | Reference Frame: ICRS |

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

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-------------------|-------------------------|---------------|--------------------------------|---------------|--------|-------------------------------------|---------------------------------|
| | 1 | | (92) ESO-445-G002 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 92 (1) | 502.936801 Secs (2011.747 Secs) |

[=>(Pattern 1)]
 [=>(Pattern 2)]
 [=>(Pattern 3)]
 [=>(Pattern 4)]



Proposal 16262 - Visit 93 - 5% Distances to Galaxies using Surface Brightness Fluctuations

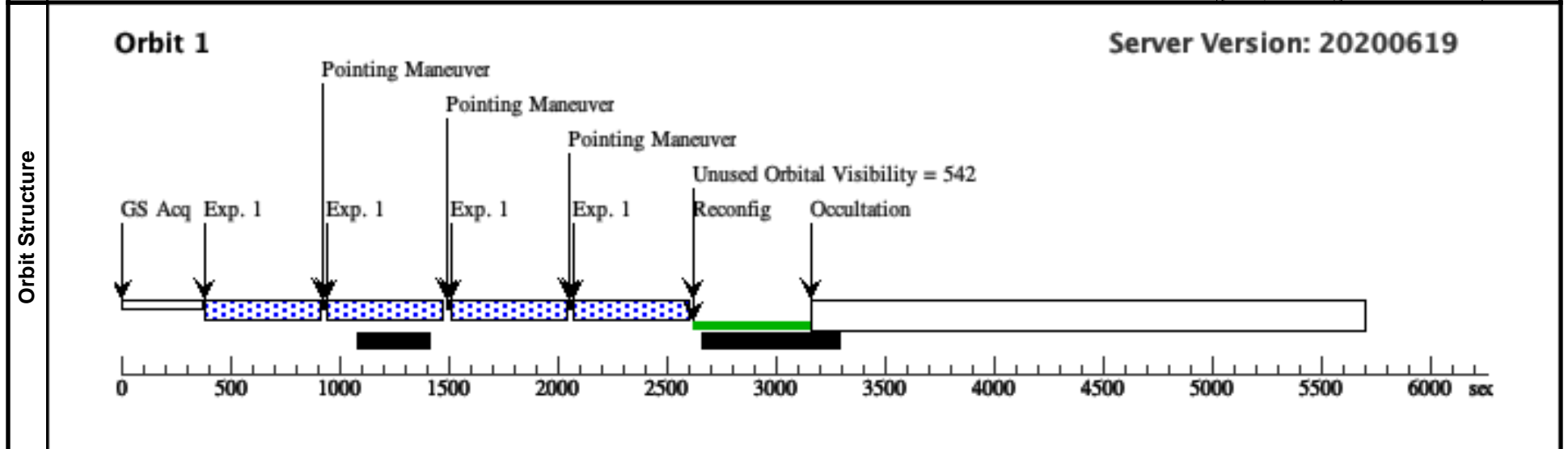
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 93 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|--------------------------------------|--|--------------------------------|------------------------------|-----------------------|
| | (93) | ESO-445-G028 Alt Name1: PGC-48888 | RA: 13 47 18.7000 (206.8279167d) Dec: -29 48 32.10 (-29.80892d) Equinox: J2000 | Radial Velocity: 4531.0 km/sec | V=(?) K=9.8, (J-H)=0.7 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-------------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (93) ESO-445-G028 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 93 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 94 - 5% Distances to Galaxies using Surface Brightness Fluctuations

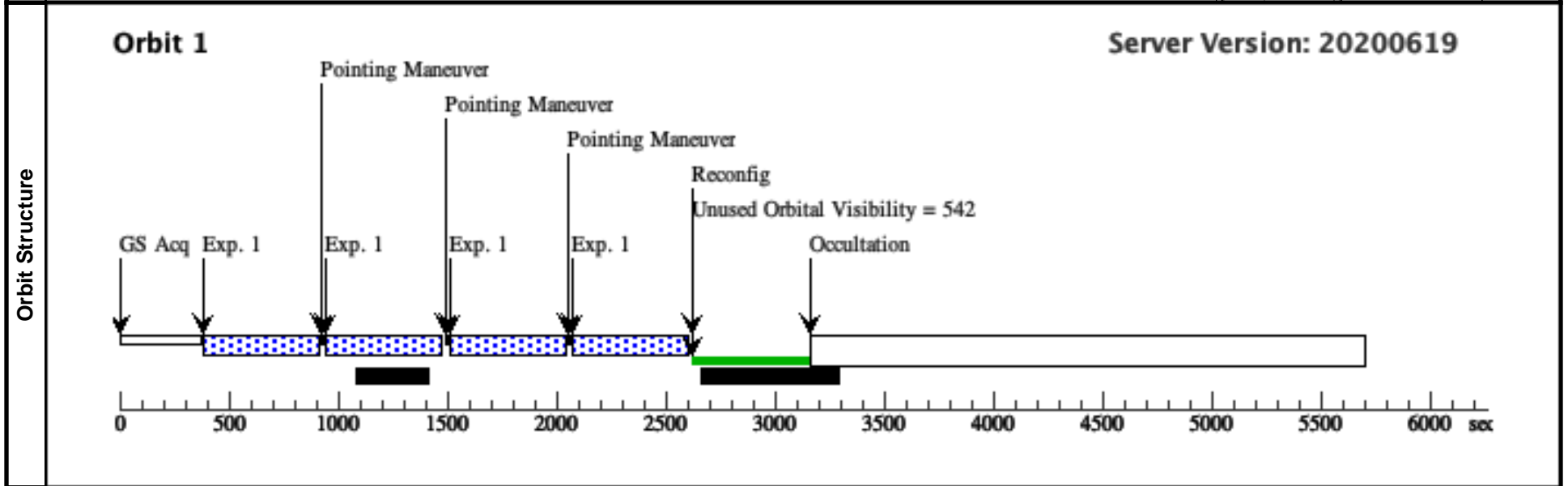
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 94 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (94) | NGC-5328 Alt Name1: PGC-49307 | RA: 13 52 53.3000 (208.2220833d) Dec: -28 29 21.40 (-28.48928d) Equinox: J2000 | Radial Velocity: 4700.0 km/sec | V=(?) K=8.47, (J-H)=0.69 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (94) NGC-5328 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 94 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 95 - 5% Distances to Galaxies using Surface Brightness Fluctuations

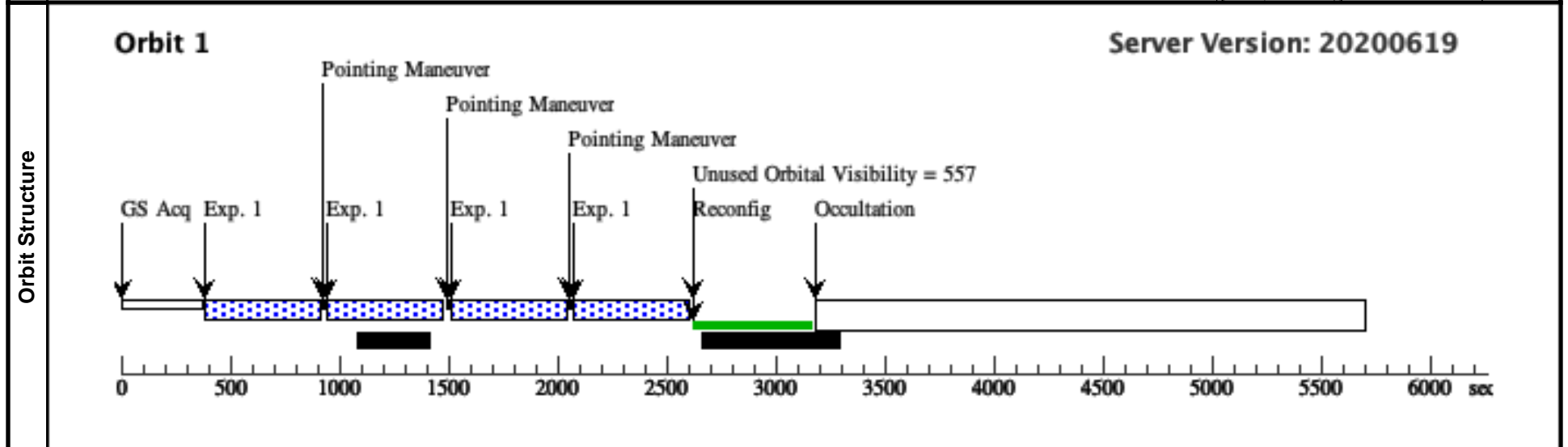
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 95 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|--------------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (95) | ESO-384-G013 Alt Name1: PGC-49516 | RA: 13 55 41.8000 (208.9241667d) Dec: -33 43 29.60 (-33.72489d) Equinox: J2000 | Radial Velocity: 3764.0 km/sec | V=(?) K=9.95, (J-H)=0.67 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-------------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (95) ESO-384-G013 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 95 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 96 - 5% Distances to Galaxies using Surface Brightness Fluctuations

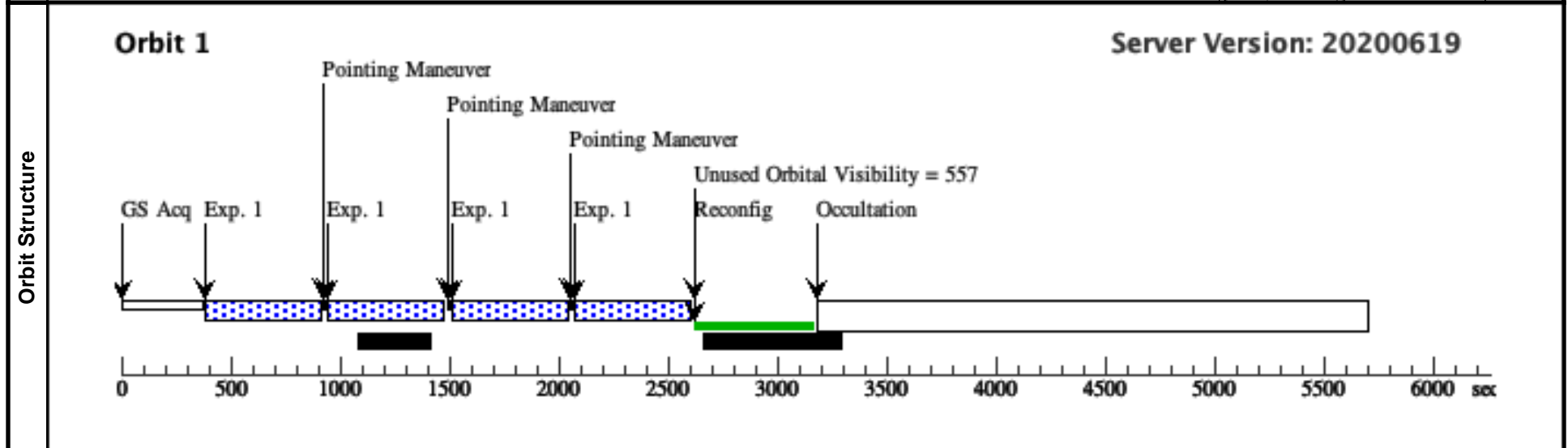
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 96 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|----------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (96) | NGC-5357 Alt Name1: PGC-49534 | RA: 13 55 59.5000 (208.9979167d) Dec: -30 20 29.10 (-30.34142d) Equinox: J2000 | Radial Velocity: 4870.0 km/sec | V=(?) K=8.91, (J-H)=0.72 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|--------|-------------------------------------|---|
| | 1 | | (96) NGC-5357 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 96 (1) | 502.936801 Secs (2011.747 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] |



Proposal 16262 - Visit 97 - 5% Distances to Galaxies using Surface Brightness Fluctuations

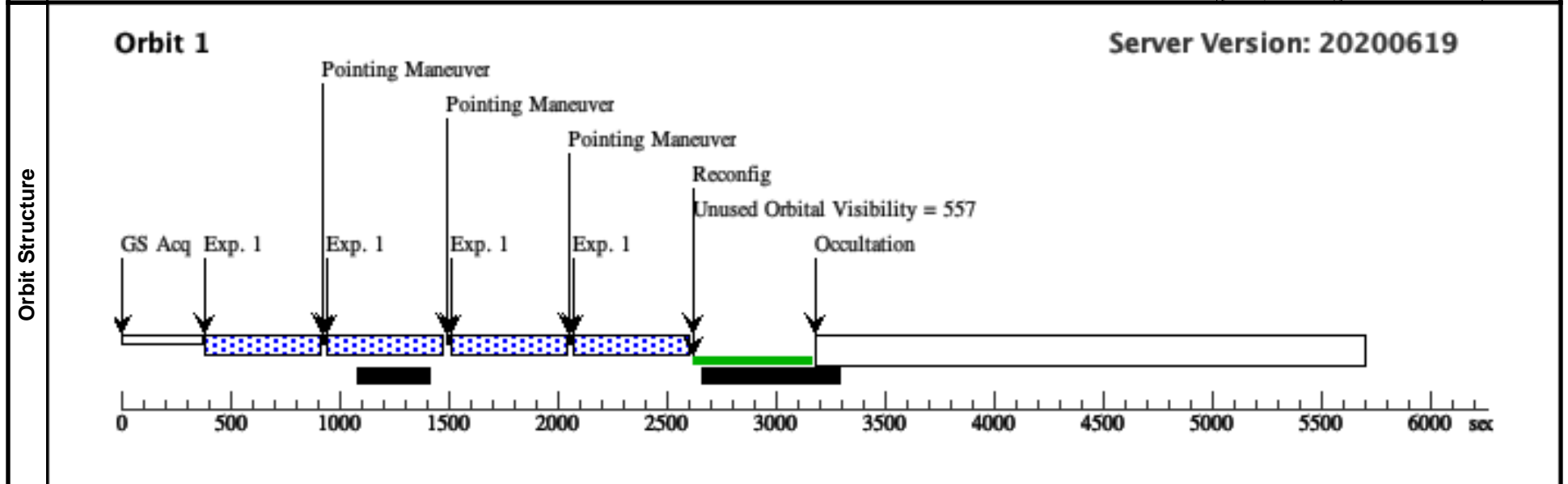
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 97 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------|--|--------------------------------|--------------------------------|-----------------------|
| | (97) | NGC-5397 | RA: 14 01 10.5000 (210.2937500d) Dec: -33 56 44.80 (-33.94578d) Equinox: J2000 | Radial Velocity: 4146.0 km/sec | V=(?) K=9.24, (J-H)=0.79 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (97) NGC-5397 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 97 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 98 - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:40 GMT 2020

| | | | | | | | | | | |
|------------------------|---|----------------------------------|---|--|--------------------------------|-----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 98 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (98) | NGC-5419 Alt Name1: PGC-50100 | RA: 14 03 38.6000 (210.9108333d) Dec: -33 58 44.30 (-33.97897d) Equinox: J2000 | Radial Velocity: 4156.0 km/sec | V=(?) K=7.49, (J-H)=0.63 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (98) NGC-5419 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 98 (1) | 502.936801 Secs (2011.747 Secs) | [1] |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram shows a timeline from 0 to 6000 seconds. Key events include: GS Acq at ~100s, Exp. 1 at ~400s, Pointing Maneuver at ~1000s, Exp. 1 at ~1400s, Pointing Maneuver at ~1800s, Exp. 1 at ~2200s, Pointing Maneuver at ~2600s, Reconfig at ~2700s, and Occultation at ~3200s. A green bar indicates a period of 'Unused Orbital Visibility = 557' between 2700s and 3257s. A blue checkered bar highlights the exposure periods.</p> | | | | | | | | | |

Proposal 16262 - Visit 99 - 5% Distances to Galaxies using Surface Brightness Fluctuations

