



11712 - Calibration of Surface Brightness Fluctuations for WFC3/IR

Cycle: 17, Proposal Category: GO

(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) IC1919 | WFC3/IR | 1 | 17-Dec-2009 21:17:25.0 | yes |
| 02 | (2) NGC1375 | WFC3/IR | 1 | 17-Dec-2009 21:17:31.0 | yes |
| 03 | (3) NGC1344 | WFC3/IR | 1 | 17-Dec-2009 21:17:37.0 | yes |
| 04 | (4) NGC1374 | WFC3/IR | 1 | 17-Dec-2009 21:17:46.0 | yes |
| 05 | (5) NGC1380 | WFC3/IR | 1 | 17-Dec-2009 21:17:50.0 | yes |
| 06 | (6) IC2006 | WFC3/IR | 1 | 17-Dec-2009 21:17:56.0 | yes |
| 07 | (7) NGC1404 | WFC3/IR | 1 | 17-Dec-2009 21:18:01.0 | yes |
| 08 | (8) NGC1399 | WFC3/IR | 1 | 17-Dec-2009 21:18:06.0 | yes |

| <i>Visit</i> | <i>Targets used in Visit</i> | <i>Configurations used in Visit</i> | <i>Orbits Used</i> | <i>Last Orbit Planner Run</i> | <i>OP Current with Visit?</i> |
|--------------|------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------------|
| 09 | (9) IC3487 | WFC3/IR | 1 | 17-Dec-2009 21:18:13.0 | yes |
| 10 | (10) IC3025 | WFC3/IR | 1 | 17-Dec-2009 21:18:18.0 | yes |
| 11 | (11) IC3032 | WFC3/IR | 1 | 17-Dec-2009 21:18:24.0 | yes |
| 12 | (12) IC3586 | WFC3/IR | 1 | 17-Dec-2009 21:18:29.0 | yes |
| 13 | (13) NGC4489 | WFC3/IR | 1 | 17-Dec-2009 21:18:37.0 | yes |
| 14 | (14) NGC4458 | WFC3/IR | 1 | 17-Dec-2009 21:18:42.0 | yes |
| 15 | (15) NGC4472 | WFC3/IR | 1 | 17-Dec-2009 21:18:47.0 | yes |
| 16 | (16) NGC4649 | WFC3/IR | 1 | 17-Dec-2009 21:18:52.0 | yes |

16 Total Orbits Used

ABSTRACT

We aim to characterize galaxy surface brightness fluctuations (SBF), and calibrate the SBF distance method, in the F110W and F160W filters of the Wide Field Camera 3 IR channel. Because of the very high throughput of F110W and the good match of F160W to the standard H band, we anticipate that both of these filters will be popular choices for galaxy observations with WFC3/IR. The SBF signal is typically an order of magnitude brighter in the near-IR than in the optical, and the characteristics (sensitivity, FOV, cosmetics) of the WFC3/IR channel will be enormously more efficient for SBF measurements than previously available near-IR cameras. As a result, our proposed SBF calibration will allow accurate distance derivation whenever an early-type or bulge-dominated galaxy is observed out to a distance of 150 Mpc or more (i.e., out to the Hubble flow) in the calibrated passbands. For individual galaxy observations, an accurate distance is useful for establishing absolute luminosities, black hole masses, linear sizes, etc. Eventually, once a large number of galaxies have been observed across the sky with WFC3/IR, this SBF calibration will enable accurate mapping of the total mass density distribution in the local universe using the data available in the HST archive. The proposed observations will have additional important scientific value; in particular, we highlight their usefulness for understanding the nature of multimodal globular cluster color distributions in giant elliptical galaxies.

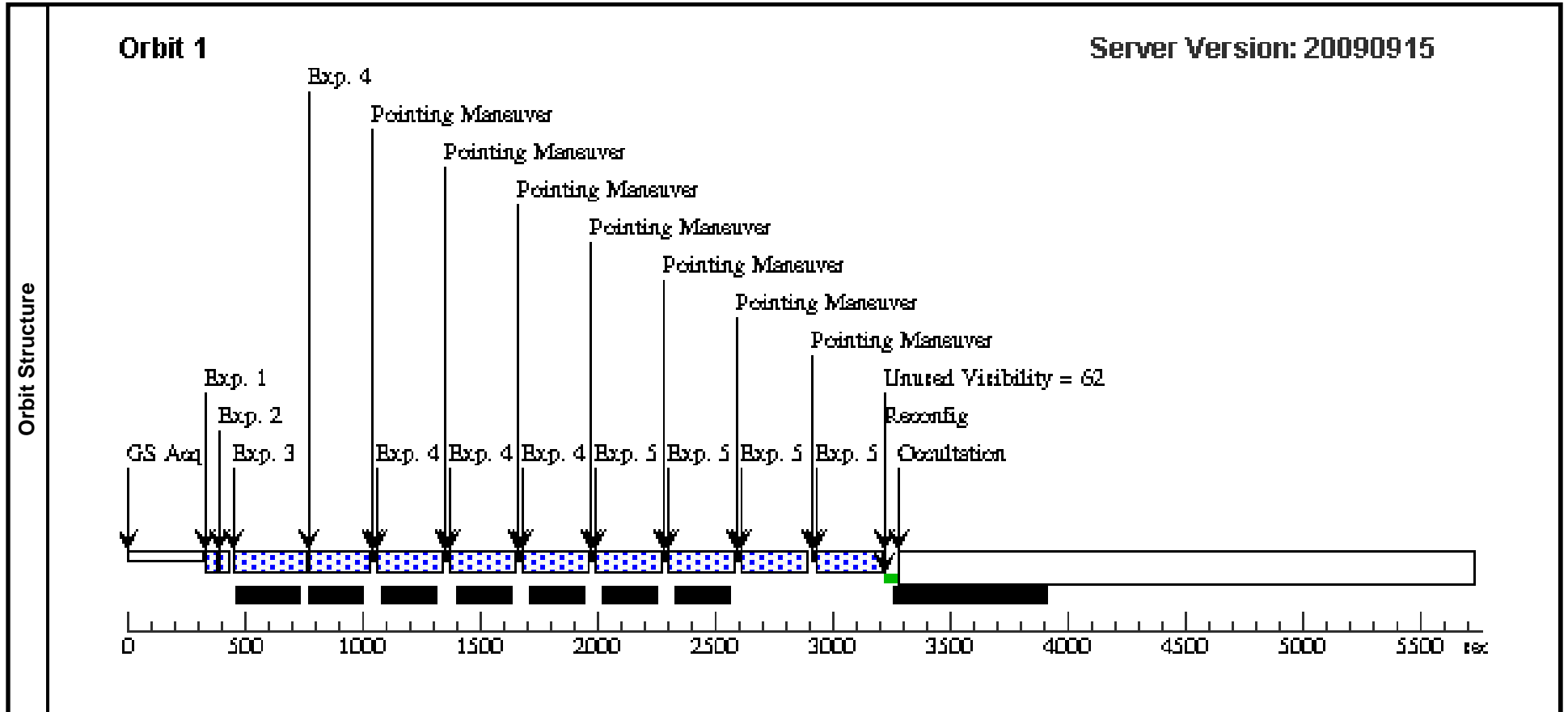
OBSERVING DESCRIPTION

Each galaxy in our program is observed with WFC3/IR for one orbit split between the F110W and F160W filters, using a four-point dither pattern in each filter to improve the PSF and minimize detector defects. At each position, the target galaxy will be observed with a pre-defined non-destructive sample sequence. For estimating the integration times at which saturation is reached in the galaxy cores, we use NGC4472 (VCC1226) as a reference since it is the brightest Virgo galaxy (and brighter than the Fornax galaxies). From Ferrarese et al. (2006) (Fig. 51), the core surface brightness for this galaxy is $u_g_AB = 16.5$ and $u_z_AB = 14.9$ mag arcsec⁻². The corresponding WFC3/IR surface brightnesses in F110W and F160W are then 13.9 and 13.1 mag arcsec⁻², respectively, in the vegamag system. We use a four-point dither pattern with a convenience pattern. Since the galaxy cores saturate in short integration times, a STEP sample sequence is chosen so that enough early reads can be used by 'calwf3' to extrapolate the saturated pixels (even more so if some pixels get CR-hit in early reads). Each orbit starts with short exposures to potentially reconstruct the core.

Proposal 11712 - Visit 01 - Calibration of Surface Brightness Fluctuations for WFC3/IR

