



# 13463 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microlensing

Cycle: 21, Proposal Category: GO

(Availability Mode: SUPPORTED)

## INVESTIGATORS

| <i>Name</i>                               | <i>Institution</i>                       | <i>E-Mail</i>                   |
|-------------------------------------------|------------------------------------------|---------------------------------|
| <b>Dr. Kailash C. Sahu (PI) (Contact)</b> | <b>Space Telescope Science Institute</b> | <b>ksahu@stsci.edu</b>          |
| Dr. Howard E. Bond (CoI)                  | The Pennsylvania State University        | heb11@psu.edu                   |
| Dr. Thomas M. Brown (CoI)                 | Space Telescope Science Institute        | tbrown@stsci.edu                |
| Dr. Harry C. Ferguson (CoI)               | Space Telescope Science Institute        | ferguson@stsci.edu              |
| Dr. Jay Anderson (CoI)                    | Space Telescope Science Institute        | jayander@stsci.edu              |
| Dr. Stefano Casertano (CoI)               | Space Telescope Science Institute        | stefano@stsci.edu               |
| Dr. Martin Dominik (CoI) (ESA Member)     | University of St. Andrews                | md35@st-andrews.ac.uk           |
| Dr. Andrzej Udalski (CoI) (ESA Member)    | Warsaw University                        | udalski@astrouw.edu.pl          |
| Dr. Mario Livio (CoI)                     | Space Telescope Science Institute        | mlivio@stsci.edu                |
| Ms. Yvette Perrott (CoI) (ESA Member)     | University of Cambridge                  | yvette.perrott@gmail.com        |
| Dr. Michael Albrow (CoI)                  | University of Canterbury                 | michael.albrow@canterbury.ac.nz |
| Dr. Philip Yock (CoI)                     | The University of Auckland               | p.yock@auckland.ac.nz           |
| Dr. Chris Fryer (CoI)                     | Los Alamos National Laboratory           | fryer@lanl.gov                  |
| Dr. Shude Mao (CoI) (ESA Member)          | Manchester University                    | smao@jb.man.ac.uk               |
| Dr. Ian Bond (CoI)                        | Massey University                        | i.a.bond@massey.ac.nz           |

## VISITS

Proposal 13463 (STScI Edit Number: 2, Created: Monday, June 24, 2013 10:51:13 PM EST) - Overview

| <b>Visit</b> | <b>Targets used in Visit</b> | <b>Configurations used in Visit</b> | <b>Orbits Used</b> | <b>Last Orbit Planner Run</b> | <b>OP Current with Visit?</b> |
|--------------|------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------------|
| 01           | (5) SWEEPS<br>ANY            | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:39:59.0        | yes                           |
| 02           | (7) SWEEPS-L1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:40:13.0        | yes                           |
| 03           | (8) SWEEPS-L2<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:40:26.0        | yes                           |
| 04           | (6) SWEEPS-R1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:40:38.0        | yes                           |
| 05           | (5) SWEEPS<br>ANY            | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:40:49.0        | yes                           |
| 06           | (7) SWEEPS-L1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:40:59.0        | yes                           |
| 07           | (8) SWEEPS-L2<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:41:09.0        | yes                           |
| 08           | (6) SWEEPS-R1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:41:19.0        | yes                           |
| 09           | (5) SWEEPS<br>ANY            | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:41:29.0        | yes                           |
| 10           | (8) SWEEPS-L2<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:41:40.0        | yes                           |
| 11           | (7) SWEEPS-L1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:41:50.0        | yes                           |
| 12           | (6) SWEEPS-R1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:42:03.0        | yes                           |
| 13           | (5) SWEEPS<br>ANY            | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:42:14.0        | yes                           |
| 14           | (8) SWEEPS-L2<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:42:25.0        | yes                           |

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| <b>Visit</b> | <b>Targets used in Visit</b> | <b>Configurations used in Visit</b> | <b>Orbits Used</b> | <b>Last Orbit Planner Run</b> | <b>OP Current with Visit?</b> |
|--------------|------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------------|
| 15           | (7) SWEEPS-L1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:42:36.0        | yes                           |
| 16           | (6) SWEEPS-R1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:42:46.0        | yes                           |
| 17           | (5) SWEEPS<br>ANY            | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:42:56.0        | yes                           |
| 18           | (8) SWEEPS-L2<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:43:06.0        | yes                           |
| 19           | (7) SWEEPS-L1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:43:15.0        | yes                           |
| 20           | (6) SWEEPS-R1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:43:25.0        | yes                           |
| 21           | (5) SWEEPS<br>ANY            | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:43:35.0        | yes                           |
| 22           | (8) SWEEPS-L2<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:43:44.0        | yes                           |
| 23           | (7) SWEEPS-L1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:43:54.0        | yes                           |
| 24           | (6) SWEEPS-R1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:44:04.0        | yes                           |
| 25           | (5) SWEEPS<br>ANY            | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:44:17.0        | yes                           |
| 26           | (8) SWEEPS-L2<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:44:28.0        | yes                           |
| 27           | (7) SWEEPS-L1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:44:38.0        | yes                           |
| 28           | (6) SWEEPS-R1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:44:48.0        | yes                           |

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| <b>Visit</b> | <b>Targets used in Visit</b> | <b>Configurations used in Visit</b> | <b>Orbits Used</b> | <b>Last Orbit Planner Run</b> | <b>OP Current with Visit?</b> |
|--------------|------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------------|
| 29           | (5) SWEEPS<br>ANY            | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:44:58.0        | yes                           |
| 30           | (8) SWEEPS-L2<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:45:08.0        | yes                           |
| 31           | (7) SWEEPS-L1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:45:17.0        | yes                           |
| 32           | (6) SWEEPS-R1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:45:27.0        | yes                           |
| 33           | (5) SWEEPS<br>ANY            | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:45:36.0        | yes                           |
| 34           | (7) SWEEPS-L1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:45:45.0        | yes                           |
| 35           | (8) SWEEPS-L2<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:45:55.0        | yes                           |
| 36           | (6) SWEEPS-R1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:46:04.0        | yes                           |
| 37           | (5) SWEEPS<br>ANY            | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:46:15.0        | yes                           |
| 38           | (7) SWEEPS-L1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:46:25.0        | yes                           |
| 39           | (8) SWEEPS-L2<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:46:39.0        | yes                           |
| 40           | (6) SWEEPS-R1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:46:49.0        | yes                           |
| 41           | (5) SWEEPS<br>ANY            | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:46:59.0        | yes                           |
| 42           | (7) SWEEPS-L1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:47:10.0        | yes                           |

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| <b>Visit</b> | <b>Targets used in Visit</b> | <b>Configurations used in Visit</b> | <b>Orbits Used</b> | <b>Last Orbit Planner Run</b> | <b>OP Current with Visit?</b> |
|--------------|------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------------|
| 43           | (8) SWEEPS-L2<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:47:20.0        | yes                           |
| 44           | (6) SWEEPS-R1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:47:30.0        | yes                           |
| 45           | (5) SWEEPS<br>ANY            | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:47:40.0        | yes                           |
| 46           | (7) SWEEPS-L1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:47:49.0        | yes                           |
| 47           | (8) SWEEPS-L2<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:47:59.0        | yes                           |
| 48           | (6) SWEEPS-R1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:48:08.0        | yes                           |
| 49           | (5) SWEEPS<br>ANY            | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:48:18.0        | yes                           |
| 50           | (7) SWEEPS-L1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:48:29.0        | yes                           |
| 51           | (8) SWEEPS-L2<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:48:39.0        | yes                           |
| 52           | (6) SWEEPS-R1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:48:50.0        | yes                           |
| 53           | (5) SWEEPS<br>ANY            | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:49:00.0        | yes                           |
| 54           | (7) SWEEPS-L1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:49:15.0        | yes                           |
| 55           | (8) SWEEPS-L2<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:49:26.0        | yes                           |
| 56           | (6) SWEEPS-R1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:49:37.0        | 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> |
|--------------|------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------------|
| 57           | (5) SWEEPS<br>ANY            | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:49:47.0        | yes                           |
| 58           | (7) SWEEPS-L1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:49:56.0        | yes                           |
| 59           | (8) SWEEPS-L2<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:50:06.0        | yes                           |
| 60           | (6) SWEEPS-R1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:50:16.0        | yes                           |
| 61           | (5) SWEEPS<br>ANY            | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:50:26.0        | yes                           |
| 62           | (7) SWEEPS-L1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:50:37.0        | yes                           |
| 63           | (8) SWEEPS-L2<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:50:47.0        | yes                           |
| 64           | (6) SWEEPS-R1<br>ANY         | ACS/WFC<br>WFC3/UVIS                | 1                  | 24-Jun-2013 23:50:58.0        | yes                           |

64 Total Orbits Used

## ABSTRACT

We propose a 3-year program of monitoring of 12 fields in the Galactic bulge, containing a total of  $\sim 1.5$  million stars down to  $V=28$ . Our primary aim is to detect microlensing events caused by non-luminous isolated black holes (BHs) and neutron stars (NSs) in the Galactic disk and bulge.

The unique capability of HST imaging for microlensing observations is the addition of high-precision astrometry, allowing detection of the astrometric shift of the source during the event. Combined with the lens parallax, provided by the HST event light curve, the astrometric shift provides a direct measurement of the lens mass. We will detect  $\sim 120$  microlensing events, of which 45% will show astrometric deflections, leading to direct determinations of the lens masses. Of these, about 18 lenses are expected to be BHs and 14 of them NSs, along with about 22 events due to main-sequence stars.

To date, BH and NS masses have been directly measured only in binaries; no isolated BH has been detected unambiguously within our Galaxy. A survey of the scope proposed here is the only means available at present for measuring the mass function of isolated BHs and NSs, and moreover one that is normalized to that of luminous stars. The results will provide a quantitative estimate of the mass content in the form of stellar remnants in the young Galactic disk and old bulge, and important constraints on SN/GRB explosion mechanisms that produce NSs and BHs.

Our data will also be useful for other investigations, including a more accurate determination of the microlensing optical depth, faint variable stars, bulge proper motions and kinematics, and a deep luminosity function of the disk and bulge stars.

## **OBSERVING DESCRIPTION**

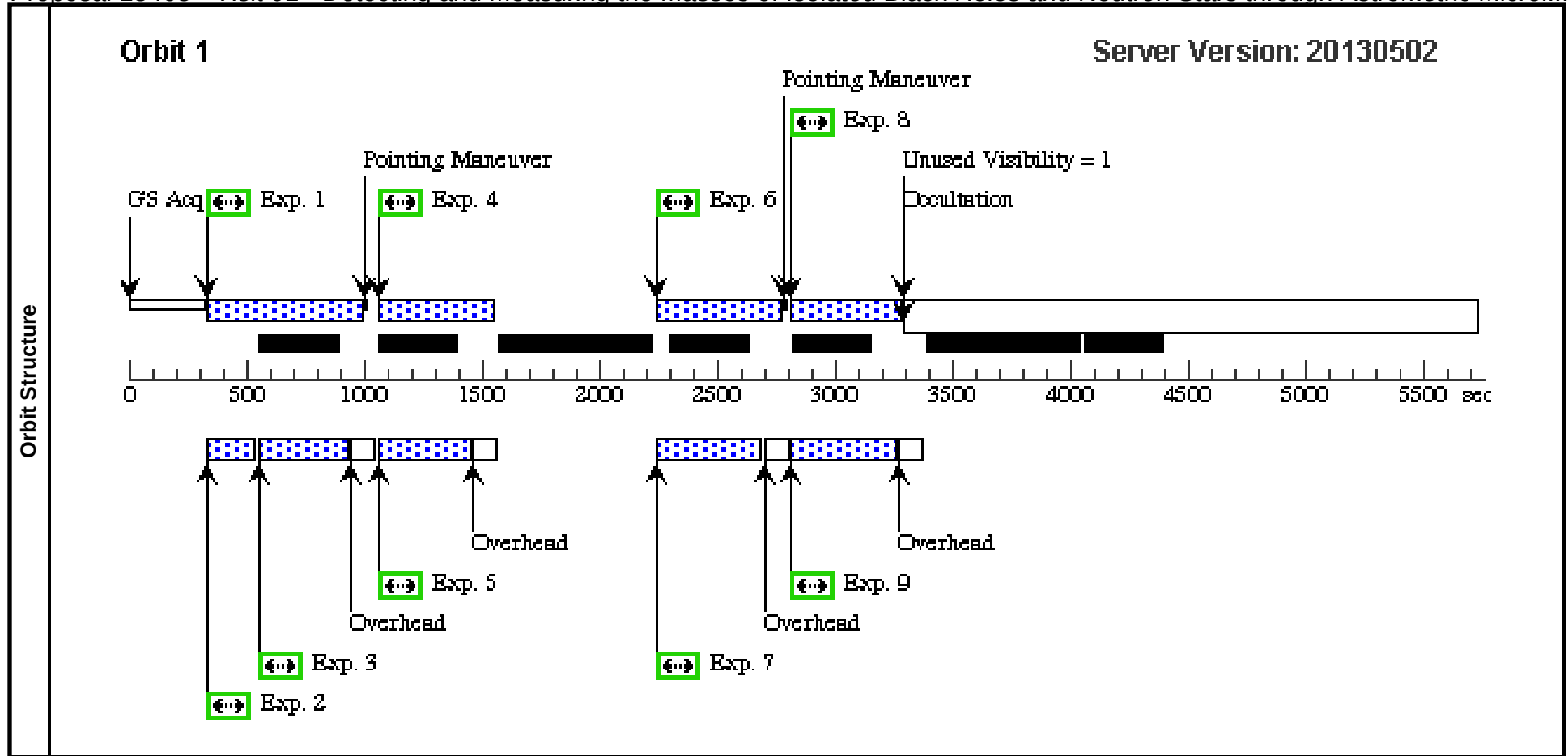
Our observing strategy has been designed to yield the maximum number of microlensing events over a wide range of event timescales, building upon the strong heritage of microlensing surveys in the Galactic bulge from the ground. To both optimize our observing strategy and accurately predict the distribution of microlensing events such a program would characterize, we performed an extensive set of Monte-Carlo simulations, where the intrinsic rates of microlensing events on various timescales were scaled from the OGLE survey (e.g., Udalski et al. 2002). The most efficient strategy is to observe 4 fields with ACS as the prime instrument, and 8 fields with WFC3 as the parallel instrument. These 12 fields would be monitored over the course of a three-year period, with a total of 48 epochs in each of the 4 ACS fields and 24 epochs in each of the 8 WFC3 fields. For the Galactic bulge, we can use just two telescope roll orientations (90 degrees and 270 degrees) throughout the 8-month yearly observing window, with each orientation available for a continuous 4-month interval per year. Our three-year program would thus image the 4 ACS fields for 8 months per year, along with 4 parallel WFC3 fields for 4 months per year, and a second set of another 4 parallel WFC3 fields for the other 4 months per year. A probable layout for these fields is shown in Fig. 7. Because of the abundant observing opportunities, our program does not present a scheduling burden.

Our goal is to characterize the population producing microlensing events on three timescales: short (less than 40 days; bulge lens mass 1 solar mass, dominated by dwarf stars), medium (40 to 70 days; bulge lens mass of 1-3 solar masses, dominated by NSs), and long (longer than 70 days; stellar-mass BHs). An individual microlensing event can be accurately characterized if it has at least 12 photometric samples, with at least 4 photometric samples outside of the event (providing a baseline) and at least 8 photometric samples during the event. Each photometric sample must be in two bands, to ensure the events are achromatic.

Each epoch of observation in each individual field will take one HST single orbit. During that orbit, we will obtain four dithered ACS/WFC images and four parallel WFC3/UVIS images, with each camera's exposures split between F606W and F814W. We have verified that the orbits can be packed in this manner using the APT.

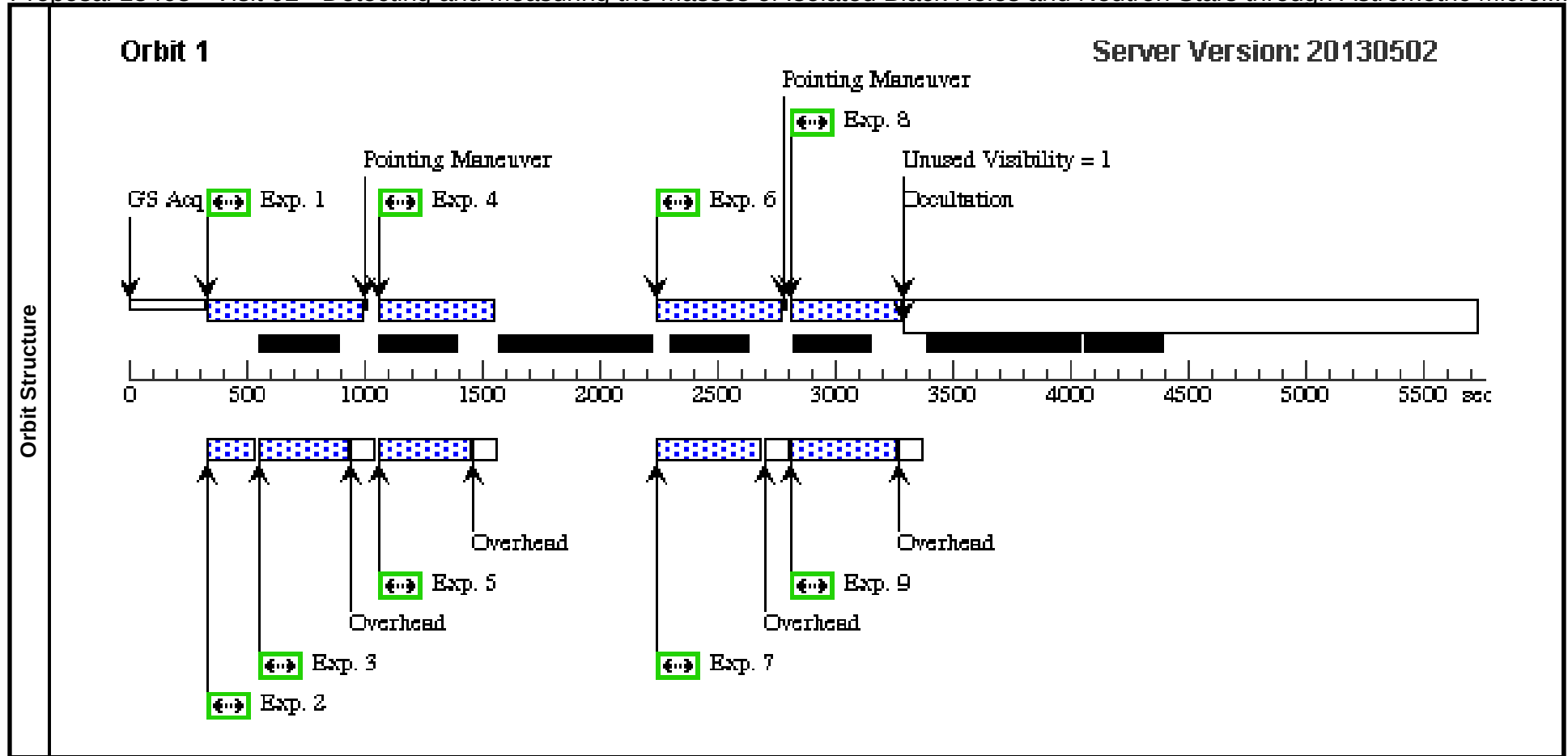
# Proposal 13463 - Visit 01 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 |                                        |                                 |       |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|-----------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 01, implementation <span style="float: right;">Tue Jun 25 03:51:15 GMT 2013</span>                                                                                            |                |                                                                                    |                               |               |                       |                 |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; BETWEEN 09-FEB-2014 AND 12-FEB-2014; VISIBILITY INTERVAL 54.96 M |                |                                                                                    |                               |               |                       |                 |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                                   | Name           | Target Coordinates                                                                 | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                 |                                        |                                 |       |
|               | (5)                                                                                                                                                                                                 | SWEEPS         | RA: 17 59 0.8000 (269.7533333d)<br>Dec: -29 12 0.00 (-29.20000d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                 |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                                   | Label          | Target                                                                             | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.   | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       |                 | Prime + Parallel Group 1-3 in Visit 01 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 | [==>]                                  |                                 | [1]   |
|               | 2                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         | FLASH=7               |                 | Prime + Parallel Group 1-3 in Visit 01 | 50 Secs (50 Secs)               |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 | [==>]                                  |                                 | [1]   |
|               | 3                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                 | Prime + Parallel Group 1-3 in Visit 01 | 380 Secs (380 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 | [==>]                                  |                                 | [1]   |
|               | 4                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG 0,3.75 | Prime + Parallel Group 4-5 in Visit 01 | 365 Secs (365 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 | [==>]                                  |                                 | [1]   |
|               | 5                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                 | Prime + Parallel Group 4-5 in Visit 01 | 390 Secs (390 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 | [==>]                                  |                                 | [1]   |
|               | 6                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 4   | Prime + Parallel Group 6-7 in Visit 01 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 | [==>]                                  |                                 | [1]   |
|               | 7                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                 | Prime + Parallel Group 6-7 in Visit 01 | 420 Secs (420 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 | [==>]                                  |                                 | [1]   |
|               | 8                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 1   | Prime + Parallel Group 8-9 in Visit 01 | 342 Secs (342 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 | [==>]                                  |                                 | [1]   |
|               | 9                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                 | Prime + Parallel Group 8-9 in Visit 01 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 | [==>]                                  |                                 | [1]   |



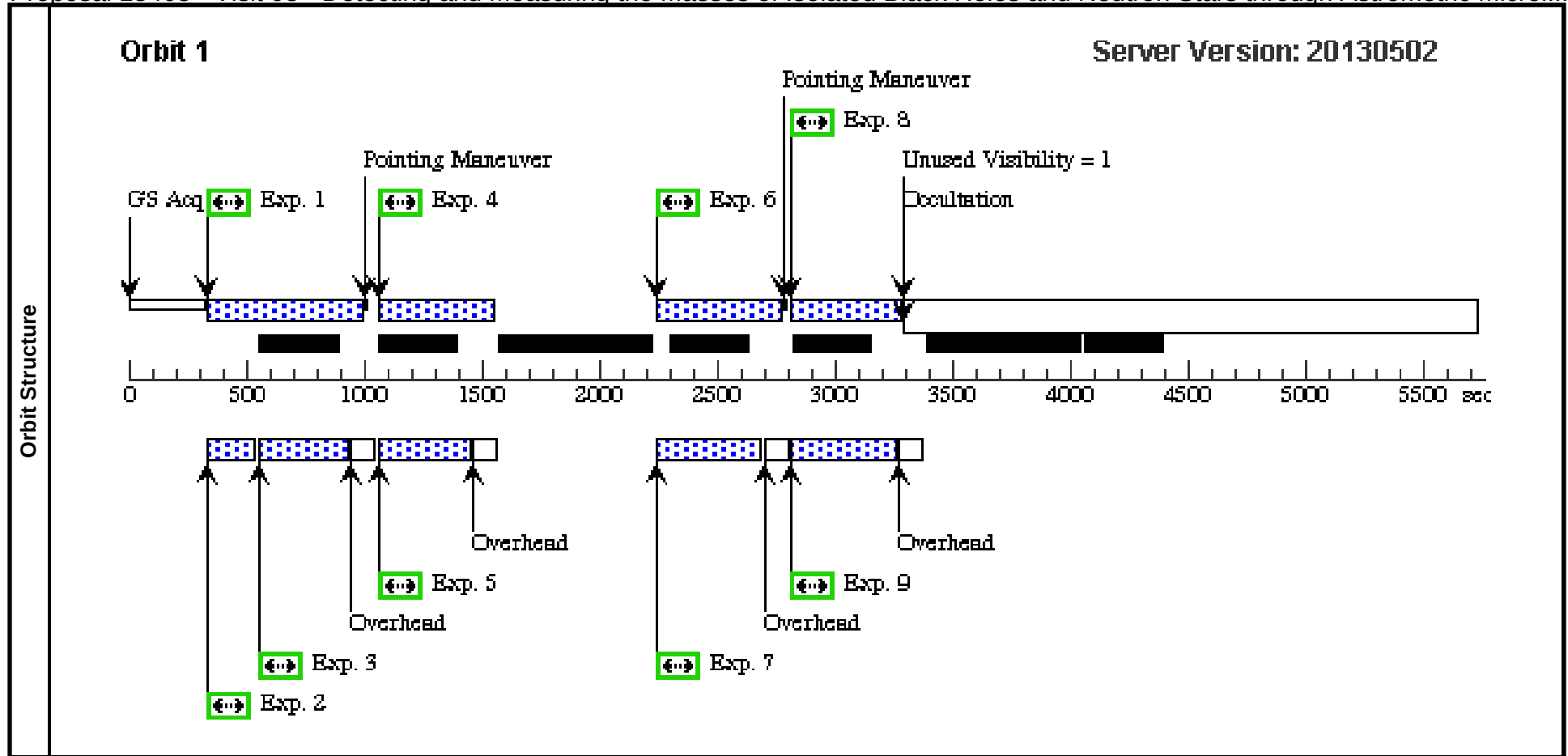
# Proposal 13463 - Visit 02 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                               |                |                                                                                      |                               |               |              |                   |                                        |                                 |       |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|-------------------|----------------------------------------|---------------------------------|-------|
| Visit         | <b>Proposal 13463, Visit 02, implementation</b> <span style="float: right;">Tue Jun 25 03:51:17 GMT 2013</span>                                                                               |                |                                                                                      |                               |               |              |                   |                                        |                                 |       |
|               | <b>Diagnostic Status: No Diagnostics</b><br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 01 BY 0 H TO 2 H; VISIBILITY INTERVAL 54.96 M |                |                                                                                      |                               |               |              |                   |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                             | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       |                   | Miscellaneous                          |                                 |       |
|               | (7)                                                                                                                                                                                           | SWEEPS-L1      | RA: 17 59 16.2271 (269.8176129d)<br>Dec: -29 11 51.36 (-29.19760d)<br>Equinox: J2000 |                               |               | V=25         |                   | Reference Frame: ICRS                  |                                 |       |
| Exposures     | #                                                                                                                                                                                             | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.     | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                             |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              |                   | Prime + Parallel Group 1-3 in Visit 02 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         | FLASH=7      |                   | Prime + Parallel Group 1-3 in Visit 02 | 50 Secs (50 Secs)<br>[==>]      | [1]   |
|               | 3                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                   | Prime + Parallel Group 1-3 in Visit 02 | 380 Secs (380 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                             |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.0,3.75 | Prime + Parallel Group 4-5 in Visit 02 | 365 Secs (365 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                   | Prime + Parallel Group 4-5 in Visit 02 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                             |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 4     | Prime + Parallel Group 6-7 in Visit 02 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                   | Prime + Parallel Group 6-7 in Visit 02 | 420 Secs (420 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                             |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 1     | Prime + Parallel Group 8-9 in Visit 02 | 342 Secs (342 Secs)<br>[==>]    | [1]   |
|               | 9                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                   | Prime + Parallel Group 8-9 in Visit 02 | 450 Secs (450 Secs)<br>[==>]    | [1]   |