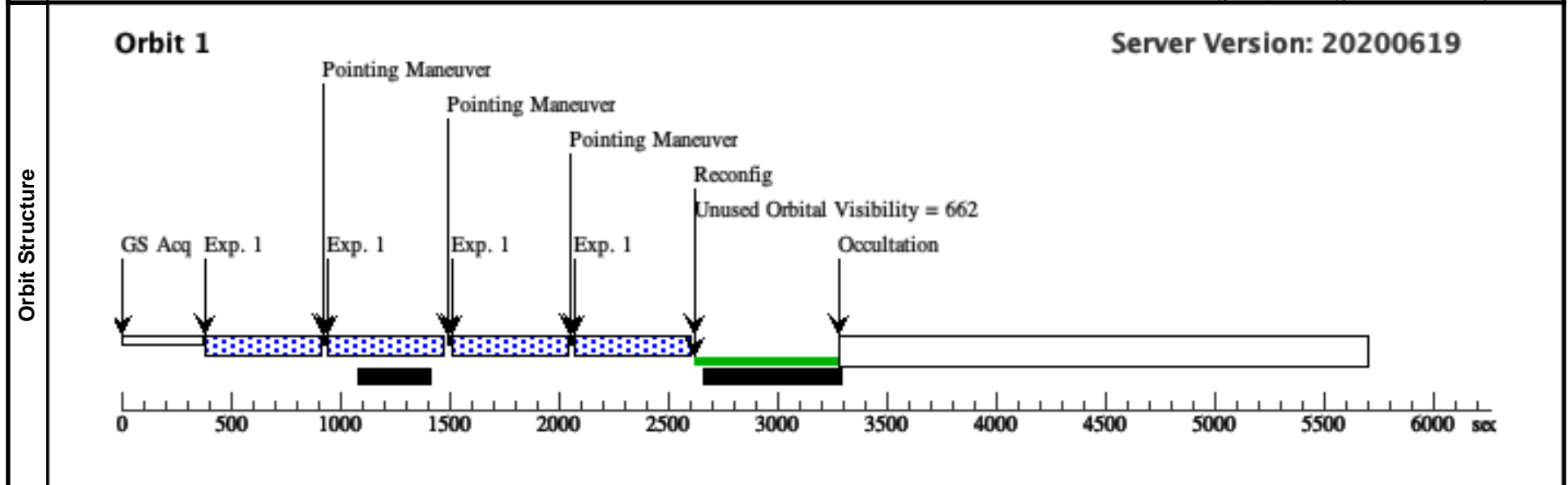
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 99 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|------|----------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (99) | NGC-5516 Alt Name1: PGC-50960 | RA: 14 15 54.7000 (213.9779167d) Dec: -48 06 53.50 (-48.11486d) Equinox: J2000 | Radial Velocity: 4377.0 km/sec | V=(?) K=8.24, (J-H)=0.69 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|--------|--|---------------------------------|
| | 1 | | (99) NGC-5516 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 99 (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0A - 5% Distances to Galaxies using Surface Brightness Fluctuations

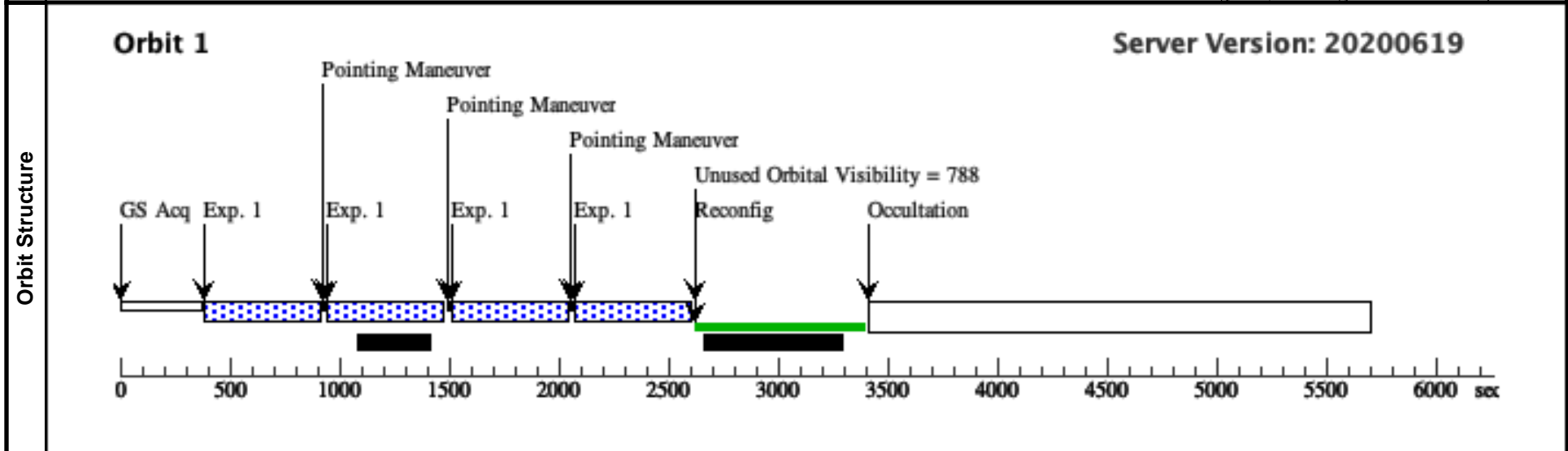
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 0A Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|--------------------------------------|---|--------------------------------|--------------------------------|-----------------------|
| | (100) | ESO-137-G006 Alt Name1: PGC-57612 | RA: 16 15 3.7000 (243.7654167d) Dec: -60 54 25.90 (-60.90719d) Equinox: J2000 | Radial Velocity: 5452.0 km/sec | V=(?) K=8.17, (J-H)=0.72 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|--------------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (100) ESO-137-G006 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 0A (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0B - 5% Distances to Galaxies using Surface Brightness Fluctuations

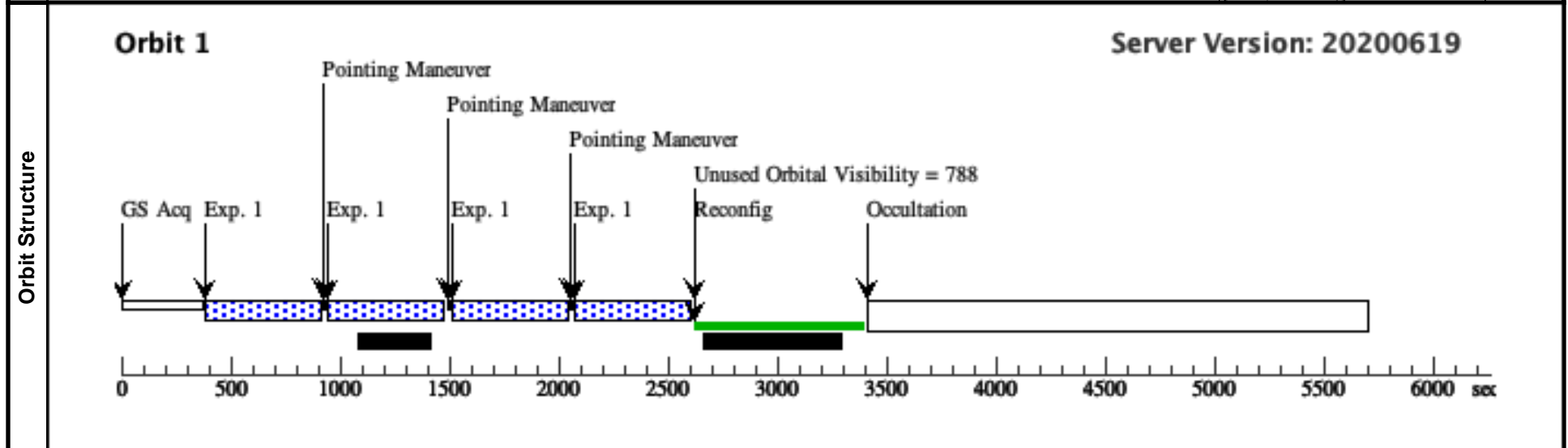
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 0B Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|--------------------------------------|--|--------------------------------|-------------------------------|-----------------------|
| | (101) | ESO-137-G007 Alt Name1: PGC-57637 | RA: 16 15 32.9000 (243.8870833d) Dec: -60 39 55.20 (-60.66533d) Equinox: J2000 | Radial Velocity: 4963.0 km/sec | V=(?) K=8.99, (J-H)=0.7 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|--------------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (101) ESO-137-G007 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 0B (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0C - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:40 GMT 2020

| | | | | | | | | | | |
|------------------------|--|--------------------------------------|---|--|--------------------------------|--------------------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 0C Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (102) | ESO-137-G008 Alt Name1: PGC-57649 | RA: 16 15 46.1000 (243.9420833d) Dec: -60 55 7.00 (-60.91861d) Equinox: J2000 | Radial Velocity: 3856.0 km/sec | V=(?) K=8.15, (J-H)=0.63 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (102) ESO-137-G008 | ESO-137-G008 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 0C (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram shows a timeline from 0 to 6000 seconds. Key events include: GS Acq at ~100s, Exp. 1 at ~400s, Pointing Maneuver at ~1000s, Exp. 1 at ~1400s, Pointing Maneuver at ~1800s, Exp. 1 at ~2100s, Pointing Maneuver at ~2400s, Reconfig at ~2600s, Unused Orbital Visibility (788s) from ~2600s to ~3388s, and Occultation starting at ~3400s. A blue checkered bar represents exposure time, and a green bar represents the reconfig period.</p> | | | | | | | | | |

Proposal 16262 - Visit 0D - 5% Distances to Galaxies using Surface Brightness Fluctuations

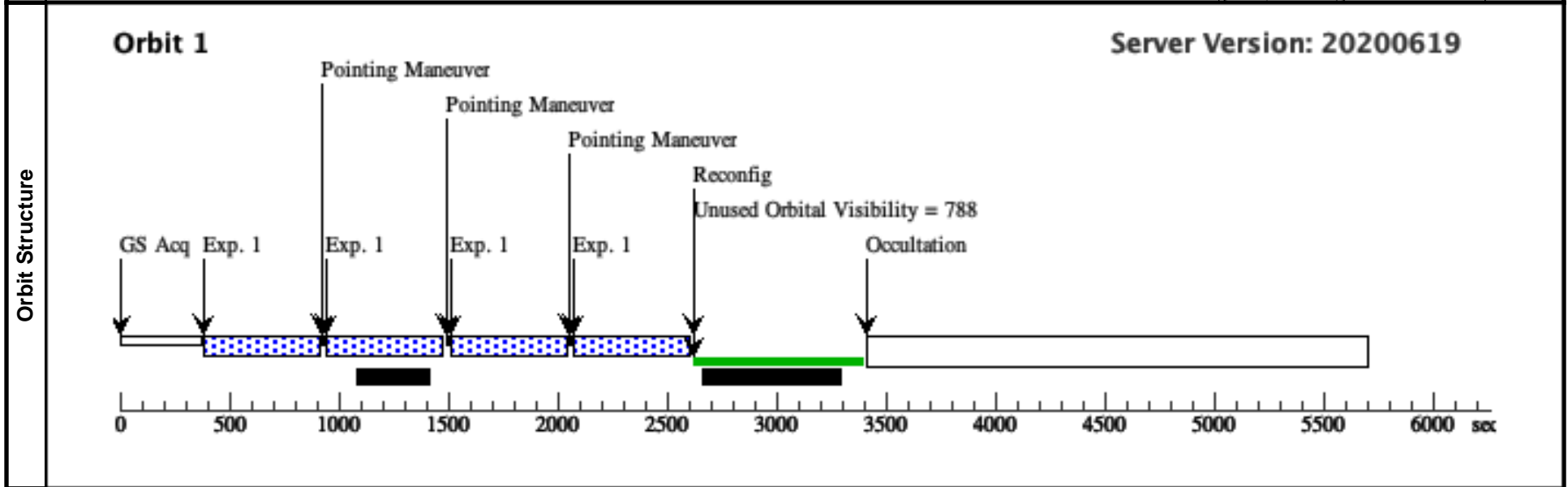
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|---|--|--|
| Visit | Proposal 16262, Visit 0D Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|--------------|--|--------------------------------|--------------------------------|-----------------------|
| | (103) | ESO-137-G010 | RA: 16 15 50.1000 (243.9587500d) Dec: -60 48 11.10 (-60.80308d) Equinox: J2000 | Radial Velocity: 3408.0 km/sec | V=(?) K=8.39, (J-H)=0.71 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|--------------------|--------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | (103) ESO-137-G010 | ESO-137-G010 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 0D (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0E - 5% Distances to Galaxies using Surface Brightness Fluctuations

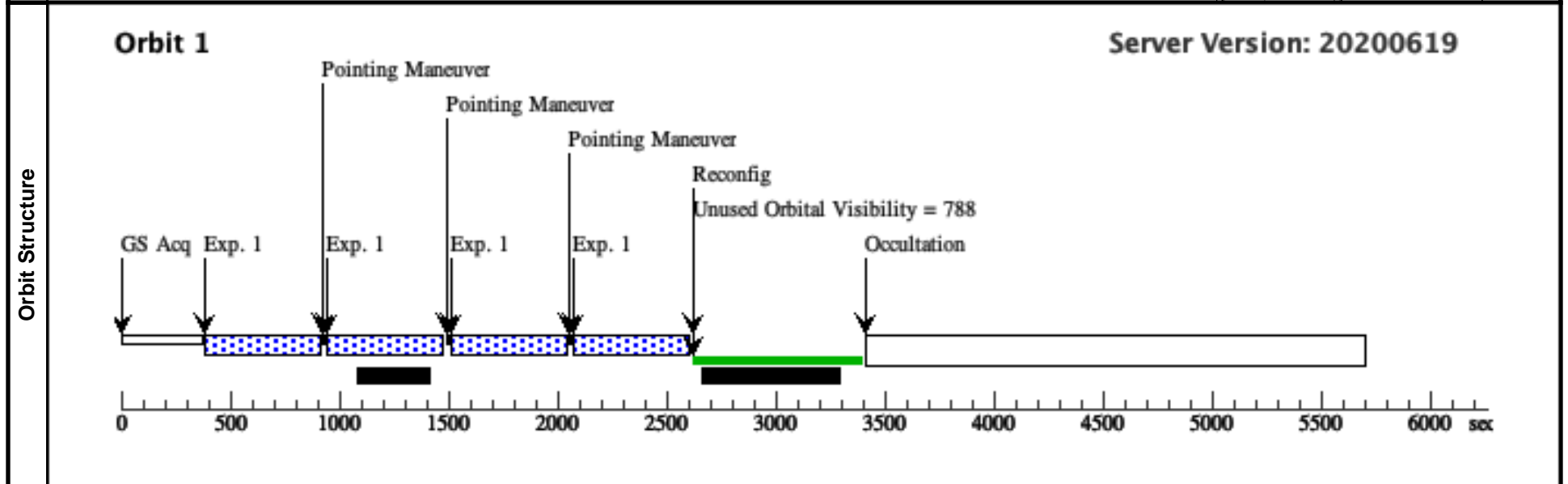
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|---|--|--|
| Visit | Proposal 16262, Visit 0E Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------|---|--------------------------------|---------------------------------|-----------------------|
| | (104) | WKK-6479 | RA: 16 19 1.5000 (244.7562500d) Dec: -63 15 52.70 (-63.26464d) Equinox: J2000 | Radial Velocity: 5150.0 km/sec | V=(?) K=10.07, (J-H)=0.76 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|----------------|-------------------------|---------------|-----------------------------------|---------------|---|--|-------|
| | 1 | | (104) WKK-6479 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 i n Visit 0E (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0F - 5% Distances to Galaxies using Surface Brightness Fluctuations

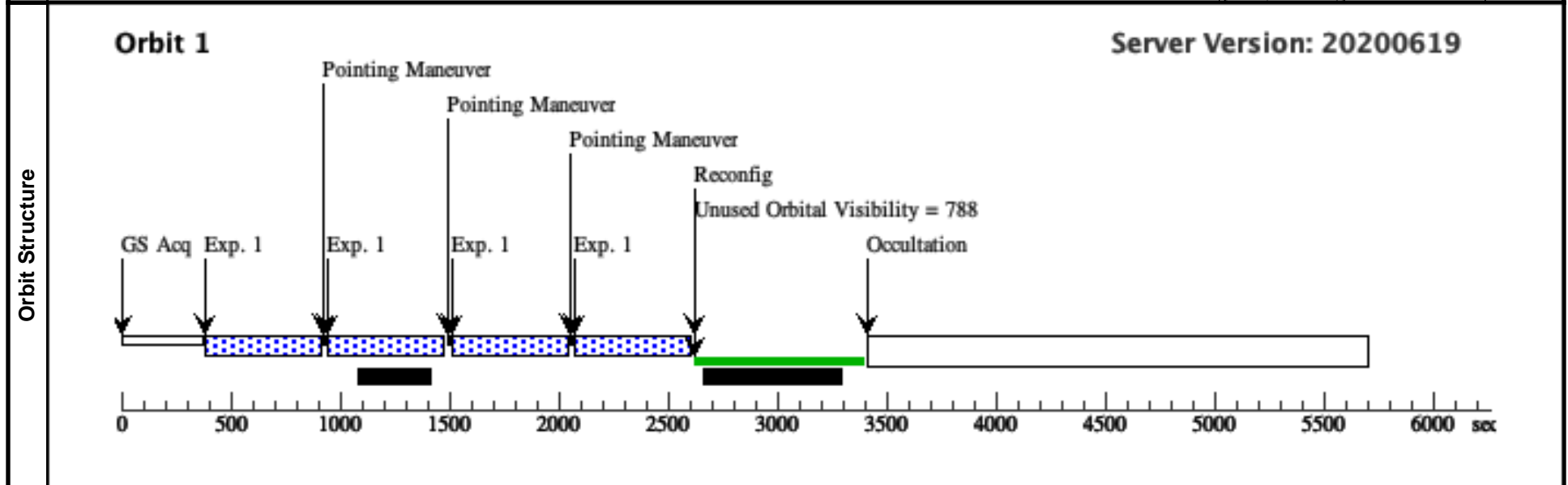
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 0F Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|--------------------------------------|---|--------------------------------|--------------------------------|----------------------|
| | (105) | ESO-137-G024 Alt Name1: PGC-58106 | RA: 16 25 50.2600 (246.4594167d) Dec: -60 45 9.40 (-60.75261d) Equinox: J2000 | Radial Velocity: 5264.0 km/sec | V=(?) K=8.91, (J-H)=0.74 | Reference Frame: NED |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|--------------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (105) ESO-137-G024 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 0F (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0G - 5% Distances to Galaxies using Surface Brightness Fluctuations