Fri Dec 18 02:18:56 GMT 2009

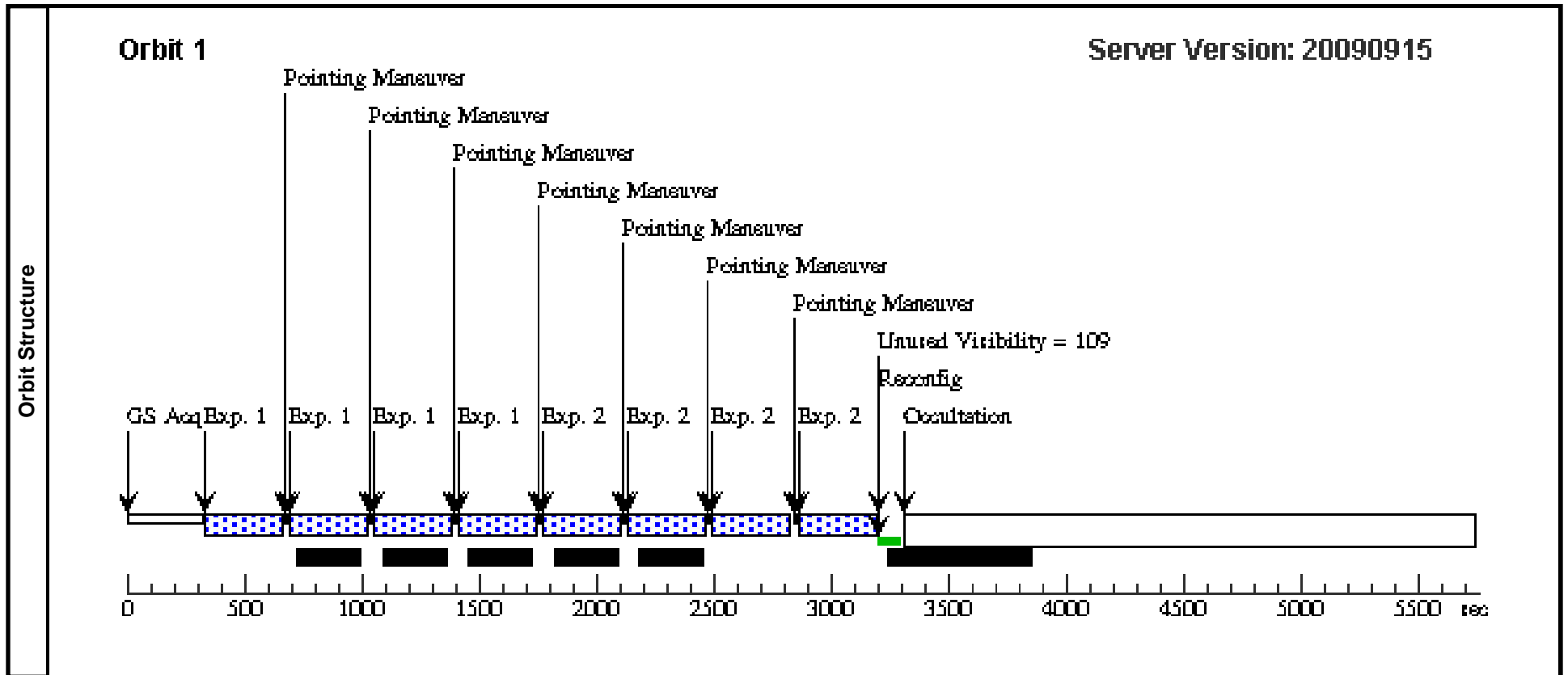
| | | | | | | | | | | |
|----------------------|--|--|--|---|----------------------|----------------------------------|------------------------------|-------------------------|--|--------------|
| Visit | Proposal 11712, Visit 01, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: Visit 1 : IC1919 Please schedule in SAA-free orbit. | | | | | | | | | |
| | Patterns | # | Primary Pattern | | | | Secondary Pattern | | | |
| (1) | | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 | | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false | | | | | | (4), (5) |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | | Fluxes | | Miscellaneous | | |
| | (1) | IC1919 | RA: 03 26 2.2400 (51.5093333d) Dec: -32 53 40.40 (-32.89456d) Equinox: J2000 | | | V=12.5+/-0.5 | | Reference Frame: ICRS | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
| | 1 | | (1) IC1919 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=5 | GS ACQ SCENARI O BASE1BNS | | [==>] | [1] |
| | 2 | | (1) IC1919 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=5 | | | [==>] | [1] |
| | 3 | | (1) IC1919 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=11 | | | [==>] | [1] |
| | 4 | IC1919 - F1 10W | (1) IC1919 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 4-4 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| | 5 | IC1919 - F1 60W | (1) IC1919 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 5-5 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 11712 - Visit 02 - Calibration of Surface Brightness Fluctuations for WFC3/IR

Fri Dec 18 02:18:57 GMT 2009

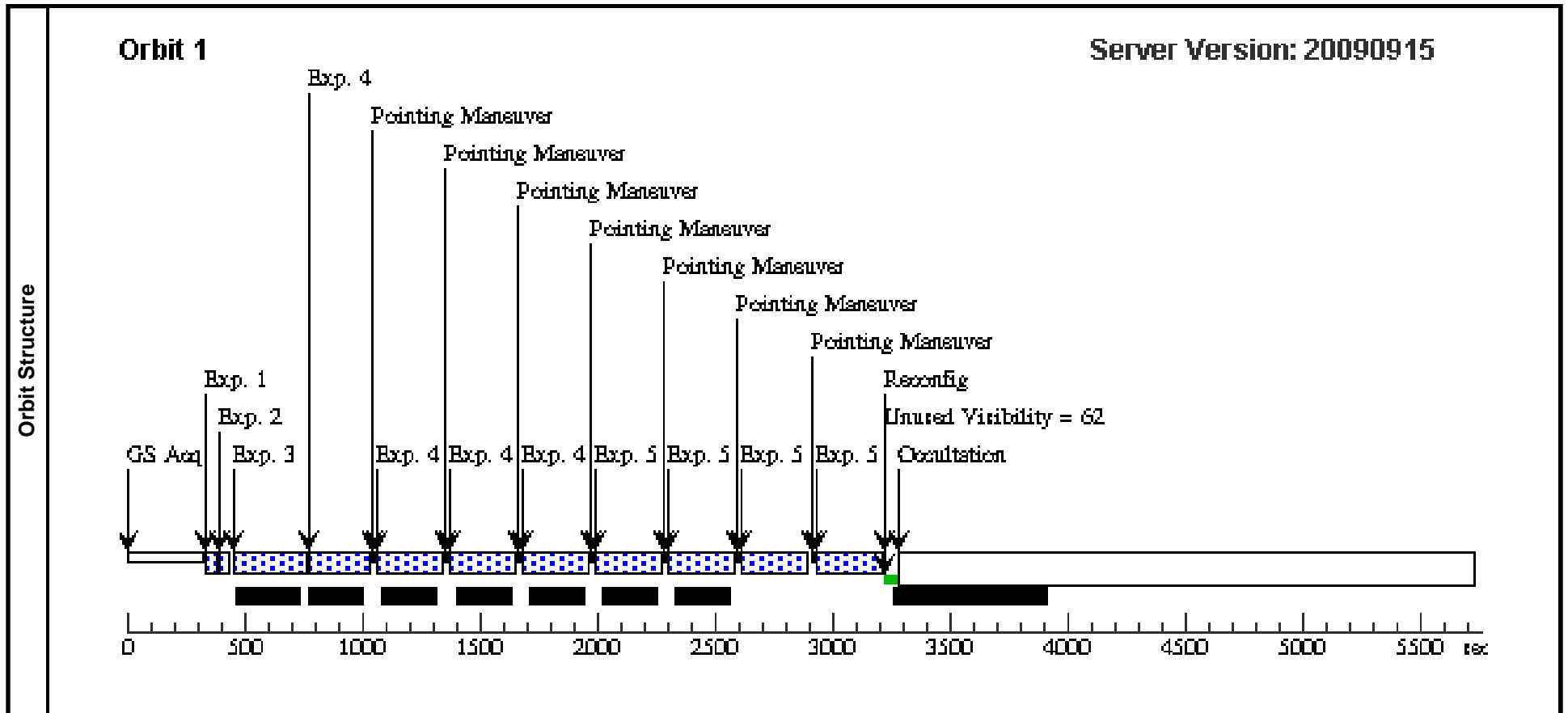
| | | | | | | | | | | |
|----------------------|---|--|---|---|---------------------------------|-------------------------------|---|-------------------------|--|------------------|
| Visit | Proposal 11712, Visit 02, scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: Visit 2 : NGC1375 Please schedule in SAA-free orbit. | | | | | | | | | |
| | Patterns | # | Primary Pattern | | | | Secondary Pattern | | | Exposures |
| (1) | | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 | | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false | | | | | (1), (2) | |
| Fixed Targets | # | Name | Target Coordinates | | Targ. Coord. Corrections | | Fluxes | | Miscellaneous | |
| | (2) | NGC1375 | RA: 03 35 16.8200 (53.8200833d) Dec: -35 15 56.40 (-35.26567d) Equinox: J2000 | | | | V=12.7+/-0.5 | | Reference Frame: ICRS | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
| | 1 | NGC1375 - F110W | (2) NGC1375 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=11 | POS TARG 0.0,0.0; GS ACQ SCENARI O BASE1BNS | Pattern 1, Exps 1-1 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| | 2 | NGC1375 - F160W | (2) NGC1375 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=11 | POS TARG 0.0,0.0 | Pattern 1, Exps 2-2 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 11712 - Visit 03 - Calibration of Surface Brightness Fluctuations for WFC3/IR