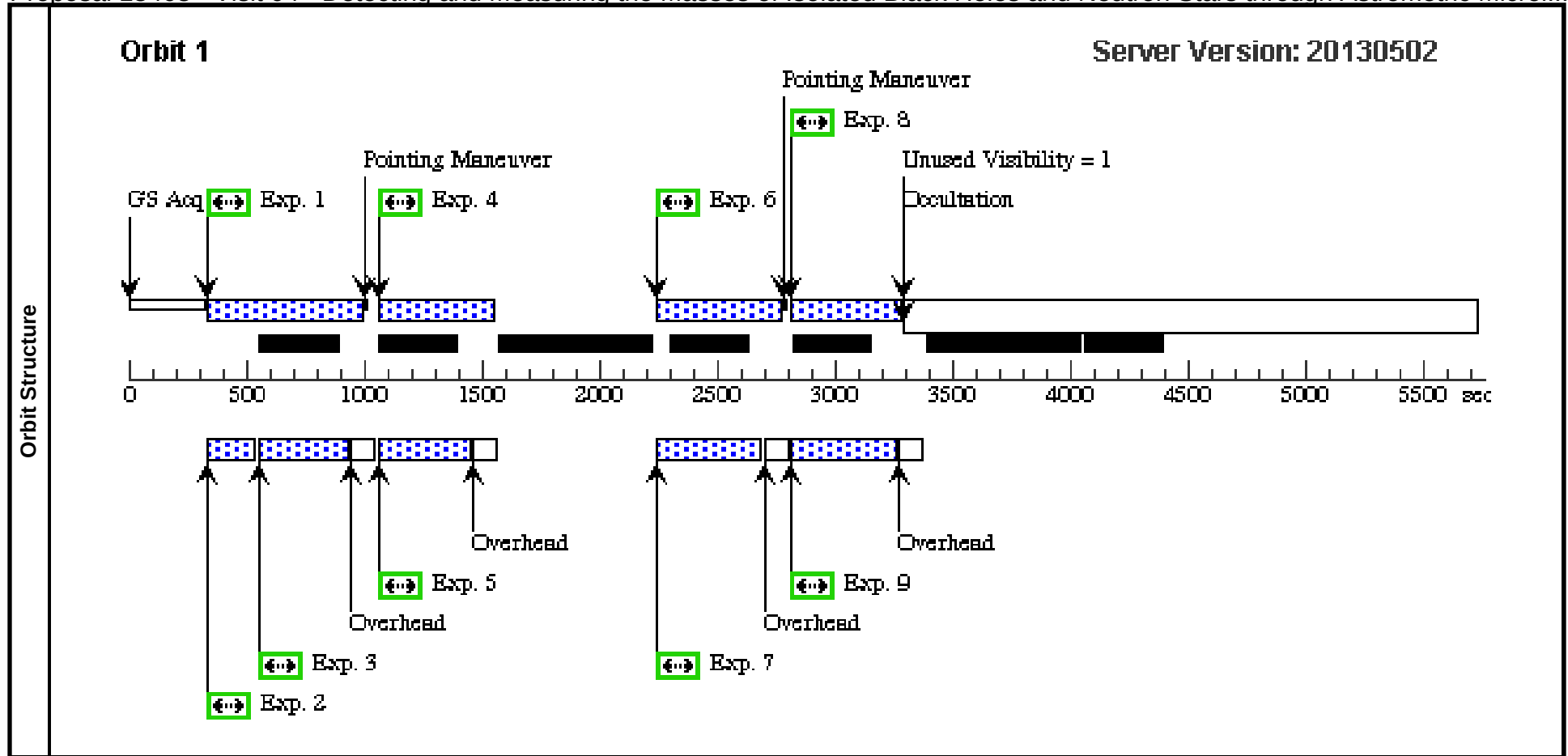
# Proposal 13463 - Visit 03 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                               |                   |                                                                                     |                                  |               |                       |                             |                                            |                                 |       |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------------------------|----------------------------------|---------------|-----------------------|-----------------------------|--------------------------------------------|---------------------------------|-------|
| Visit         | <b>Proposal 13463, Visit 03, implementation</b> <span style="float: right;">Tue Jun 25 03:51:18 GMT 2013</span>                                                                               |                   |                                                                                     |                                  |               |                       |                             |                                            |                                 |       |
|               | <b>Diagnostic Status: No Diagnostics</b><br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 02 BY 0 H TO 2 H; VISIBILITY INTERVAL 54.96 M |                   |                                                                                     |                                  |               |                       |                             |                                            |                                 |       |
| Fixed Targets | #                                                                                                                                                                                             | Name              | Target Coordinates                                                                  | Targ. Coord. Corrections         | Fluxes        | Miscellaneous         |                             |                                            |                                 |       |
|               | (8)                                                                                                                                                                                           | SWEEPS-L2         | RA: 17 59 3.0300 (269.7626250d)<br>Dec: -29 15 20.00 (-29.25556d)<br>Equinox: J2000 |                                  | V=25          | Reference Frame: ICRS |                             |                                            |                                 |       |
| Exposures     | #                                                                                                                                                                                             | Label             | Target                                                                              | Config,Mode,Aperture             | Spectral Els. | Opt. Params.          | Special Reqs.               | Groups                                     | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                             |                   | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER         | F606W         |                       | GS ACQ SCENARI<br>O BASE1B3 | Prime + Parallel Gro<br>up 1-3 in Visit 03 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                             | WFC3 parall<br>el | ANY                                                                                 | WFC3/UVIS, ACCUM,<br>UVIS-CENTER | F606W         | FLASH=7               |                             | Prime + Parallel Gro<br>up 1-3 in Visit 03 | 50 Secs (50 Secs)<br>[==>]      | [1]   |
|               | 3                                                                                                                                                                                             | WFC3 parall<br>el | ANY                                                                                 | WFC3/UVIS, ACCUM,<br>UVIS-CENTER | F606W         |                       |                             | Prime + Parallel Gro<br>up 1-3 in Visit 03 | 380 Secs (380 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                             |                   | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER         | F606W         |                       | POS TARG 0,3.75             | Prime + Parallel Gro<br>up 4-5 in Visit 03 | 365 Secs (365 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                             | WFC3 parall<br>el | ANY                                                                                 | WFC3/UVIS, ACCUM,<br>UVIS-CENTER | F606W         |                       |                             | Prime + Parallel Gro<br>up 4-5 in Visit 03 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                             |                   | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER         | F814W         |                       | SAME POS AS 4               | Prime + Parallel Gro<br>up 6-7 in Visit 03 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                             | WFC3 parall<br>el | ANY                                                                                 | WFC3/UVIS, ACCUM,<br>UVIS-CENTER | F814W         |                       |                             | Prime + Parallel Gro<br>up 6-7 in Visit 03 | 420 Secs (420 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                             |                   | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER         | F814W         |                       | SAME POS AS 1               | Prime + Parallel Gro<br>up 8-9 in Visit 03 | 342 Secs (342 Secs)<br>[==>]    | [1]   |
|               | 9                                                                                                                                                                                             | WFC3 parall<br>el | ANY                                                                                 | WFC3/UVIS, ACCUM,<br>UVIS-CENTER | F814W         |                       |                             | Prime + Parallel Gro<br>up 8-9 in Visit 03 | 450 Secs (450 Secs)<br>[==>]    | [1]   |



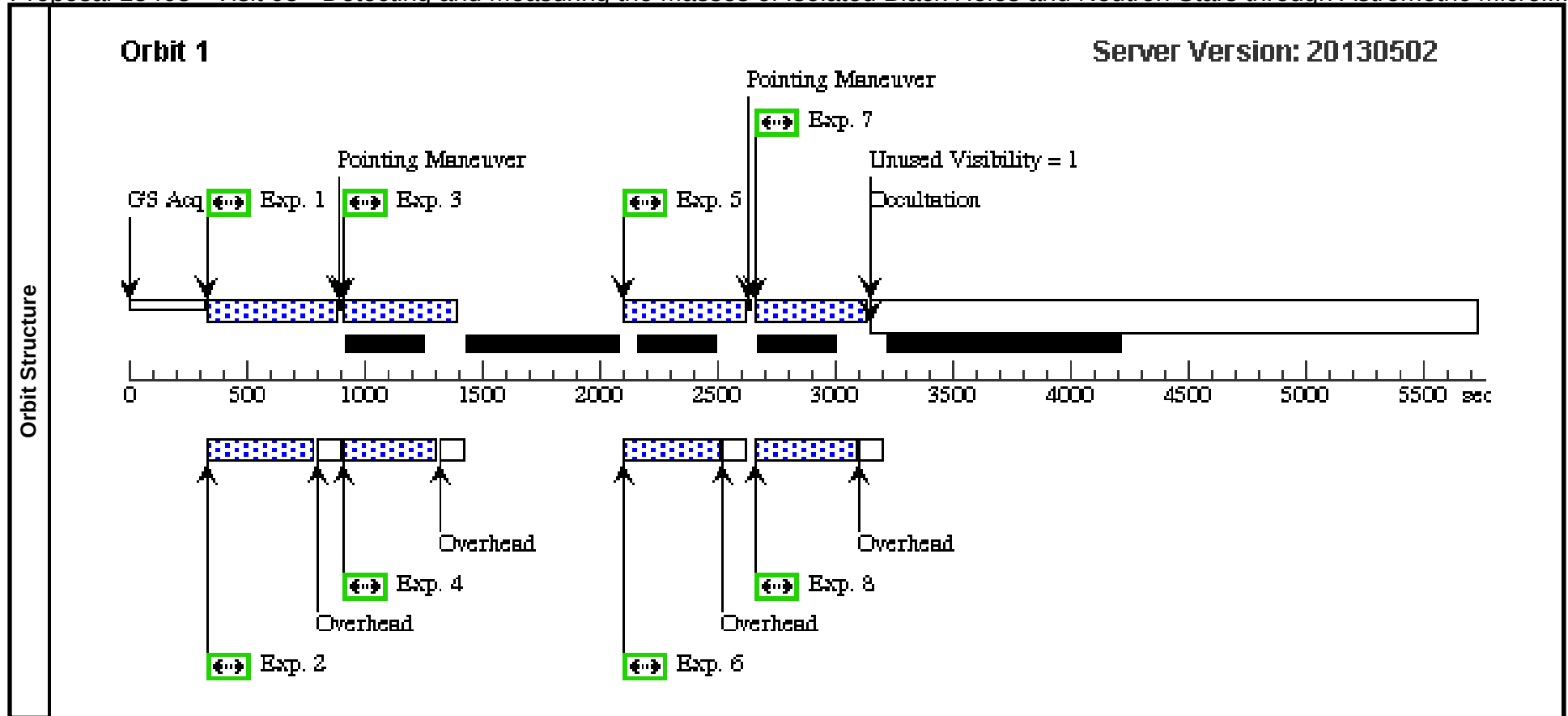
# Proposal 13463 - Visit 04 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|-------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 04, implementation <span style="float: right;">Tue Jun 25 03:51:19 GMT 2013</span>                                                                               |                |                                                                                      |                               |               |                       |                   |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 03 BY 0 H TO 2 H; VISIBILITY INTERVAL 54.96 M |                |                                                                                      |                               |               |                       |                   |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                      | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                   |                                        |                                 |       |
|               | (6)                                                                                                                                                                                    | SWEEPS-R1      | RA: 17 58 47.6030 (269.6983458d)<br>Dec: -29 15 28.64 (-29.25796d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                   |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                      | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.     | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       |                   | Prime + Parallel Group 1-3 in Visit 04 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 2                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         | FLASH=7               |                   | Prime + Parallel Group 1-3 in Visit 04 | 50 Secs (50 Secs)               |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 3                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                   | Prime + Parallel Group 1-3 in Visit 04 | 380 Secs (380 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 4                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG 0.0,3.75 | Prime + Parallel Group 4-5 in Visit 04 | 365 Secs (365 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 5                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                   | Prime + Parallel Group 4-5 in Visit 04 | 390 Secs (390 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 6                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 4     | Prime + Parallel Group 6-7 in Visit 04 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 7                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                   | Prime + Parallel Group 6-7 in Visit 04 | 420 Secs (420 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 8                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 1     | Prime + Parallel Group 8-9 in Visit 04 | 342 Secs (342 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 9                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                   | Prime + Parallel Group 8-9 in Visit 04 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |



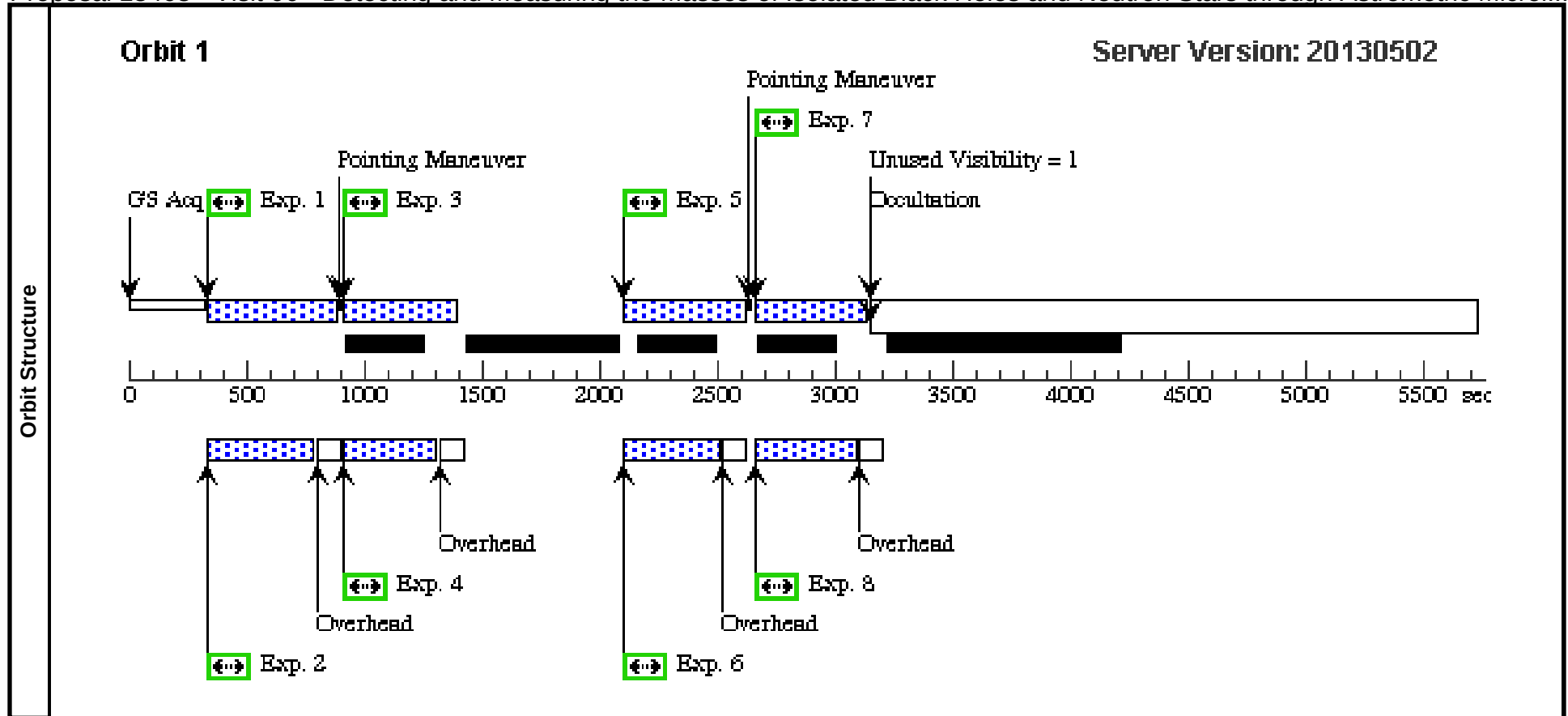
# Proposal 13463 - Visit 05 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 |                                        |                                 |       |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|-----------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 05, implementation <span style="float: right;">Tue Jun 25 03:51:20 GMT 2013</span>                                                                                            |                |                                                                                    |                               |               |                       |                 |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; BETWEEN 26-FEB-2014 AND 01-MAR-2014; VISIBILITY INTERVAL 52.52 M |                |                                                                                    |                               |               |                       |                 |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                                   | Name           | Target Coordinates                                                                 | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                 |                                        |                                 |       |
|               | (5)                                                                                                                                                                                                 | SWEEPS         | RA: 17 59 0.8000 (269.7533333d)<br>Dec: -29 12 0.00 (-29.20000d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                 |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                                   | Label          | Target                                                                             | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.   | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       |                 | Prime + Parallel Group 1-2 in Visit 05 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 | [==>]                                  |                                 | [1]   |
|               | 2                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                 | Prime + Parallel Group 1-2 in Visit 05 | 425 Secs (425 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 | [==>]                                  |                                 | [1]   |
|               | 3                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG 0,3.75 | Prime + Parallel Group 3-4 in Visit 05 | 360 Secs (360 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 | [==>]                                  |                                 | [1]   |
|               | 4                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                 | Prime + Parallel Group 3-4 in Visit 05 | 390 Secs (390 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 | [==>]                                  |                                 | [1]   |
|               | 5                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 3   | Prime + Parallel Group 5-6 in Visit 05 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 | [==>]                                  |                                 | [1]   |
|               | 6                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                 | Prime + Parallel Group 5-6 in Visit 05 | 390 Secs (390 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 | [==>]                                  |                                 | [1]   |
|               | 7                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 1   | Prime + Parallel Group 7-8 in Visit 05 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 | [==>]                                  |                                 | [1]   |
|               | 8                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                 | Prime + Parallel Group 7-8 in Visit 05 | 430 Secs (430 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                 | [==>]                                  |                                 | [1]   |



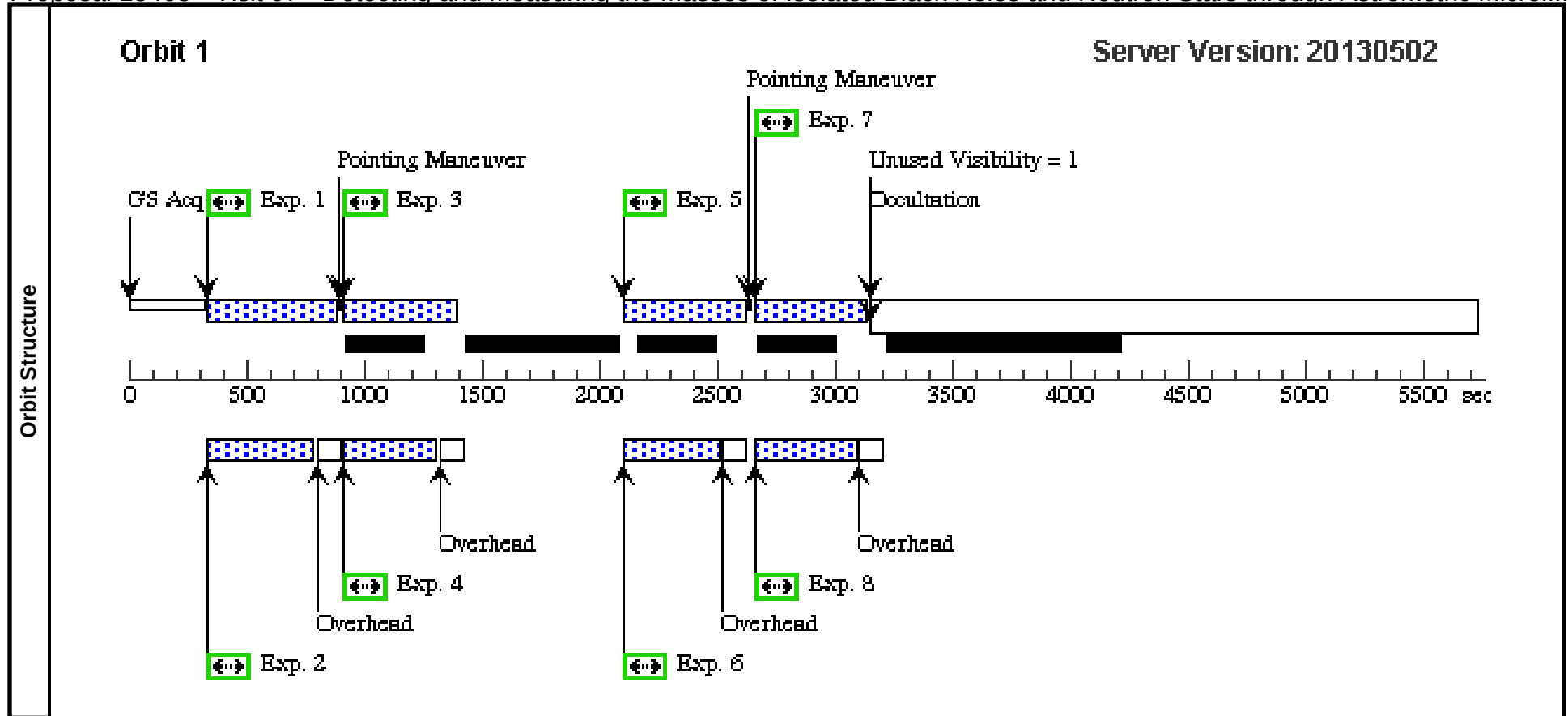
# Proposal 13463 - Visit 06 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|-------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 06, implementation <span style="float: right;">Tue Jun 25 03:51:21 GMT 2013</span>                                                                               |                |                                                                                      |                               |               |                       |                   |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 05 BY 0 H TO 2 H; VISIBILITY INTERVAL 52.52 M |                |                                                                                      |                               |               |                       |                   |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                      | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                   |                                        |                                 |       |
|               | (7)                                                                                                                                                                                    | SWEEPS-L1      | RA: 17 59 16.2271 (269.8176129d)<br>Dec: -29 11 51.36 (-29.19760d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                   |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                      | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.     | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                      |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       |                   | Prime + Parallel Group 1-2 in Visit 06 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 2                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                   | Prime + Parallel Group 1-2 in Visit 06 | 425 Secs (425 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 3                                                                                                                                                                                      |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG 0.0,3.75 | Prime + Parallel Group 3-4 in Visit 06 | 360 Secs (360 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 4                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                   | Prime + Parallel Group 3-4 in Visit 06 | 390 Secs (390 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 5                                                                                                                                                                                      |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 3     | Prime + Parallel Group 5-6 in Visit 06 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 6                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                   | Prime + Parallel Group 5-6 in Visit 06 | 390 Secs (390 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 7                                                                                                                                                                                      |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 1     | Prime + Parallel Group 7-8 in Visit 06 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 8                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                   | Prime + Parallel Group 7-8 in Visit 06 | 430 Secs (430 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |



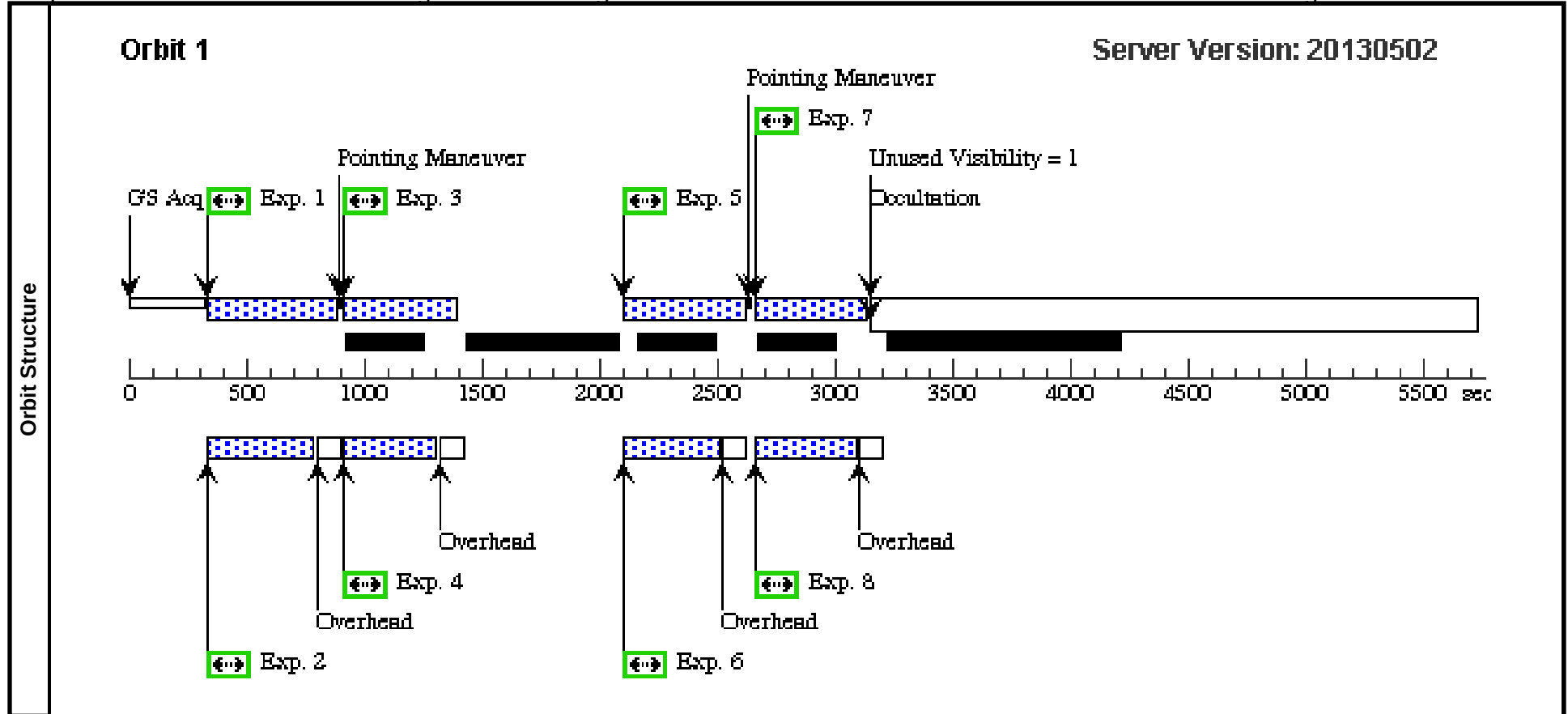
# Proposal 13463 - Visit 07 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                        |                   |                                                                                     |                                  |               |                       |                             |                                            |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------------------------|----------------------------------|---------------|-----------------------|-----------------------------|--------------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 07, implementation <span style="float: right;">Tue Jun 25 03:51:22 GMT 2013</span>                                                                               |                   |                                                                                     |                                  |               |                       |                             |                                            |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 06 BY 0 H TO 2 H; VISIBILITY INTERVAL 52.52 M |                   |                                                                                     |                                  |               |                       |                             |                                            |                                 |       |
| Fixed Targets | #                                                                                                                                                                                      | Name              | Target Coordinates                                                                  | Targ. Coord. Corrections         | Fluxes        | Miscellaneous         |                             |                                            |                                 |       |
|               | (8)                                                                                                                                                                                    | SWEEPS-L2         | RA: 17 59 3.0300 (269.7626250d)<br>Dec: -29 15 20.00 (-29.25556d)<br>Equinox: J2000 |                                  | V=25          | Reference Frame: ICRS |                             |                                            |                                 |       |
| Exposures     | #                                                                                                                                                                                      | Label             | Target                                                                              | Config,Mode,Aperture             | Spectral Els. | Opt. Params.          | Special Reqs.               | Groups                                     | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                      |                   | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER         | F606W         |                       | GS ACQ SCENARI<br>O BASE1B3 | Prime + Parallel Gro<br>up 1-2 in Visit 07 | 340 Secs (340 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                      | WFC3 parall<br>el | ANY                                                                                 | WFC3/UVIS, ACCUM,<br>UVIS-CENTER | F606W         |                       |                             | Prime + Parallel Gro<br>up 1-2 in Visit 07 | 425 Secs (425 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                      |                   | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER         | F606W         |                       | POS TARG 0,3.75             | Prime + Parallel Gro<br>up 3-4 in Visit 07 | 360 Secs (360 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                      | WFC3 parall<br>el | ANY                                                                                 | WFC3/UVIS, ACCUM,<br>UVIS-CENTER | F606W         |                       |                             | Prime + Parallel Gro<br>up 3-4 in Visit 07 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                      |                   | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER         | F814W         |                       | SAME POS AS 3               | Prime + Parallel Gro<br>up 5-6 in Visit 07 | 340 Secs (340 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                      | WFC3 parall<br>el | ANY                                                                                 | WFC3/UVIS, ACCUM,<br>UVIS-CENTER | F814W         |                       |                             | Prime + Parallel Gro<br>up 5-6 in Visit 07 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                      |                   | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER         | F814W         |                       | SAME POS AS 1               | Prime + Parallel Gro<br>up 7-8 in Visit 07 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                      | WFC3 parall<br>el | ANY                                                                                 | WFC3/UVIS, ACCUM,<br>UVIS-CENTER | F814W         |                       |                             | Prime + Parallel Gro<br>up 7-8 in Visit 07 | 430 Secs (430 Secs)<br>[==>]    | [1]   |