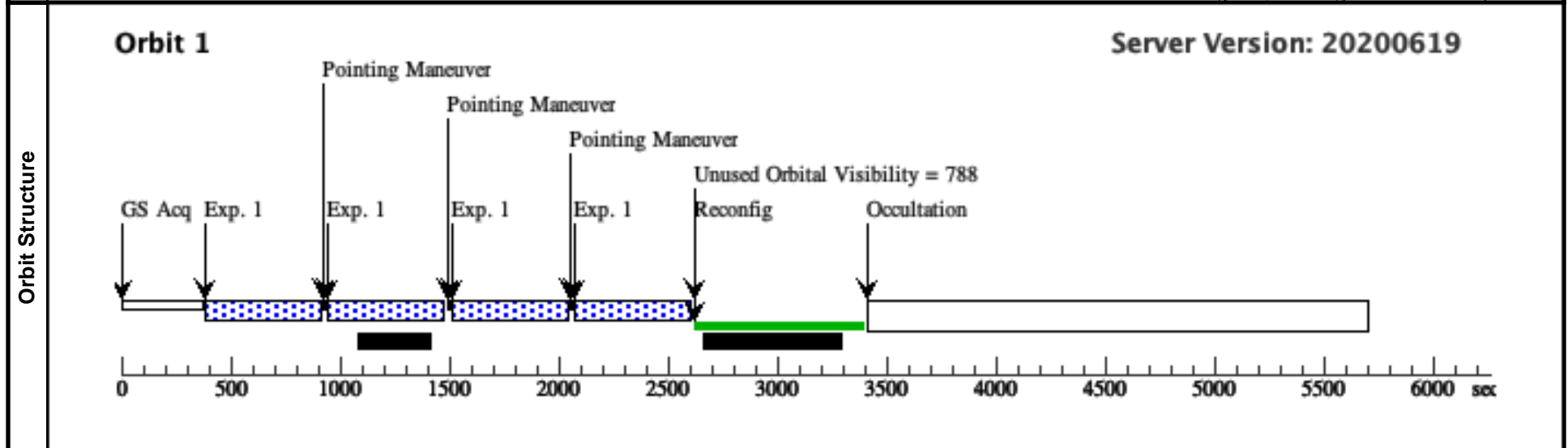
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 0G Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|-------|----------------------------------|--|--------------------------------|-------------------------------|----------------------|
| | (106) | NGC-6223 Alt Name1: PGC-58828 | RA: 16 43 4.3100 (250.7679583d) Dec: +61 34 44.10 (61.57892d) Equinox: J2000 | Radial Velocity: 5768.0 km/sec | V=(?) K=9.1, (J-H)=0.74 | Reference Frame: NED |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|----------|-------------------------|---------------|--------------------------------|---------------|--------|-------------------------------------|---|
| | 1 | (106) | NGC-6223 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 0G (1) | 502.936801 Secs (2011.747 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] |



Proposal 16262 - Visit 0H - 5% Distances to Galaxies using Surface Brightness Fluctuations

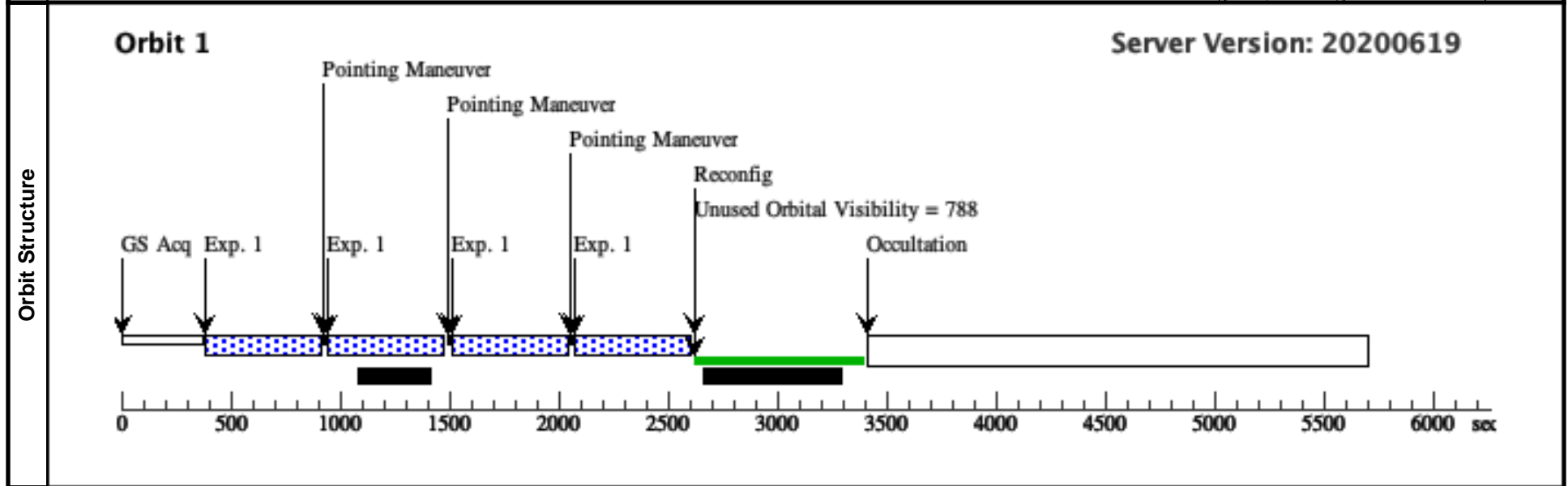
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|---|--|--|
| Visit | Proposal 16262, Visit 0H Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------|--|--------------------------------|--------------------------------|----------------------|
| | (107) | NGC-6407 | RA: 17 44 57.6900 (266.2403750d) Dec: -60 44 23.30 (-60.73981d) Equinox: J2000 | Radial Velocity: 4625.0 km/sec | V=(?) K=8.64, (J-H)=0.72 | Reference Frame: NED |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|----------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (107) NGC-6407 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 0H (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0I - 5% Distances to Galaxies using Surface Brightness Fluctuations

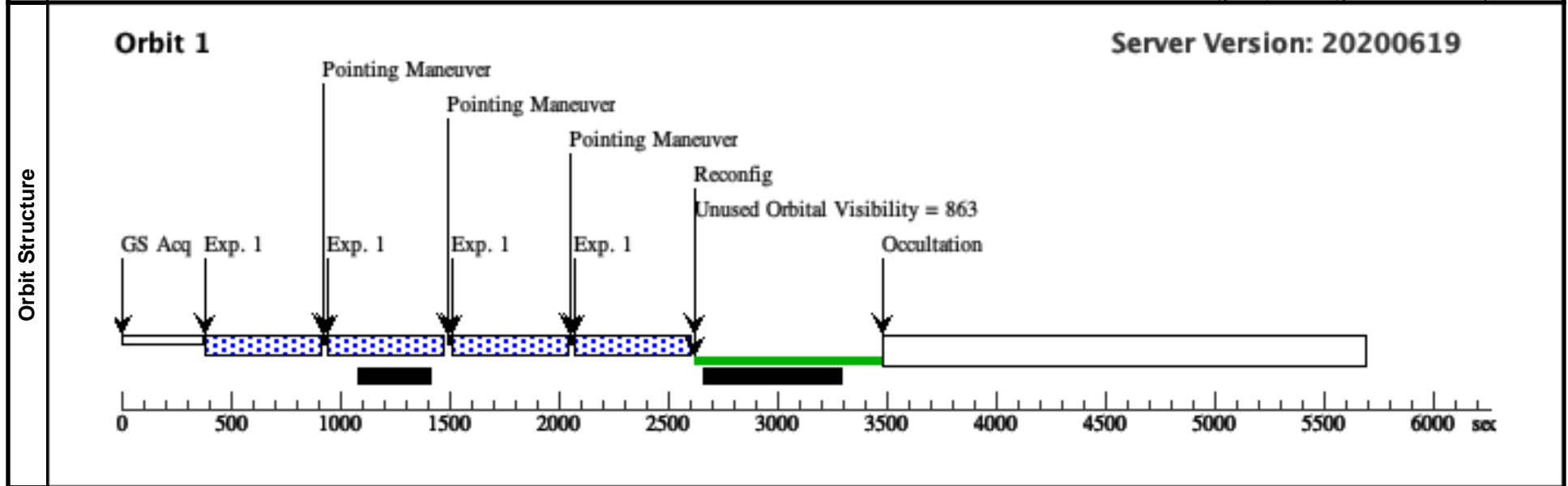
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 0I Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|-------|----------------------------------|--|--------------------------------|--------------------------------|----------------------|
| | (108) | NGC-6502 Alt Name1: PGC-61352 | RA: 18 04 13.7200 (271.0571667d) Dec: -65 24 35.80 (-65.40994d) Equinox: J2000 | Radial Velocity: 5514.0 km/sec | V=(?) K=9.18, (J-H)=0.68 | Reference Frame: NED |
| <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|----------|-------------------------|---------------|--------------------------------|---------------|--------|--|---------------------------------|
| | 1 | (108) | NGC-6502 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 0I (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0J - 5% Distances to Galaxies using Surface Brightness Fluctuations

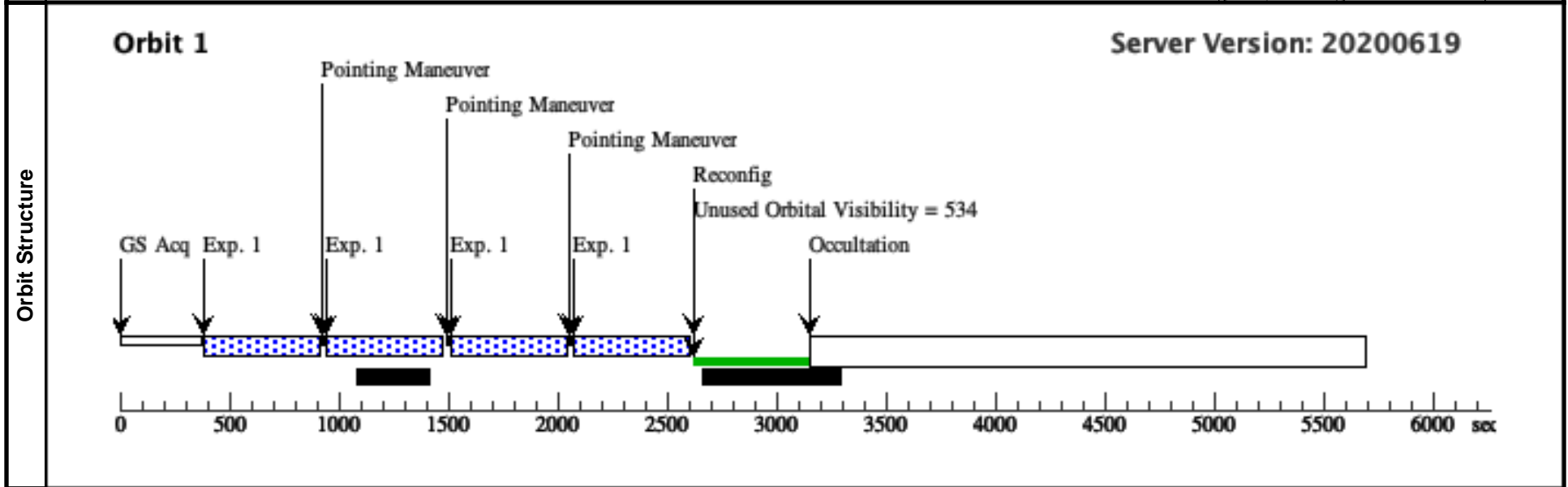
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 0J Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|-------|----------------------------------|--|--------------------------------|-------------------------------|----------------------|
| | (109) | NGC-6577 Alt Name1: PGC-61543 | RA: 18 12 1.2330 (273.0051375d) Dec: +21 27 48.16 (21.46338d) Equinox: J2000 | Radial Velocity: 5200.0 km/sec | V=(?) K=9.7, (J-H)=0.67 | Reference Frame: NED |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|----------------|-------------------------|----------------------|--------------------------------|--------------|---------------|-------------------------------------|--|-------|
| | 1 | (109) NGC-6577 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 0J (1) | 502.936801 Secs (2011.747 Secs) | [1] |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | |



Proposal 16262 - Visit 0K - 5% Distances to Galaxies using Surface Brightness Fluctuations

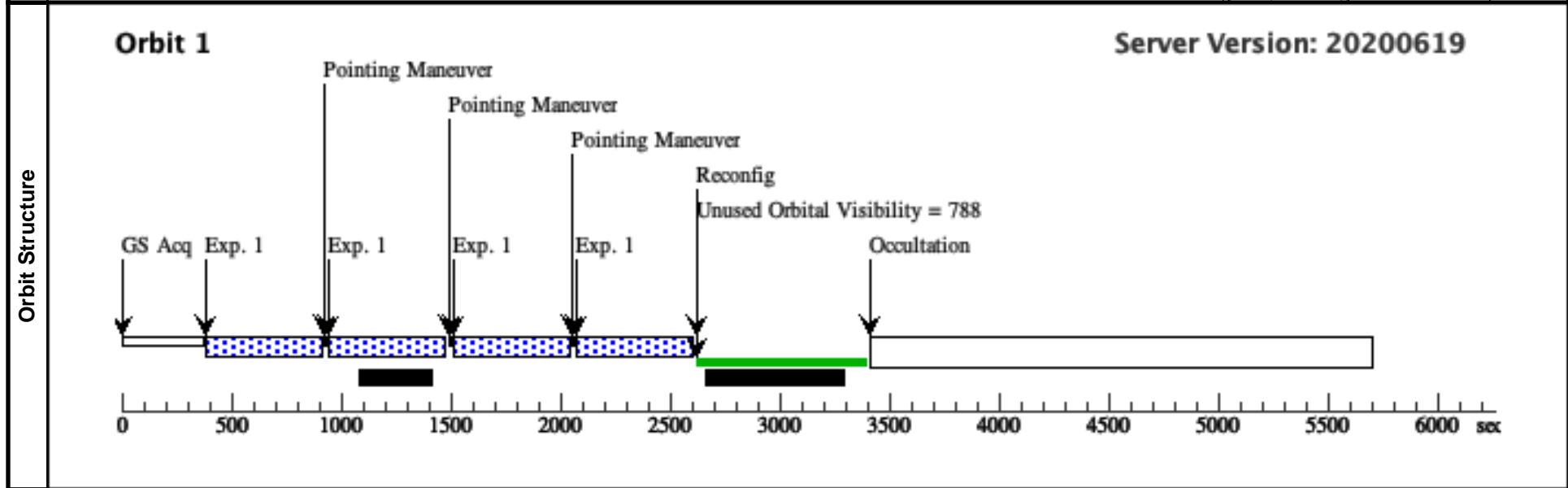
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|---|--|--|
| Visit | Proposal 16262, Visit 0K Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---------|---|--------------------------------|--------------------------------|-----------------------|
| | (110) | IC-4727 | RA: 18 37 56.1000 (279.4837500d) Dec: -62 42 2.10 (-62.70058d) Equinox: J2000 | Radial Velocity: 4508.0 km/sec | V=(?) K=9.17, (J-H)=0.65 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (110) IC-4727 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 0K (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0L - 5% Distances to Galaxies using Surface Brightness Fluctuations

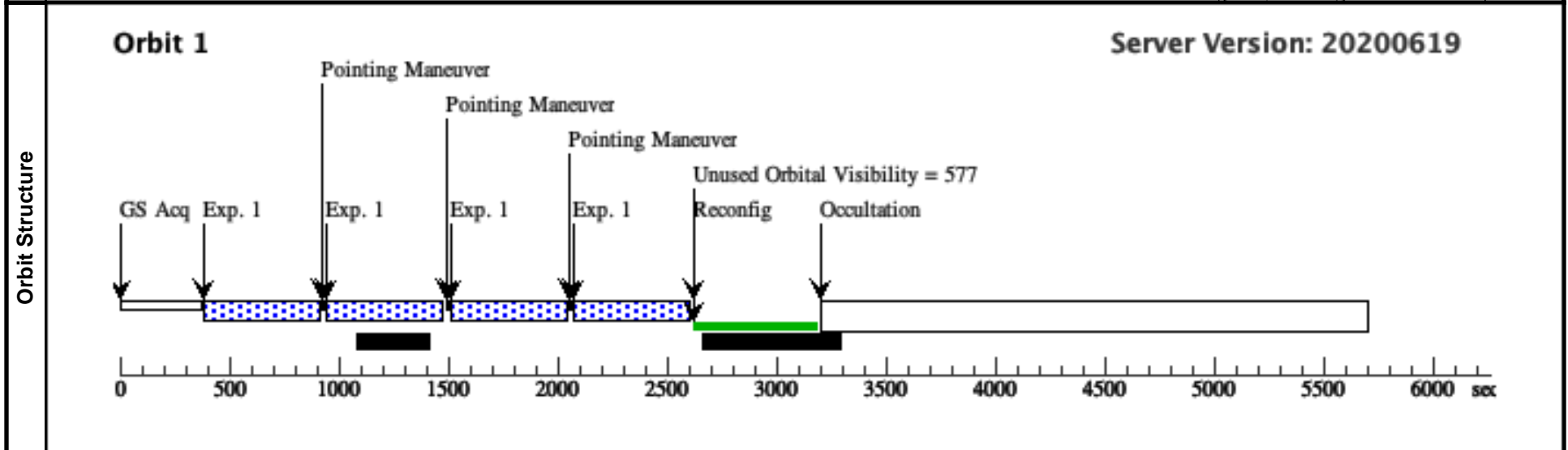
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 0L Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------|---|--------------------------------|--------------------------------|----------------------|
| | (111) | NGC-6688 | RA: 18 40 40.1300 (280.1672083d) Dec: +36 17 22.70 (36.28964d) Equinox: J2000 | Radial Velocity: 5462.0 km/sec | V=(?) K=9.03, (J-H)=0.73 | Reference Frame: NED |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|----------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (111) NGC-6688 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 0L (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0M - 5% Distances to Galaxies using Surface Brightness Fluctuations