Fri Dec 18 02:18:57 GMT 2009

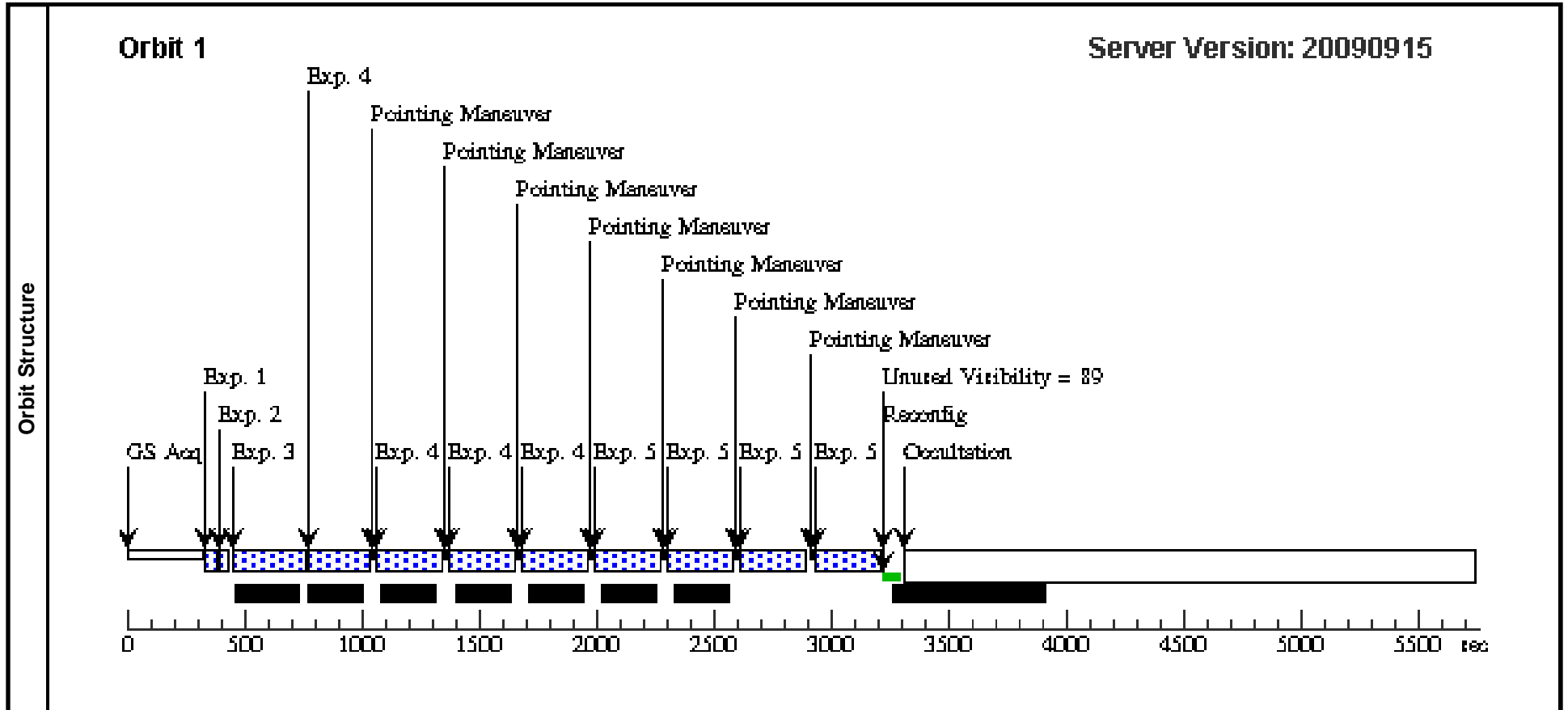
| | | | | | | | | | | |
|----------------------|--|--|--|---|---------------------------------|----------------------------------|------------------------------|-------------------------|--|--------------|
| Visit | Proposal 11712, Visit 03, completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: Visit 3 : NGC1344 Please schedule in SAA-free orbit. | | | | | | | | | |
| | Patterns | # | Primary Pattern | | | | Secondary Pattern | | | |
| (1) | | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 | | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false | | | | | | (4), (5) |
| Fixed Targets | # | Name | Target Coordinates | | Targ. Coord. Corrections | | Fluxes | | Miscellaneous | |
| | (3) | NGC1344 | RA: 03 28 19.6700 (52.0819583d) Dec: -31 04 5.40 (-31.06817d) Equinox: J2000 | | | | V=10.3+/-0.5 | | Reference Frame: ICRS | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
| | 1 | | (3) NGC1344 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=5 | GS ACQ SCENARI O BASE1BNS | | [==>] | [1] |
| | 2 | | (3) NGC1344 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=5 | | | [==>] | [1] |
| | 3 | | (3) NGC1344 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=11 | | | [==>] | [1] |
| | 4 | NGC1344 - F110W | (3) NGC1344 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 4-4 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| | 5 | NGC1344 - F160W | (3) NGC1344 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 5-5 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 11712 - Visit 04 - Calibration of Surface Brightness Fluctuations for WFC3/IR

Fri Dec 18 02:18:57 GMT 2009

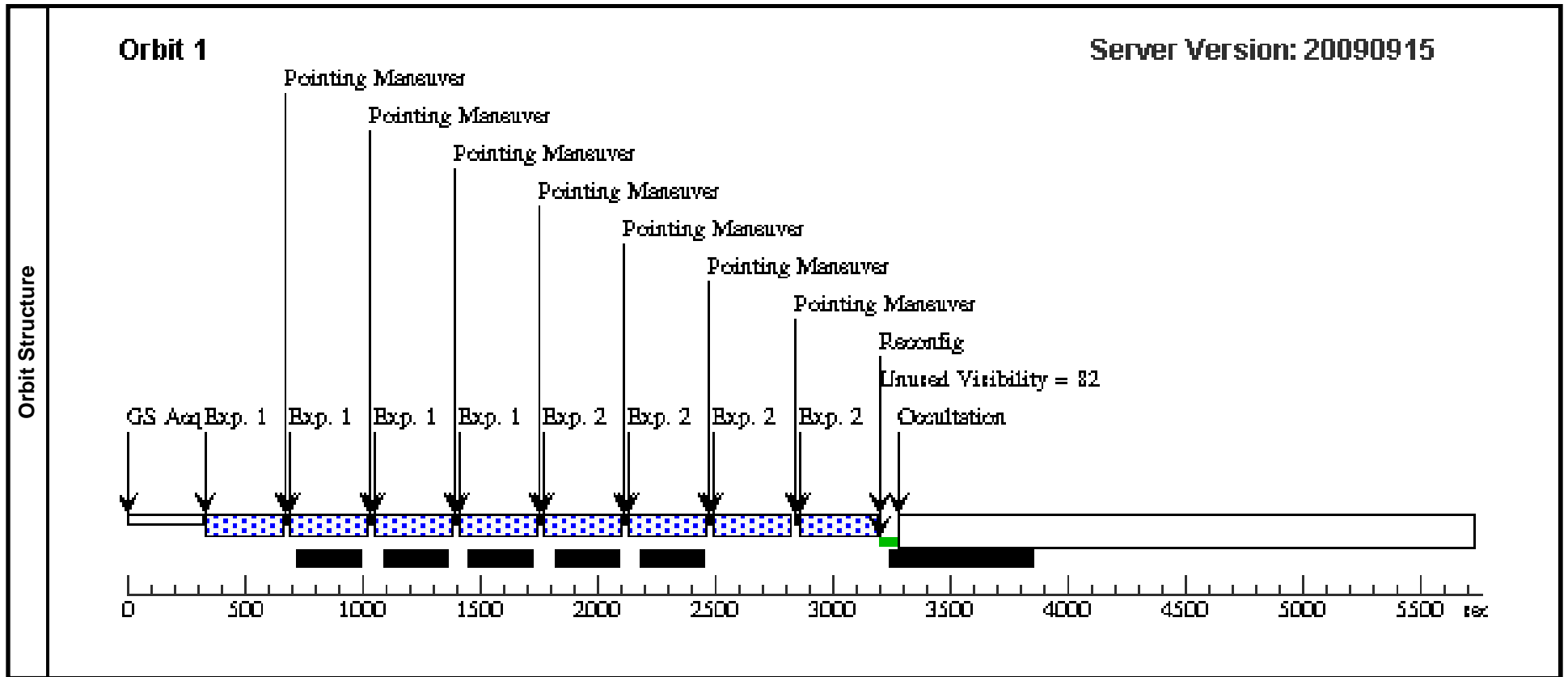
| | | | | | | | | | | |
|----------------------|---|--|---|---|---------------------------------|----------------------------------|------------------------------|-------------------------|--|------------------|
| Visit | Proposal 11712, Visit 04, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: Visit 4 : NGC1374 Please schedule in SAA-free orbit. | | | | | | | | | |
| | Patterns | # | Primary Pattern | | | | Secondary Pattern | | | Exposures |
| (1) | | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 | | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false | | | | | (4), (5) | |
| Fixed Targets | # | Name | Target Coordinates | | Targ. Coord. Corrections | | Fluxes | | Miscellaneous | |
| | (4) | NGC1374 | RA: 03 35 16.5900 (53.8191250d) Dec: -35 13 34.50 (-35.22625d) Equinox: J2000 | | | | V=10.9+/-0.5 | | Reference Frame: ICRS | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
| | 1 | | (4) NGC1374 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=5 | GS ACQ SCENARI O BASE1BNS | | [==>] | [1] |
| | 2 | | (4) NGC1374 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=5 | | | [==>] | [1] |
| | 3 | | (4) NGC1374 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=11 | | | [==>] | [1] |
| | 4 | NGC1374 - F110W | (4) NGC1374 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 4-4 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| | 5 | NGC1374 - F160W | (4) NGC1374 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 5-5 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 11712 - Visit 05 - Calibration of Surface Brightness Fluctuations for WFC3/IR