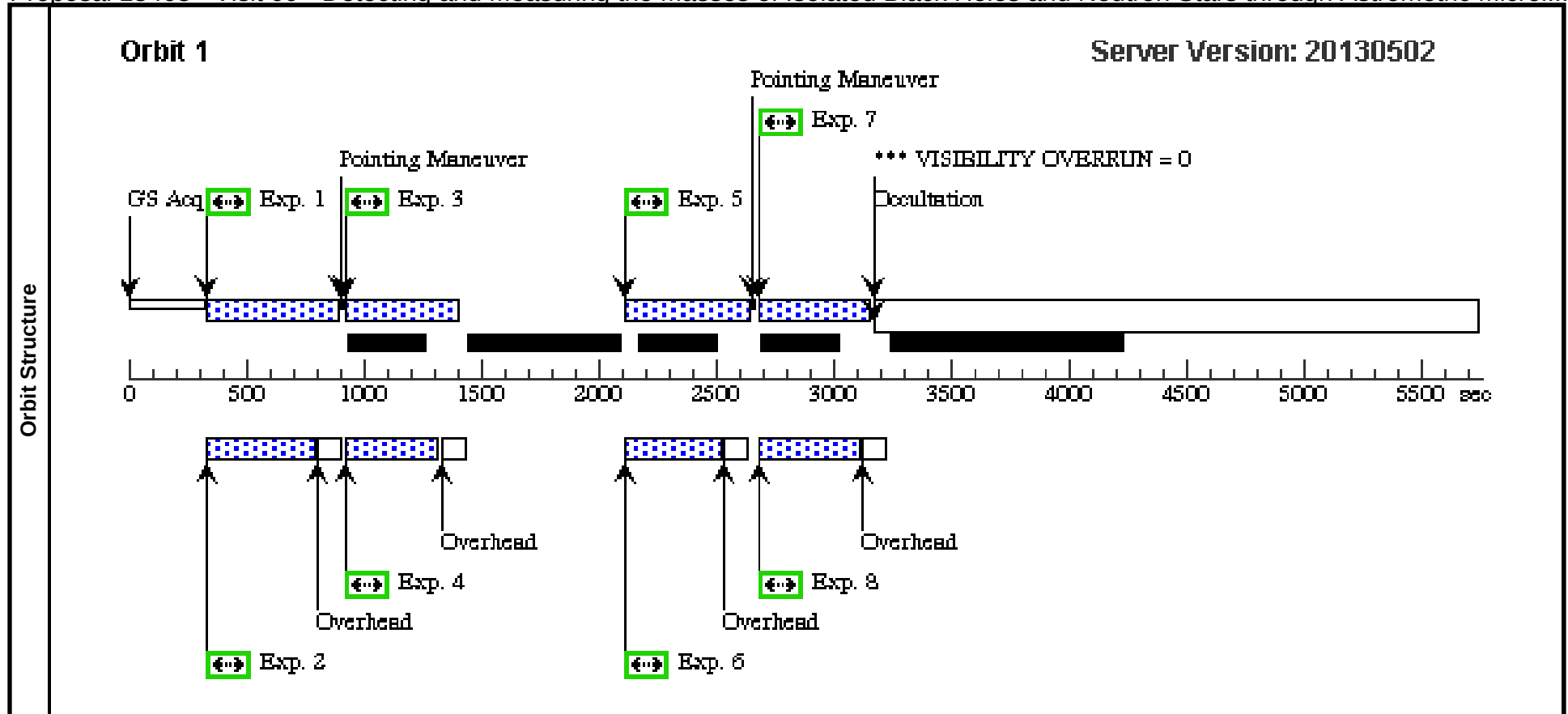
# Proposal 13463 - Visit 08 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 08, implementation <span style="float: right;">Tue Jun 25 03:51:23 GMT 2013</span>                                                                               |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 07 BY 0 H TO 2 H; VISIBILITY INTERVAL 52.52 M |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                      | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous         |                                        |                                 |       |
|               | (6)                                                                                                                                                                                    | SWEEPS-R1      | RA: 17 58 47.6030 (269.6983458d)<br>Dec: -29 15 28.64 (-29.25796d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                      | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              |                       | Prime + Parallel Group 1-2 in Visit 08 | 340 Secs (340 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 1-2 in Visit 08 | 425 Secs (425 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.0,3.75     | Prime + Parallel Group 3-4 in Visit 08 | 360 Secs (360 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 3-4 in Visit 08 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 3         | Prime + Parallel Group 5-6 in Visit 08 | 340 Secs (340 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 5-6 in Visit 08 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 1         | Prime + Parallel Group 7-8 in Visit 08 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 7-8 in Visit 08 | 430 Secs (430 Secs)<br>[==>]    | [1]   |



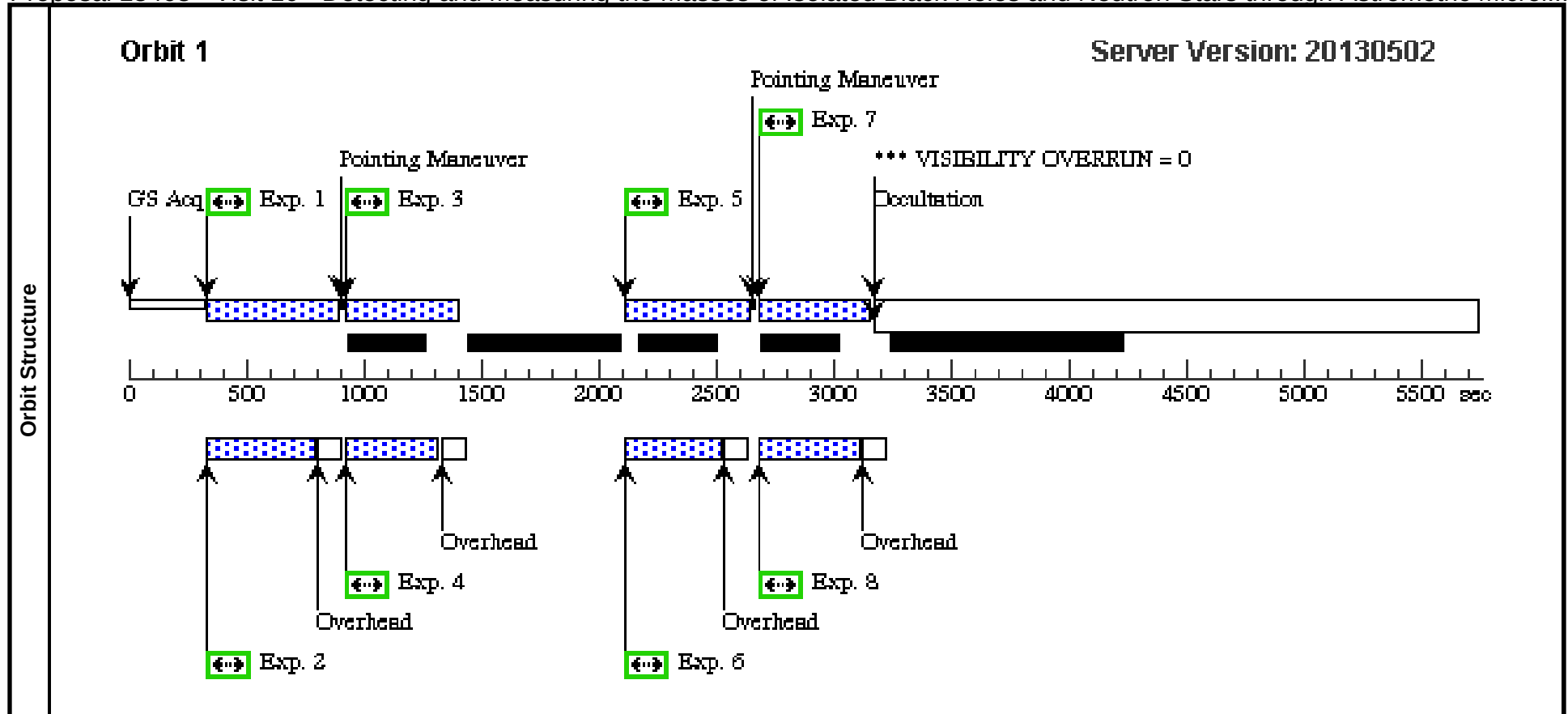
# Proposal 13463 - Visit 09 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                   |                                        |                                 |       |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|-------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 09, implementation <span style="float: right;">Tue Jun 25 03:51:24 GMT 2013</span>                                                                                            |                |                                                                                    |                               |               |                       |                   |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; BETWEEN 15-MAR-2014 AND 18-MAR-2014; VISIBILITY INTERVAL 52.83 M |                |                                                                                    |                               |               |                       |                   |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                                   | Name           | Target Coordinates                                                                 | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                   |                                        |                                 |       |
|               | (5)                                                                                                                                                                                                 | SWEEPS         | RA: 17 59 0.8000 (269.7533333d)<br>Dec: -29 12 0.00 (-29.20000d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                   |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                                   | Label          | Target                                                                             | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.     | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       |                   | Prime + Parallel Group 1-2 in Visit 09 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 2                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                   | Prime + Parallel Group 1-2 in Visit 09 | 430 Secs (430 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 3                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG 0.0,3.75 | Prime + Parallel Group 3-4 in Visit 09 | 360 Secs (360 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 4                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                   | Prime + Parallel Group 3-4 in Visit 09 | 390 Secs (390 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 5                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 3     | Prime + Parallel Group 5-6 in Visit 09 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 6                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                   | Prime + Parallel Group 5-6 in Visit 09 | 390 Secs (390 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 7                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 1     | Prime + Parallel Group 7-8 in Visit 09 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 8                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                   | Prime + Parallel Group 7-8 in Visit 09 | 430 Secs (430 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                   | [==>]                                  |                                 | [1]   |



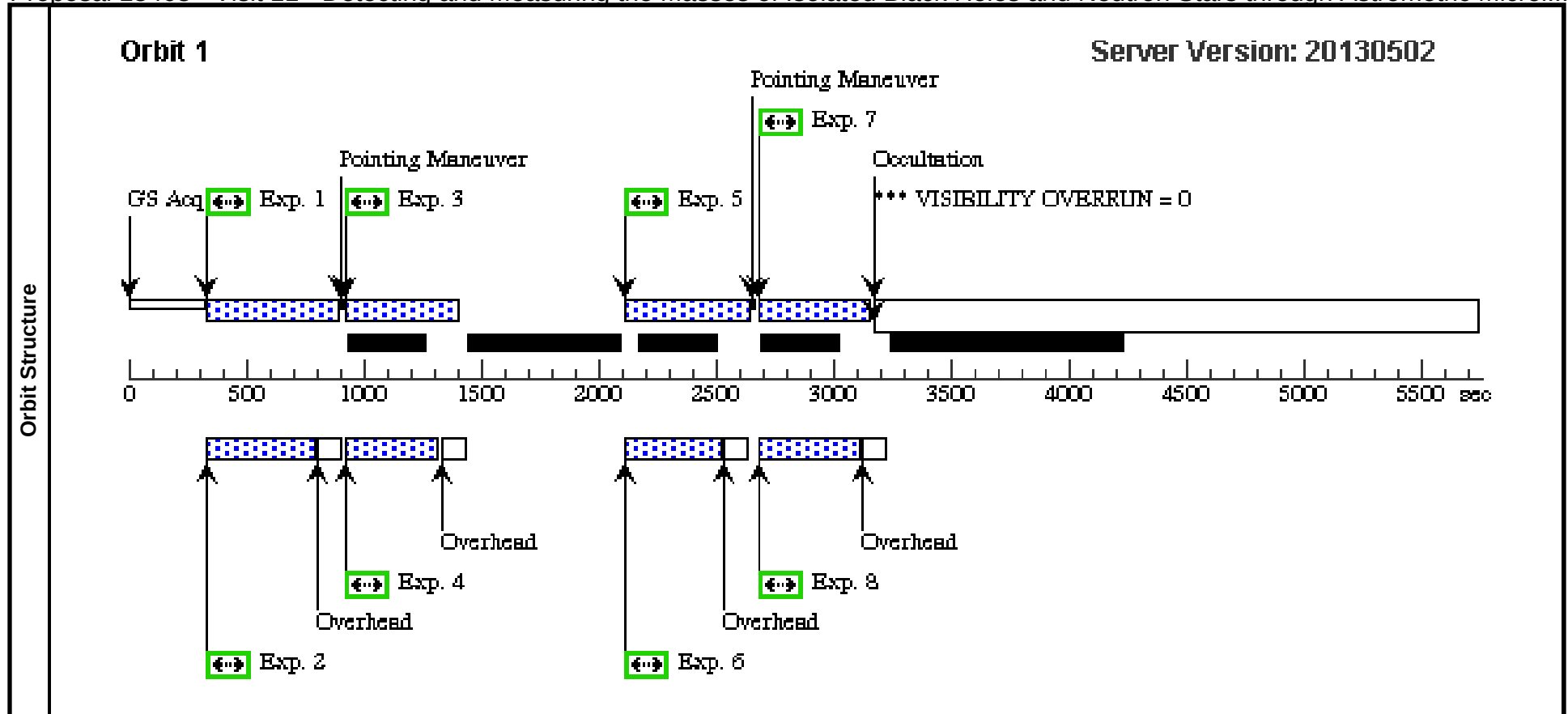
# Proposal 13463 - Visit 10 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |                       |                   |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|-------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 10, implementation <span style="float: right;">Tue Jun 25 03:51:25 GMT 2013</span>                                                                               |                |                                                                                     |                               |               |                       |                   |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 09 BY 0 H TO 2 H; VISIBILITY INTERVAL 52.83 M |                |                                                                                     |                               |               |                       |                   |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                      | Name           | Target Coordinates                                                                  | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                   |                                        |                                 |       |
|               | (8)                                                                                                                                                                                    | SWEEPS-L2      | RA: 17 59 3.0300 (269.7626250d)<br>Dec: -29 15 20.00 (-29.25556d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                   |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                      | Label          | Target                                                                              | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.     | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       |                   | Prime + Parallel Group 1-2 in Visit 10 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                   | Prime + Parallel Group 1-2 in Visit 10 | 430 Secs (430 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG 0.0,3.75 | Prime + Parallel Group 3-4 in Visit 10 | 360 Secs (360 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                   | Prime + Parallel Group 3-4 in Visit 10 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 3     | Prime + Parallel Group 5-6 in Visit 10 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                   | Prime + Parallel Group 5-6 in Visit 10 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 1     | Prime + Parallel Group 7-8 in Visit 10 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                   | Prime + Parallel Group 7-8 in Visit 10 | 430 Secs (430 Secs)<br>[==>]    | [1]   |



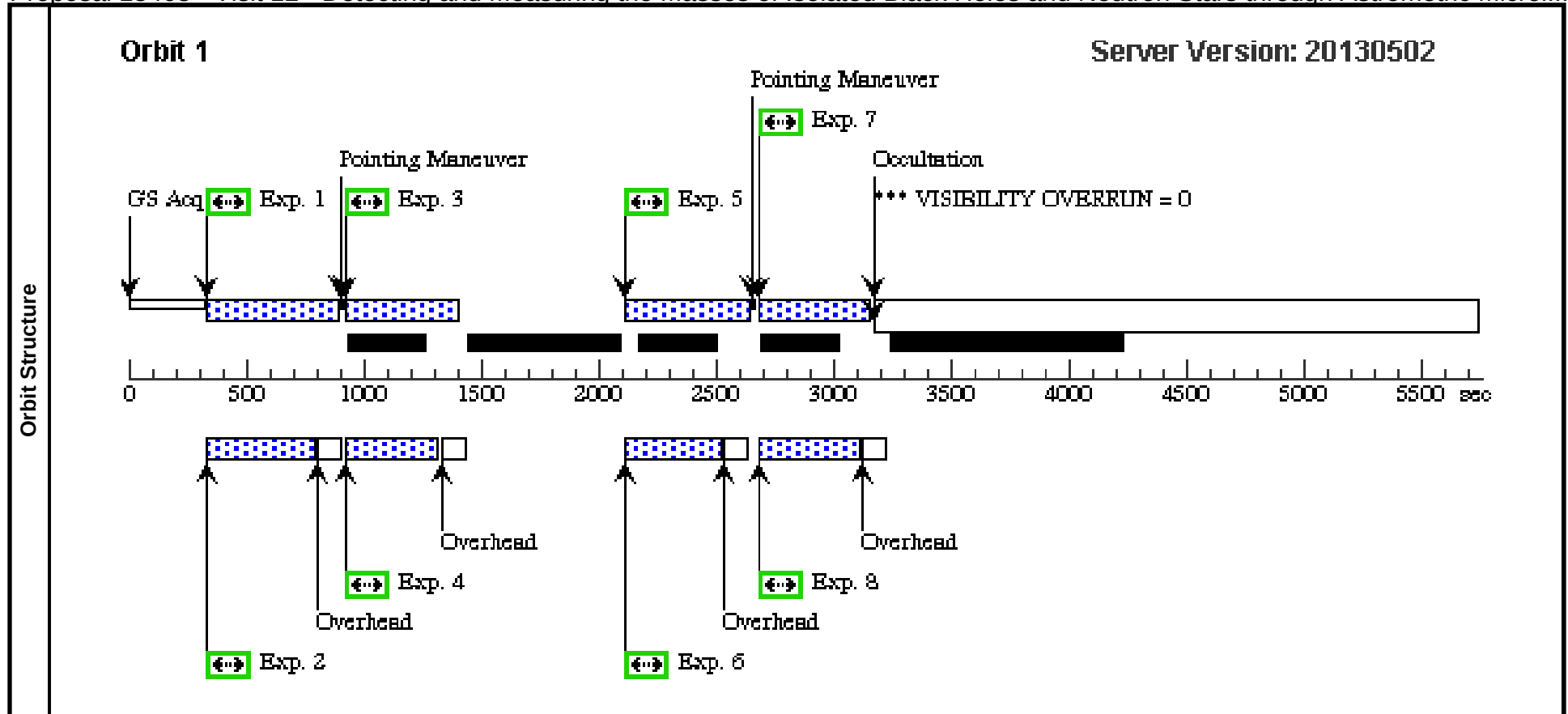
# Proposal 13463 - Visit 11 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|-------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 11, implementation <span style="float: right;">Tue Jun 25 03:51:26 GMT 2013</span>                                                                               |                |                                                                                      |                               |               |                       |                   |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 10 BY 0 H TO 2 H; VISIBILITY INTERVAL 52.83 M |                |                                                                                      |                               |               |                       |                   |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                      | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                   |                                        |                                 |       |
|               | (7)                                                                                                                                                                                    | SWEEPS-L1      | RA: 17 59 16.2271 (269.8176129d)<br>Dec: -29 11 51.36 (-29.19760d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                   |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                      | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.     | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                      |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       |                   | Prime + Parallel Group 1-2 in Visit 11 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                   | Prime + Parallel Group 1-2 in Visit 11 | 430 Secs (430 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                      |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG 0.0,3.75 | Prime + Parallel Group 3-4 in Visit 11 | 360 Secs (360 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                   | Prime + Parallel Group 3-4 in Visit 11 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                      |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 3     | Prime + Parallel Group 5-6 in Visit 11 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                   | Prime + Parallel Group 5-6 in Visit 11 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                      |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 1     | Prime + Parallel Group 7-8 in Visit 11 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                   | Prime + Parallel Group 7-8 in Visit 11 | 430 Secs (430 Secs)<br>[==>]    | [1]   |



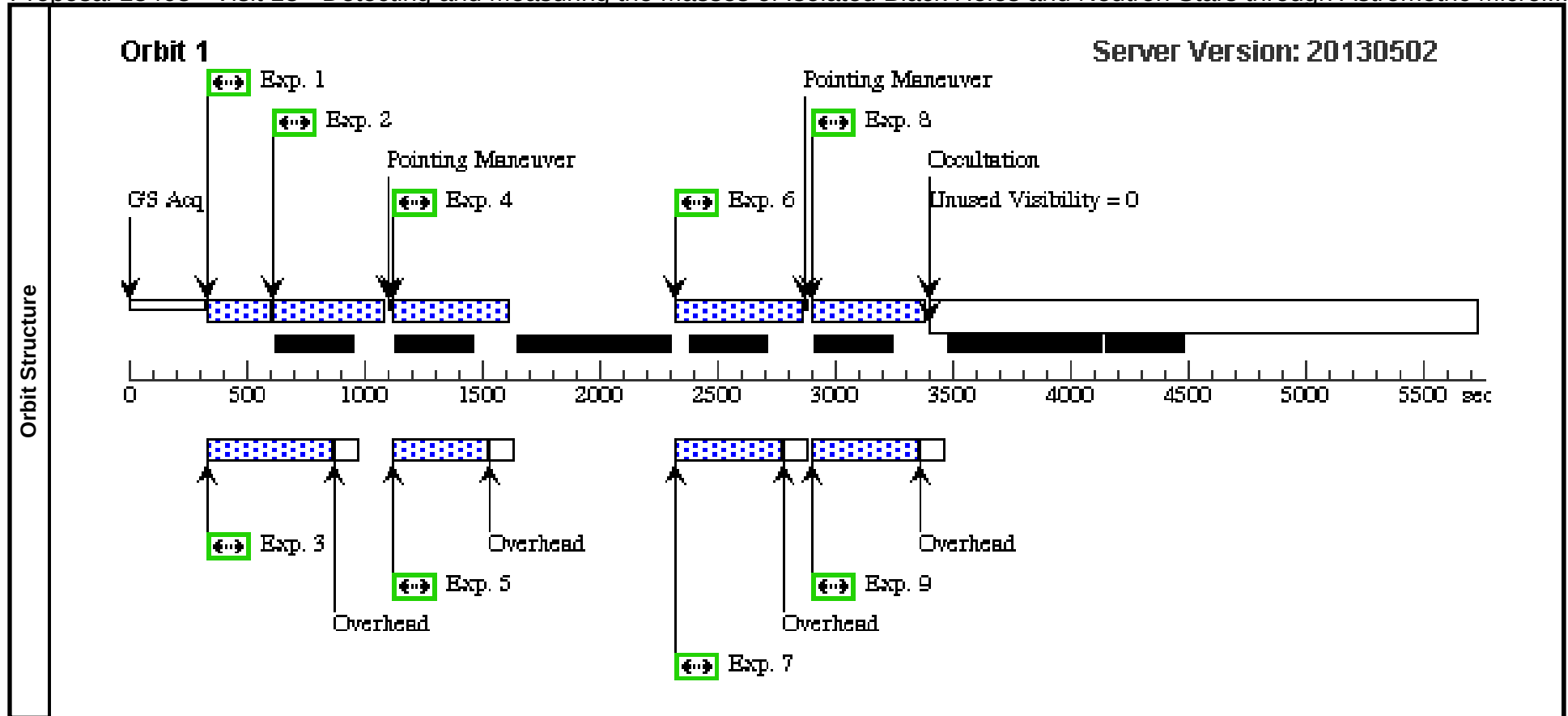
# Proposal 13463 - Visit 12 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|-------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 12, implementation <span style="float: right;">Tue Jun 25 03:51:27 GMT 2013</span>                                                                               |                |                                                                                      |                               |               |                       |                   |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 11 BY 0 H TO 2 H; VISIBILITY INTERVAL 52.83 M |                |                                                                                      |                               |               |                       |                   |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                      | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                   |                                        |                                 |       |
|               | (6)                                                                                                                                                                                    | SWEEPS-R1      | RA: 17 58 47.6030 (269.6983458d)<br>Dec: -29 15 28.64 (-29.25796d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                   |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                      | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.     | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       |                   | Prime + Parallel Group 1-2 in Visit 12 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 2                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                   | Prime + Parallel Group 1-2 in Visit 12 | 430 Secs (430 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 3                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG 0.0,3.75 | Prime + Parallel Group 3-4 in Visit 12 | 360 Secs (360 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 4                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                   | Prime + Parallel Group 3-4 in Visit 12 | 390 Secs (390 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 5                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 3     | Prime + Parallel Group 5-6 in Visit 12 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 6                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                   | Prime + Parallel Group 5-6 in Visit 12 | 390 Secs (390 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 7                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 1     | Prime + Parallel Group 7-8 in Visit 12 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |
|               | 8                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                   | Prime + Parallel Group 7-8 in Visit 12 | 430 Secs (430 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                   | [==>]                                  |                                 | [1]   |