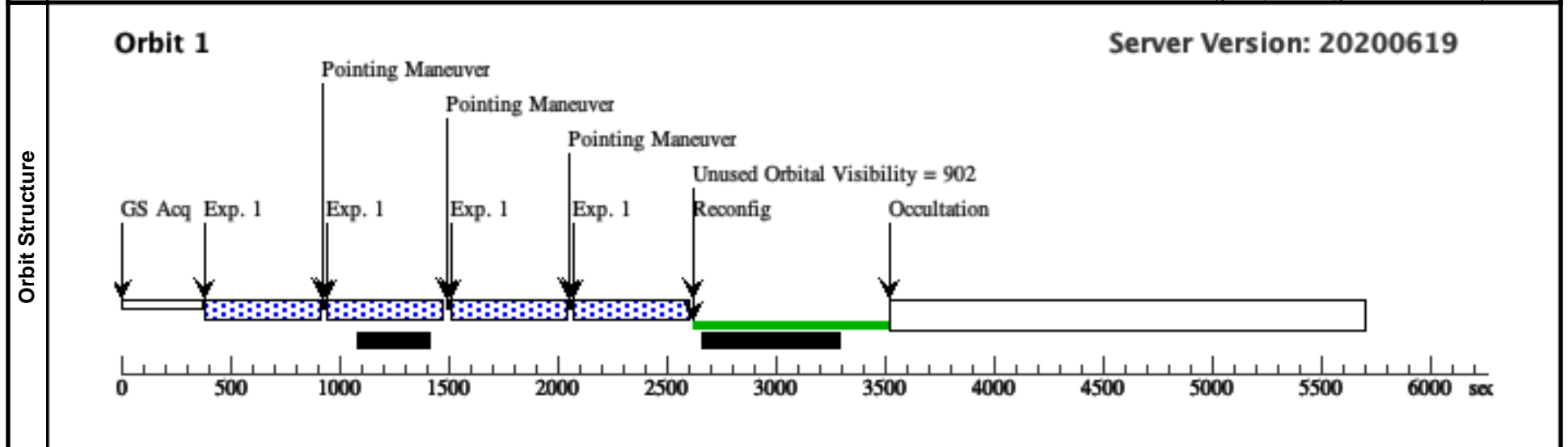
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 0M Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|-------|----------------------------------|--|--------------------------------|--------------------------------|----------------------|
| | (112) | NGC-6653 Alt Name1: PGC-62342 | RA: 18 44 38.3700 (281.1598750d) Dec: -73 15 48.30 (-73.26342d) Equinox: J2000 | Radial Velocity: 5163.0 km/sec | V=(?) K=8.93, (J-H)=0.76 | Reference Frame: NED |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|----------------|-------------------------|----------------------|--------------------------------|--------------|---------------|-------------------------------------|--|-------|
| | 1 | (112) NGC-6653 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 0M (1) | 502.936801 Secs (2011.747 Secs) | [1] |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | |



Proposal 16262 - Visit 0N - 5% Distances to Galaxies using Surface Brightness Fluctuations

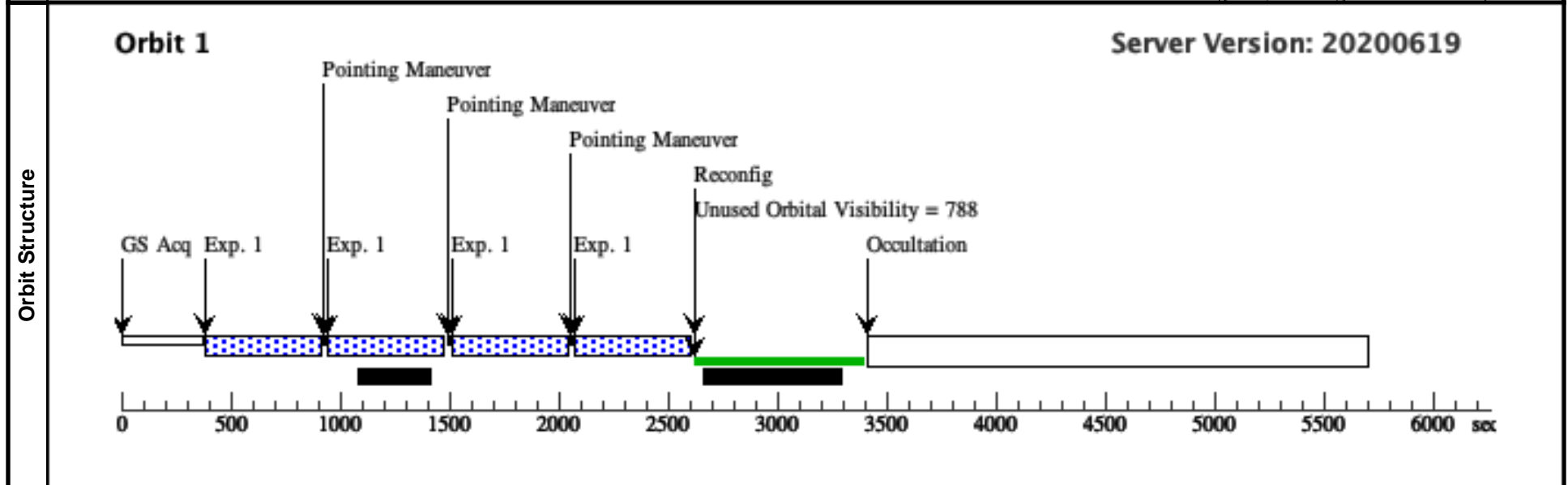
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 0N Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---------|---|--------------------------------|--------------------------------|-----------------------|
| | (113) | IC-4794 | RA: 18 57 9.6000 (284.2900000d) Dec: -62 05 27.20 (-62.09089d) Equinox: J2000 | Radial Velocity: 5237.0 km/sec | V=(?) K=9.68, (J-H)=0.67 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (113) IC-4794 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 0N (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 00 - 5% Distances to Galaxies using Surface Brightness Fluctuations

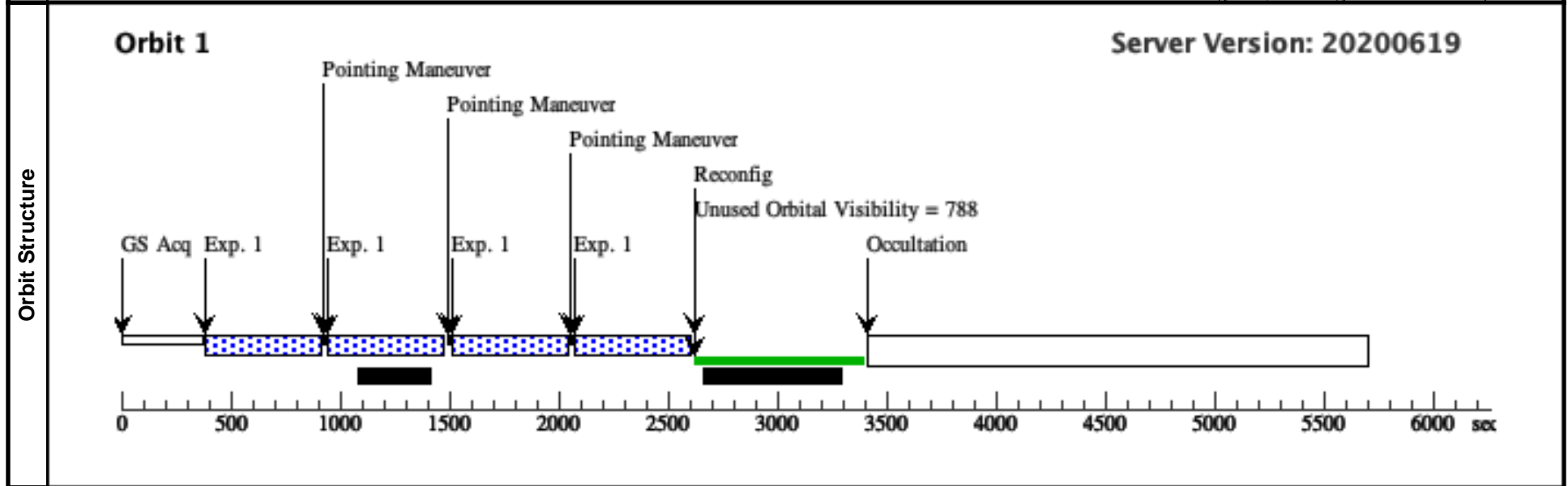
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 00 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---------------------------------|---|--------------------------------|-------------------------------|-----------------------|
| | (114) | IC-4798 Alt Name1: PGC-62630 | RA: 18 58 20.9000 (284.5870833d) Dec: -62 07 6.40 (-62.11844d) Equinox: J2000 | Radial Velocity: 4511.0 km/sec | V=(?) K=8.7, (J-H)=0.78 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (114) IC-4798 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 00 (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0P - 5% Distances to Galaxies using Surface Brightness Fluctuations

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| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 0P Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
|--------------|--|--|--|

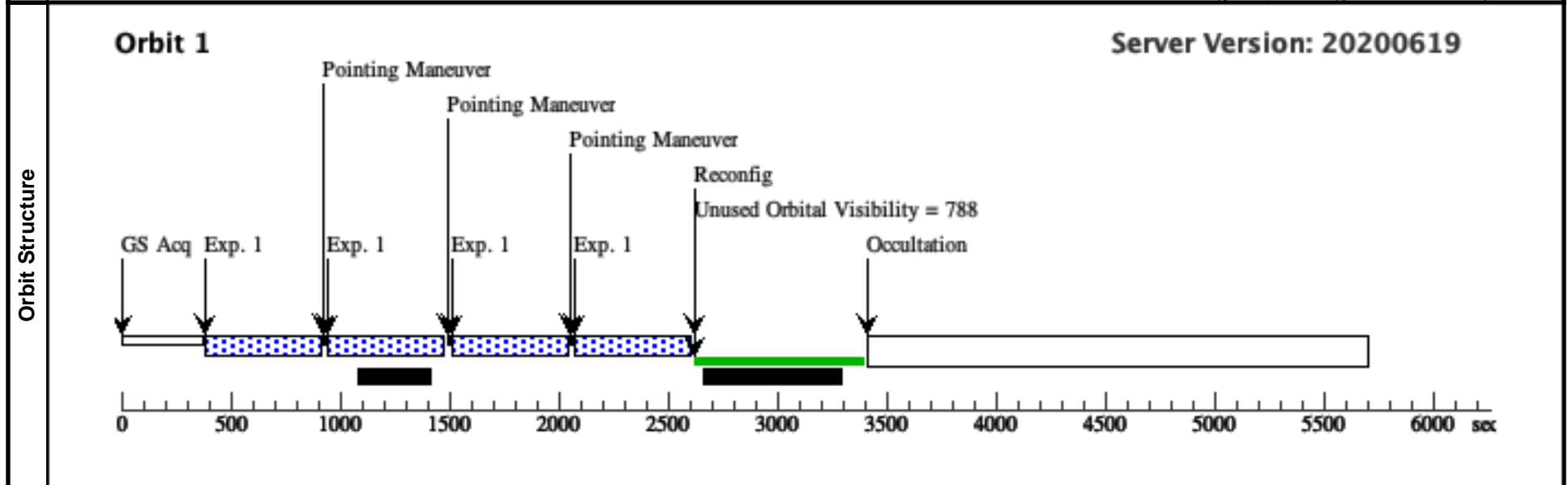
| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|-------|----------------------------------|---|--------------------------------|--------------------------------|-----------------------|
| | (115) | NGC-6739 Alt Name1: PGC-62799 | RA: 19 07 48.8000 (286.9533333d) Dec: -61 22 5.20 (-61.36811d) Equinox: J2000 | Radial Velocity: 4252.0 km/sec | V=(?) K=8.85, (J-H)=0.68 | Reference Frame: ICRS |

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

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|----------------|-------------------------|----------------------|--------------------------------|--------------|---------------|-------------------------------------|---------------------------------|-------|
| | 1 | (115) NGC-6739 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 0P (1) | 502.936801 Secs (2011.747 Secs) | [1] |

[=>(Pattern 1)]
 [=>(Pattern 2)]
 [=>(Pattern 3)]
 [=>(Pattern 4)]



Proposal 16262 - Visit 0Q - 5% Distances to Galaxies using Surface Brightness Fluctuations

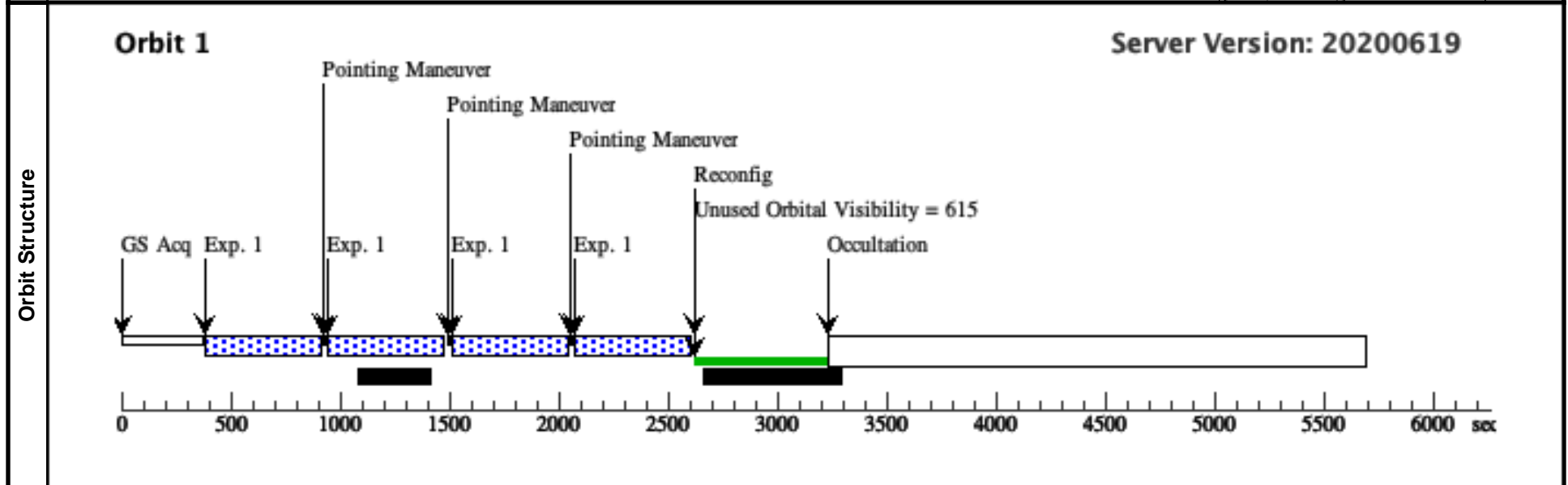
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 0Q | | |
| | Diagnostic Status: No Diagnostics | | |
| | Scientific Instruments: WFC3/IR | | |
| | Special Requirements: (none) | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------|--|--------------------------------|--------------------------------|----------------------|
| | (116) | NGC-6768 | RA: 19 16 32.5992 (289.1358300d) Dec: -40 12 33.01 (-40.20917d) Equinox: J2000 | Radial Velocity: 5569.0 km/sec | V=(?) K=8.78, (J-H)=0.69 | Reference Frame: NED |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|----------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (116) NGC-6768 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 0Q (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0R - 5% Distances to Galaxies using Surface Brightness Fluctuations