Fri Dec 18 02:18:58 GMT 2009

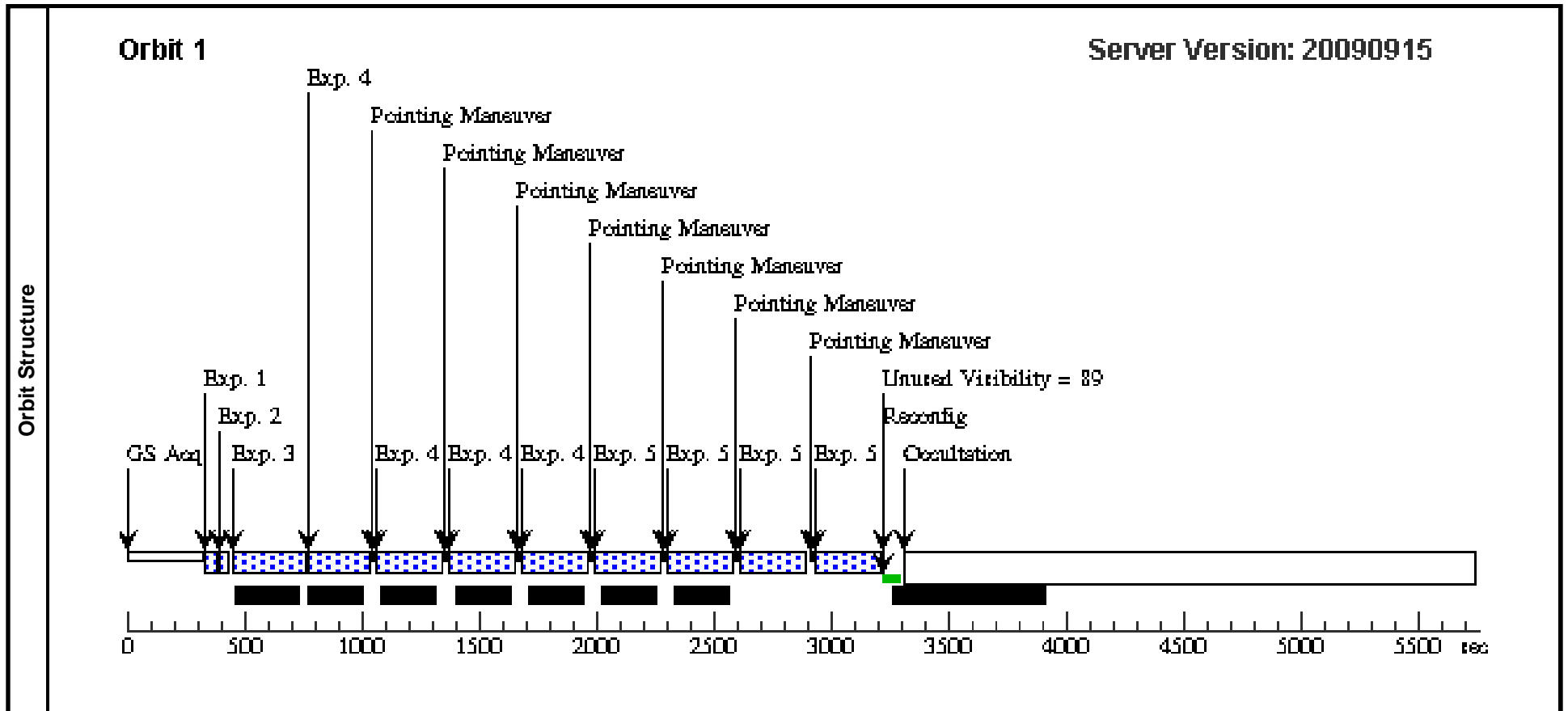
| | | | | | | | | | | |
|----------------------|---|--|---|---|---------------------------------|-------------------------------|---|-------------------------|--|------------------|
| Visit | Proposal 11712, Visit 05, scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: Visit 5 : NGC1380 Please schedule in SAA-free orbit. | | | | | | | | | |
| | Patterns | # | Primary Pattern | | | | Secondary Pattern | | | Exposures |
| (1) | | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 | | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false | | | | | (1), (2) | |
| Fixed Targets | # | Name | Target Coordinates | | Targ. Coord. Corrections | | Fluxes | | Miscellaneous | |
| | (5) | NGC1380 | RA: 03 36 27.5800 (54.1149167d) Dec: -34 58 33.60 (-34.97600d) Equinox: J2000 | | | | V=10.3+/-0.5 | | Reference Frame: ICRS | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
| | 1 | NGC1380 - F110W | (5) NGC1380 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=11 | POS TARG 0.0,0.0; GS ACQ SCENARI O BASE1BN3 | Pattern 1, Exps 1-1 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| | 2 | NGC1380 - F160W | (5) NGC1380 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=11 | POS TARG 0.0,0.0 | Pattern 1, Exps 2-2 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 11712 - Visit 06 - Calibration of Surface Brightness Fluctuations for WFC3/IR

Fri Dec 18 02:18:58 GMT 2009

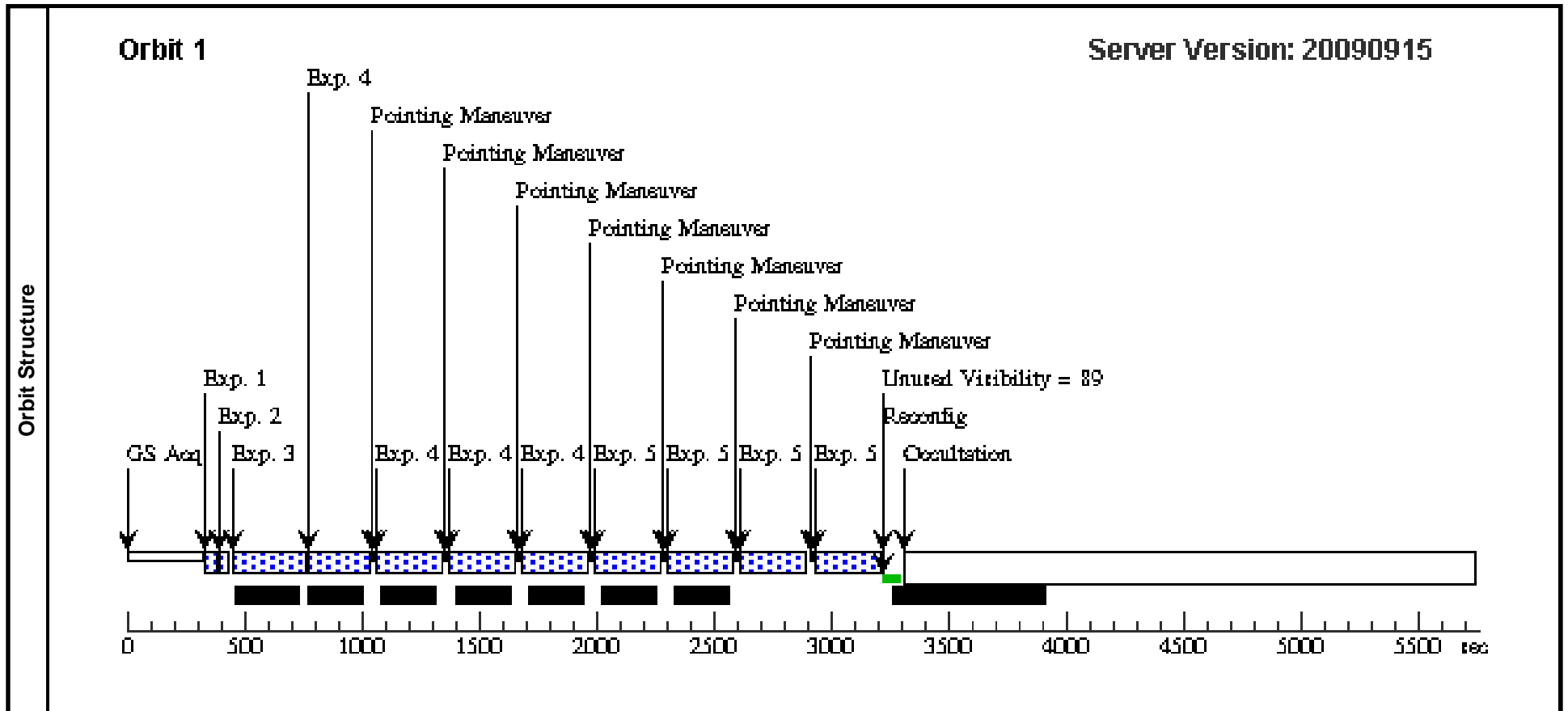
| | | | | | | | | | | |
|----------------------|--|--|--|---|---------------------------------|----------------------------------|------------------------------|-------------------------|--|------------------|
| Visit | Proposal 11712, Visit 06, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: Visit 6 : IC2006 Please schedule in SAA-free orbit. | | | | | | | | | |
| | Patterns | # | Primary Pattern | | | | Secondary Pattern | | | Exposures |
| (1) | | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 | | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false | | | | | (4), (5) | |
| Fixed Targets | # | Name | Target Coordinates | | Targ. Coord. Corrections | | Fluxes | | Miscellaneous | |
| | (6) | IC2006 | RA: 03 54 28.4500 (58.6185417d) Dec: -35 58 1.70 (-35.96714d) Equinox: J2000 | | | | V=11.2+/-0.5 | | Reference Frame: ICRS | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
| | 1 | | (6) IC2006 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=5 | GS ACQ SCENARI O BASE1BNS | | [==>] | [1] |
| | 2 | | (6) IC2006 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=5 | | | [==>] | [1] |
| | 3 | | (6) IC2006 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=11 | | | [==>] | [1] |
| | 4 | IC2006 - F1 10W | (6) IC2006 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 4-4 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| | 5 | IC2006 - F1 60W | (6) IC2006 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 5-5 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 11712 - Visit 07 - Calibration of Surface Brightness Fluctuations for WFC3/IR

Fri Dec 18 02:18:59 GMT 2009

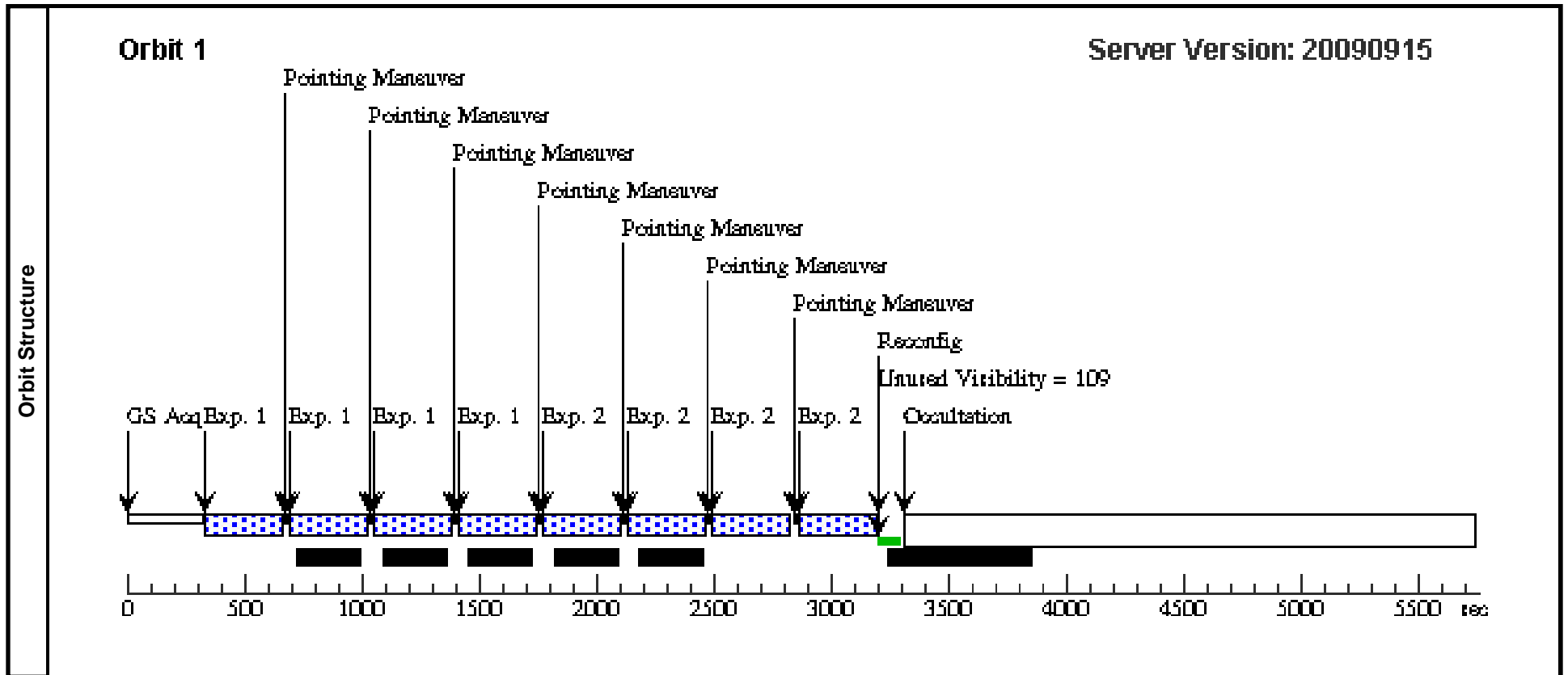
| | | | | | | | | | | | |
|----------------------|---|--|---|---|---------------------------------|----------------------------------|------------------------------|-------------------------|--|----------|------------------|
| Visit | Proposal 11712, Visit 07, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: Visit 7 : NGC1404 Please schedule in SAA-free orbit. | | | | | | | | | | |
| | Patterns | # | Primary Pattern | | | | Secondary Pattern | | | | Exposures |
| (1) | | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 | | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false | | | | | | (4), (5) | |
| Fixed Targets | # | Name | Target Coordinates | | Targ. Coord. Corrections | | Fluxes | | Miscellaneous | | |
| | (7) | NGC1404 | RA: 03 38 51.9200 (54.7163333d) Dec: -35 35 39.80 (-35.59439d) Equinox: J2000 | | | | V=9.9+/-0.5 | | Reference Frame: ICRS | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | | Orbit |
| | 1 | | (7) NGC1404 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=5 | GS ACQ SCENARI O BASE1BNS | | [==>] | | [1] |
| | 2 | | (7) NGC1404 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=5 | | | [==>] | | [1] |
| | 3 | | (7) NGC1404 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=11 | | | [==>] | | [1] |
| | 4 | NGC1404 - F110W | (7) NGC1404 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 4-4 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | | [1] |
| | 5 | NGC1404 - F160W | (7) NGC1404 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 5-5 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | | [1] |