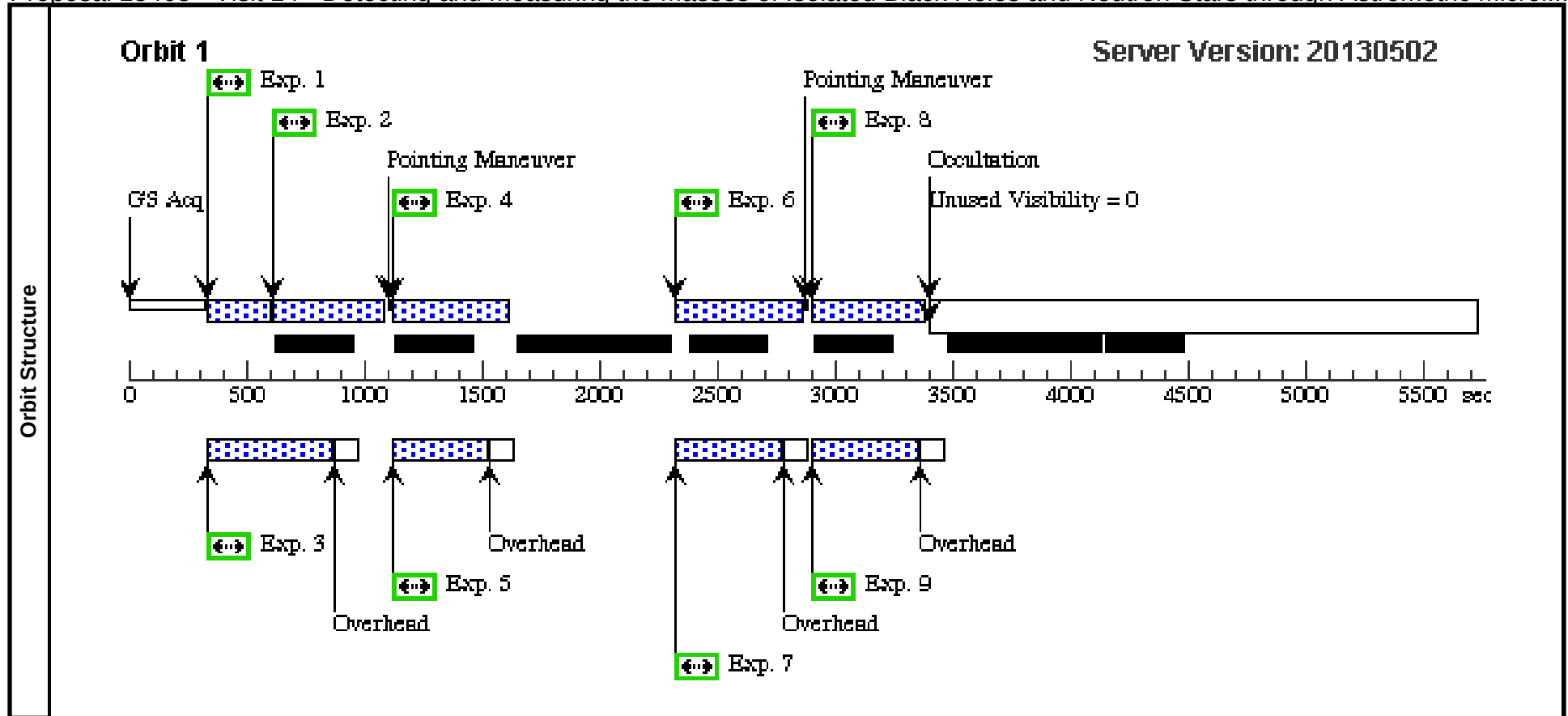
# Proposal 13463 - Visit 13 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |              |                       |                                        |                                 |       |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 13, implementation <span style="float: right;">Tue Jun 25 03:51:27 GMT 2013</span>                                                                                            |                |                                                                                    |                               |               |              |                       |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; BETWEEN 01-APR-2014 AND 04-APR-2014; VISIBILITY INTERVAL 56.70 M |                |                                                                                    |                               |               |              |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                                   | Name           | Target Coordinates                                                                 | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous         |                                        |                                 |       |
|               | (5)                                                                                                                                                                                                 | SWEEPS         | RA: 17 59 0.8000 (269.7533333d)<br>Dec: -29 12 0.00 (-29.20000d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                                   | Label          | Target                                                                             | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         | FLASH=50     | POS TARG 0.125,0.125  | Prime + Parallel Group 1-3 in Visit 13 | 50 Secs (50 Secs)               |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 2                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.125,0.125  | Prime + Parallel Group 1-3 in Visit 13 | 349 Secs (349 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 3                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 1-3 in Visit 13 | 500 Secs (500 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 4                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.125,3.875  | Prime + Parallel Group 4-5 in Visit 13 | 365 Secs (365 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 5                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 4-5 in Visit 13 | 400 Secs (400 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 6                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 4         | Prime + Parallel Group 6-7 in Visit 13 | 363 Secs (363 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 7                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 6-7 in Visit 13 | 430 Secs (430 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 8                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 1         | Prime + Parallel Group 8-9 in Visit 13 | 360 Secs (360 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 9                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 8-9 in Visit 13 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |              |                       |                                        | [==>]                           | [1]   |



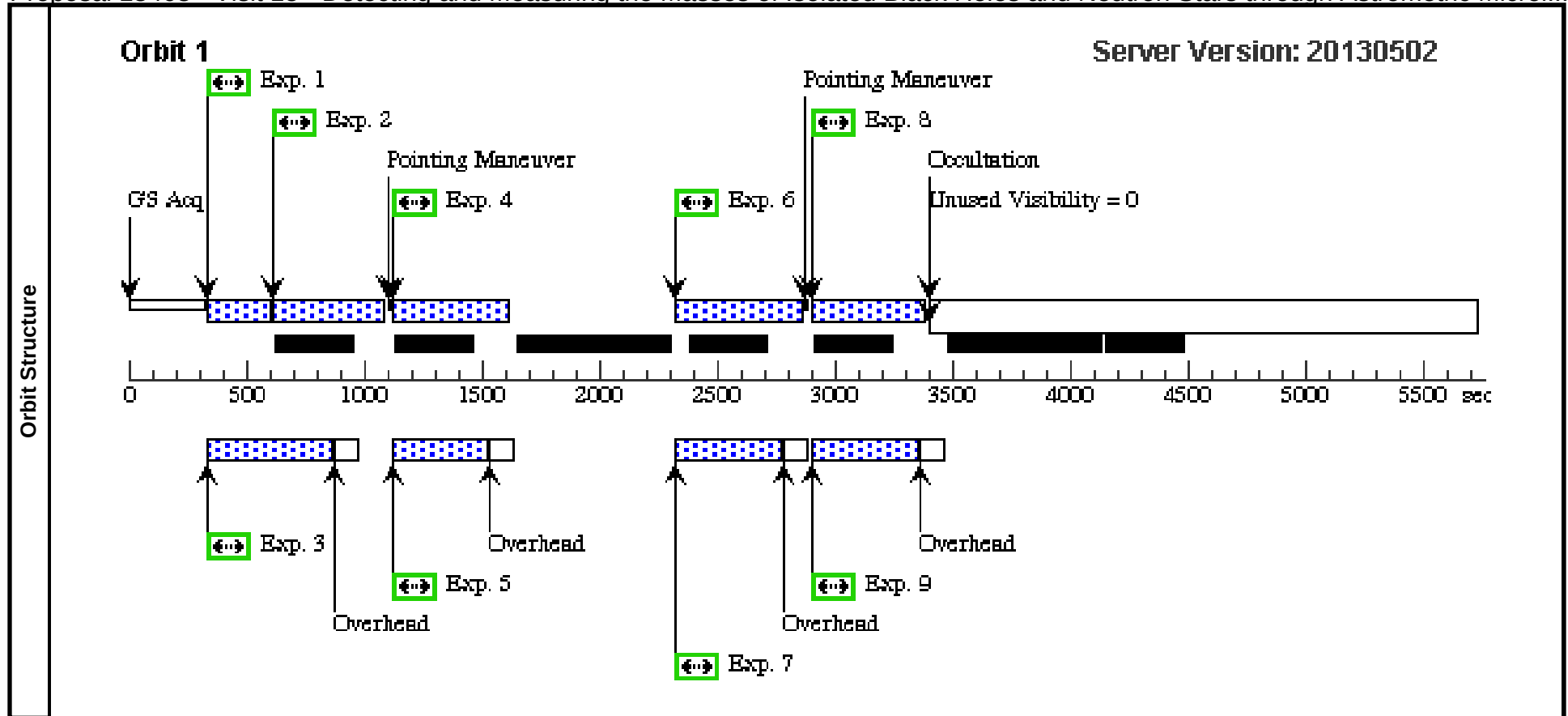
# Proposal 13463 - Visit 14 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |              |                       |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 14, implementation <span style="float: right;">Tue Jun 25 03:51:29 GMT 2013</span>                                                                               |                |                                                                                     |                               |               |              |                       |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 13 BY 0 H TO 2 H; VISIBILITY INTERVAL 56.70 M |                |                                                                                     |                               |               |              |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                      | Name           | Target Coordinates                                                                  | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous         |                                        |                                 |       |
|               | (8)                                                                                                                                                                                    | SWEEPS-L2      | RA: 17 59 3.0300 (269.7626250d)<br>Dec: -29 15 20.00 (-29.25556d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                      | Label          | Target                                                                              | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         | FLASH=50     | POS TARG 0.125,0.125  | Prime + Parallel Group 1-3 in Visit 14 | 50 Secs (50 Secs)               |       |
|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 2                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.125,0.125  | Prime + Parallel Group 1-3 in Visit 14 | 349 Secs (349 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 3                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 1-3 in Visit 14 | 500 Secs (500 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 4                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.125,3.875  | Prime + Parallel Group 4-5 in Visit 14 | 365 Secs (365 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 5                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 4-5 in Visit 14 | 400 Secs (400 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 6                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 4         | Prime + Parallel Group 6-7 in Visit 14 | 363 Secs (363 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 7                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 6-7 in Visit 14 | 430 Secs (430 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 8                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 1         | Prime + Parallel Group 8-9 in Visit 14 | 360 Secs (360 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 9                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 8-9 in Visit 14 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |              |                       |                                        | [==>]                           | [1]   |



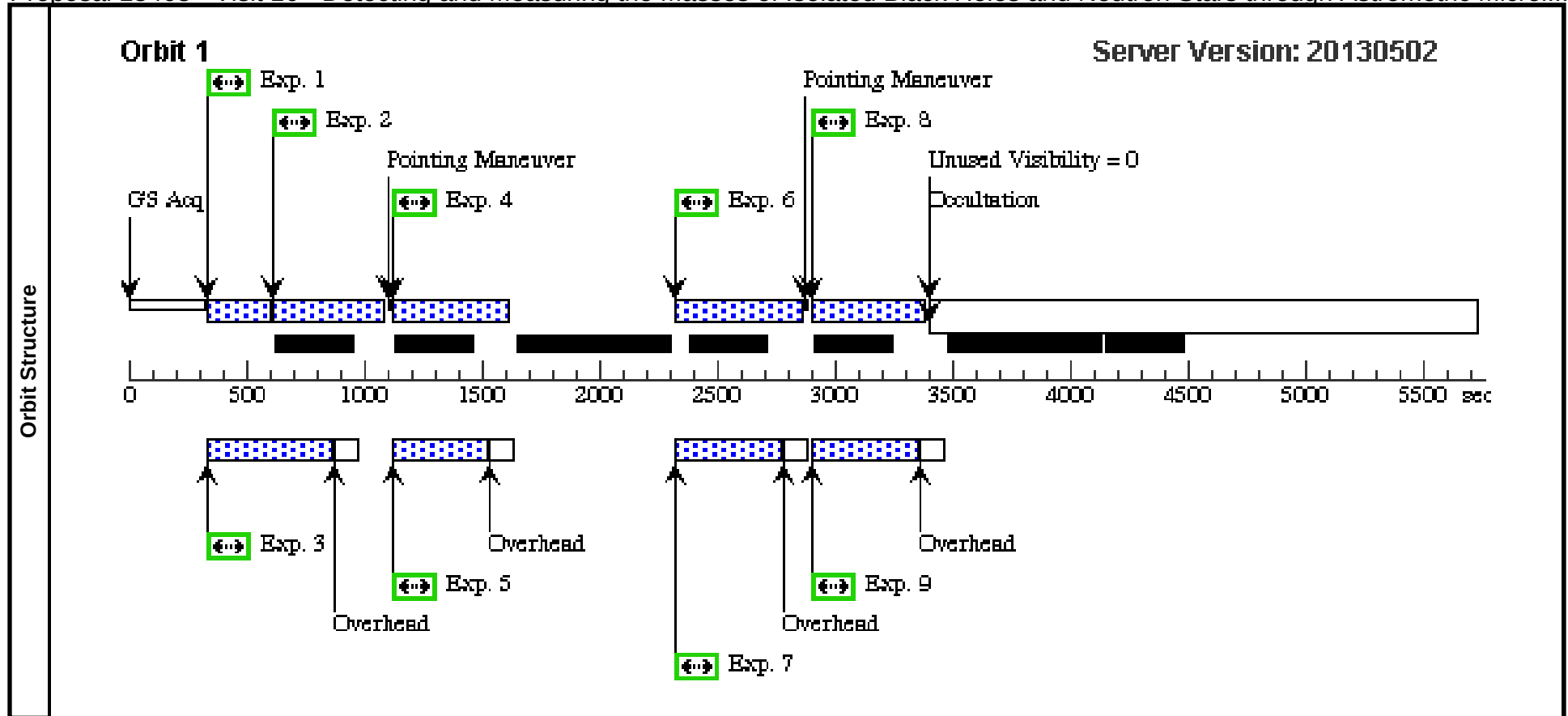
# Proposal 13463 - Visit 15 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                               |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | <b>Proposal 13463, Visit 15, implementation</b> <span style="float: right;">Tue Jun 25 03:51:29 GMT 2013</span>                                                                               |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|               | <b>Diagnostic Status: No Diagnostics</b><br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 14 BY 0 H TO 2 H; VISIBILITY INTERVAL 56.70 M |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                             | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous         |                                        |                                 |       |
|               | (7)                                                                                                                                                                                           | SWEEPS-L1      | RA: 17 59 16.2271 (269.8176129d)<br>Dec: -29 11 51.36 (-29.19760d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                             | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                             |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         | FLASH=50     | POS TARG 0.125,0.125  | Prime + Parallel Group 1-3 in Visit 15 | 50 Secs (50 Secs)<br>[==>]      | [1]   |
|               | 2                                                                                                                                                                                             |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.125,0.125  | Prime + Parallel Group 1-3 in Visit 15 | 349 Secs (349 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 1-3 in Visit 15 | 500 Secs (500 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                             |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.125,3.875  | Prime + Parallel Group 4-5 in Visit 15 | 365 Secs (365 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 4-5 in Visit 15 | 400 Secs (400 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                             |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 4         | Prime + Parallel Group 6-7 in Visit 15 | 363 Secs (363 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 6-7 in Visit 15 | 430 Secs (430 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                             |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 1         | Prime + Parallel Group 8-9 in Visit 15 | 360 Secs (360 Secs)<br>[==>]    | [1]   |
|               | 9                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 8-9 in Visit 15 | 450 Secs (450 Secs)<br>[==>]    | [1]   |



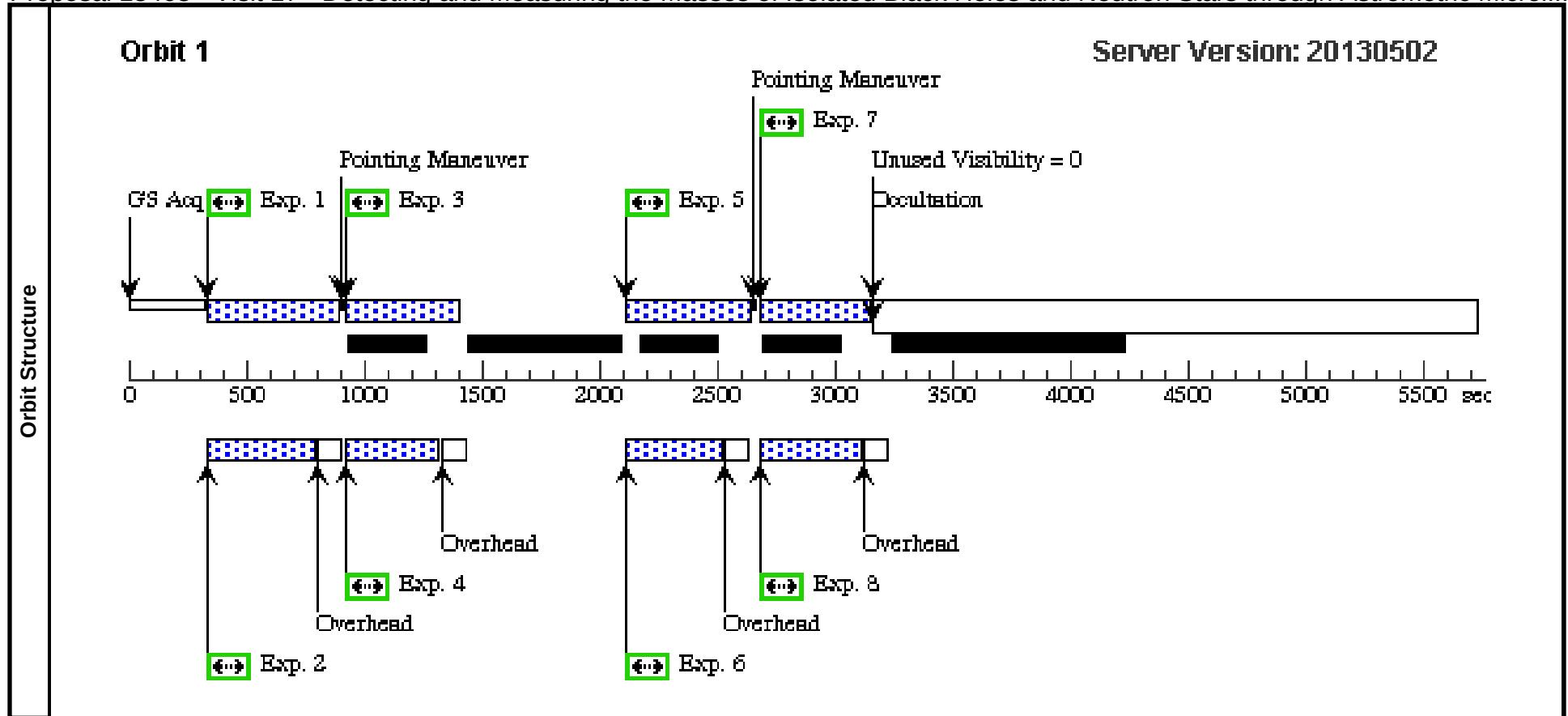
# Proposal 13463 - Visit 16 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 16, implementation <span style="float: right;">Tue Jun 25 03:51:30 GMT 2013</span>                                                                               |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 15 BY 0 H TO 2 H; VISIBILITY INTERVAL 56.70 M |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                      | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous         |                                        |                                 |       |
|               | (6)                                                                                                                                                                                    | SWEEPS-R1      | RA: 17 58 47.6030 (269.6983458d)<br>Dec: -29 15 28.64 (-29.25796d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                      | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         | FLASH=50     | POS TARG 0.125,0.125  | Prime + Parallel Group 1-3 in Visit 16 | 50 Secs (50 Secs)               |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 2                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.125,0.125  | Prime + Parallel Group 1-3 in Visit 16 | 349 Secs (349 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 3                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 1-3 in Visit 16 | 500 Secs (500 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 4                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.125,3.875  | Prime + Parallel Group 4-5 in Visit 16 | 365 Secs (365 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 5                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 4-5 in Visit 16 | 400 Secs (400 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 6                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 4         | Prime + Parallel Group 6-7 in Visit 16 | 363 Secs (363 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 7                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 6-7 in Visit 16 | 430 Secs (430 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 8                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 1         | Prime + Parallel Group 8-9 in Visit 16 | 360 Secs (360 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 9                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 8-9 in Visit 16 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |



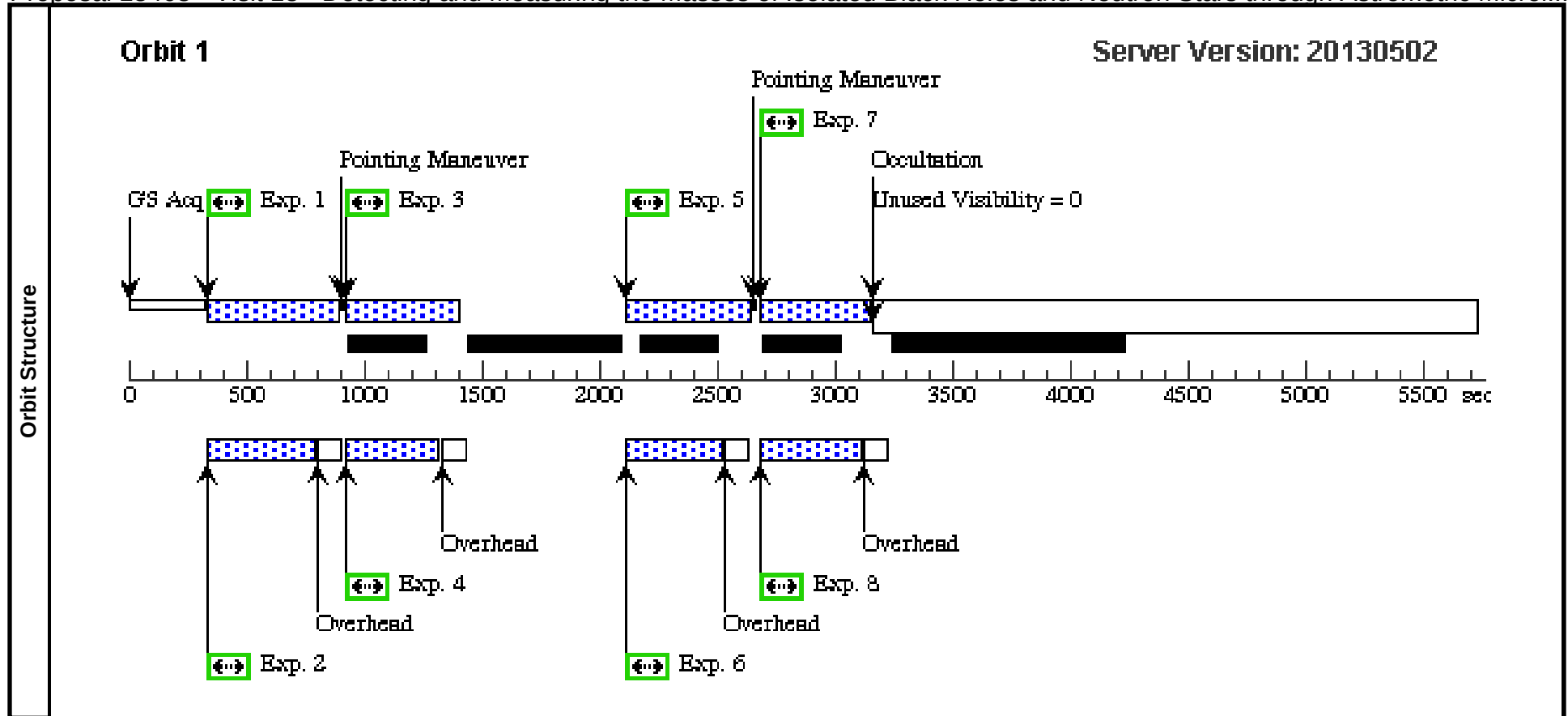
# Proposal 13463 - Visit 17 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |                       |                       |                                        |                                 |       |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 17, implementation <span style="float: right;">Tue Jun 25 03:51:31 GMT 2013</span>                                                                                            |                |                                                                                    |                               |               |                       |                       |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; BETWEEN 17-APR-2014 AND 20-APR-2014; VISIBILITY INTERVAL 52.80 M |                |                                                                                    |                               |               |                       |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                                   | Name           | Target Coordinates                                                                 | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                       |                                        |                                 |       |
|               | (5)                                                                                                                                                                                                 | SWEEPS         | RA: 17 59 0.8000 (269.7533333d)<br>Dec: -29 12 0.00 (-29.20000d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                       |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                                   | Label          | Target                                                                             | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG -0.125,0.125 | Prime + Parallel Group 1-2 in Visit 17 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                       | Prime + Parallel Group 1-2 in Visit 17 | 430 Secs (430 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG -0.125,0.875 | Prime + Parallel Group 3-4 in Visit 17 | 360 Secs (360 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                       | Prime + Parallel Group 3-4 in Visit 17 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 3         | Prime + Parallel Group 5-6 in Visit 17 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                       | Prime + Parallel Group 5-6 in Visit 17 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 1         | Prime + Parallel Group 7-8 in Visit 17 | 348 Secs (348 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                       | Prime + Parallel Group 7-8 in Visit 17 | 430 Secs (430 Secs)<br>[==>]    | [1]   |



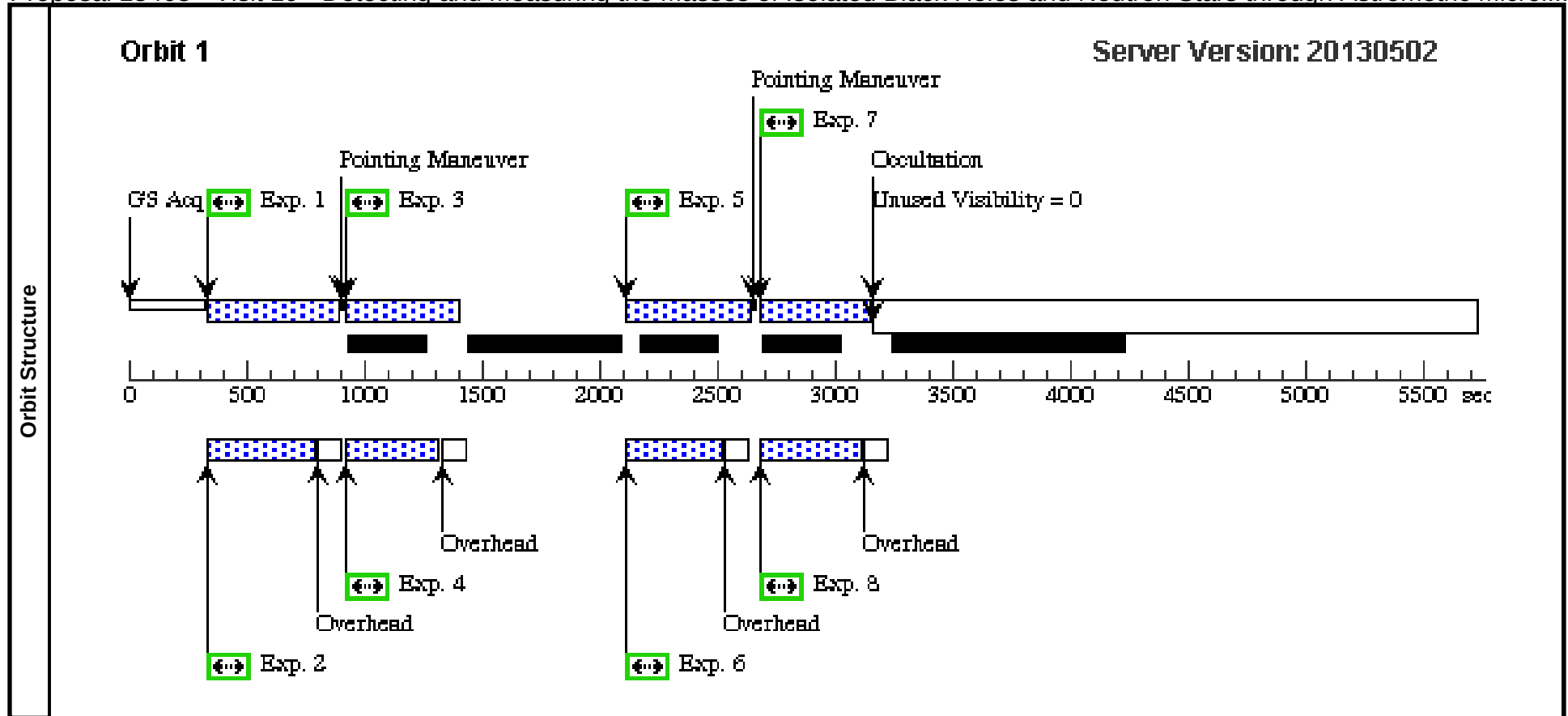
# Proposal 13463 - Visit 18 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |              |                       |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 18, implementation <span style="float: right;">Tue Jun 25 03:51:32 GMT 2013</span>                                                                               |                |                                                                                     |                               |               |              |                       |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 17 BY 0 H TO 2 H; VISIBILITY INTERVAL 52.80 M |                |                                                                                     |                               |               |              |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                      | Name           | Target Coordinates                                                                  | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous         |                                        |                                 |       |
|               | (8)                                                                                                                                                                                    | SWEEPS-L2      | RA: 17 59 3.0300 (269.7626250d)<br>Dec: -29 15 20.00 (-29.25556d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                      | Label          | Target                                                                              | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.125,0.125 | Prime + Parallel Group 1-2 in Visit 18 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 1-2 in Visit 18 | 430 Secs (430 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.125,0.875 | Prime + Parallel Group 3-4 in Visit 18 | 360 Secs (360 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 3-4 in Visit 18 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 3         | Prime + Parallel Group 5-6 in Visit 18 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 5-6 in Visit 18 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 1         | Prime + Parallel Group 7-8 in Visit 18 | 348 Secs (348 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 7-8 in Visit 18 | 430 Secs (430 Secs)<br>[==>]    | [1]   |