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| | | | | | | | | | | |
|------------------------|---|---------------------------------|---|--|--------------------------------|-----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 0R Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (117) | IC-4842 Alt Name1: PGC-63065 | RA: 19 19 24.5000 (289.8520833d) Dec: -60 38 39.30 (-60.64425d) Equinox: J2000 | Radial Velocity: 4167.0 km/sec | V=(?) K=9.35, (J-H)=0.69 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (117) IC-4842 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 0R (1) | 502.936801 Secs (2011.747 Secs) | [1] |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram illustrates the orbit structure over a 6000-second period. Key events include:</p> <ul style="list-style-type: none"> GS Acq: Occurs at approximately 100 seconds. Exp. 1: Four exposure periods are shown, each lasting approximately 100 seconds, occurring at roughly 400, 900, 1400, and 2000 seconds. Pointing Maneuver: Three pointing maneuvers are indicated by vertical arrows at approximately 1000, 1500, and 2000 seconds. Reconfig: A reconfiguration event occurs at approximately 2600 seconds. Unused Orbital Visibility = 788: A period of 788 seconds of unused orbital visibility is shown as a green bar starting at approximately 2600 seconds and ending at 3388 seconds. Occultation: An occultation event is shown as a white bar starting at approximately 3400 seconds and ending at 5700 seconds. <p>The x-axis is labeled 'sec' and ranges from 0 to 6000 with major ticks every 500 seconds.</p> | | | | | | | | | |

Proposal 16262 - Visit 0S - 5% Distances to Galaxies using Surface Brightness Fluctuations

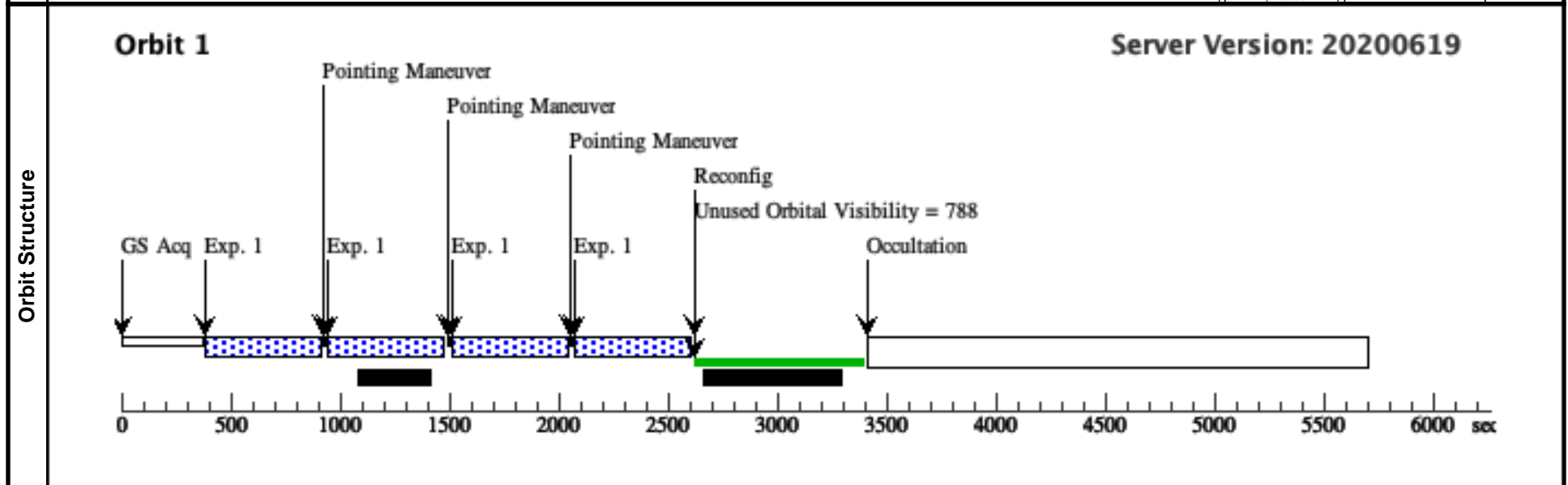
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 0S | | |
| | Diagnostic Status: No Diagnostics | | |
| | Scientific Instruments: WFC3/IR | | |
| | Special Requirements: (none) | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---|--|--------------------------------|---------------------------------|-----------------------|
| | (118) | 2MASS-J19215490-6003146 Alt Name1: PGC-3906906 | RA: 19 21 59.4000 (290.4975000d) Dec: -60 02 35.00 (-60.04306d) Equinox: J2000 | Radial Velocity: 4441.0 km/sec | V=(?) K=10.47, (J-H)=0.66 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-------------------------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (118) 2MASS-J19215490-6003146 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 0S (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0T - 5% Distances to Galaxies using Surface Brightness Fluctuations

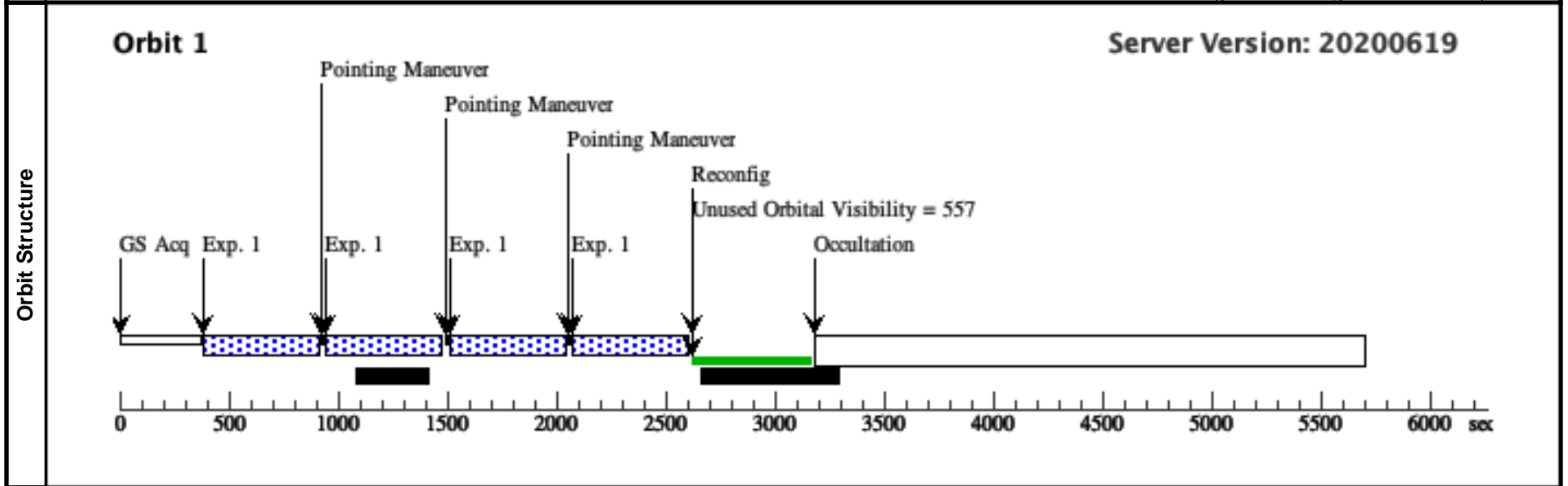
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|---|--|--|
| Visit | Proposal 16262, Visit 0T Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (119) | NGC-6841 Alt Name1: PGC-63881 | RA: 19 57 49.1000 (299.4545833d) Dec: -31 48 38.20 (-31.81061d) Equinox: J2000 | Radial Velocity: 5842.0 km/sec | V=(?) K=8.83, (J-H)=0.69 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|----------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (119) NGC-6841 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 0T (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0U - 5% Distances to Galaxies using Surface Brightness Fluctuations

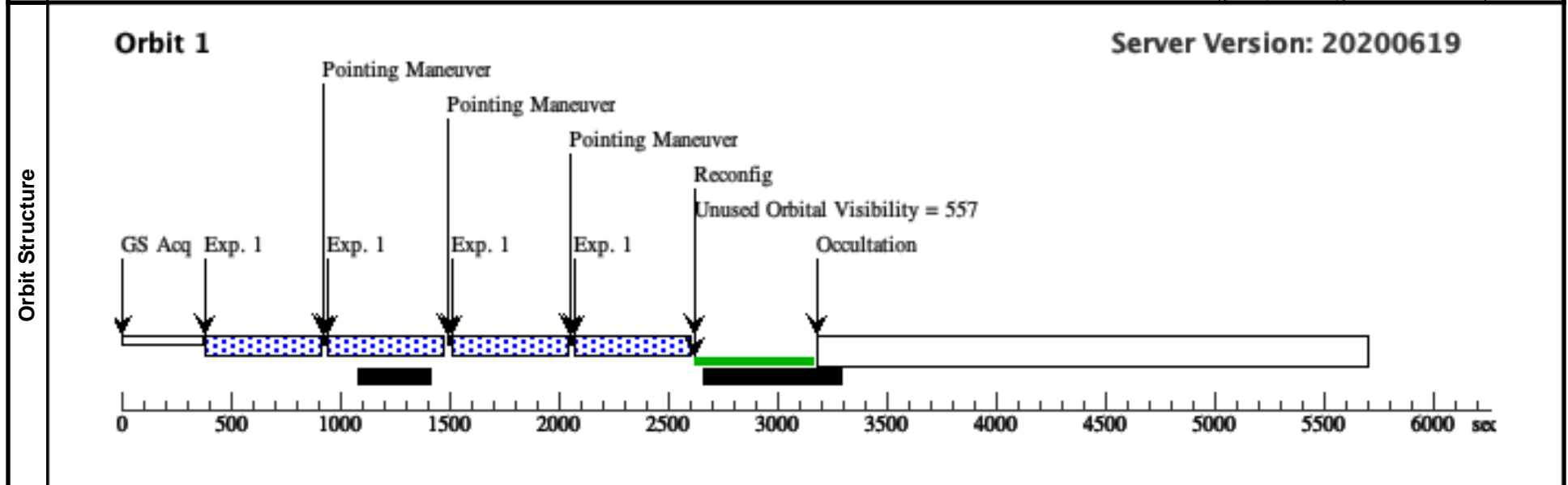
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 0U Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|--------------------------------------|---|--------------------------------|--------------------------------|-----------------------|
| | (120) | ESO-399-G010 Alt Name1: PGC-63886 | RA: 19 58 0.0000 (299.5000000d) Dec: -32 39 48.30 (-32.66342d) Equinox: J2000 | Radial Velocity: 5734.0 km/sec | V=(?) K=9.33, (J-H)=0.68 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|--------------------|--------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | (120) ESO-399-G010 | ESO-399-G010 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 0U (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0V - 5% Distances to Galaxies using Surface Brightness Fluctuations

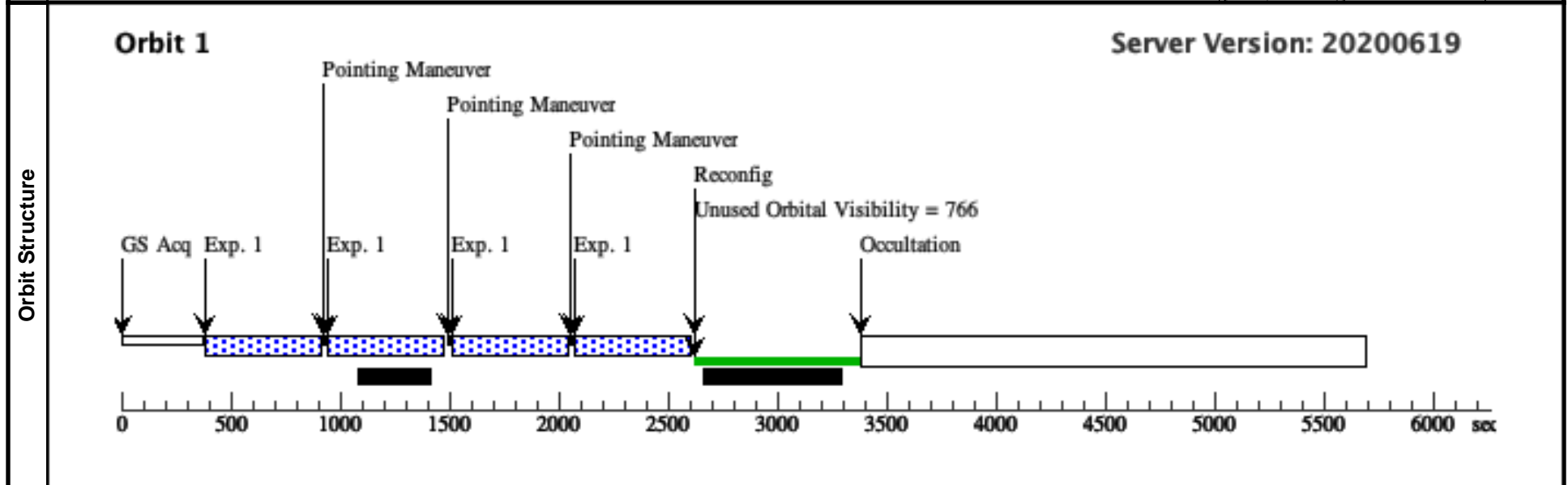
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 0V | | |
| | Diagnostic Status: No Diagnostics | | |
| | Scientific Instruments: WFC3/IR | | |
| | Special Requirements: (none) | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|-----------|---|--------------------------------|---------------------------------|-----------------------|
| | (121) | PGC-63905 | RA: 19 58 26.8000 (299.6116667d) Dec: -55 35 4.80 (-55.58467d) Equinox: J2000 | Radial Velocity: 5150.0 km/sec | V=(?) K=10.03, (J-H)=0.73 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-----------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (121) PGC-63905 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 0V (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0W - 5% Distances to Galaxies using Surface Brightness Fluctuations

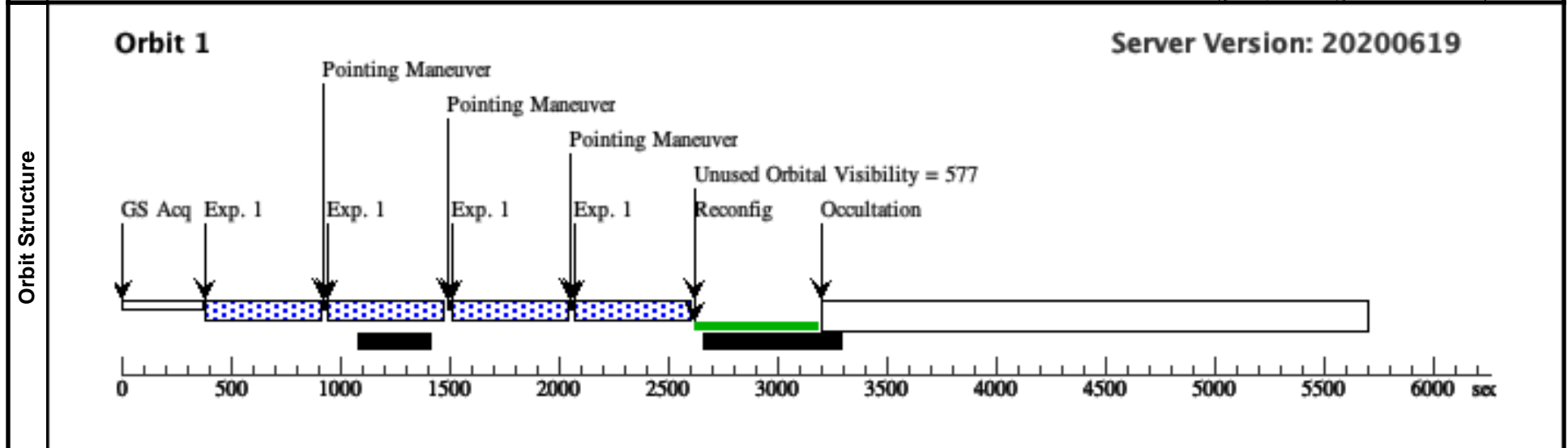
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|---|--|--|
| Visit | Proposal 16262, Visit 0W Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (122) | IC-4926 Alt Name1: PGC-63961 | RA: 20 00 12.1000 (300.0504167d) Dec: -38 34 42.80 (-38.57856d) Equinox: J2000 | Radial Velocity: 5570.0 km/sec | V=(?) K=9.43, (J-H)=0.68 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (122) IC-4926 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 0W (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0X - 5% Distances to Galaxies using Surface Brightness Fluctuations