Proposal 11712 - Visit 08 - Calibration of Surface Brightness Fluctuations for WFC3/IR

Fri Dec 18 02:18:59 GMT 2009

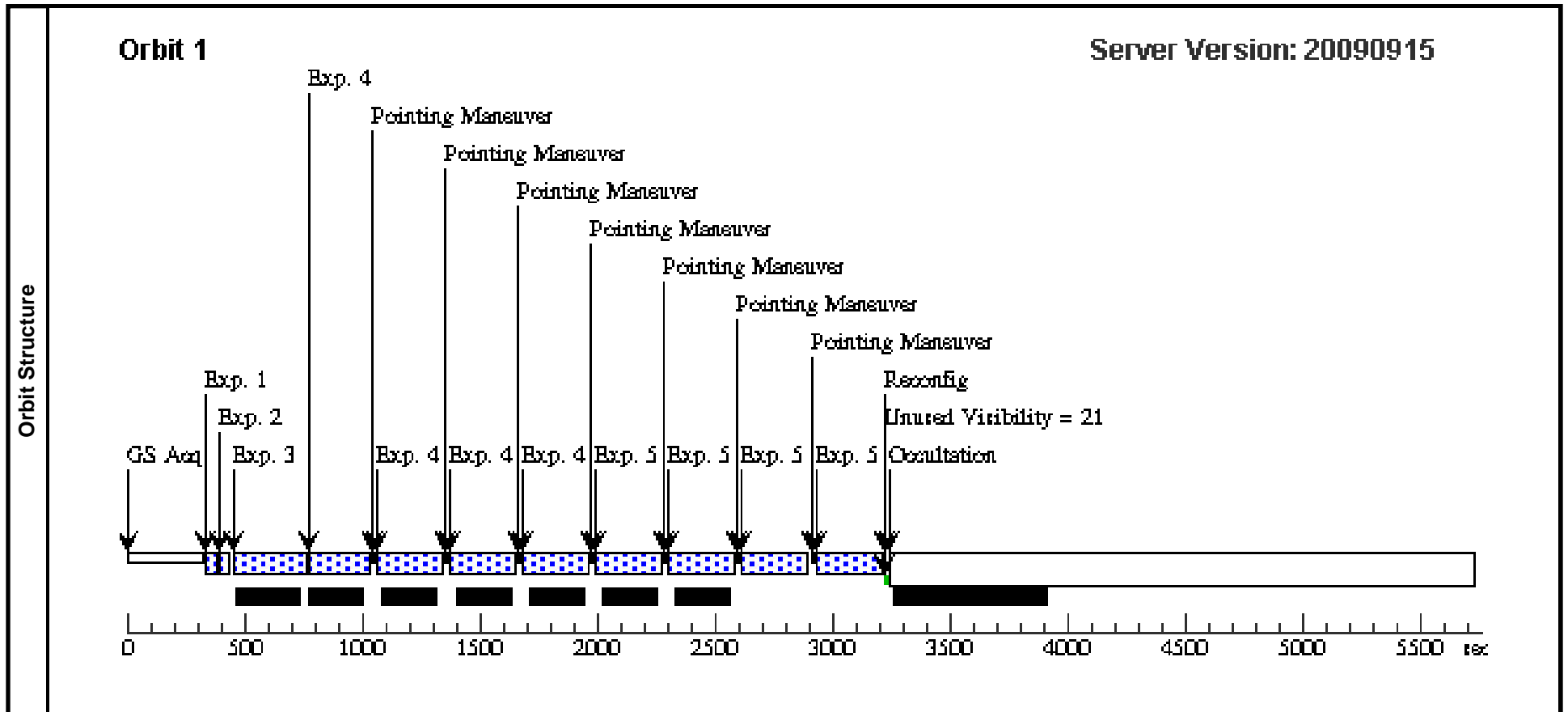
| | | | | | | | | | | |
|----------------------|---|--|--|---|---------------------------------|-------------------------------|---|-------------------------|--|------------------|
| Visit | Proposal 11712, Visit 08, scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: Visit 8 : NGC1399 Please schedule in SAA-free orbit. | | | | | | | | | |
| | Patterns | # | Primary Pattern | | | | Secondary Pattern | | | Exposures |
| (1) | | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 | | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false | | | | | (1), (2) | |
| Fixed Targets | # | Name | Target Coordinates | | Targ. Coord. Corrections | | Fluxes | | Miscellaneous | |
| | (8) | NGC1399 | RA: 03 38 29.0800 (54.6211667d) Dec: -35 27 2.70 (-35.45075d) Equinox: J2000 | | | | V=9.6+/-0.5 | | Reference Frame: ICRS | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
| | 1 | NGC1399 - F110W | (8) NGC1399 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=11 | POS TARG 0.0,0.0; GS ACQ SCENARI O BASE1BNS | Pattern 1, Exps 1-1 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| | 2 | NGC1399 - F160W | (8) NGC1399 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=11 | POS TARG 0.0,0.0 | Pattern 1, Exps 2-2 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 11712 - Visit 09 - Calibration of Surface Brightness Fluctuations for WFC3/IR

Fri Dec 18 02:19:00 GMT 2009

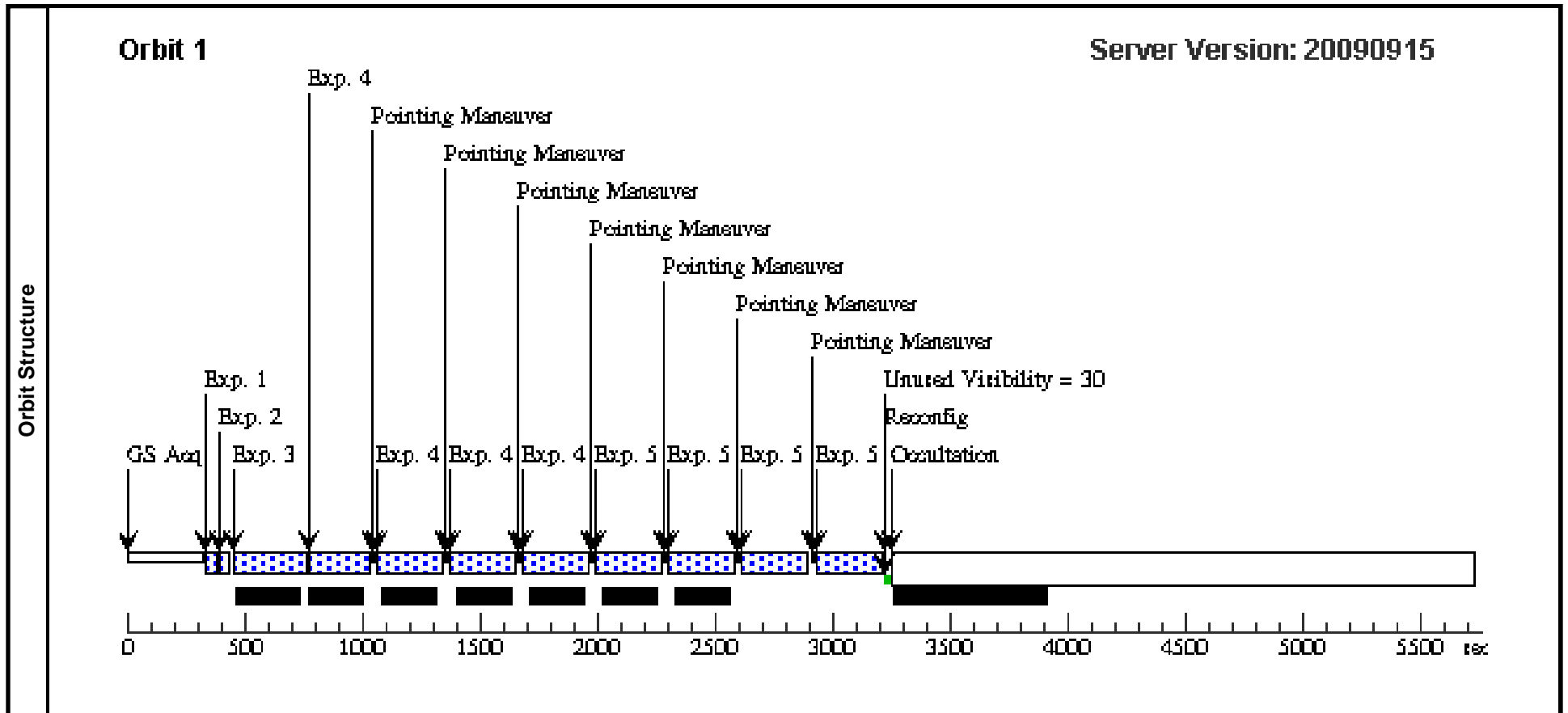
| | | | | | | | | | | | |
|----------------------|--|--|--|---|---------------------------------|----------------------------------|------------------------------|-------------------------|--|------------------|--------------|
| Visit | Proposal 11712, Visit 09, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: Visit 9 : IC3487 Please schedule in SAA-free orbit. | | | | | | | | | | |
| | Patterns | # | Primary Pattern | | | | Secondary Pattern | | | Exposures | |
| (1) | | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 | | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false | | | | | (4), (5) | | |
| Fixed Targets | # | Name | Target Coordinates | | Targ. Coord. Corrections | | Fluxes | Miscellaneous | | | |
| | (9) | IC3487 | RA: 12 33 13.4300 (188.3059583d) Dec: +09 23 50.50 (9.39736d) Equinox: J2000 | | | | V=13.8+/-0.5 | Reference Frame: ICRS | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | | Orbit |
| | 1 | | (9) IC3487 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=5 | GS ACQ SCENARI O BASE1BNS | | [==>] | | [1] |
| | 2 | | (9) IC3487 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=5 | | | [==>] | | [1] |
| | 3 | | (9) IC3487 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=11 | | | [==>] | | [1] |
| | 4 | IC3487 - F1 10W | (9) IC3487 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 4-4 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | | [1] |
| | 5 | IC3487 - F1 60W | (9) IC3487 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 5-5 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | | [1] |