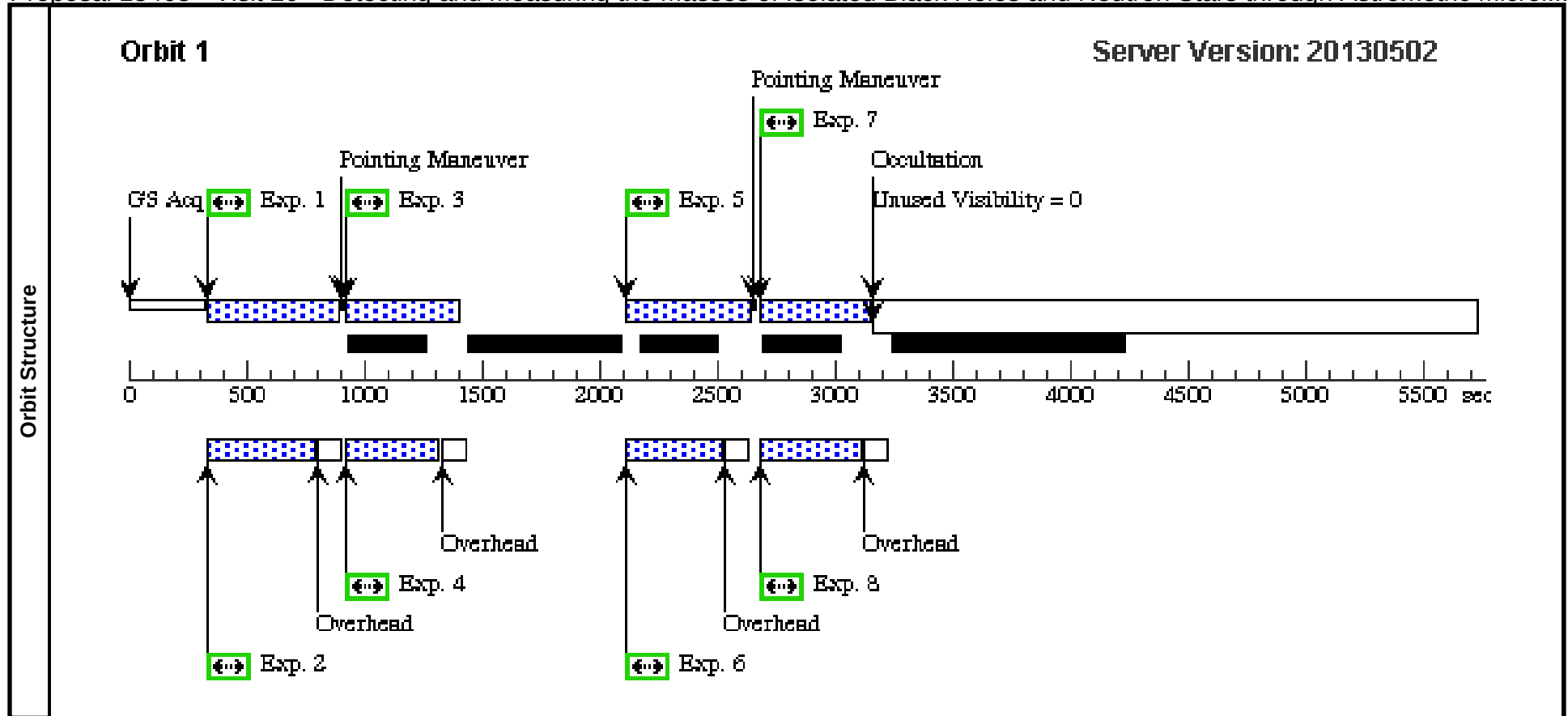
# Proposal 13463 - Visit 19 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 19, implementation <span style="float: right;">Tue Jun 25 03:51:33 GMT 2013</span>                                                                               |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 18 BY 0 H TO 2 H; VISIBILITY INTERVAL 52.80 M |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                      | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous         |                                        |                                 |       |
|               | (7)                                                                                                                                                                                    | SWEEPS-L1      | RA: 17 59 16.2271 (269.8176129d)<br>Dec: -29 11 51.36 (-29.19760d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                      | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                      |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.125,0.125 | Prime + Parallel Group 1-2 in Visit 19 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 1-2 in Visit 19 | 430 Secs (430 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                      |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.125,0.875 | Prime + Parallel Group 3-4 in Visit 19 | 360 Secs (360 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 3-4 in Visit 19 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                      |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 3         | Prime + Parallel Group 5-6 in Visit 19 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 5-6 in Visit 19 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                      |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 1         | Prime + Parallel Group 7-8 in Visit 19 | 348 Secs (348 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 7-8 in Visit 19 | 430 Secs (430 Secs)<br>[==>]    | [1]   |



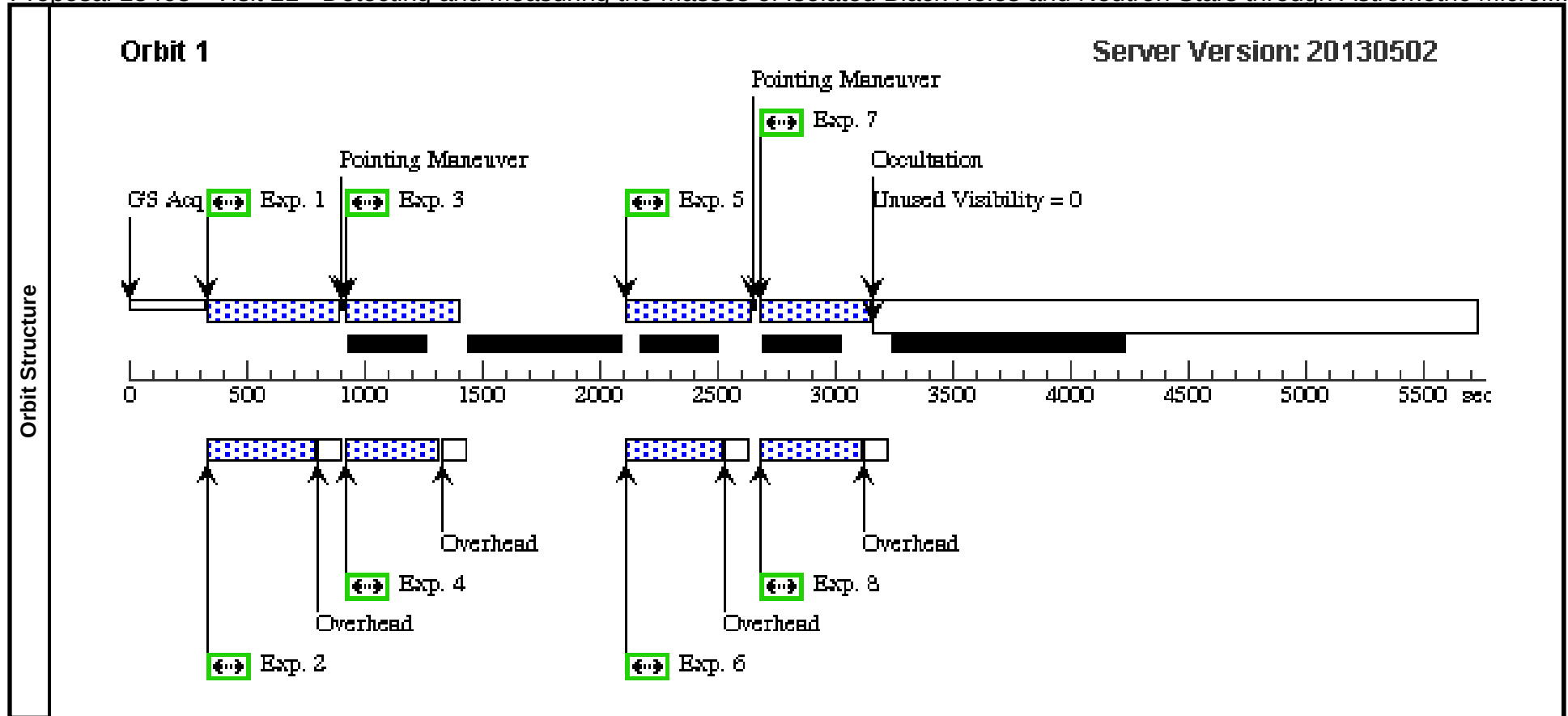
# Proposal 13463 - Visit 20 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                               |                |                                                                                      |                               |               |                       |                       |                                        |                                 |       |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | <b>Proposal 13463, Visit 20, implementation</b> <span style="float: right;">Tue Jun 25 03:51:34 GMT 2013</span>                                                                               |                |                                                                                      |                               |               |                       |                       |                                        |                                 |       |
|               | <b>Diagnostic Status: No Diagnostics</b><br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 19 BY 0 H TO 2 H; VISIBILITY INTERVAL 52.80 M |                |                                                                                      |                               |               |                       |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                             | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                       |                                        |                                 |       |
|               | (6)                                                                                                                                                                                           | SWEEPS-R1      | RA: 17 58 47.6030 (269.6983458d)<br>Dec: -29 15 28.64 (-29.25796d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                       |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                             | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                             |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG -0.125,0.125 | Prime + Parallel Group 1-2 in Visit 20 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                       | Prime + Parallel Group 1-2 in Visit 20 | 430 Secs (430 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                             |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG -0.125,0.875 | Prime + Parallel Group 3-4 in Visit 20 | 360 Secs (360 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                       | Prime + Parallel Group 3-4 in Visit 20 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                             |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 3         | Prime + Parallel Group 5-6 in Visit 20 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                       | Prime + Parallel Group 5-6 in Visit 20 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                             |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 1         | Prime + Parallel Group 7-8 in Visit 20 | 348 Secs (348 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                       | Prime + Parallel Group 7-8 in Visit 20 | 430 Secs (430 Secs)<br>[==>]    | [1]   |



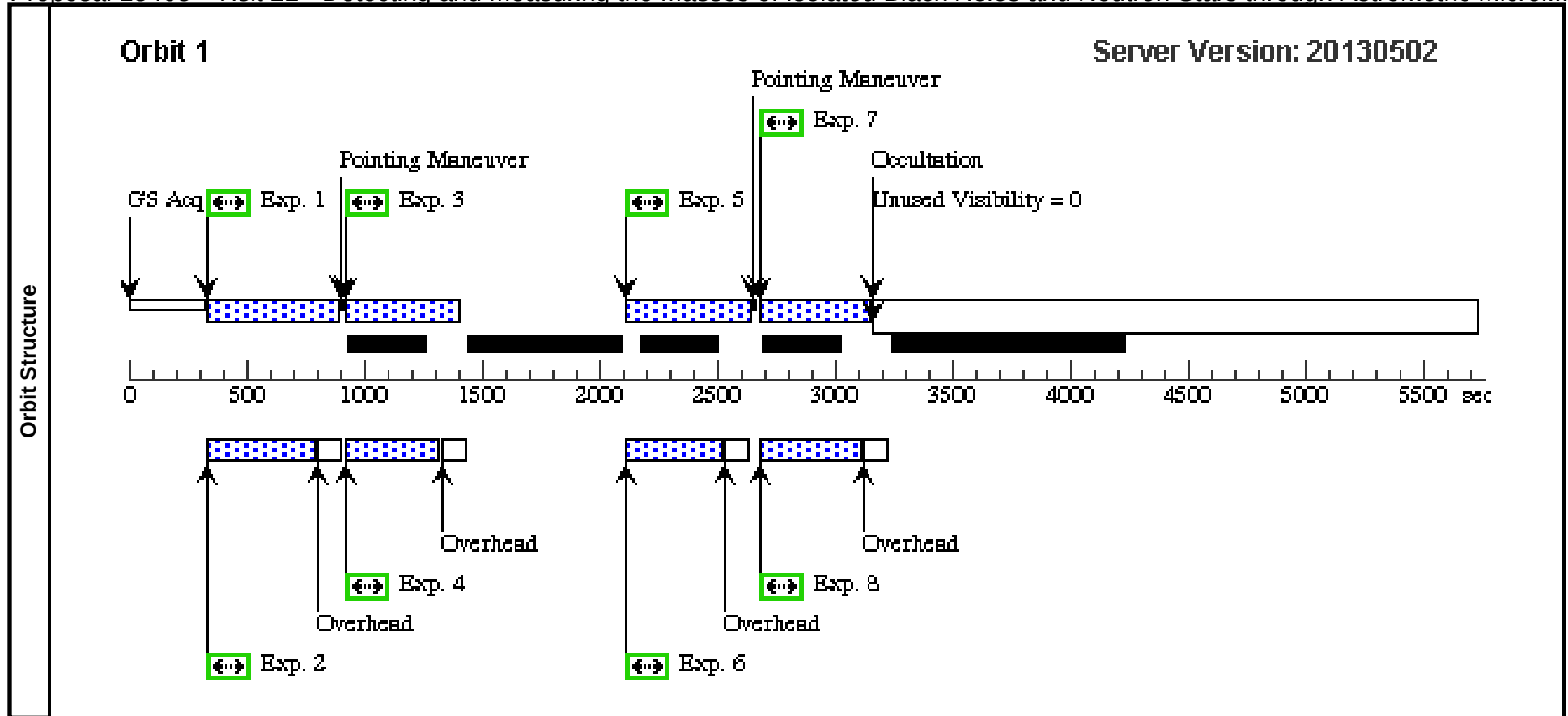
# Proposal 13463 - Visit 21 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |              |                        |                                        |                                 |       |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 21, implementation <span style="float: right;">Tue Jun 25 03:51:35 GMT 2013</span>                                                                                            |                |                                                                                    |                               |               |              |                        |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; BETWEEN 05-MAY-2014 AND 08-MAY-2014; VISIBILITY INTERVAL 52.74 M |                |                                                                                    |                               |               |              |                        |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                                   | Name           | Target Coordinates                                                                 | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous          |                                        |                                 |       |
|               | (5)                                                                                                                                                                                                 | SWEEPS         | RA: 17 59 0.8000 (269.7533333d)<br>Dec: -29 12 0.00 (-29.20000d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS  |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                                   | Label          | Target                                                                             | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.          | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.125,-0.125 | Prime + Parallel Group 1-2 in Visit 21 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                        | Prime + Parallel Group 1-2 in Visit 21 | 430 Secs (430 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.125,3.625  | Prime + Parallel Group 3-4 in Visit 21 | 360 Secs (360 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                        | Prime + Parallel Group 3-4 in Visit 21 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 3          | Prime + Parallel Group 5-6 in Visit 21 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                        | Prime + Parallel Group 5-6 in Visit 21 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 1          | Prime + Parallel Group 7-8 in Visit 21 | 344 Secs (344 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                        | Prime + Parallel Group 7-8 in Visit 21 | 430 Secs (430 Secs)<br>[==>]    | [1]   |



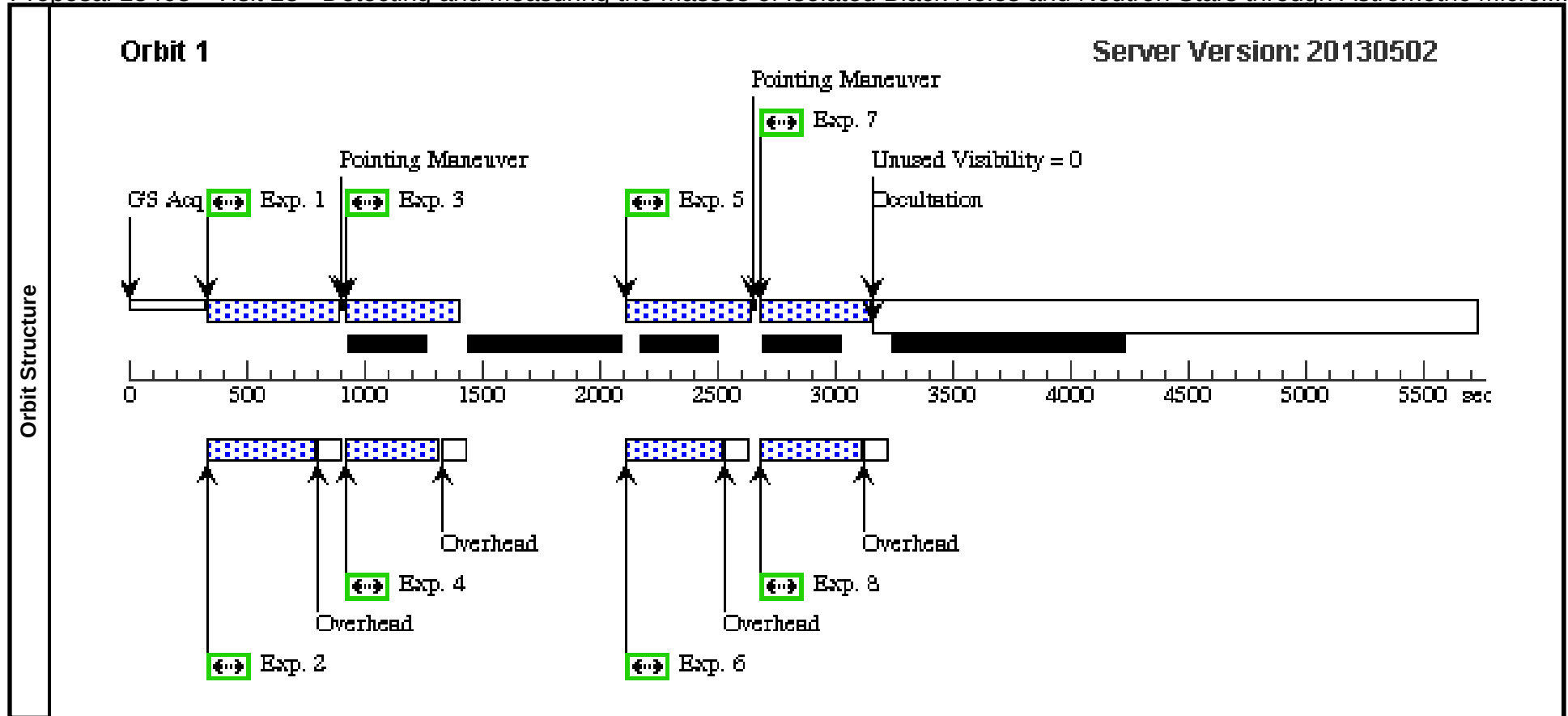
# Proposal 13463 - Visit 22 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |                       |                        |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 22, implementation <span style="float: right;">Tue Jun 25 03:51:36 GMT 2013</span>                                                                               |                |                                                                                     |                               |               |                       |                        |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 21 BY 0 H TO 2 H; VISIBILITY INTERVAL 52.74 M |                |                                                                                     |                               |               |                       |                        |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                      | Name           | Target Coordinates                                                                  | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                        |                                        |                                 |       |
|               | (8)                                                                                                                                                                                    | SWEEPS-L2      | RA: 17 59 3.0300 (269.7626250d)<br>Dec: -29 15 20.00 (-29.25556d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                        |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                      | Label          | Target                                                                              | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.          | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG -0.125,-0.125 | Prime + Parallel Group 1-2 in Visit 22 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                        | Prime + Parallel Group 1-2 in Visit 22 | 430 Secs (430 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG -0.125,3.625  | Prime + Parallel Group 3-4 in Visit 22 | 360 Secs (360 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                        | Prime + Parallel Group 3-4 in Visit 22 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 3          | Prime + Parallel Group 5-6 in Visit 22 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                        | Prime + Parallel Group 5-6 in Visit 22 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 1          | Prime + Parallel Group 7-8 in Visit 22 | 344 Secs (344 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                        | Prime + Parallel Group 7-8 in Visit 22 | 430 Secs (430 Secs)<br>[==>]    | [1]   |



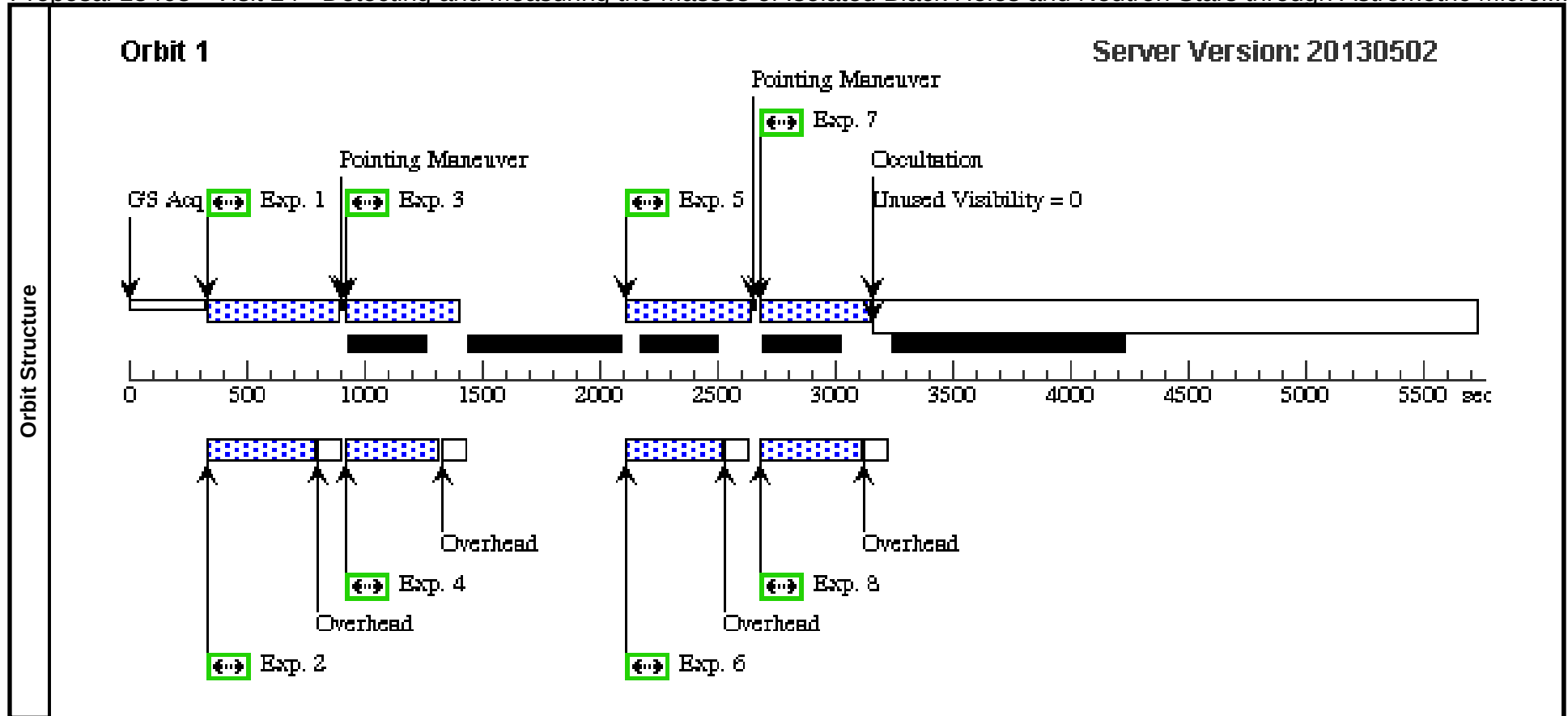
# Proposal 13463 - Visit 23 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                               |                |                                                                                      |                               |               |                       |                        |                                        |                                 |       |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | <b>Proposal 13463, Visit 23, implementation</b> <span style="float: right;">Tue Jun 25 03:51:36 GMT 2013</span>                                                                               |                |                                                                                      |                               |               |                       |                        |                                        |                                 |       |
|               | <b>Diagnostic Status: No Diagnostics</b><br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 22 BY 0 H TO 2 H; VISIBILITY INTERVAL 52.74 M |                |                                                                                      |                               |               |                       |                        |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                             | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                        |                                        |                                 |       |
|               | (7)                                                                                                                                                                                           | SWEEPS-L1      | RA: 17 59 16.2271 (269.8176129d)<br>Dec: -29 11 51.36 (-29.19760d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                        |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                             | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.          | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                             |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG -0.125,-0.125 | Prime + Parallel Group 1-2 in Visit 23 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                        | Prime + Parallel Group 1-2 in Visit 23 | 430 Secs (430 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                             |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG -0.125,3.625  | Prime + Parallel Group 3-4 in Visit 23 | 360 Secs (360 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                        | Prime + Parallel Group 3-4 in Visit 23 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                             |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 3          | Prime + Parallel Group 5-6 in Visit 23 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                        | Prime + Parallel Group 5-6 in Visit 23 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                             |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 1          | Prime + Parallel Group 7-8 in Visit 23 | 344 Secs (344 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                        | Prime + Parallel Group 7-8 in Visit 23 | 430 Secs (430 Secs)<br>[==>]    | [1]   |