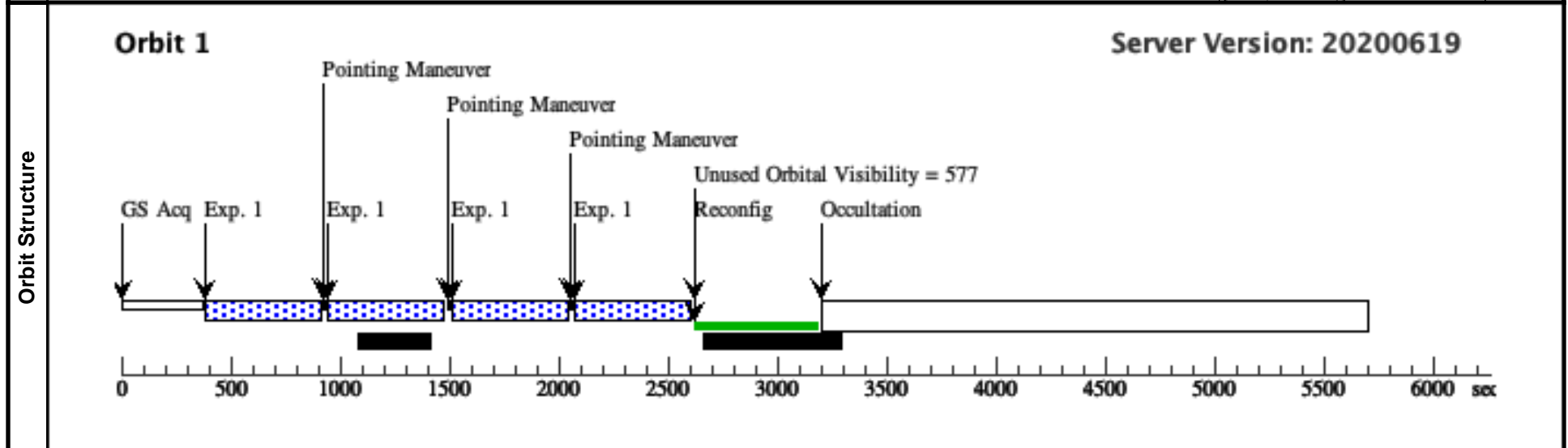
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 0X Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (123) | IC-4931 Alt Name1: PGC-63976 | RA: 20 00 50.2000 (300.2091667d) Dec: -38 34 29.60 (-38.57489d) Equinox: J2000 | Radial Velocity: 5999.0 km/sec | V=(?) K=8.64, (J-H)=0.64 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (123) IC-4931 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 0X (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0Y - 5% Distances to Galaxies using Surface Brightness Fluctuations

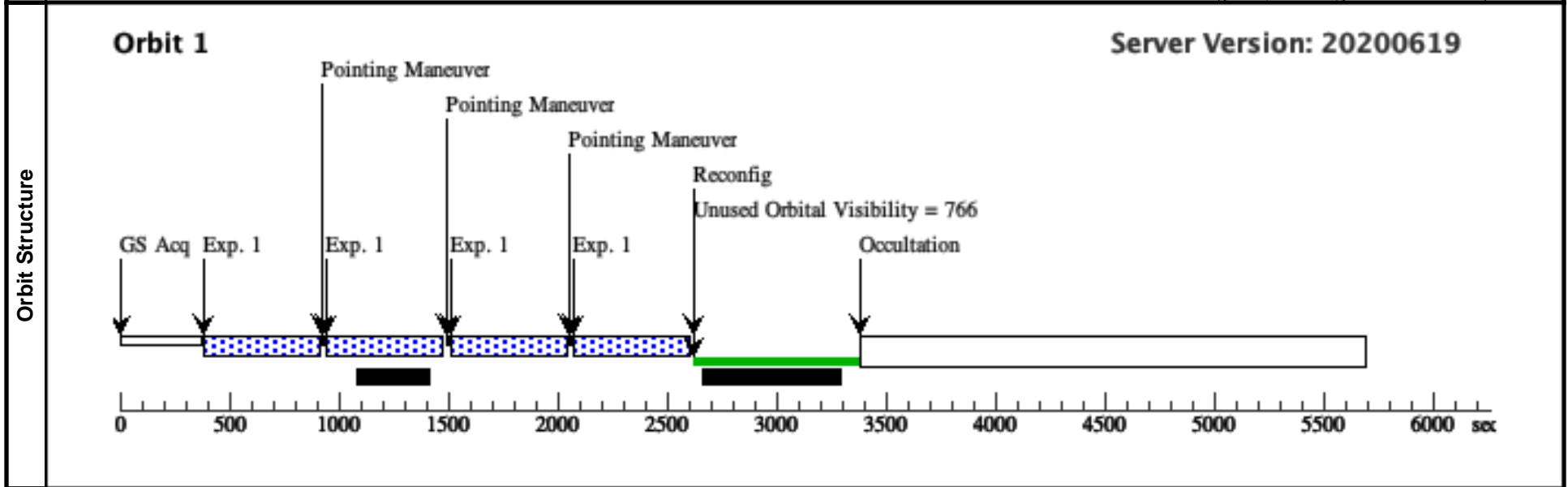
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 0Y Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|--------------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (124) | ESO-185-G054 Alt Name1: PGC-64041 | RA: 20 03 27.0000 (300.8625000d) Dec: -55 56 49.80 (-55.94717d) Equinox: J2000 | Radial Velocity: 4439.0 km/sec | V=(?) K=7.91, (J-H)=0.66 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|--------------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (124) ESO-185-G054 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 0Y (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 0Z - 5% Distances to Galaxies using Surface Brightness Fluctuations

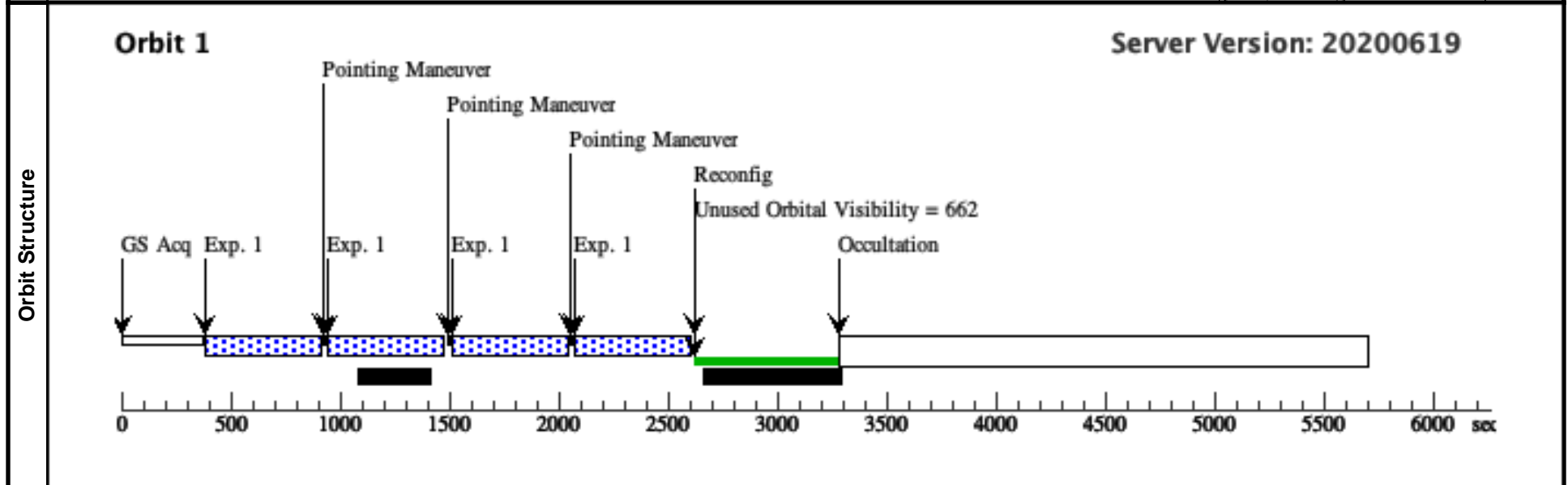
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 0Z | | |
| | Diagnostic Status: No Diagnostics | | |
| | Scientific Instruments: WFC3/IR | | |
| | Special Requirements: (none) | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|-------|---|----------------------------------|--------------------------------|-------------------------------|----------------------|
| | (125) | NGC-6868 | RA: 20 09 54.0696 (302.4752900d) | Radial Velocity: 2854.0 km/sec | V=(?) K=7.3, (J-H)=0.71 | Reference Frame: NED |
| | | Alt Name1: PGC-64192 | Dec: -48 22 46.42 (-48.37956d) | | | |
| | | | Equinox: J2000 | | | |
| | | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|----------------|-------------------------|---------------|-----------------------------------|---------------|---|--|-------|
| | 1 | | (125) NGC-6868 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 i n Visit 0Z (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 1A - 5% Distances to Galaxies using Surface Brightness Fluctuations

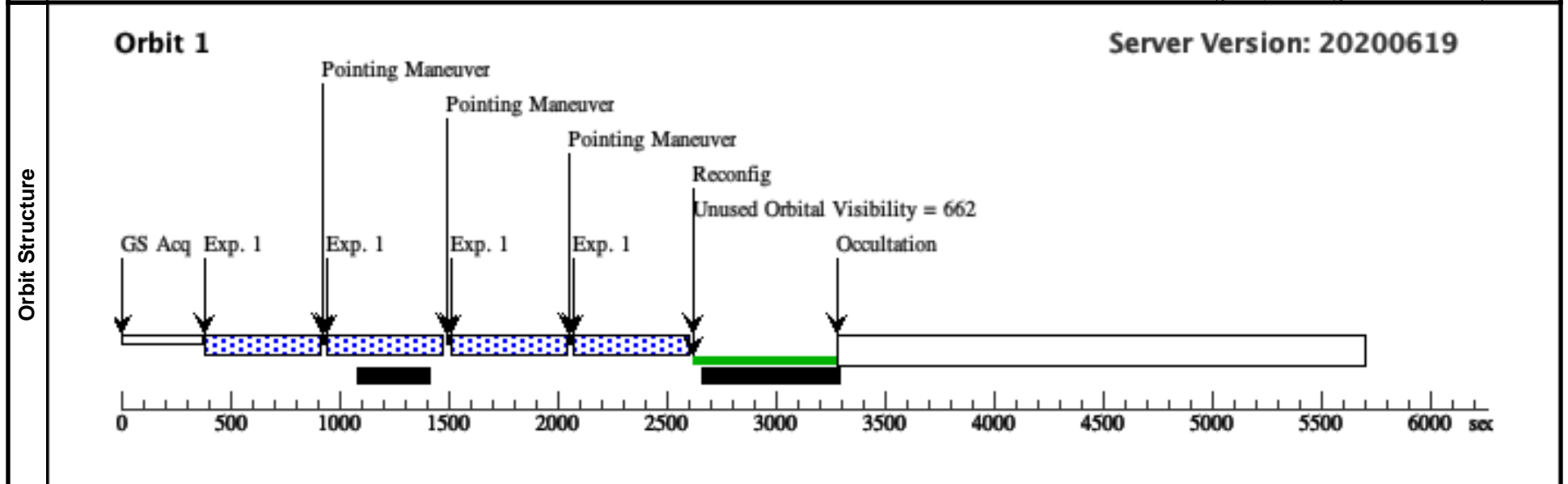
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|---|--|--|
| Visit | Proposal 16262, Visit 1A Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|---------------------------------|--|--------------------------------|--------------------------------|----------------------|
| | (126) | IC-4956 Alt Name1: PGC-64230 | RA: 20 11 31.2600 (302.8802500d) Dec: -45 35 35.60 (-45.59322d) Equinox: J2000 | Radial Velocity: 5205.0 km/sec | V=(?) K=8.82, (J-H)=0.73 | Reference Frame: NED |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|---|--|-------|
| | 1 | | (126) IC-4956 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 i n Visit 1A (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 1B - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:40 GMT 2020

| | | | | | | | | | | |
|------------------------|--|----------------------------------|---|--|-----------------------------------|-----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 1B Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (127) | NGC-6876 Alt Name1: PGC-64447 | RA: 20 18 19.0000 (304.5791667d) Dec: -70 51 32.60 (-70.85906d) Equinox: J2000 | Radial Velocity: 3869.0 km/sec | V=(?) K=7.68, (J-H)=0.71 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (127) NGC-6876 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 1B (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> <div> <h3>Orbit 1</h3> <p>The diagram shows a timeline for Orbit 1 from 0 to 6000 seconds. Key events include: GS Acq at ~200s, four exposures (Exp. 1) at ~400s, ~1000s, ~1500s, and ~2100s, each preceded by a Pointing Maneuver. A Reconfig phase occurs at ~2600s, followed by an Occultation phase starting at ~3500s. A green bar indicates 'Unused Orbital Visibility = 902' between 2600s and 3500s. A black bar is present between 1000s and 1500s.</p> </div> <div> <p>Server Version: 20200619</p> </div> </div> | | | | | | | | | |

Proposal 16262 - Visit 1C - 5% Distances to Galaxies using Surface Brightness Fluctuations

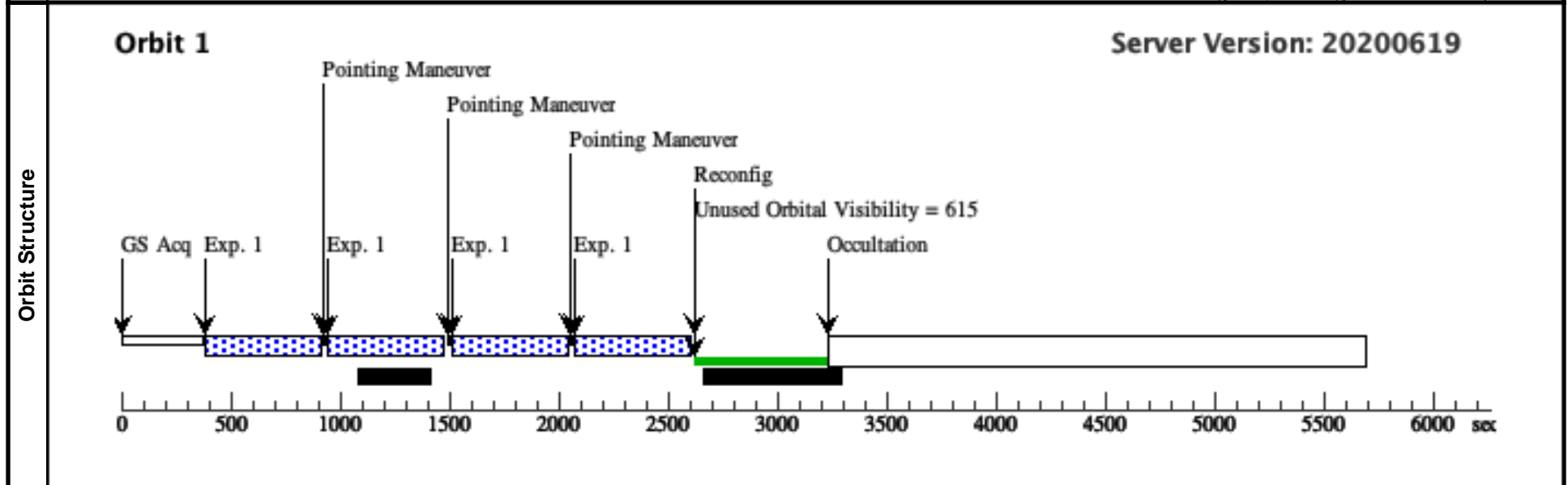
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 1C Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|-------|---------------------------------|---|--------------------------------|--------------------------------|-----------------------|
| | (128) | IC-4991 Alt Name1: PGC-64450 | RA: 20 18 23.3000 (304.5970833d) Dec: -41 03 0.40 (-41.05011d) Equinox: J2000 | Radial Velocity: 5615.0 km/sec | V=(?) K=8.47, (J-H)=0.64 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|--------|--|---------------------------------|
| | 1 | | (128) IC-4991 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 1C (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | |



Proposal 16262 - Visit 1D - 5% Distances to Galaxies using Surface Brightness Fluctuations

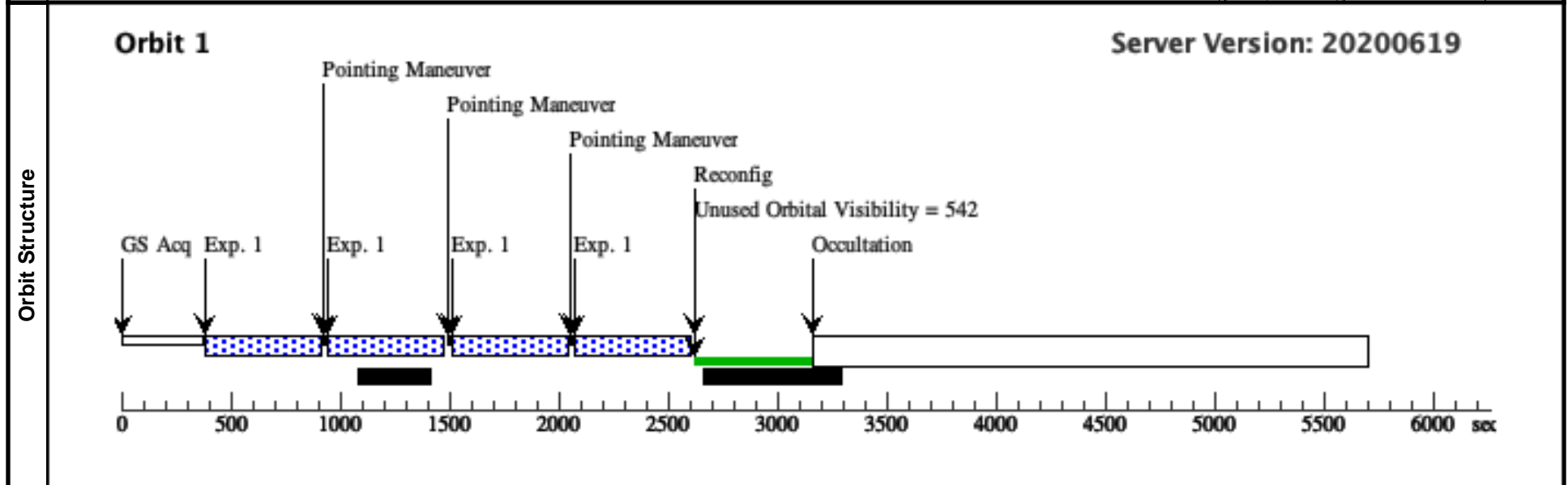
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 1D Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|--------------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (129) | ESO-462-G015 Alt Name1: PGC-64584 | RA: 20 23 13.8000 (305.8075000d) Dec: -27 42 52.50 (-27.71458d) Equinox: J2000 | Radial Velocity: 5858.0 km/sec | V=(?) K=8.78, (J-H)=0.68 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|--------------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (129) ESO-462-G015 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 1D (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 1E - 5% Distances to Galaxies using Surface Brightness Fluctuations