Proposal 11712 - Visit 10 - Calibration of Surface Brightness Fluctuations for WFC3/IR

Fri Dec 18 02:19:00 GMT 2009

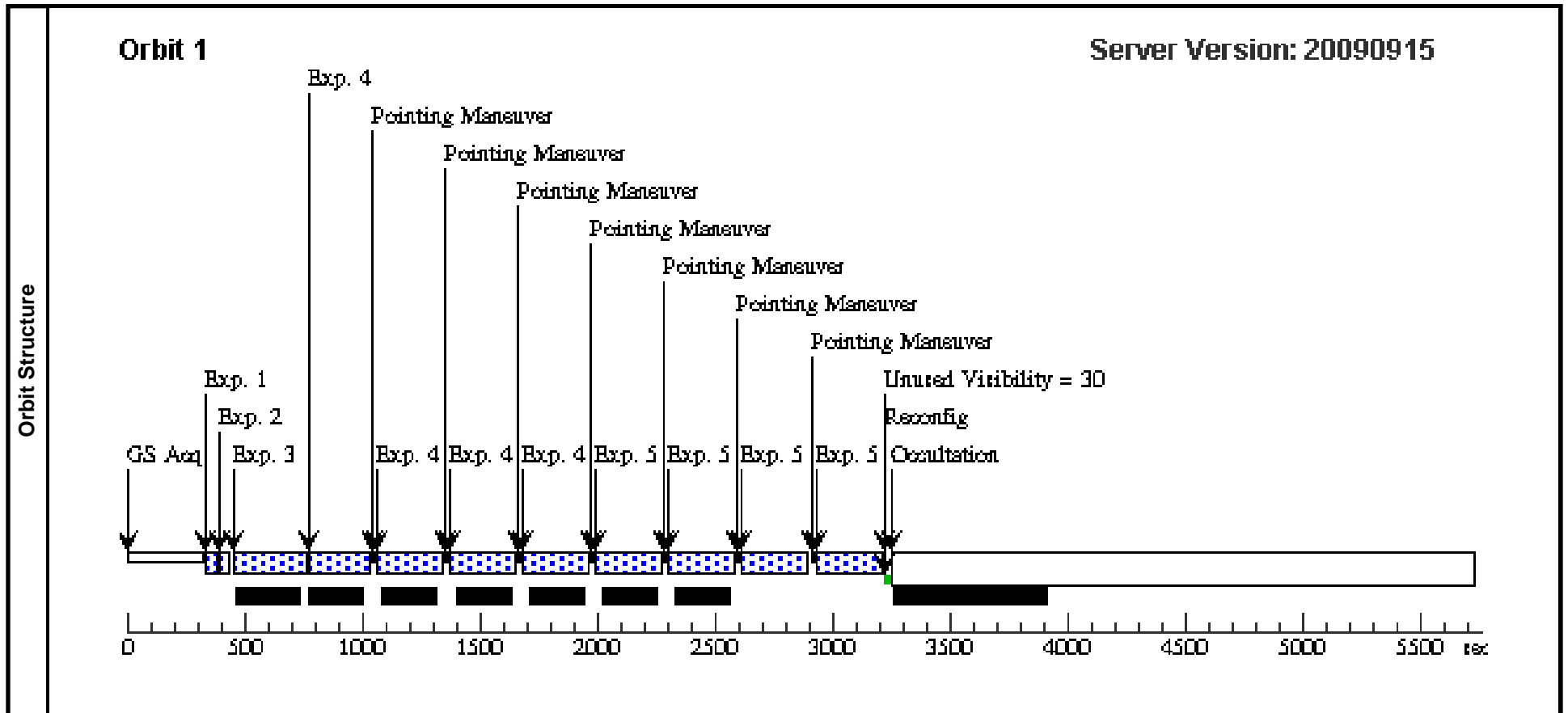
| | | | | | | | | | | |
|----------------------|---|--|---|---|---------------------------------|----------------------------------|------------------------------|-------------------------|--|--------------|
| Visit | Proposal 11712, Visit 10, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: Visit 10 : IC3025 Please schedule in SAA-free orbit. | | | | | | | | | |
| | Patterns | # | Primary Pattern | | | | Secondary Pattern | | | |
| (1) | | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 | | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false | | | | | | (4), (5) |
| Fixed Targets | # | Name | Target Coordinates | | Targ. Coord. Corrections | | Fluxes | | Miscellaneous | |
| | (10) | IC3025 | RA: 12 10 23.0900 (182.5962083d) Dec: +10 11 18.80 (10.18856d) Equinox: J2000 | | | | V=13.7+/-0.5 | | Reference Frame: ICRS | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
| | 1 | | (10) IC3025 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=5 | GS ACQ SCENARI O BASE1BNS | | [==>] | [1] |
| | 2 | | (10) IC3025 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=5 | | | [==>] | [1] |
| | 3 | | (10) IC3025 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=11 | | | [==>] | [1] |
| | 4 | IC3025 - F1 10W | (10) IC3025 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 4-4 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| | 5 | IC3025 - F1 60W | (10) IC3025 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 5-5 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 11712 - Visit 11 - Calibration of Surface Brightness Fluctuations for WFC3/IR

Fri Dec 18 02:19:01 GMT 2009

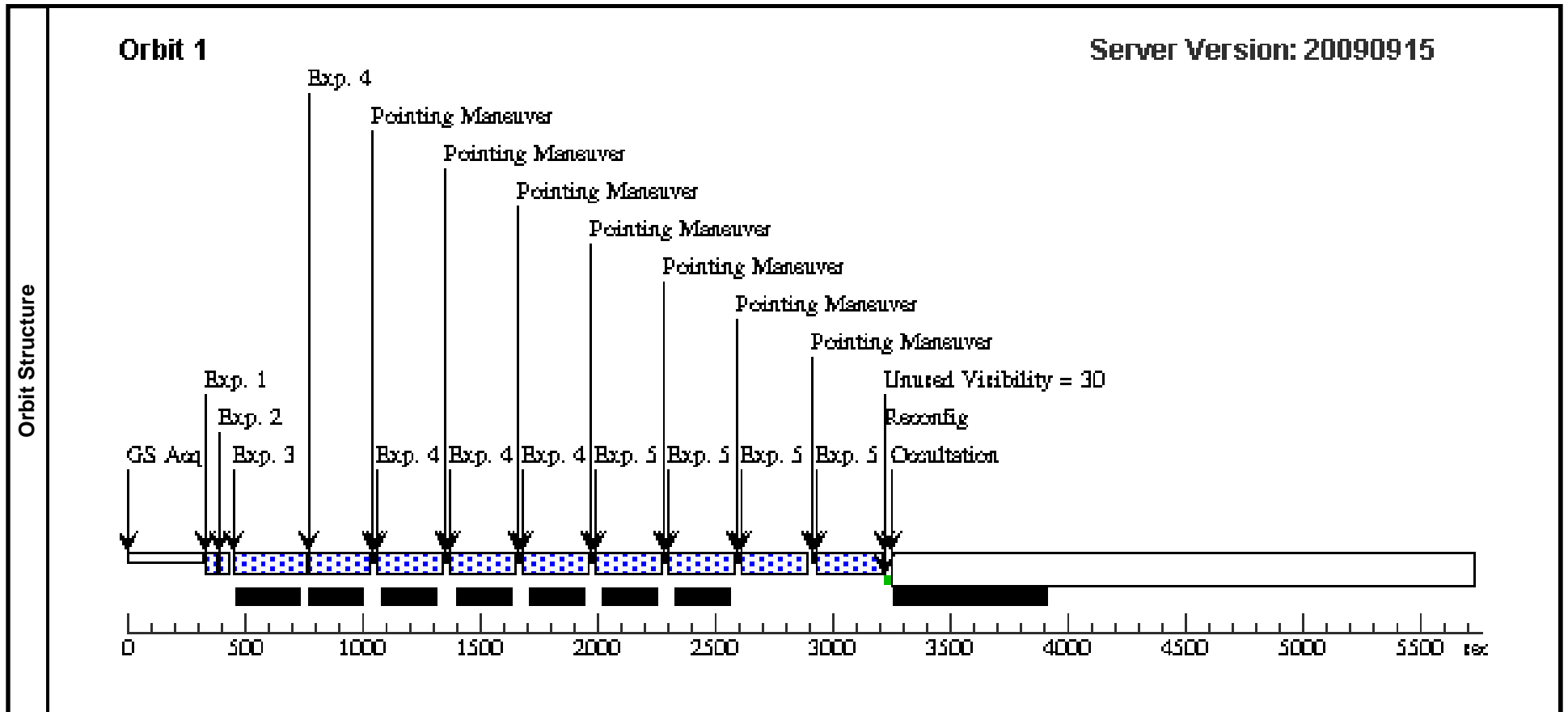
| | | | | | | | | | | |
|----------------------|---|--|--|---|---------------------------------|----------------------------------|------------------------------|-------------------------|--|------------------|
| Visit | Proposal 11712, Visit 11, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: Visit 11 : IC3032 Please schedule in SAA-free orbit. | | | | | | | | | |
| | Patterns | # | Primary Pattern | | | | Secondary Pattern | | | Exposures |
| (1) | | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 | | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false | | | | | (4), (5) | |
| Fixed Targets | # | Name | Target Coordinates | | Targ. Coord. Corrections | | Fluxes | | Miscellaneous | |
| | (11) | IC3032 | RA: 12 11 7.7600 (182.7823333d) Dec: +14 16 29.30 (14.27481d) Equinox: J2000 | | | | V=13.7+/-0.5 | | Reference Frame: ICRS | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
| | 1 | | (11) IC3032 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=5 | GS ACQ SCENARI O BASE1BNS | | [==>] | [1] |
| | 2 | | (11) IC3032 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=5 | | | [==>] | [1] |
| | 3 | | (11) IC3032 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=11 | | | [==>] | [1] |
| | 4 | IC3032 - F1 10W | (11) IC3032 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 4-4 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| | 5 | IC3032 - F1 60W | (11) IC3032 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 5-5 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 11712 - Visit 12 - Calibration of Surface Brightness Fluctuations for WFC3/IR