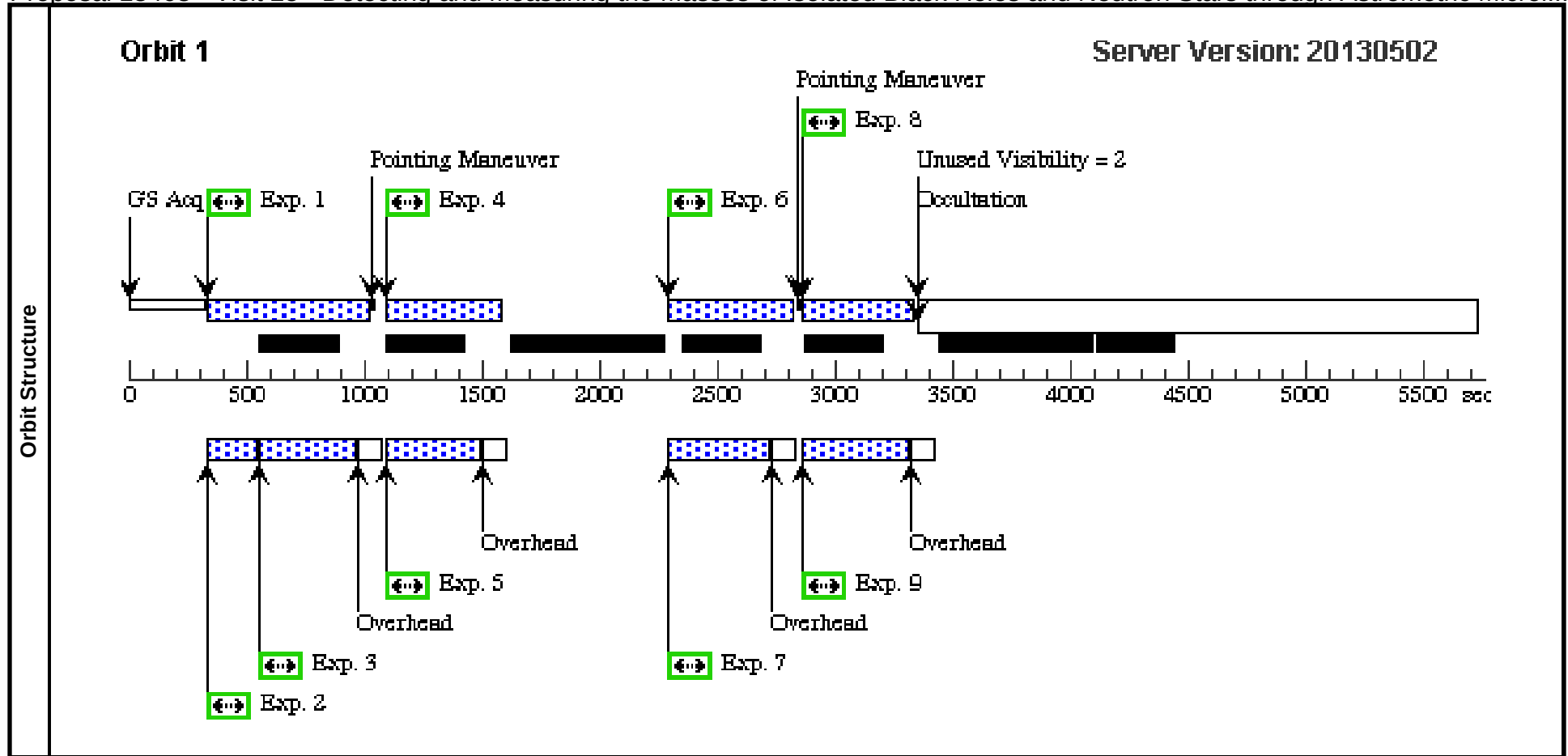
# Proposal 13463 - Visit 24 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                        |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 24, implementation <span style="float: right;">Tue Jun 25 03:51:37 GMT 2013</span>                                                                               |                |                                                                                      |                               |               |                       |                        |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 23 BY 0 H TO 2 H; VISIBILITY INTERVAL 52.74 M |                |                                                                                      |                               |               |                       |                        |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                      | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                        |                                        |                                 |       |
|               | (6)                                                                                                                                                                                    | SWEEPS-R1      | RA: 17 58 47.6030 (269.6983458d)<br>Dec: -29 15 28.64 (-29.25796d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                        |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                      | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.          | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG -0.125,-0.125 | Prime + Parallel Group 1-2 in Visit 24 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                        | Prime + Parallel Group 1-2 in Visit 24 | 430 Secs (430 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG -0.125,3.625  | Prime + Parallel Group 3-4 in Visit 24 | 360 Secs (360 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                        | Prime + Parallel Group 3-4 in Visit 24 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 3          | Prime + Parallel Group 5-6 in Visit 24 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                        | Prime + Parallel Group 5-6 in Visit 24 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 1          | Prime + Parallel Group 7-8 in Visit 24 | 344 Secs (344 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                        | Prime + Parallel Group 7-8 in Visit 24 | 430 Secs (430 Secs)<br>[==>]    | [1]   |



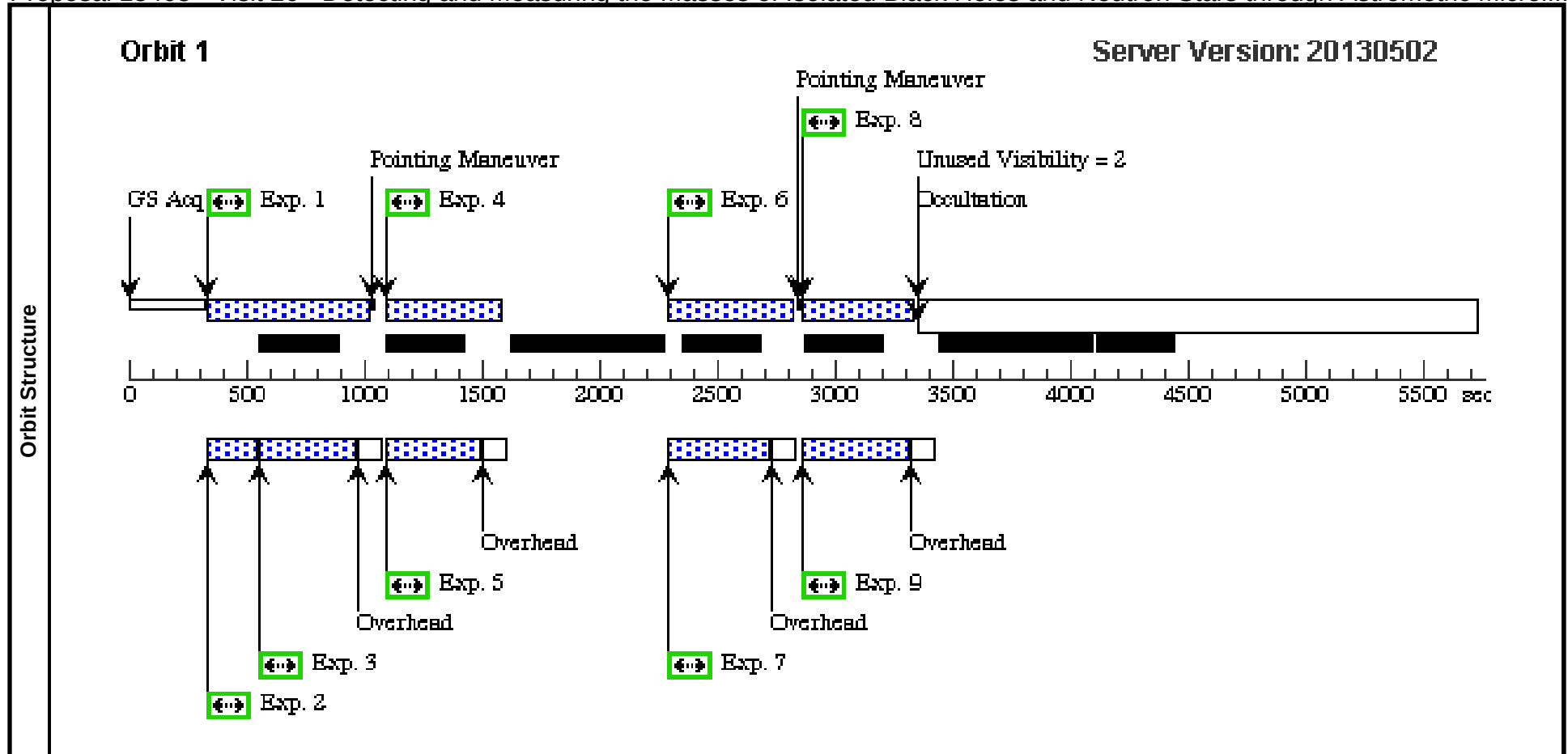
# Proposal 13463 - Visit 25 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |              |                       |                                        |                                 |       |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 25, implementation <span style="float: right;">Tue Jun 25 03:51:38 GMT 2013</span>                                                                                            |                |                                                                                    |                               |               |              |                       |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; BETWEEN 23-MAY-2014 AND 26-MAY-2014; VISIBILITY INTERVAL 55.92 M |                |                                                                                    |                               |               |              |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                                   | Name           | Target Coordinates                                                                 | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous         |                                        |                                 |       |
|               | (5)                                                                                                                                                                                                 | SWEEPS         | RA: 17 59 0.8000 (269.7533333d)<br>Dec: -29 12 0.00 (-29.20000d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                                   | Label          | Target                                                                             | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG 0.125,-0.125 | Prime + Parallel Group 1-3 in Visit 25 | 480 Secs (480 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         | FLASH=8      |                       | Prime + Parallel Group 1-3 in Visit 25 | 50 Secs (50 Secs)<br>[==>]      | [1]   |
|               | 3                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 1-3 in Visit 25 | 410 Secs (410 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG 0.125,3.625  | Prime + Parallel Group 4-5 in Visit 25 | 365 Secs (365 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 4-5 in Visit 25 | 405 Secs (405 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | SAME POS AS 4         | Prime + Parallel Group 6-7 in Visit 25 | 355 Secs (355 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 6-7 in Visit 25 | 410 Secs (410 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | SAME POS AS 1         | Prime + Parallel Group 8-9 in Visit 25 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 9                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 8-9 in Visit 25 | 450 Secs (450 Secs)<br>[==>]    | [1]   |



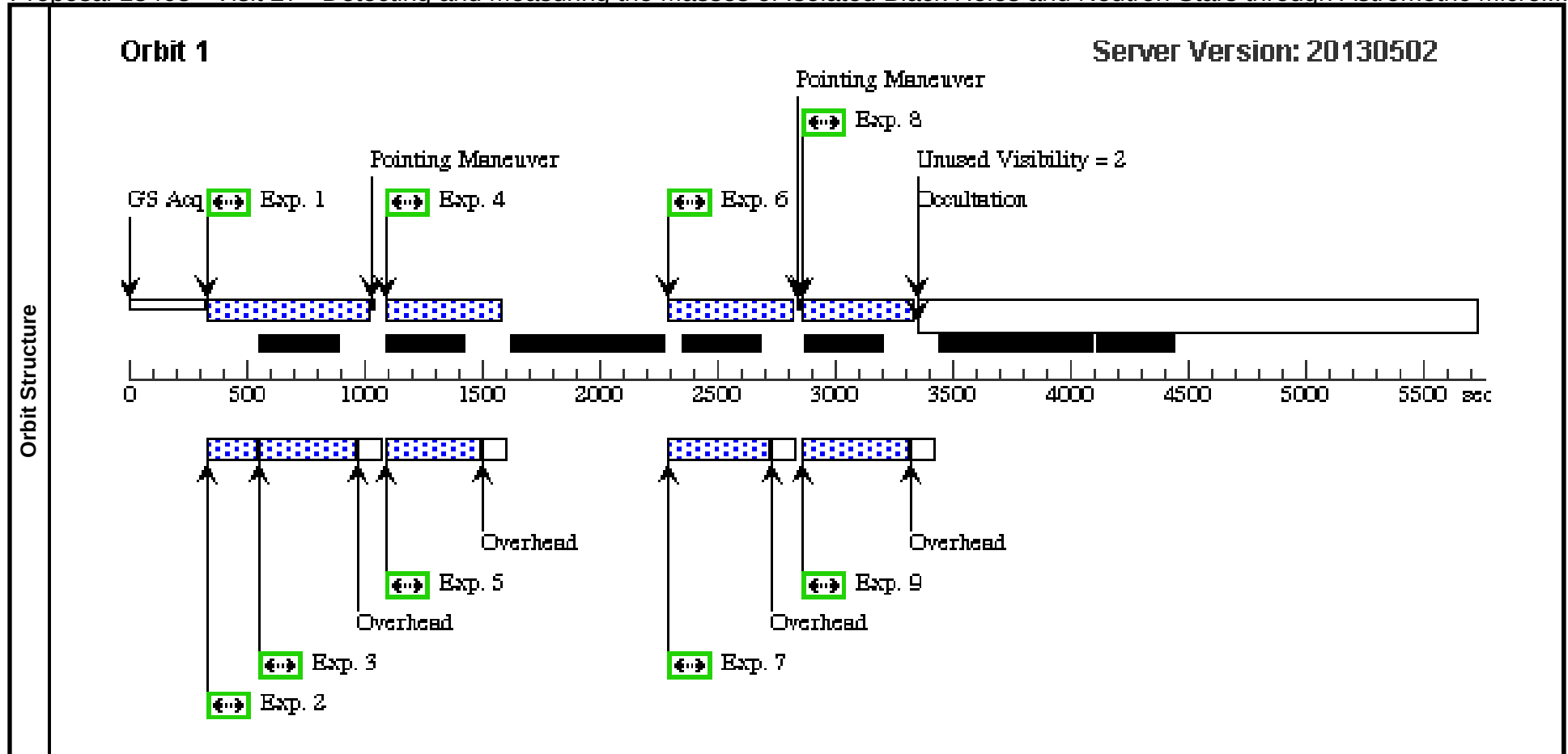
# Proposal 13463 - Visit 26 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |                       |                       |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 26, implementation <span style="float: right;">Tue Jun 25 03:51:39 GMT 2013</span>                                                                               |                |                                                                                     |                               |               |                       |                       |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 25 BY 0 H TO 2 H; VISIBILITY INTERVAL 55.92 M |                |                                                                                     |                               |               |                       |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                      | Name           | Target Coordinates                                                                  | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                       |                                        |                                 |       |
|               | (8)                                                                                                                                                                                    | SWEEPS-L2      | RA: 17 59 3.0300 (269.7626250d)<br>Dec: -29 15 20.00 (-29.25556d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                       |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                      | Label          | Target                                                                              | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.125,-0.125 | Prime + Parallel Group 1-3 in Visit 26 | 480 Secs (480 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |                       |                       |                                        | [==>]                           | [1]   |
|               | 2                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         | FLASH=8               |                       | Prime + Parallel Group 1-3 in Visit 26 | 50 Secs (50 Secs)               |       |
|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |                       |                       |                                        | [==>]                           | [1]   |
|               | 3                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                       | Prime + Parallel Group 1-3 in Visit 26 | 410 Secs (410 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |                       |                       |                                        | [==>]                           | [1]   |
|               | 4                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.125,3.625  | Prime + Parallel Group 4-5 in Visit 26 | 365 Secs (365 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |                       |                       |                                        | [==>]                           | [1]   |
|               | 5                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                       | Prime + Parallel Group 4-5 in Visit 26 | 405 Secs (405 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |                       |                       |                                        | [==>]                           | [1]   |
|               | 6                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 4         | Prime + Parallel Group 6-7 in Visit 26 | 355 Secs (355 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |                       |                       |                                        | [==>]                           | [1]   |
|               | 7                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                       | Prime + Parallel Group 6-7 in Visit 26 | 410 Secs (410 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |                       |                       |                                        | [==>]                           | [1]   |
|               | 8                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 1         | Prime + Parallel Group 8-9 in Visit 26 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |                       |                       |                                        | [==>]                           | [1]   |
|               | 9                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                       | Prime + Parallel Group 8-9 in Visit 26 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |                       |                       |                                        | [==>]                           | [1]   |



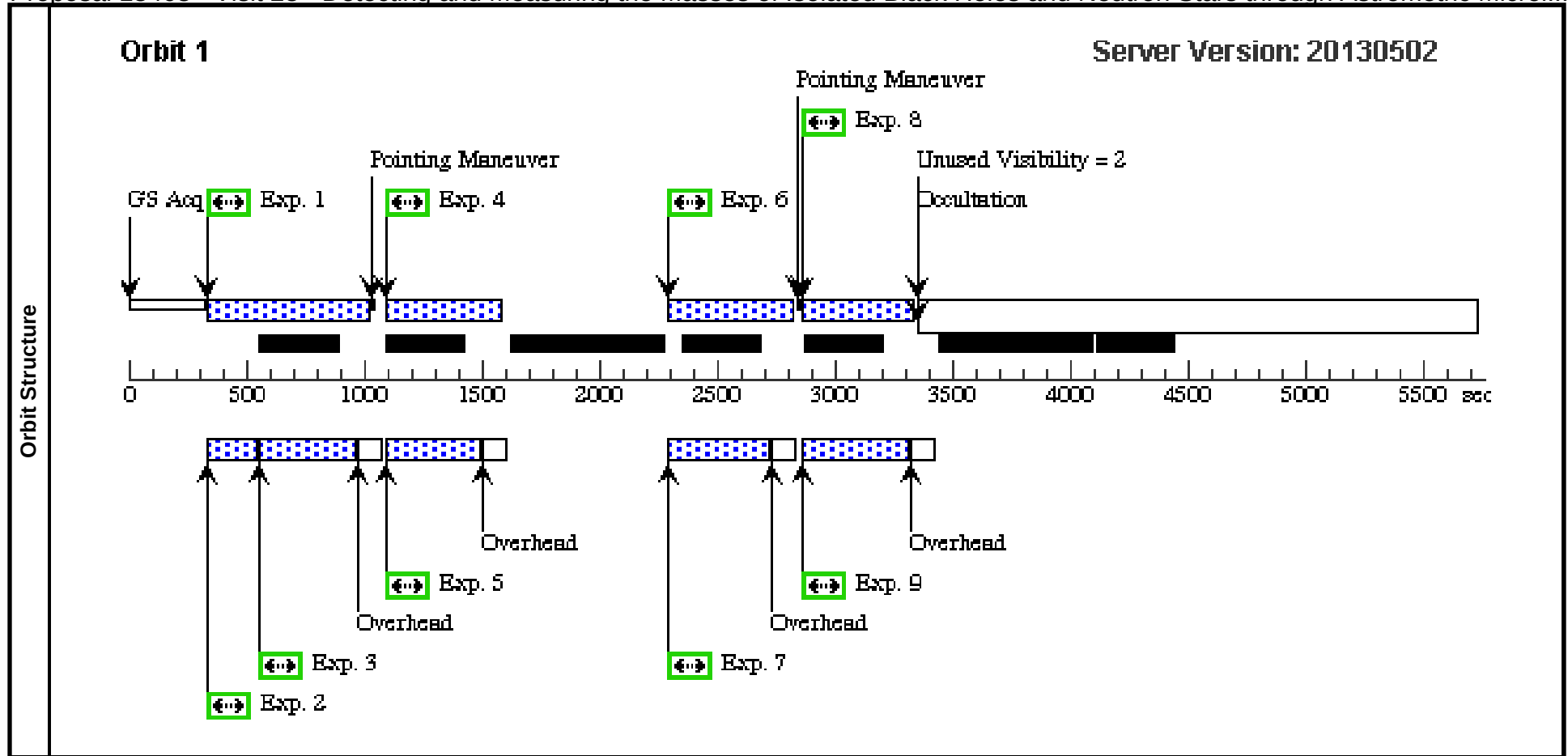
# Proposal 13463 - Visit 27 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                               |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | <b>Proposal 13463, Visit 27, implementation</b> <span style="float: right;">Tue Jun 25 03:51:40 GMT 2013</span>                                                                               |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|               | <b>Diagnostic Status: No Diagnostics</b><br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 26 BY 0 H TO 2 H; VISIBILITY INTERVAL 55.92 M |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                             | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous         |                                        |                                 |       |
|               | (7)                                                                                                                                                                                           | SWEEPS-L1      | RA: 17 59 16.2271 (269.8176129d)<br>Dec: -29 11 51.36 (-29.19760d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                             | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                             |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG 0.125,-0.125 | Prime + Parallel Group 1-3 in Visit 27 | 480 Secs (480 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         | FLASH=8      |                       | Prime + Parallel Group 1-3 in Visit 27 | 50 Secs (50 Secs)<br>[==>]      | [1]   |
|               | 3                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 1-3 in Visit 27 | 410 Secs (410 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                             |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG 0.125,3.625  | Prime + Parallel Group 4-5 in Visit 27 | 365 Secs (365 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 4-5 in Visit 27 | 405 Secs (405 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                             |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | SAME POS AS 4         | Prime + Parallel Group 6-7 in Visit 27 | 355 Secs (355 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 6-7 in Visit 27 | 410 Secs (410 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                             |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | SAME POS AS 1         | Prime + Parallel Group 8-9 in Visit 27 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 9                                                                                                                                                                                             | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 8-9 in Visit 27 | 450 Secs (450 Secs)<br>[==>]    | [1]   |



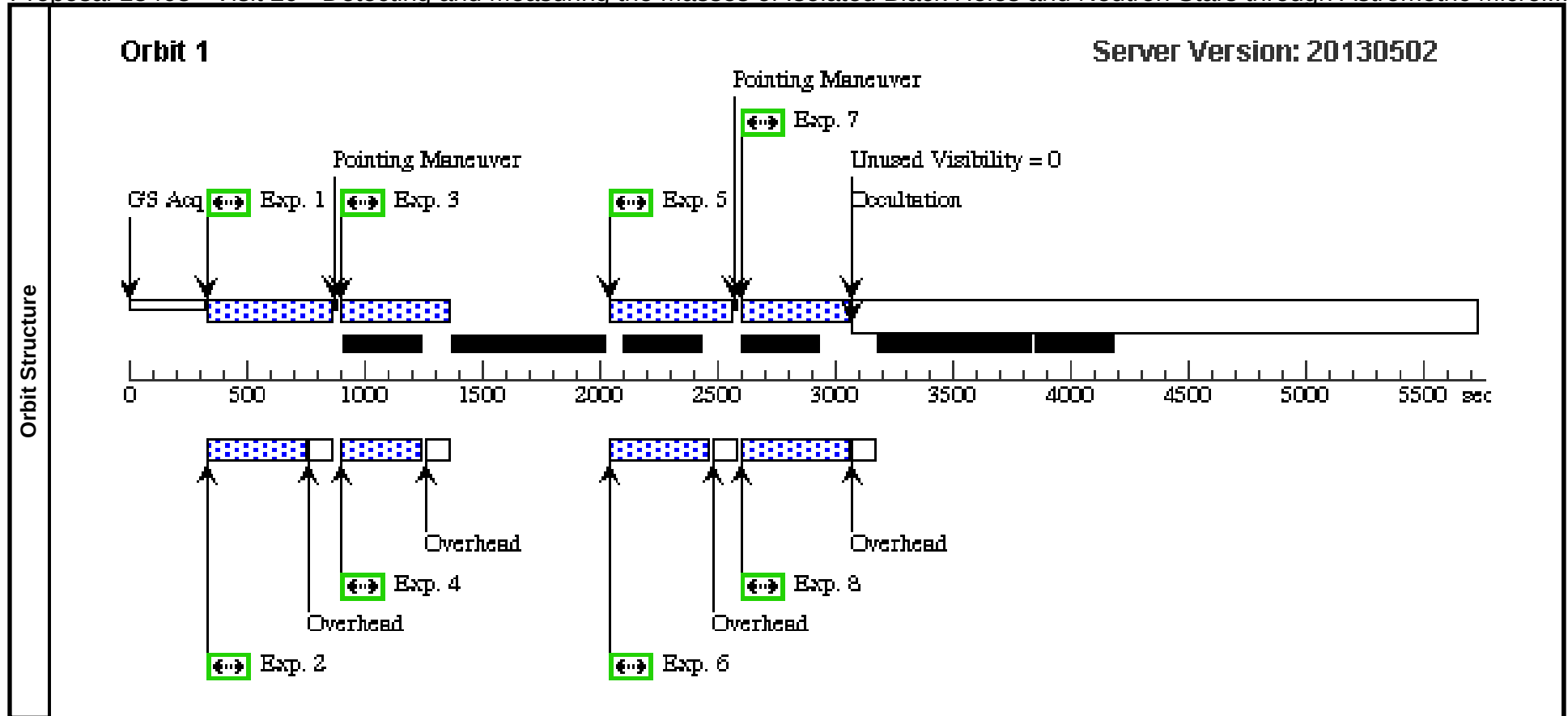
# Proposal 13463 - Visit 28 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 28, implementation <span style="float: right;">Tue Jun 25 03:51:41 GMT 2013</span>                                                                               |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 27 BY 0 H TO 2 H; VISIBILITY INTERVAL 55.92 M |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                      | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous         |                                        |                                 |       |
|               | (6)                                                                                                                                                                                    | SWEEPS-R1      | RA: 17 58 47.6030 (269.6983458d)<br>Dec: -29 15 28.64 (-29.25796d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                      | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG 0.125,-0.125 | Prime + Parallel Group 1-3 in Visit 28 | 480 Secs (480 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         | FLASH=8      |                       | Prime + Parallel Group 1-3 in Visit 28 | 50 Secs (50 Secs)<br>[==>]      | [1]   |
|               | 3                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 1-3 in Visit 28 | 410 Secs (410 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG 0.125,3.625  | Prime + Parallel Group 4-5 in Visit 28 | 365 Secs (365 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 4-5 in Visit 28 | 405 Secs (405 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | SAME POS AS 4         | Prime + Parallel Group 6-7 in Visit 28 | 355 Secs (355 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 6-7 in Visit 28 | 410 Secs (410 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | SAME POS AS 1         | Prime + Parallel Group 8-9 in Visit 28 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 9                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 8-9 in Visit 28 | 450 Secs (450 Secs)<br>[==>]    | [1]   |