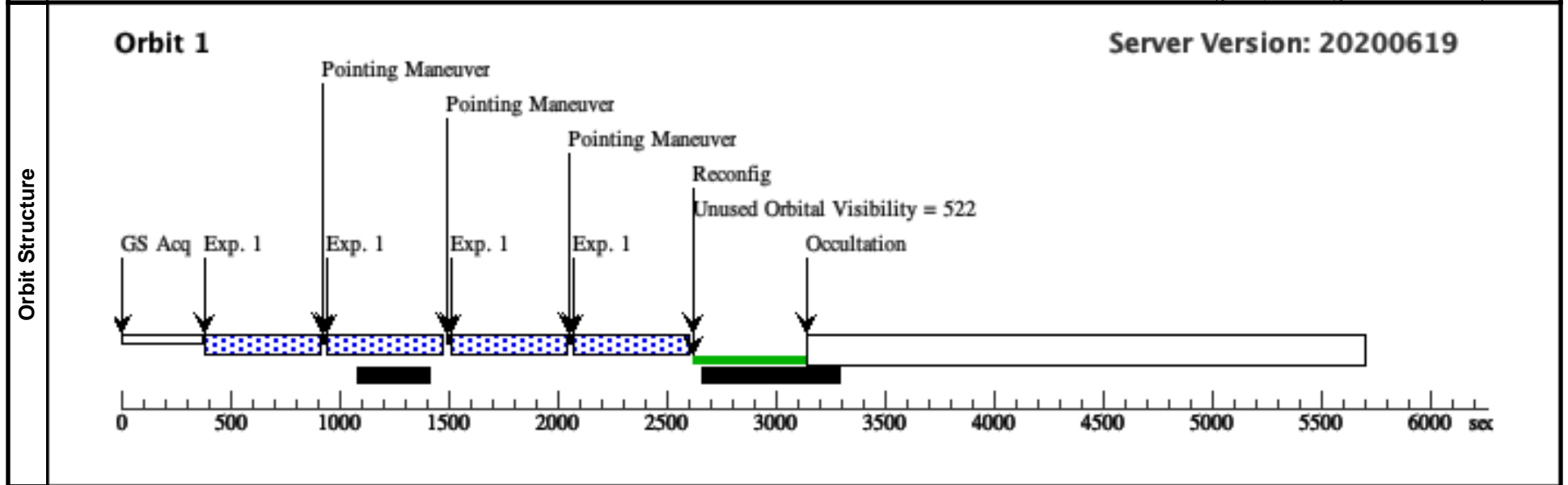
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|---|--|--|
| Visit | Proposal 16262, Visit 1E Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------------------------------|---|--------------------------------|--------------------------------|----------------------|
| | (130) | NGC-6968 Alt Name1: PGC-65428 | RA: 20 48 32.4760 (312.1353167d) Dec: -08 21 37.14 (-8.36032d) Equinox: J2000 | Radial Velocity: 6213.0 km/sec | V=(?) K=9.28, (J-H)=0.67 | Reference Frame: NED |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|----------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (130) NGC-6968 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 1E (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 1F - 5% Distances to Galaxies using Surface Brightness Fluctuations

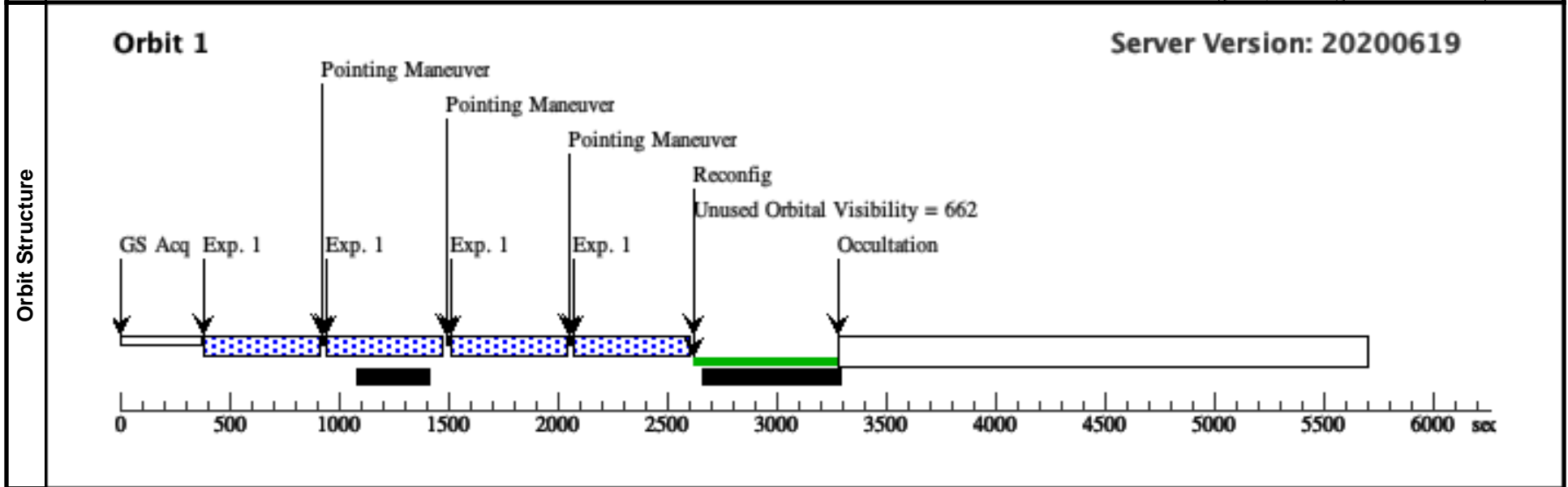
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 1F | | |
| | Diagnostic Status: No Diagnostics | | |
| | Scientific Instruments: WFC3/IR | | |
| | Special Requirements: (none) | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|--------------|--|--------------------------------|--------------------------------|-----------------------|
| | (131) | ESO-235-G049 | RA: 21 04 41.0000 (316.1708333d) Dec: -48 11 27.10 (-48.19086d) Equinox: J2000 | Radial Velocity: 5234.0 km/sec | V=(?) K=9.39, (J-H)=0.79 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|--------------------|-------------------------|----------------------|--------------------------------|--------------|---------------|-------------------------------------|--|-------|
| | 1 | (131) ESO-235-G049 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 1F (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 1G - 5% Distances to Galaxies using Surface Brightness Fluctuations

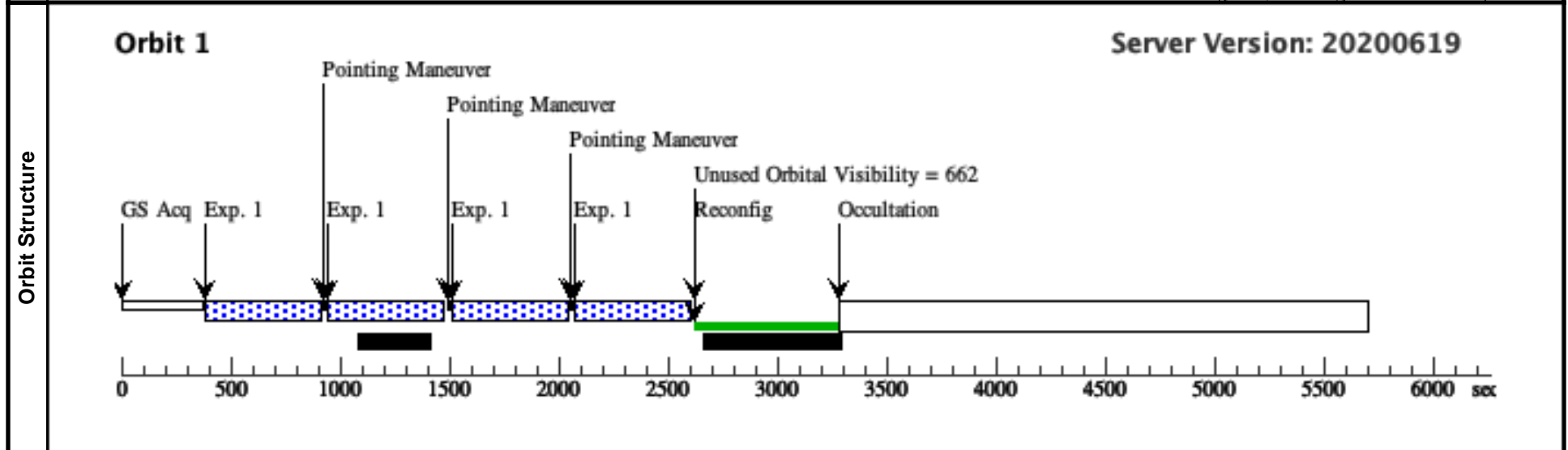
Wed Jul 01 06:01:40 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 1G Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|-------|----------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (132) | NGC-7014 Alt Name1: PGC-66153 | RA: 21 07 52.1000 (316.9670833d) Dec: -47 10 44.50 (-47.17903d) Equinox: J2000 | Radial Velocity: 4762.0 km/sec | V=(?) K=9.14, (J-H)=0.71 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|----------------|-------------------------|---------------|-----------------------------------|---------------|--------|--|---------------------------------|
| | 1 | | (132) NGC-7014 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 i n Visit 1G (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 1H - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:40 GMT 2020

| | | | | | | | | | | |
|------------------------|--|---------------------------------|---|--|--------------------------------|-----------------------|---------------|-------------------------------------|--|-------|
| Visit | Proposal 16262, Visit 1H Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | | | | | | | | |
| | Patterns | # (1) | Primary Pattern Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Secondary Pattern Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | Exposures (1) | | | | | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (133) | IC-5105 Alt Name1: PGC-66694 | RA: 21 24 22.1000 (321.0920833d) Dec: -40 32 15.00 (-40.53750d) Equinox: J2000 | Radial Velocity: 5407.0 km/sec | V=(?) K=8.44, (J-H)=0.71 | Reference Frame: ICRS | | | | |
| | Comments: Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | (133) IC-5105 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 1H (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |
| Orbit Structure | <div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20200619 </div> <p>The diagram shows a timeline from 0 to 6000 seconds. Key events include: GS Acq at ~100s, Exp. 1 at ~400s, Pointing Maneuver at ~900s, Exp. 1 at ~1400s, Pointing Maneuver at ~1900s, Exp. 1 at ~2400s, Pointing Maneuver at ~2900s, Reconfig at ~3100s, and Occultation at ~3300s. A green bar indicates a period of 'Unused Orbital Visibility = 615' seconds between 2600s and 3200s. A blue checkered bar highlights the exposure periods.</p> | | | | | | | | | |

Proposal 16262 - Visit 1I - 5% Distances to Galaxies using Surface Brightness Fluctuations

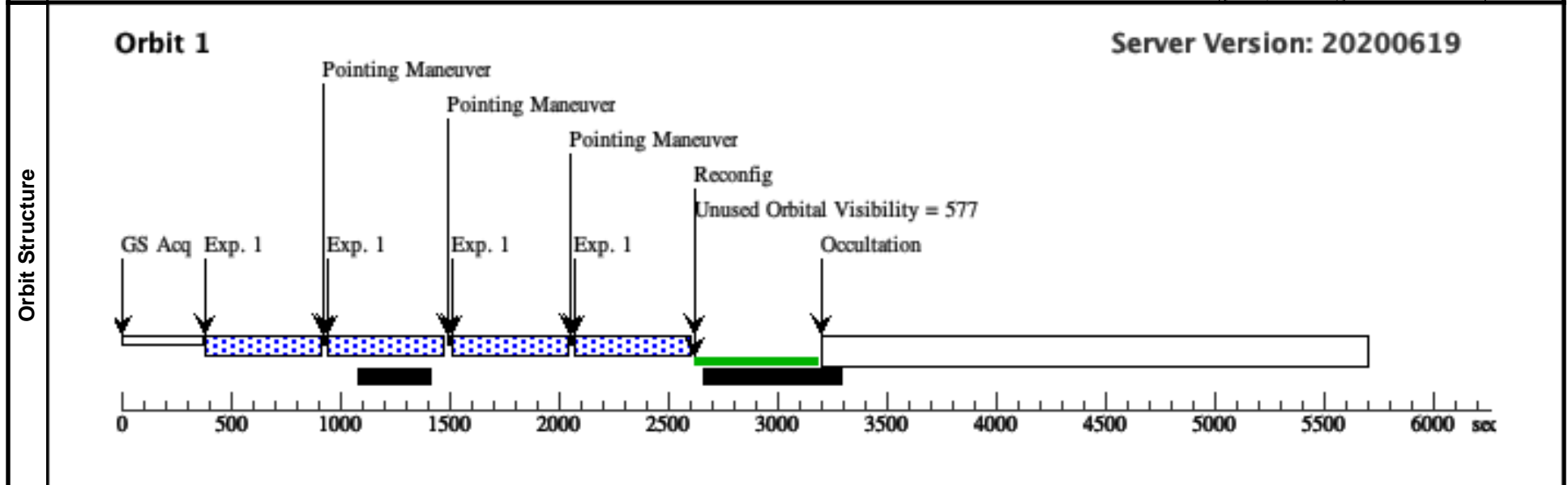
Wed Jul 01 06:01:41 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 1I | | |
| | Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|-------|----------------------------------|---|--------------------------------|--------------------------------|-----------------------|
| | (134) | NGC-7242 Alt Name1: PGC-68434 | RA: 22 15 39.5000 (333.9145833d) Dec: +37 17 55.20 (37.29867d) Equinox: J2000 | Radial Velocity: 5881.0 km/sec | V=(?) K=8.28, (J-H)=0.68 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|----------|-------------------------|---------------|--------------------------------|---------------|--------|--|---------------------------------|
| | 1 | (134) | NGC-7242 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit II (1) | 502.936801 Secs (2011.747 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | |



Proposal 16262 - Visit 1J - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:41 GMT 2020

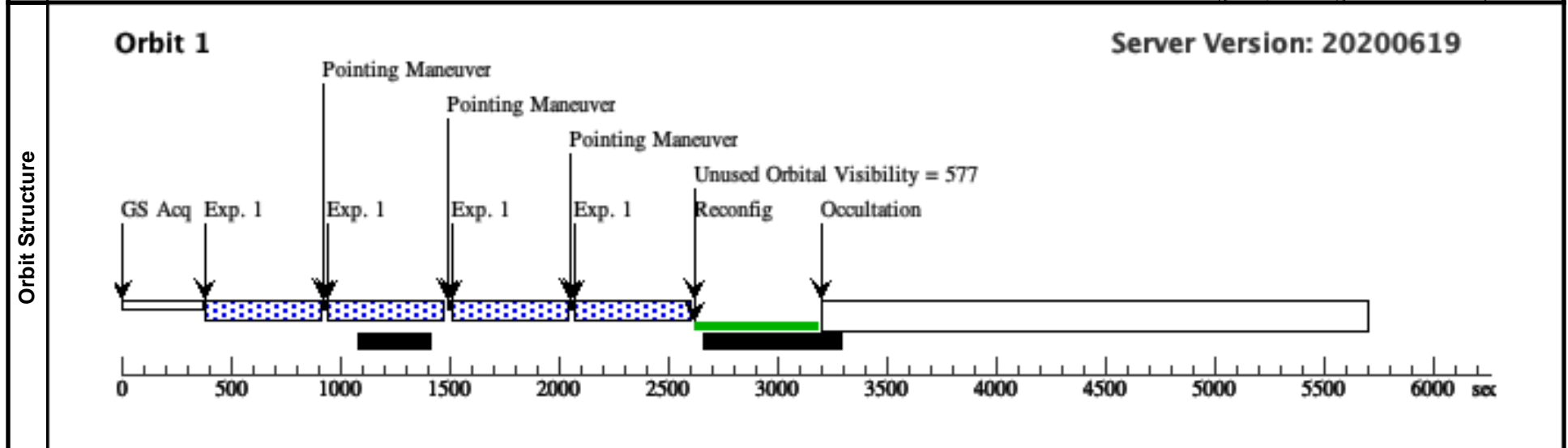
| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 1J Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|-------|---------------------------------|---|--------------------------------|---------------------------------|-----------------------|
| | (135) | IC-5193 Alt Name1: PGC-68436 | RA: 22 15 43.6000 (333.9316667d) Dec: +37 14 34.20 (37.24283d) Equinox: J2000 | Radial Velocity: 5586.0 km/sec | V=(?) K=10.38, (J-H)=0.72 | Reference Frame: ICRS |