Fri Dec 18 02:19:01 GMT 2009

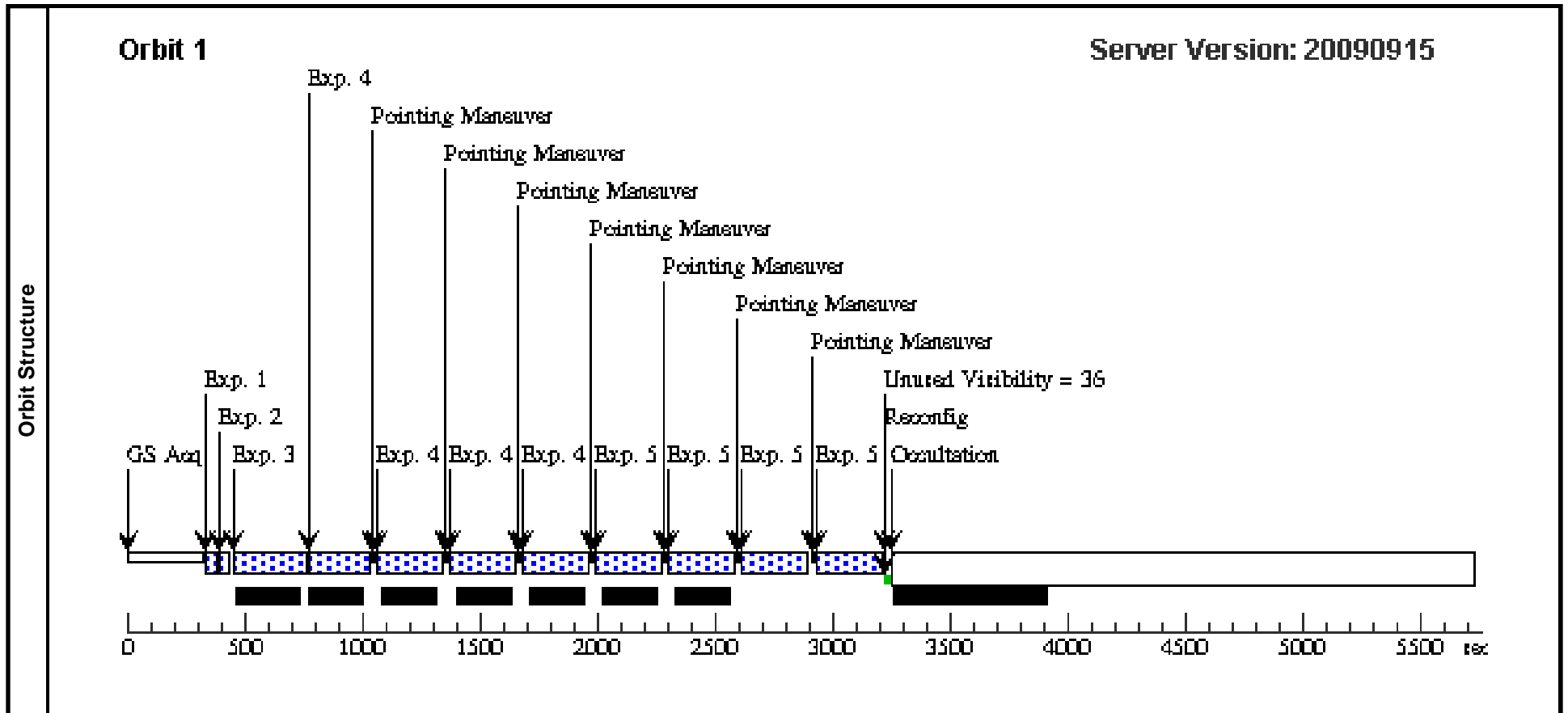
| | | | | | | | | | | |
|----------------------|---|--|---|---|---------------------------------|----------------------------------|------------------------------|-------------------------|--|------------------|
| Visit | Proposal 11712, Visit 12, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: Visit 12 : IC3586 Please schedule in SAA-free orbit. | | | | | | | | | |
| | Patterns | # | Primary Pattern | | | | Secondary Pattern | | | Exposures |
| (1) | | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 | | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false | | | | | (4), (5) | |
| Fixed Targets | # | Name | Target Coordinates | | Targ. Coord. Corrections | | Fluxes | | Miscellaneous | |
| | (12) | IC3586 | RA: 12 36 54.8400 (189.2285000d) Dec: +12 31 12.30 (12.52008d) Equinox: J2000 | | | | V=13.5+/-0.5 | | Reference Frame: ICRS | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
| | 1 | | (12) IC3586 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=5 | GS ACQ SCENARI O BASE1BNS | | [==>] | [1] |
| | 2 | | (12) IC3586 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=5 | | | [==>] | [1] |
| | 3 | | (12) IC3586 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=11 | | | [==>] | [1] |
| | 4 | IC3586 - F1 10W | (12) IC3586 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 4-4 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| | 5 | IC3586 - F1 60W | (12) IC3586 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 5-5 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 11712 - Visit 13 - Calibration of Surface Brightness Fluctuations for WFC3/IR

Fri Dec 18 02:19:01 GMT 2009

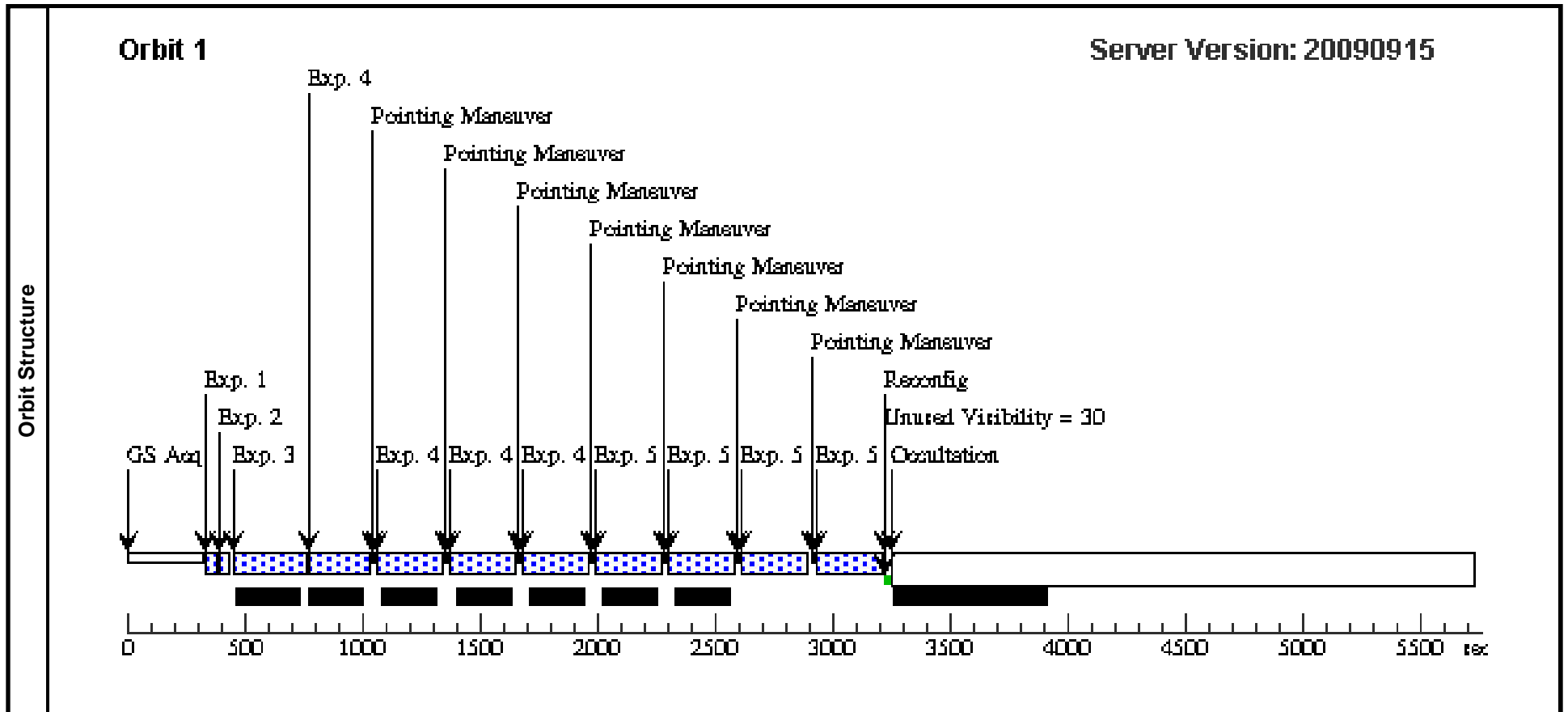
| | | | | | | | | | | |
|----------------------|--|--|---|---|---------------------------------|-------------------------------|------------------------------|-------------------------|--|--------------|
| Visit | Proposal 11712, Visit 13, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: Visit 13 : NGC4489 Please schedule in SAA-free orbit. | | | | | | | | | |
| | Patterns | # | Primary Pattern | | | | Secondary Pattern | | | |
| (1) | | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 | | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false | | | | | | (4), (5) |
| Fixed Targets | # | Name | Target Coordinates | | Targ. Coord. Corrections | | Fluxes | | Miscellaneous | |
| | (13) | NGC4489 | RA: 12 30 52.2400 (187.7176667d) Dec: +16 45 31.60 (16.75878d) Equinox: J2000 | | | | V=11.8+/-0.5 | | Reference Frame: ICRS | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
| | 1 | | (13) NGC4489 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=5 | GS ACQ SCENARI O BASE1BNS | | [==>] | [1] |
| | 2 | | (13) NGC4489 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=5 | | | [==>] | [1] |
| | 3 | | (13) NGC4489 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=11 | | | [==>] | [1] |
| | 4 | NGC4489 - F110W | (13) NGC4489 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 4-4 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| | 5 | NGC4489 - F160W | (13) NGC4489 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 5-5 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 11712 - Visit 14 - Calibration of Surface Brightness Fluctuations for WFC3/IR

Fri Dec 18 02:19:02 GMT 2009

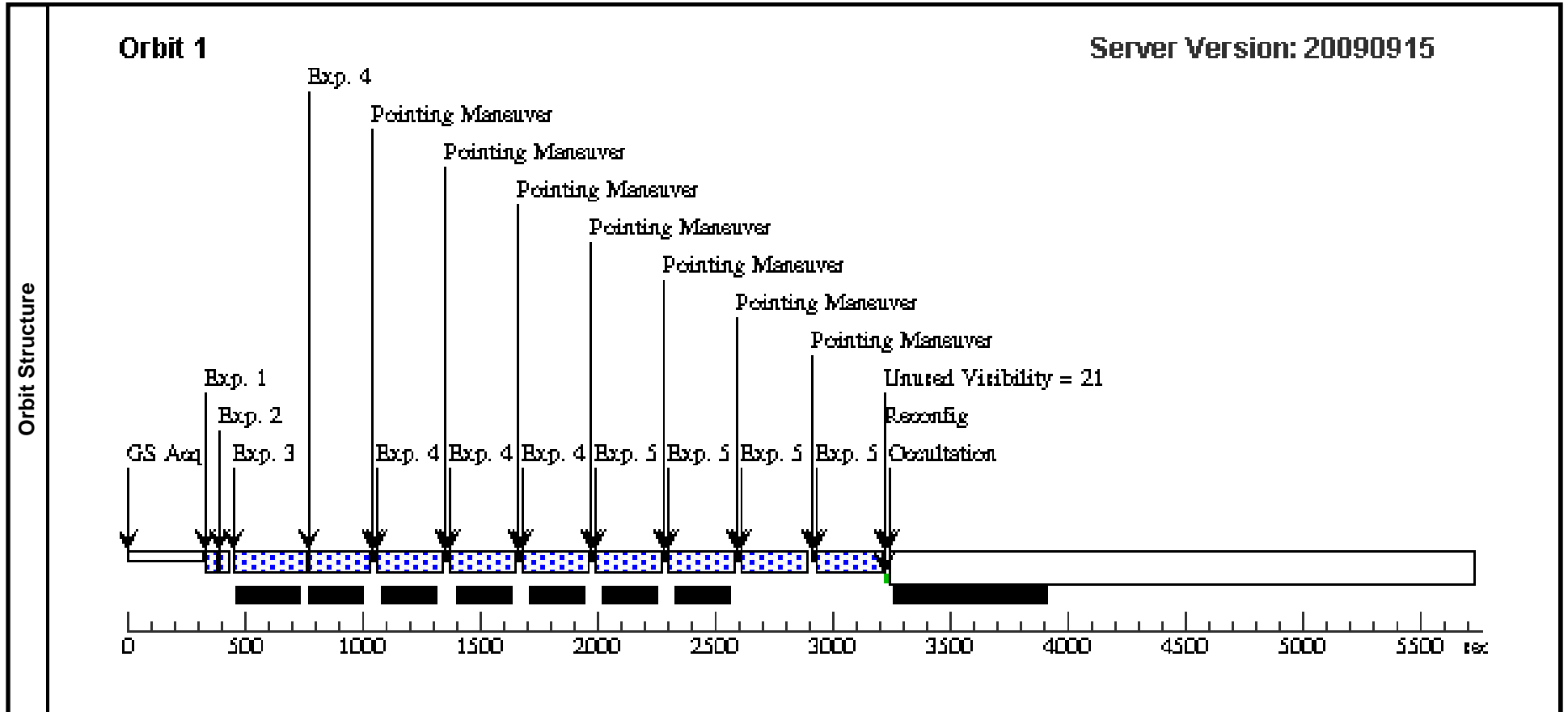
| | | | | | | | | | | |
|----------------------|--|--|---|---|---------------------------------|----------------------------------|------------------------------|-------------------------|--|--------------|
| Visit | Proposal 11712, Visit 14, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: Visit 14 : NGC4458 Please schedule in SAA-free orbit. | | | | | | | | | |
| | Patterns | # | Primary Pattern | | | | Secondary Pattern | | | |
| (1) | | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 | | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false | | | | | | (4), (5) |
| Fixed Targets | # | Name | Target Coordinates | | Targ. Coord. Corrections | | Fluxes | | Miscellaneous | |
| | (14) | NGC4458 | RA: 12 28 57.5600 (187.2398333d) Dec: +13 14 30.80 (13.24189d) Equinox: J2000 | | | | V=11.9+/-0.5 | | Reference Frame: ICRS | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
| | 1 | | (14) NGC4458 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=5 | GS ACQ SCENARI O BASE1BNS | | [==>] | [1] |
| | 2 | | (14) NGC4458 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=5 | | | [==>] | [1] |
| | 3 | | (14) NGC4458 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=11 | | | [==>] | [1] |
| | 4 | NGC4458 - F110W | (14) NGC4458 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 4-4 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| | 5 | NGC4458 - F160W | (14) NGC4458 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 5-5 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 11712 - Visit 15 - Calibration of Surface Brightness Fluctuations for WFC3/IR

Fri Dec 18 02:19:02 GMT 2009

| | | | | | | | | | | |
|----------------------|--|--|---|---|---------------------------------|----------------------------------|------------------------------|-------------------------|--|--------------|
| Visit | Proposal 11712, Visit 15, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: Visit 15 : NGC4472 Please schedule in SAA-free orbit. | | | | | | | | | |
| | Patterns | # | Primary Pattern | | | | Secondary Pattern | | | |
| (1) | | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 | | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false | | | | | | (4), (5) |
| Fixed Targets | # | Name | Target Coordinates | | Targ. Coord. Corrections | | Fluxes | | Miscellaneous | |
| | (15) | NGC4472 Alt Name1: M49 | RA: 12 29 46.7600 (187.4448333d) Dec: +08 00 1.70 (8.00047d) Equinox: J2000 | | | | V=8.3+/-0.5 | | Reference Frame: ICRS | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
| | 1 | | (15) NGC4472 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=5 | GS ACQ SCENARI O BASE1BNS | | [==>] | [1] |
| | 2 | | (15) NGC4472 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=5 | | | [==>] | [1] |
| | 3 | | (15) NGC4472 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=11 | | | [==>] | [1] |
| | 4 | NGC4472 - F110W | (15) NGC4472 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 4-4 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| | 5 | NGC4472 - F160W | (15) NGC4472 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 5-5 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 11712 - Visit 16 - Calibration of Surface Brightness Fluctuations for WFC3/IR

Fri Dec 18 02:19:02 GMT 2009

| | | | | | | | | | | |
|----------------------|--|--|---|---|----------------------|----------------------------------|------------------------------|-------------------------|--|------------------|
| Visit | Proposal 11712, Visit 16, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: ORIENT 89.0D TO 123.0 D; ORIENT 158.0D TO 192.0 D; ORIENT 264D TO 304 D; ORIENT 337D TO 10.0 D Comments: Visit 16 : NGC4649 Please schedule in SAA-free orbit. | | | | | | | | | |
| | Patterns | # | Primary Pattern | | | | Secondary Pattern | | | Exposures |
| (1) | | Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 | | Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false | | | | | (4), (5) | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | | Fluxes | Miscellaneous | | | |
| | (16) | NGC4649 Alt Name1: M60 | RA: 12 43 37.7260 (190.9071917d) Dec: +11 33 11.30 (11.55314d) Equinox: J2000 | | | V=8.8+/-0.5 | Reference Frame: ICRS | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
| | 1 | | (16) NGC4649 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=5 | GS ACQ SCENARI O ONEB1BNS | | [==>] | [1] |
| | 2 | | (16) NGC4649 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=5 | | | [==>] | [1] |
| | 3 | | (16) NGC4649 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=11 | | | [==>] | [1] |
| | 4 | NGC4649 - F110W | (16) NGC4649 | WFC3/IR, MULTIACCUM, IR | F110W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 4-4 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |
| | 5 | NGC4649 - F160W | (16) NGC4649 | WFC3/IR, MULTIACCUM, IR | F160W | SAMP-SEQ=STEP5 0; NSAMP=10 | POS TARG 0.0,0.0 | Pattern 1, Exps 5-5 (1) | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |