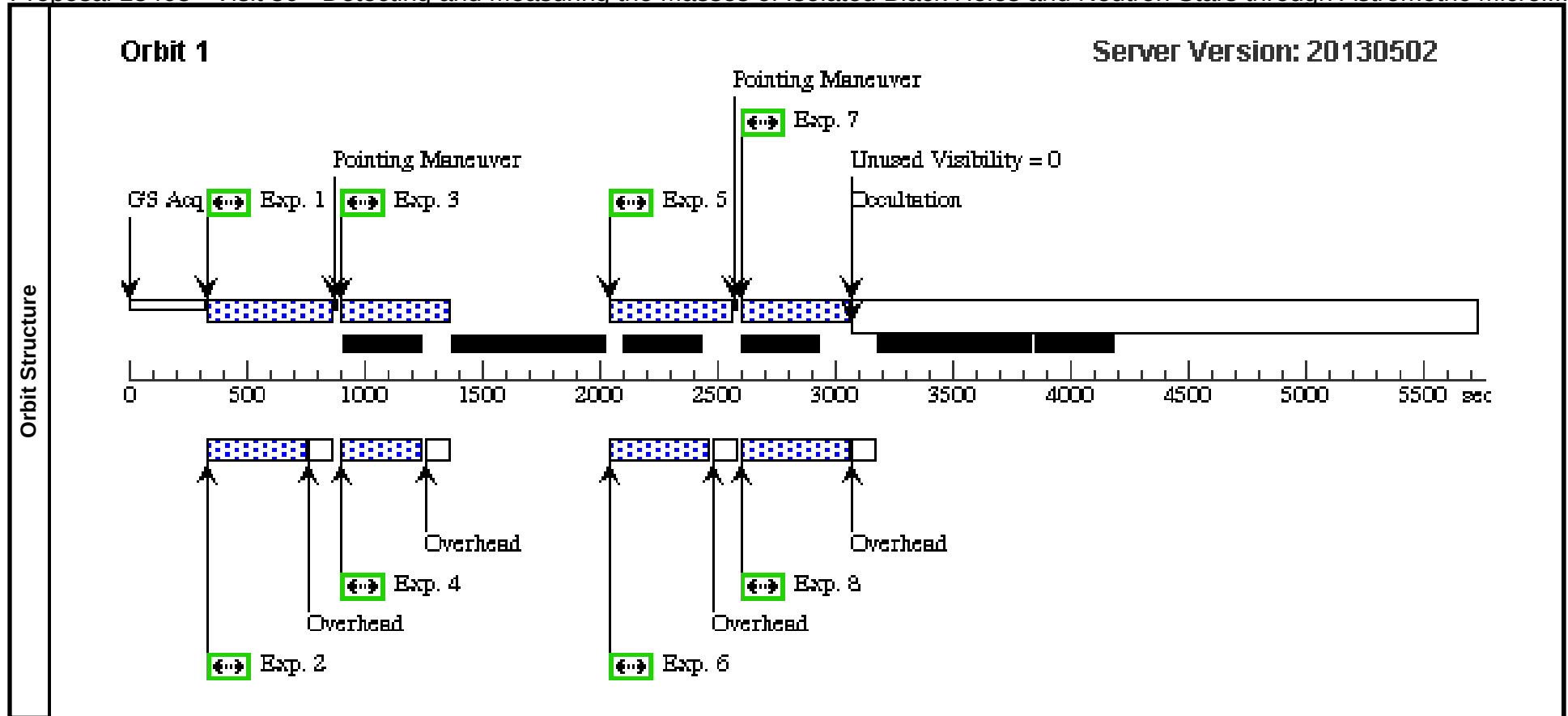
# Proposal 13463 - Visit 29 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                                     |                |                                                                                    |                               |               |              |                       |                                        |                                 |       |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 29, implementation <span style="float: right;">Tue Jun 25 03:51:42 GMT 2013</span>                                                                                            |                |                                                                                    |                               |               |              |                       |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; BETWEEN 08-JUN-2014 AND 11-JUN-2014; VISIBILITY INTERVAL 51.27 M |                |                                                                                    |                               |               |              |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                                   | Name           | Target Coordinates                                                                 | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous         |                                        |                                 |       |
|               | (5)                                                                                                                                                                                                 | SWEEPS         | RA: 17 59 0.8000 (269.7533333d)<br>Dec: -29 12 0.00 (-29.20000d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                                   | Label          | Target                                                                             | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG 0.175,0.175  | Prime + Parallel Group 1-2 in Visit 29 | 325 Secs (325 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 1-2 in Visit 29 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG 0.175,3.925  | Prime + Parallel Group 3-4 in Visit 29 | 337 Secs (337 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 3-4 in Visit 29 | 347 Secs (347 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | SAME POS AS 3         | Prime + Parallel Group 5-6 in Visit 29 | 337 Secs (337 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 5-6 in Visit 29 | 400 Secs (400 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                                   |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.175,0.175  | Prime + Parallel Group 7-8 in Visit 29 | 337 Secs (337 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                                   | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 7-8 in Visit 29 | 460 Secs (460 Secs)<br>[==>]    | [1]   |



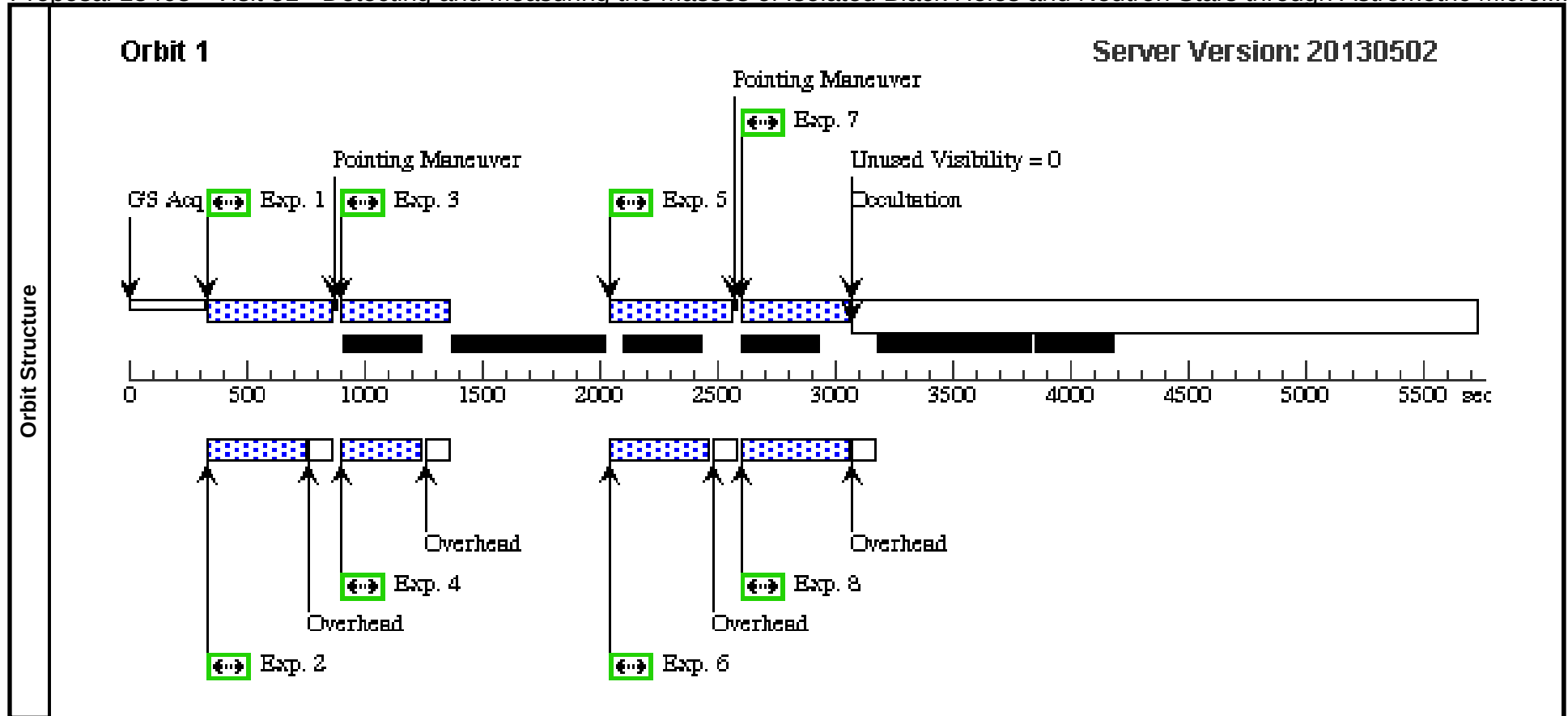
# Proposal 13463 - Visit 30 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                        |                |                                                                                     |                               |               |                       |                      |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 30, implementation <span style="float: right;">Tue Jun 25 03:51:43 GMT 2013</span>                                                                               |                |                                                                                     |                               |               |                       |                      |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 29 BY 0 H TO 2 H; VISIBILITY INTERVAL 51.27 M |                |                                                                                     |                               |               |                       |                      |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                      | Name           | Target Coordinates                                                                  | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                      |                                        |                                 |       |
|               | (8)                                                                                                                                                                                    | SWEEPS-L2      | RA: 17 59 3.0300 (269.7626250d)<br>Dec: -29 15 20.00 (-29.25556d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                      |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                      | Label          | Target                                                                              | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.        | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.175,0.175 | Prime + Parallel Group 1-2 in Visit 30 | 325 Secs (325 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                      | Prime + Parallel Group 1-2 in Visit 30 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.175,3.925 | Prime + Parallel Group 3-4 in Visit 30 | 337 Secs (337 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                      | Prime + Parallel Group 3-4 in Visit 30 | 347 Secs (347 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 3        | Prime + Parallel Group 5-6 in Visit 30 | 337 Secs (337 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                      | Prime + Parallel Group 5-6 in Visit 30 | 400 Secs (400 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                      |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG 0.175,0.175 | Prime + Parallel Group 7-8 in Visit 30 | 337 Secs (337 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                      | Prime + Parallel Group 7-8 in Visit 30 | 460 Secs (460 Secs)<br>[==>]    | [1]   |



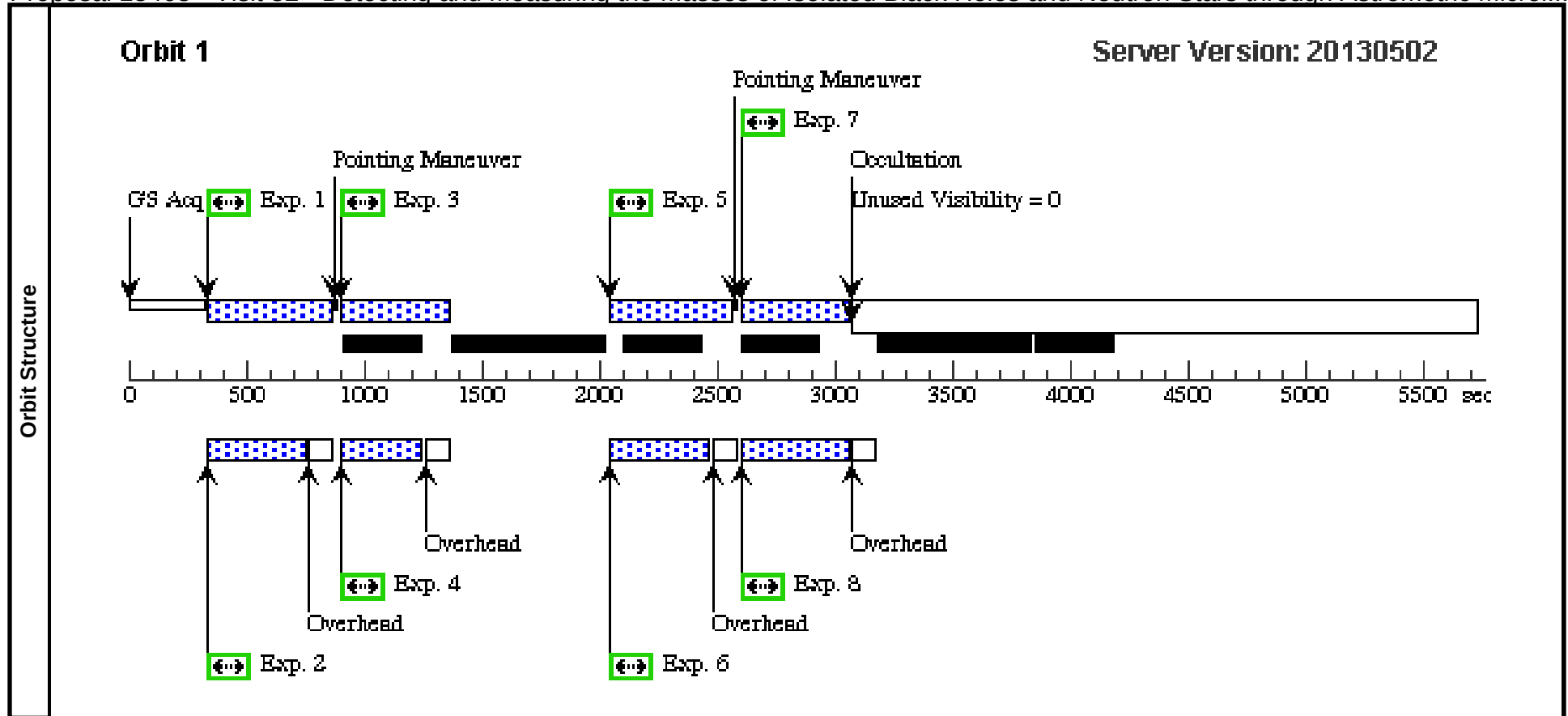
# Proposal 13463 - Visit 31 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                      |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 31, implementation <span style="float: right;">Tue Jun 25 03:51:43 GMT 2013</span>                                                                               |                |                                                                                      |                               |               |                       |                      |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 30 BY 0 H TO 2 H; VISIBILITY INTERVAL 51.27 M |                |                                                                                      |                               |               |                       |                      |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                      | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                      |                                        |                                 |       |
|               | (7)                                                                                                                                                                                    | SWEEPS-L1      | RA: 17 59 16.2271 (269.8176129d)<br>Dec: -29 11 51.36 (-29.19760d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                      |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                      | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.        | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                      |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.175,0.175 | Prime + Parallel Group 1-2 in Visit 31 | 325 Secs (325 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                      | Prime + Parallel Group 1-2 in Visit 31 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                      |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.175,3.925 | Prime + Parallel Group 3-4 in Visit 31 | 337 Secs (337 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                      | Prime + Parallel Group 3-4 in Visit 31 | 347 Secs (347 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                      |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 3        | Prime + Parallel Group 5-6 in Visit 31 | 337 Secs (337 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                      | Prime + Parallel Group 5-6 in Visit 31 | 400 Secs (400 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                      |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG 0.175,0.175 | Prime + Parallel Group 7-8 in Visit 31 | 337 Secs (337 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                      | Prime + Parallel Group 7-8 in Visit 31 | 460 Secs (460 Secs)<br>[==>]    | [1]   |



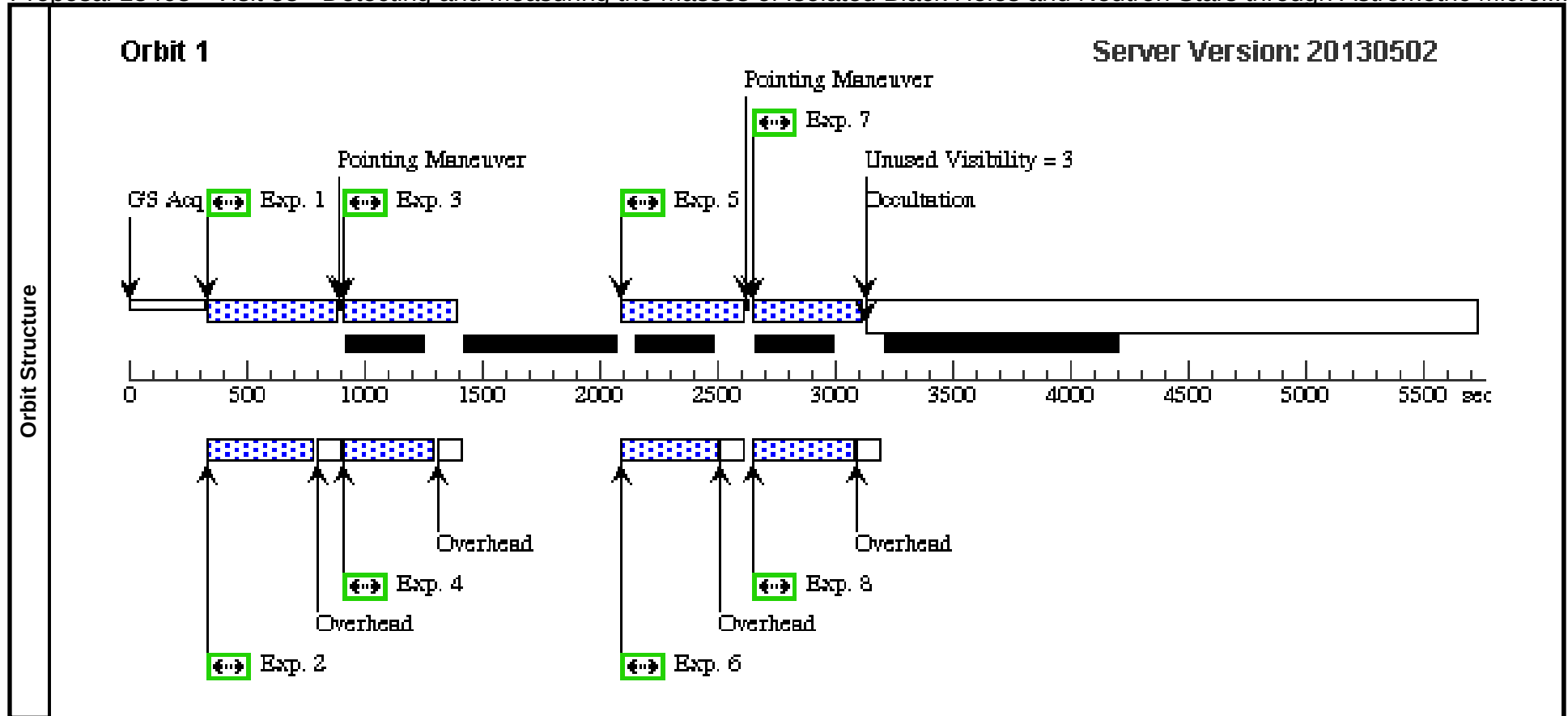
# Proposal 13463 - Visit 32 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                        |                |                                                                                      |                               |               |                       |                      |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 32, implementation <span style="float: right;">Tue Jun 25 03:51:44 GMT 2013</span>                                                                               |                |                                                                                      |                               |               |                       |                      |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 270.0D TO 270.0 D; AFTER 31 BY 0 H TO 2 H; VISIBILITY INTERVAL 51.27 M |                |                                                                                      |                               |               |                       |                      |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                      | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                      |                                        |                                 |       |
|               | (6)                                                                                                                                                                                    | SWEEPS-R1      | RA: 17 58 47.6030 (269.6983458d)<br>Dec: -29 15 28.64 (-29.25796d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                      |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                      | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.        | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.175,0.175 | Prime + Parallel Group 1-2 in Visit 32 | 325 Secs (325 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                      | Prime + Parallel Group 1-2 in Visit 32 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.175,3.925 | Prime + Parallel Group 3-4 in Visit 32 | 337 Secs (337 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                      | Prime + Parallel Group 3-4 in Visit 32 | 347 Secs (347 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 3        | Prime + Parallel Group 5-6 in Visit 32 | 337 Secs (337 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                      | Prime + Parallel Group 5-6 in Visit 32 | 400 Secs (400 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                      |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG 0.175,0.175 | Prime + Parallel Group 7-8 in Visit 32 | 337 Secs (337 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                      | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                      | Prime + Parallel Group 7-8 in Visit 32 | 460 Secs (460 Secs)<br>[==>]    | [1]   |



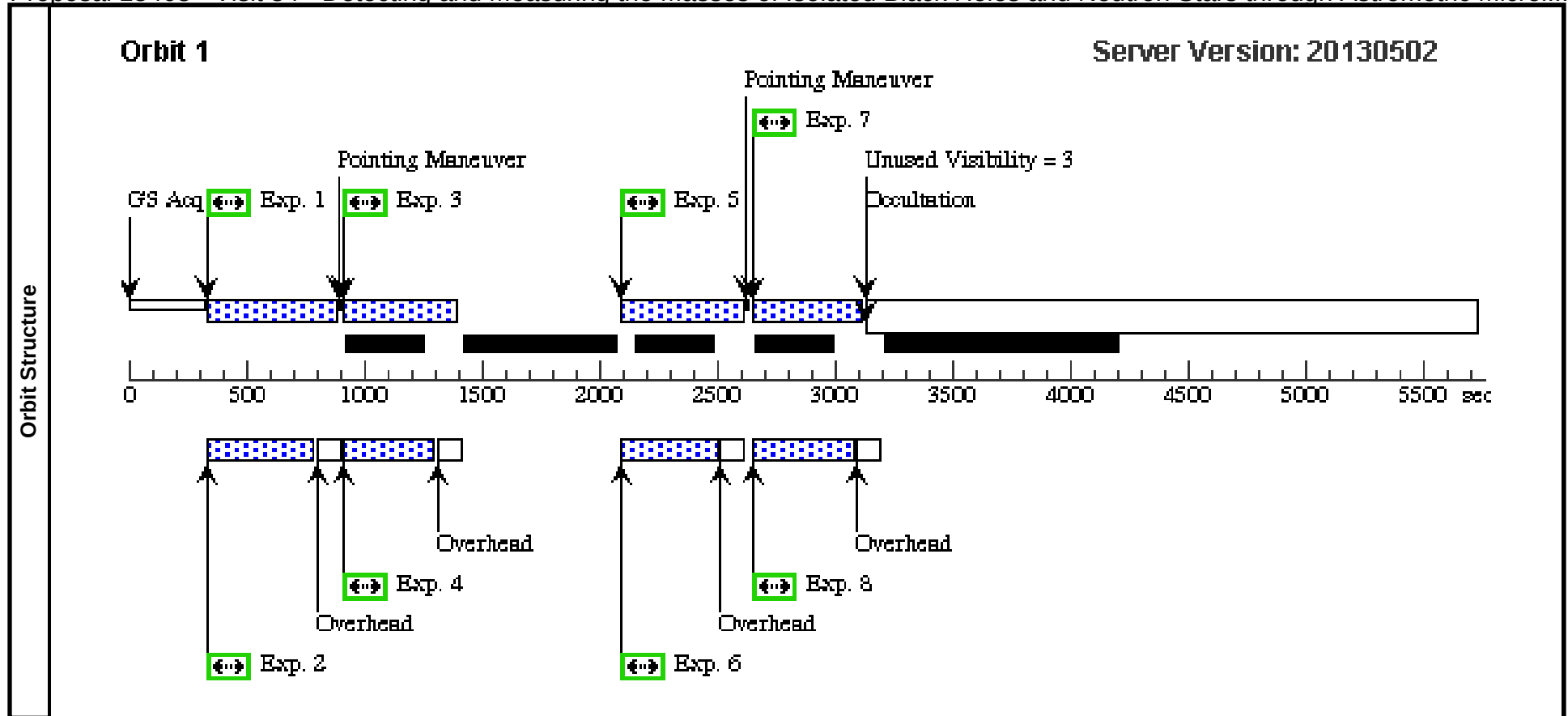
# Proposal 13463 - Visit 33 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |                       |                       |                                        |                                 |       |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 33, implementation <span style="float: right;">Tue Jun 25 03:51:45 GMT 2013</span>                                                                                          |                |                                                                                    |                               |               |                       |                       |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; BETWEEN 02-JUL-2014 AND 05-JUL-2014; VISIBILITY INTERVAL 52.22 M |                |                                                                                    |                               |               |                       |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                                 | Name           | Target Coordinates                                                                 | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                       |                                        |                                 |       |
|               | (5)                                                                                                                                                                                               | SWEEPS         | RA: 17 59 0.8000 (269.7533333d)<br>Dec: -29 12 0.00 (-29.20000d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                       |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                                 | Label          | Target                                                                             | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG -0.175,0.175 | Prime + Parallel Group 1-2 in Visit 33 | 340 Secs (340 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                       | Prime + Parallel Group 1-2 in Visit 33 | 425 Secs (425 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG -0.175,0.925 | Prime + Parallel Group 3-4 in Visit 33 | 360 Secs (360 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                       | Prime + Parallel Group 3-4 in Visit 33 | 380 Secs (380 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 3         | Prime + Parallel Group 5-6 in Visit 33 | 340 Secs (340 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                       | Prime + Parallel Group 5-6 in Visit 33 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG -0.175,0.175 | Prime + Parallel Group 7-8 in Visit 33 | 340 Secs (340 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                       | Prime + Parallel Group 7-8 in Visit 33 | 430 Secs (430 Secs)<br>[==>]    | [1]   |



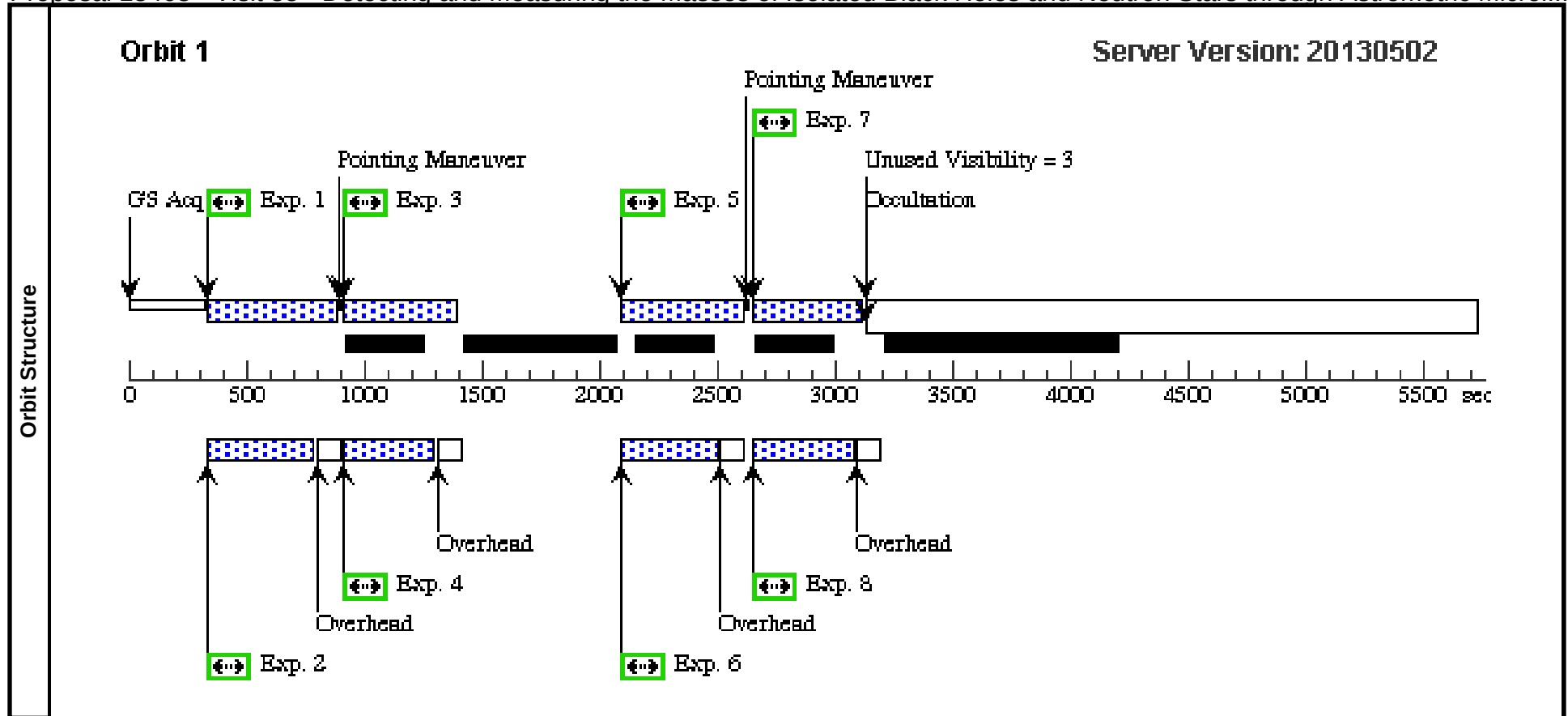
# Proposal 13463 - Visit 34 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 34, implementation <span style="float: right;">Tue Jun 25 03:51:46 GMT 2013</span>                                                                             |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 33 BY 0 H TO 2 H; VISIBILITY INTERVAL 52.22 M |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous         |                                        |                                 |       |
|               | (7)                                                                                                                                                                                  | SWEEPS-L1      | RA: 17 59 16.2271 (269.8176129d)<br>Dec: -29 11 51.36 (-29.19760d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.175,0.175 | Prime + Parallel Group 1-2 in Visit 34 | 340 Secs (340 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 1-2 in Visit 34 | 425 Secs (425 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.175,0.925 | Prime + Parallel Group 3-4 in Visit 34 | 360 Secs (360 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 3-4 in Visit 34 | 380 Secs (380 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 3         | Prime + Parallel Group 5-6 in Visit 34 | 340 Secs (340 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 5-6 in Visit 34 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG -0.175,0.175 | Prime + Parallel Group 7-8 in Visit 34 | 340 Secs (340 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 7-8 in Visit 34 | 430 Secs (430 Secs)<br>[==>]    | [1]   |