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

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|---------------|-------------------------|---------------|--------------------------------|---------------|--------|-------------------------------------|---|
| | 1 | | (135) IC-5193 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 1J (1) | 502.936801 Secs (2011.747 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] |



Proposal 16262 - Visit 1K - 5% Distances to Galaxies using Surface Brightness Fluctuations

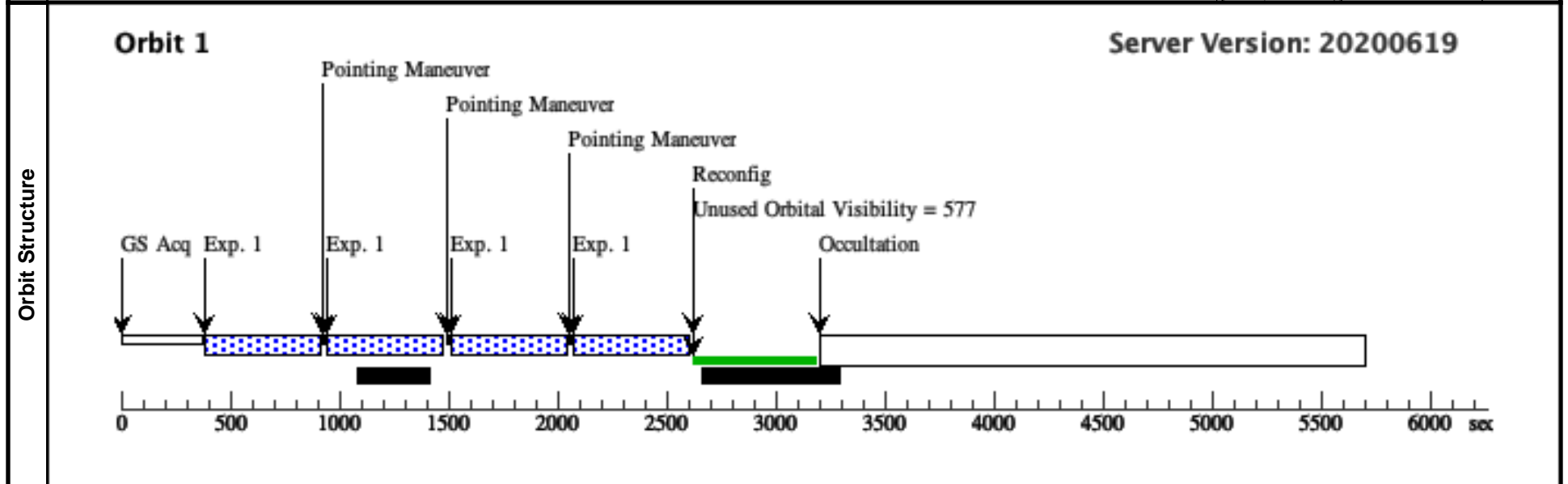
Wed Jul 01 06:01:41 GMT 2020

| | | | |
|--------------|---|--|--|
| Visit | Proposal 16262, Visit 1K Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|-------|-----------------------------------|---|--------------------------------|--------------------------------|-----------------------|
| | (136) | UGC-11990 Alt Name1: PGC-68605 | RA: 22 20 30.0000 (335.1250000d) Dec: +35 58 24.80 (35.97356d) Equinox: J2000 | Radial Velocity: 5834.0 km/sec | V=(?) K=10.08, (J-H)=0.7 | Reference Frame: ICRS |
| <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-----------------|-------------------------|----------------------|--------------------------------|--------------|---------------|-------------------------------------|---|-------|
| | 1 | (136) UGC-11990 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | | Pattern 1, Exps 1-1 in Visit 1K (1) | 502.936801 Secs (2011.747 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 1L - 5% Distances to Galaxies using Surface Brightness Fluctuations

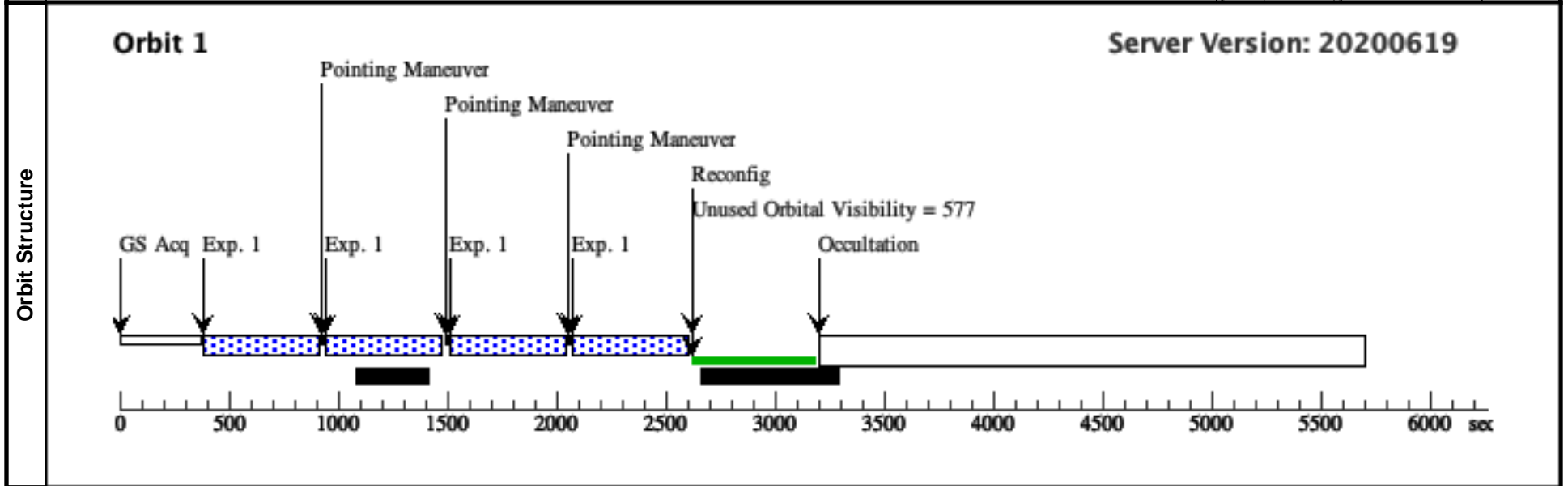
Wed Jul 01 06:01:41 GMT 2020

| | | | |
|--------------|---|--|--|
| Visit | Proposal 16262, Visit 1L Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------------------------------|---|--------------------------------|--------------------------------|-----------------------|
| | (137) | NGC-7265 Alt Name1: PGC-68668 | RA: 22 22 27.5000 (335.6145833d) Dec: +36 12 35.40 (36.20983d) Equinox: J2000 | Radial Velocity: 5083.0 km/sec | V=(?) K=8.65, (J-H)=0.73 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[LENTICULAR] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|----------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (137) NGC-7265 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 1L (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 1M - 5% Distances to Galaxies using Surface Brightness Fluctuations

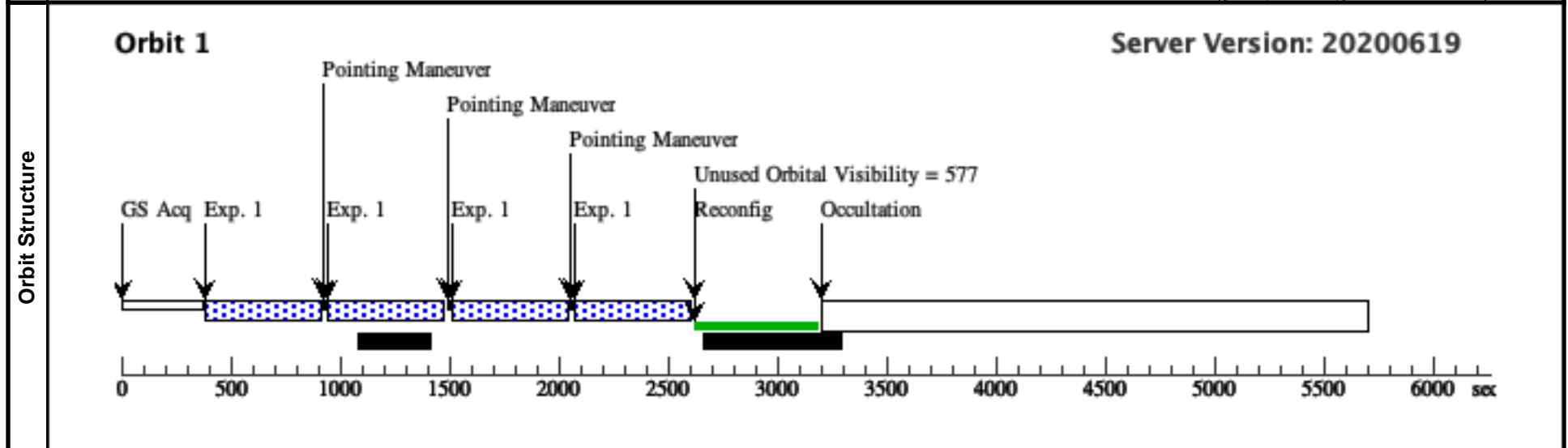
Wed Jul 01 06:01:41 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 1M Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------|---|--------------------------------|------------------------------|-----------------------|
| | (138) | NGC-7274 | RA: 22 24 11.1000 (336.0462500d) Dec: +36 07 33.00 (36.12583d) Equinox: J2000 | Radial Velocity: 6124.0 km/sec | V=(?) K=9.2, (J-H)=0.7 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|----------------|-------------------------|---------------|--------------------------------|---------------|---|--|-------|
| | 1 | | (138) NGC-7274 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 i n Visit 1M (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 1N - 5% Distances to Galaxies using Surface Brightness Fluctuations

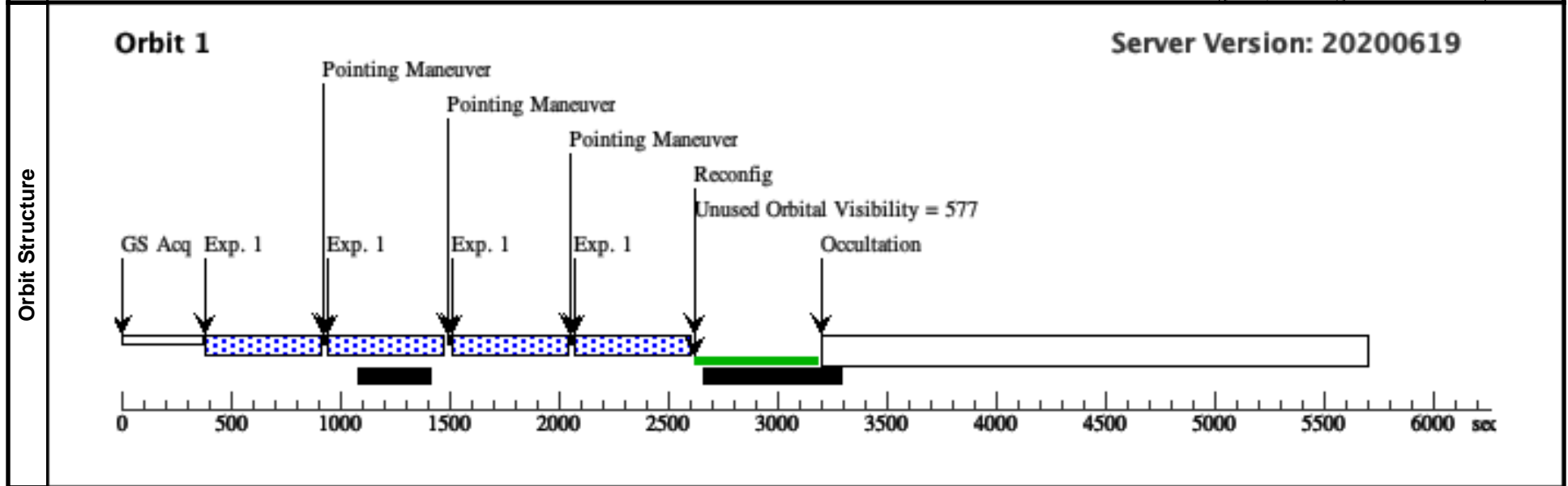
Wed Jul 01 06:01:41 GMT 2020

| | | | |
|--------------|---|--|--|
| Visit | Proposal 16262, Visit 1N Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------|--|--------------------------------|--------------------------------|----------------------|
| | (139) | NGC-7426 | RA: 22 56 2.8600 (344.0119167d) Dec: +36 21 40.90 (36.36136d) Equinox: J2000 | Radial Velocity: 5325.0 km/sec | V=(?) K=8.77, (J-H)=0.72 | Reference Frame: NED |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|----------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (139) NGC-7426 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 1N (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 16262 - Visit 1O - 5% Distances to Galaxies using Surface Brightness Fluctuations

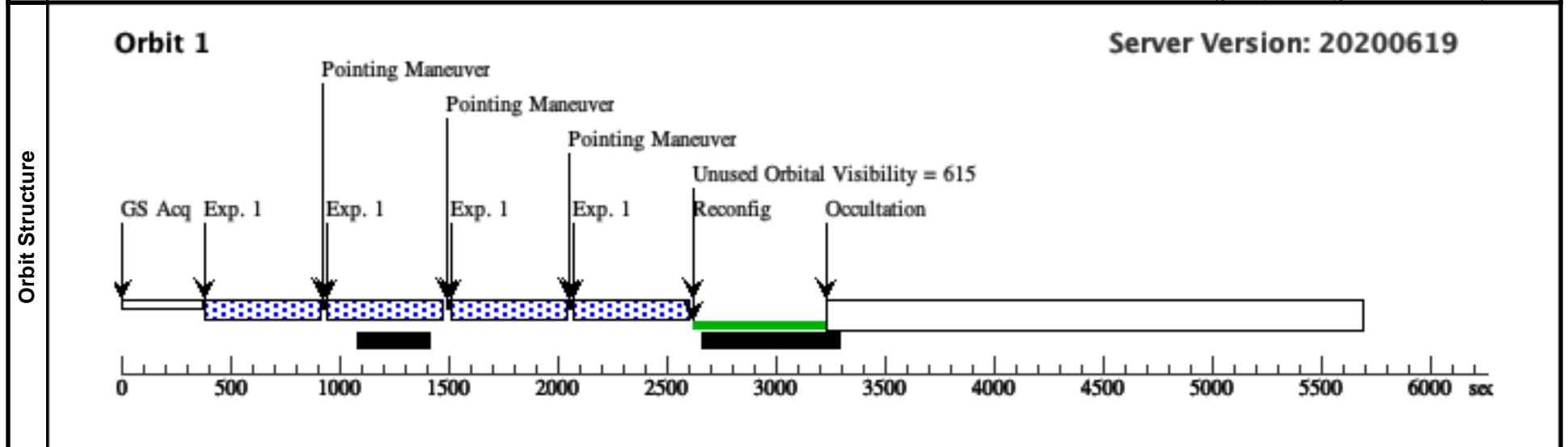
Wed Jul 01 06:01:41 GMT 2020

| | | | |
|--------------|---|--|--|
| Visit | Proposal 16262, Visit 1O Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|----------------------------------|--|--------------------------------|--------------------------------|-----------------------|
| | (140) | NGC-7618 Alt Name1: PGC-71090 | RA: 23 19 47.2000 (349.9466667d) Dec: +42 51 9.60 (42.85267d) Equinox: J2000 | Radial Velocity: 5201.0 km/sec | V=(?) K=8.96, (J-H)=0.71 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|----------------|-------------------------|---------------|--------------------------------|---------------|---|--|-------|
| | 1 | | (140) NGC-7618 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 i n Visit 1O (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 16262 - Visit 1P - 5% Distances to Galaxies using Surface Brightness Fluctuations

Wed Jul 01 06:01:41 GMT 2020

| | | | |
|--------------|--|--|--|
| Visit | Proposal 16262, Visit 1P Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|---|--|-----------|
| | (1) | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=1.144 Line Spacing=0.73 | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|-----------------------------------|---|--------------------------------|------------------------------|-----------------------|
| | (141) | UGC-12517 Alt Name1: PGC-71096 | RA: 23 19 54.4000 (349.9766667d) Dec: +43 57 27.60 (43.95767d) Equinox: J2000 | Radial Velocity: 5471.0 km/sec | V=(?) K=9.3, (J-H)=0.7 | Reference Frame: ICRS |
| | <i>Comments:</i> Category=GALAXY Description=[ELLIPTICAL] Extended=YES | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-----------------|-------------------------|---------------|--------------------------------|---------------|-------------------------------------|--|-------|
| | 1 | | (141) UGC-12517 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=SPARS 50; NSAMP=11 | | Pattern 1, Exps 1-1 in Visit 1P (1) | 502.936801 Secs (2011.747 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |