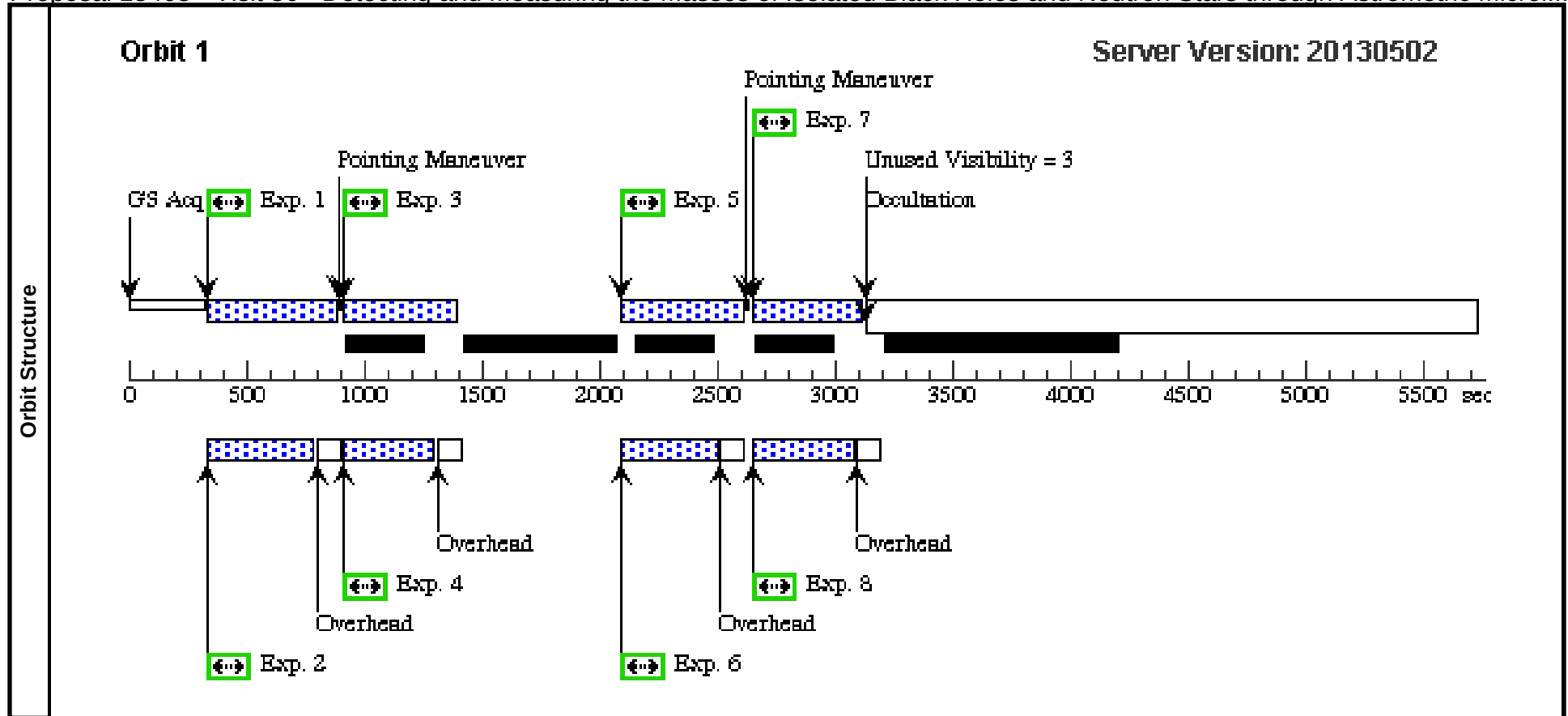
# Proposal 13463 - Visit 35 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                   |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|---------------------------------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 35, implementation <span style="float: right;">Tue Jun 25 03:51:47 GMT 2013</span>                                                                             |                |                                                                                     |                               |               |                       |                                                   |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 34 BY 0 H TO 2 H; VISIBILITY INTERVAL 52.22 M |                |                                                                                     |                               |               |                       |                                                   |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                  | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                                                   |                                        |                                 |       |
|               | (8)                                                                                                                                                                                  | SWEEPS-L2      | RA: 17 59 3.0300 (269.7626250d)<br>Dec: -29 15 20.00 (-29.25556d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                                                   |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                              | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.                                     | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG -0.175,0.175                             | Prime + Parallel Group 1-2 in Visit 35 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                   |                                        | [==>]                           | [1]   |
|               | 2                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                                                   | Prime + Parallel Group 1-2 in Visit 35 | 425 Secs (425 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                   |                                        | [==>]                           | [1]   |
|               | 3                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG -0.175,0.925;<br>GS ACQ SCENARIO BASE1B3 | Prime + Parallel Group 3-4 in Visit 35 | 360 Secs (360 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                   |                                        | [==>]                           | [1]   |
|               | 4                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                                                   | Prime + Parallel Group 3-4 in Visit 35 | 380 Secs (380 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                   |                                        | [==>]                           | [1]   |
|               | 5                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 3                                     | Prime + Parallel Group 5-6 in Visit 35 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                   |                                        | [==>]                           | [1]   |
|               | 6                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                                                   | Prime + Parallel Group 5-6 in Visit 35 | 390 Secs (390 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                   |                                        | [==>]                           | [1]   |
|               | 7                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG -0.175,0.175                             | Prime + Parallel Group 7-8 in Visit 35 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                   |                                        | [==>]                           | [1]   |
|               | 8                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                                                   | Prime + Parallel Group 7-8 in Visit 35 | 430 Secs (430 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                   |                                        | [==>]                           | [1]   |



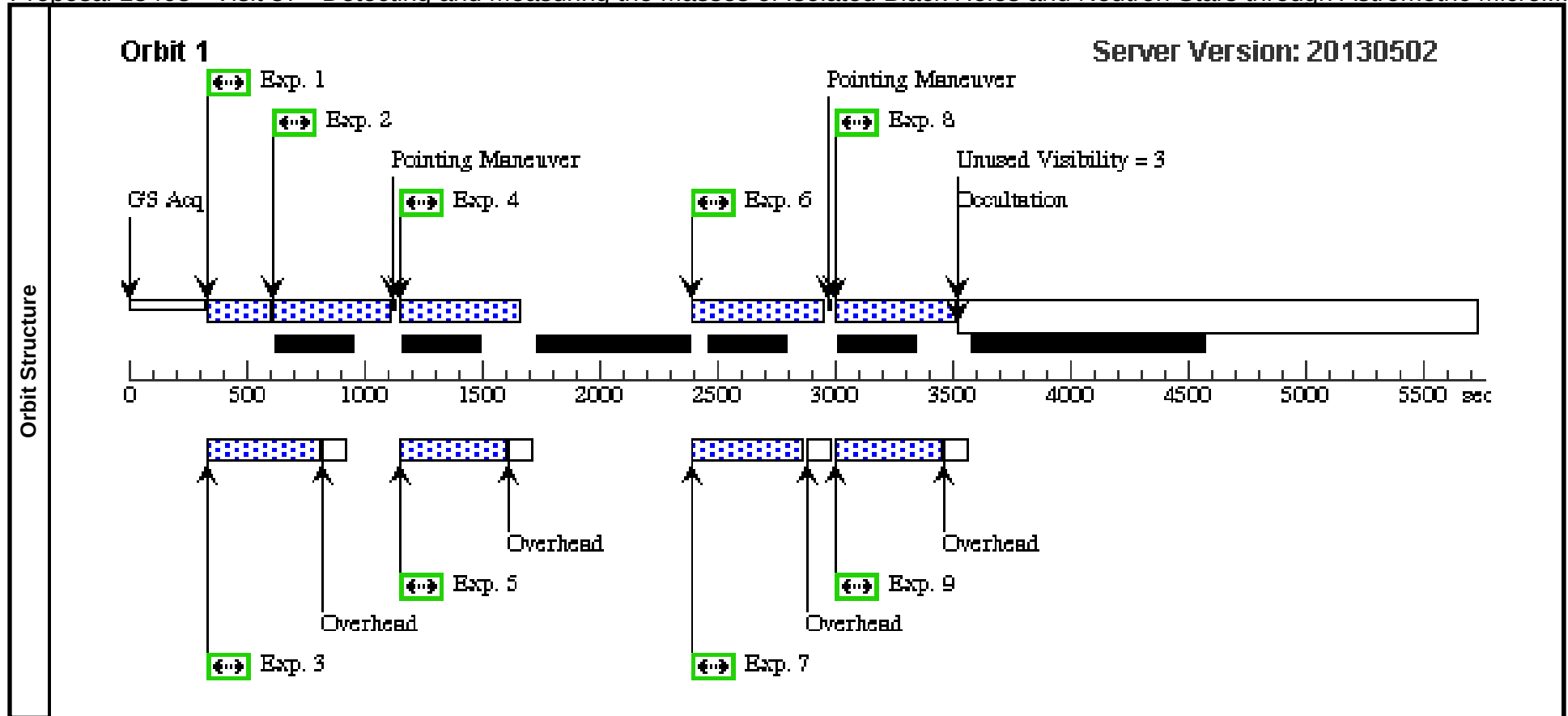
# Proposal 13463 - Visit 36 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 36, implementation <span style="float: right;">Tue Jun 25 03:51:47 GMT 2013</span>                                                                             |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 35 BY 0 H TO 2 H; VISIBILITY INTERVAL 52.22 M |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous         |                                        |                                 |       |
|               | (6)                                                                                                                                                                                  | SWEEPS-R1      | RA: 17 58 47.6030 (269.6983458d)<br>Dec: -29 15 28.64 (-29.25796d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.175,0.175 | Prime + Parallel Group 1-2 in Visit 36 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 2                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 1-2 in Visit 36 | 425 Secs (425 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 3                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.175,0.925 | Prime + Parallel Group 3-4 in Visit 36 | 360 Secs (360 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 4                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 3-4 in Visit 36 | 380 Secs (380 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 5                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 3         | Prime + Parallel Group 5-6 in Visit 36 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 6                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 5-6 in Visit 36 | 390 Secs (390 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 7                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG -0.175,0.175 | Prime + Parallel Group 7-8 in Visit 36 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 8                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 7-8 in Visit 36 | 430 Secs (430 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |



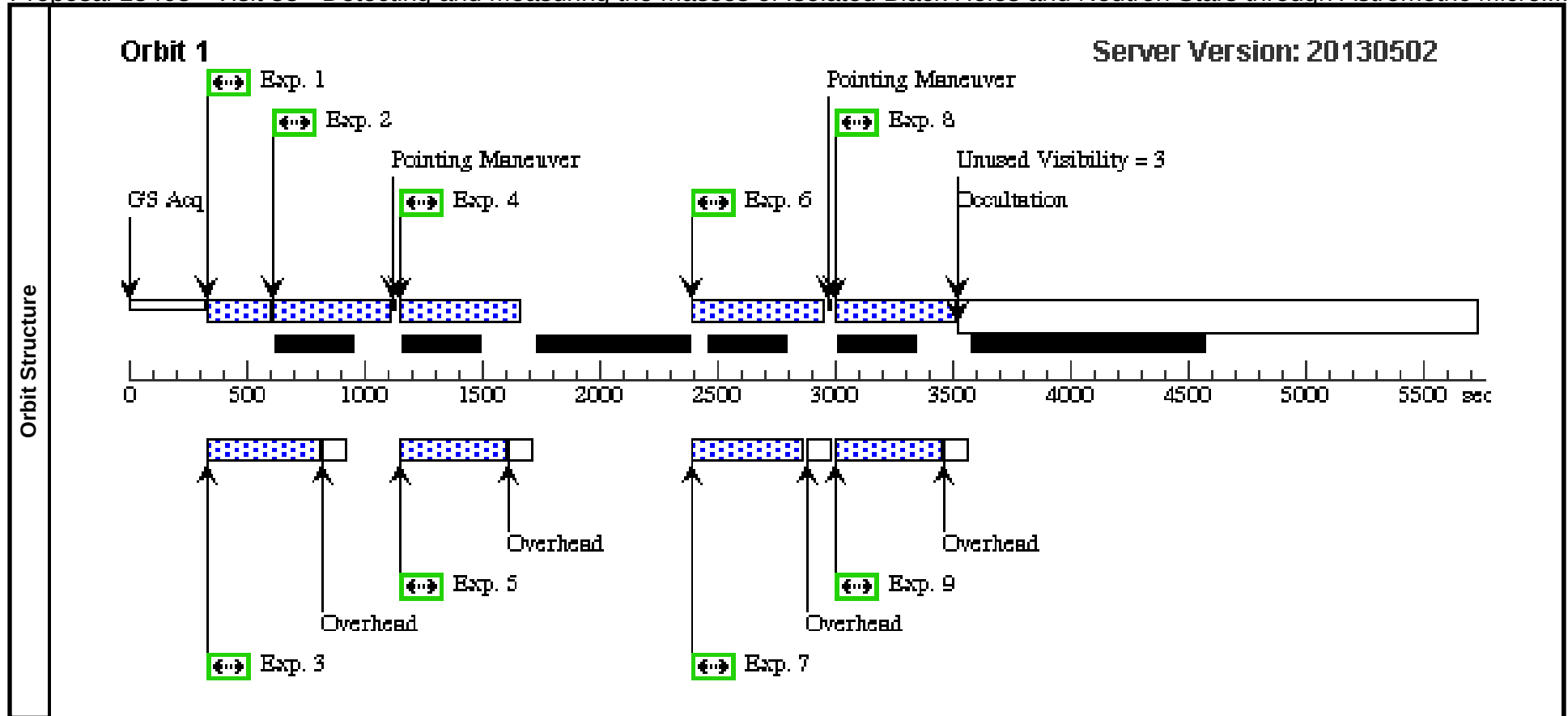
# Proposal 13463 - Visit 37 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        |                                 |       |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 37, implementation <span style="float: right;">Tue Jun 25 03:51:48 GMT 2013</span>                                                                                          |                |                                                                                    |                               |               |              |                        |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; BETWEEN 19-JUL-2014 AND 22-JUL-2014; VISIBILITY INTERVAL 58.80 M |                |                                                                                    |                               |               |              |                        |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                                 | Name           | Target Coordinates                                                                 | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous          |                                        |                                 |       |
|               | (5)                                                                                                                                                                                               | SWEEPS         | RA: 17 59 0.8000 (269.7533333d)<br>Dec: -29 12 0.00 (-29.20000d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS  |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                                 | Label          | Target                                                                             | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.          | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         | FLASH=50     | POS TARG -0.175,-0.175 | Prime + Parallel Group 1-3 in Visit 37 | 50 Secs (50 Secs)               |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 2                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.175,-0.175 | Prime + Parallel Group 1-3 in Visit 37 | 375 Secs (375 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 3                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                        | Prime + Parallel Group 1-3 in Visit 37 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 4                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.175,3.575  | Prime + Parallel Group 4-5 in Visit 37 | 385 Secs (385 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 5                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                        | Prime + Parallel Group 4-5 in Visit 37 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 6                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 4          | Prime + Parallel Group 6-7 in Visit 37 | 385 Secs (385 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 7                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                        | Prime + Parallel Group 6-7 in Visit 37 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 8                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 1          | Prime + Parallel Group 8-9 in Visit 37 | 385 Secs (385 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 9                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                        | Prime + Parallel Group 8-9 in Visit 37 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |



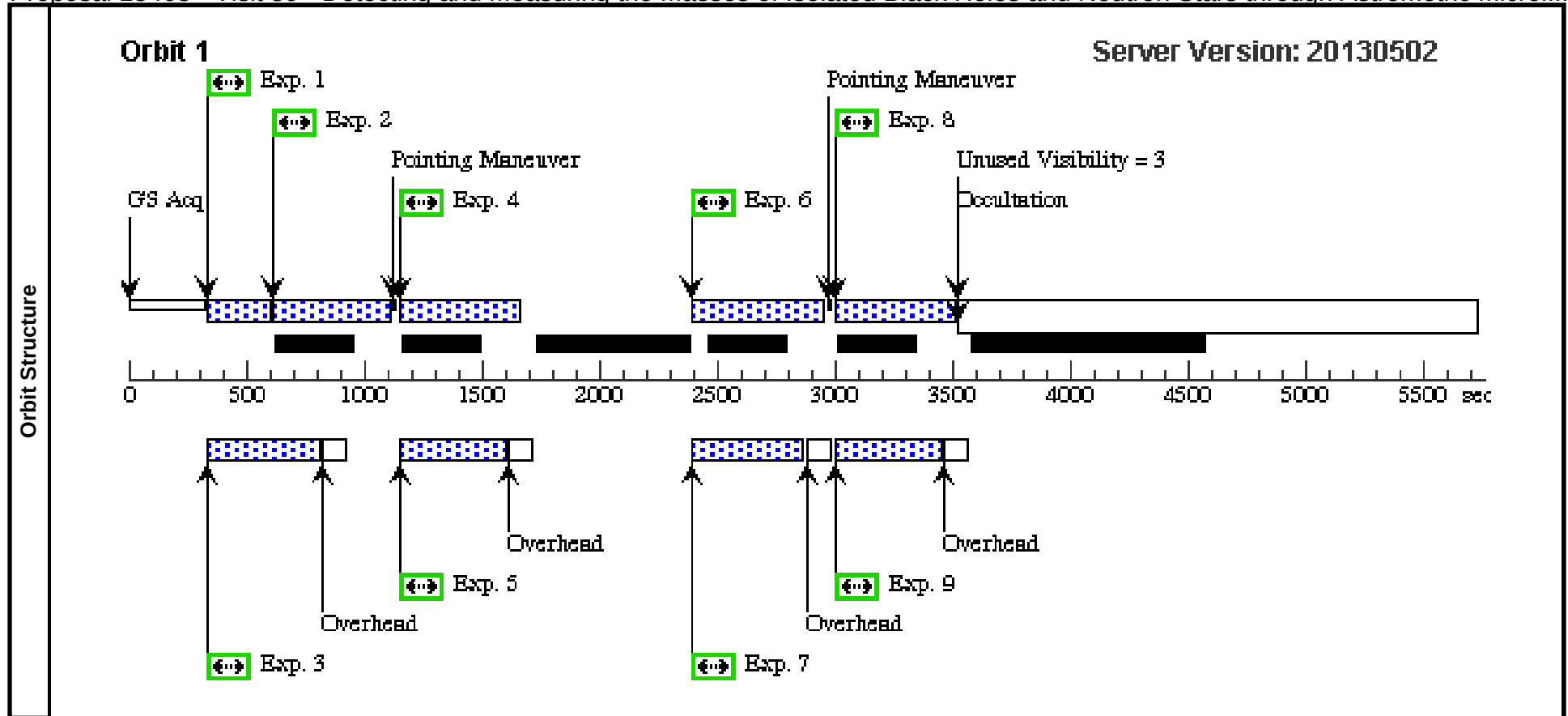
# Proposal 13463 - Visit 38 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                             |                |                                                                                      |                               |               |                       |                        |                                        |                                 |       |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | <b>Proposal 13463, Visit 38, implementation</b> <span style="float: right;">Tue Jun 25 03:51:49 GMT 2013</span>                                                                             |                |                                                                                      |                               |               |                       |                        |                                        |                                 |       |
|               | <b>Diagnostic Status: No Diagnostics</b><br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 37 BY 0 D TO 2 H; VISIBILITY INTERVAL 58.80 M |                |                                                                                      |                               |               |                       |                        |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                           | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                        |                                        |                                 |       |
|               | (7)                                                                                                                                                                                         | SWEEPS-L1      | RA: 17 59 16.2271 (269.8176129d)<br>Dec: -29 11 51.36 (-29.19760d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                        |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                           | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.          | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                           |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         | FLASH=50              | POS TARG -0.175,-0.175 | Prime + Parallel Group 1-3 in Visit 38 | 50 Secs (50 Secs)<br>[==>]      | [1]   |
|               | 2                                                                                                                                                                                           |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG -0.175,-0.175 | Prime + Parallel Group 1-3 in Visit 38 | 375 Secs (375 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                           | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                        | Prime + Parallel Group 1-3 in Visit 38 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                           |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG -0.175,3.575  | Prime + Parallel Group 4-5 in Visit 38 | 385 Secs (385 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                           | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                        | Prime + Parallel Group 4-5 in Visit 38 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                           |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 4          | Prime + Parallel Group 6-7 in Visit 38 | 385 Secs (385 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                           | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                        | Prime + Parallel Group 6-7 in Visit 38 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                           |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 1          | Prime + Parallel Group 8-9 in Visit 38 | 385 Secs (385 Secs)<br>[==>]    | [1]   |
|               | 9                                                                                                                                                                                           | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                        | Prime + Parallel Group 8-9 in Visit 38 | 450 Secs (450 Secs)<br>[==>]    | [1]   |



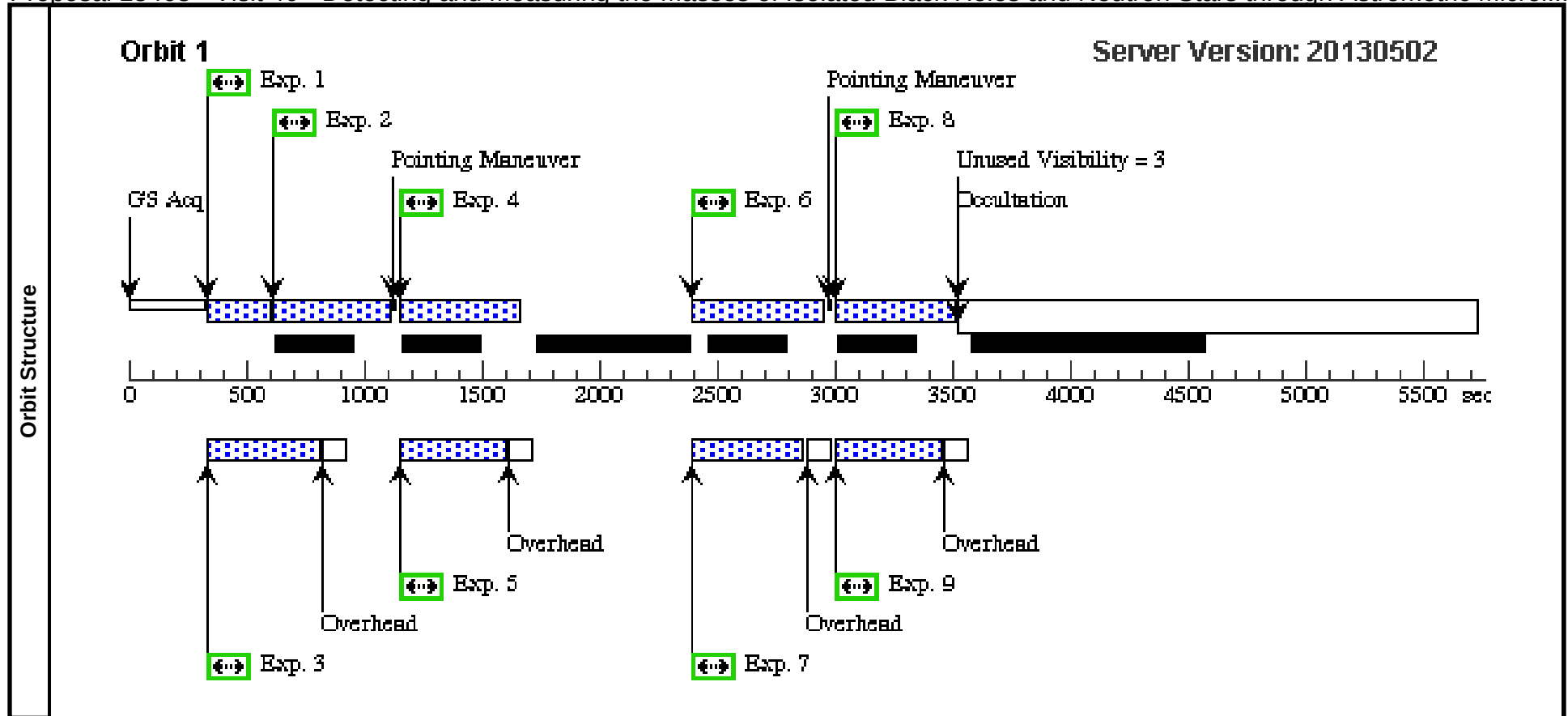
# Proposal 13463 - Visit 39 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |              |                                                    |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|----------------------------------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 39, implementation <span style="float: right;">Tue Jun 25 03:51:50 GMT 2013</span>                                                                             |                |                                                                                     |                               |               |              |                                                    |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 38 BY 0 D TO 2 H; VISIBILITY INTERVAL 58.80 M |                |                                                                                     |                               |               |              |                                                    |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                  | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous                                      |                                        |                                 |       |
|               | (8)                                                                                                                                                                                  | SWEEPS-L2      | RA: 17 59 3.0300 (269.7626250d)<br>Dec: -29 15 20.00 (-29.25556d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS                              |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                              | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.                                      | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         | FLASH=50     | POS TARG -0.175,-0.175;<br>GS ACQ SCENARIO BASE1B3 | Prime + Parallel Group 1-3 in Visit 39 | 50 Secs (50 Secs)<br>[==>]      | [1]   |
|               | 2                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.175,-0.175                             | Prime + Parallel Group 1-3 in Visit 39 | 375 Secs (375 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                                                    | Prime + Parallel Group 1-3 in Visit 39 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.175,3.575                              | Prime + Parallel Group 4-5 in Visit 39 | 385 Secs (385 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                                                    | Prime + Parallel Group 4-5 in Visit 39 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 4                                      | Prime + Parallel Group 6-7 in Visit 39 | 385 Secs (385 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                                                    | Prime + Parallel Group 6-7 in Visit 39 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 1                                      | Prime + Parallel Group 8-9 in Visit 39 | 385 Secs (385 Secs)<br>[==>]    | [1]   |
|               | 9                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                                                    | Prime + Parallel Group 8-9 in Visit 39 | 450 Secs (450 Secs)<br>[==>]    | [1]   |



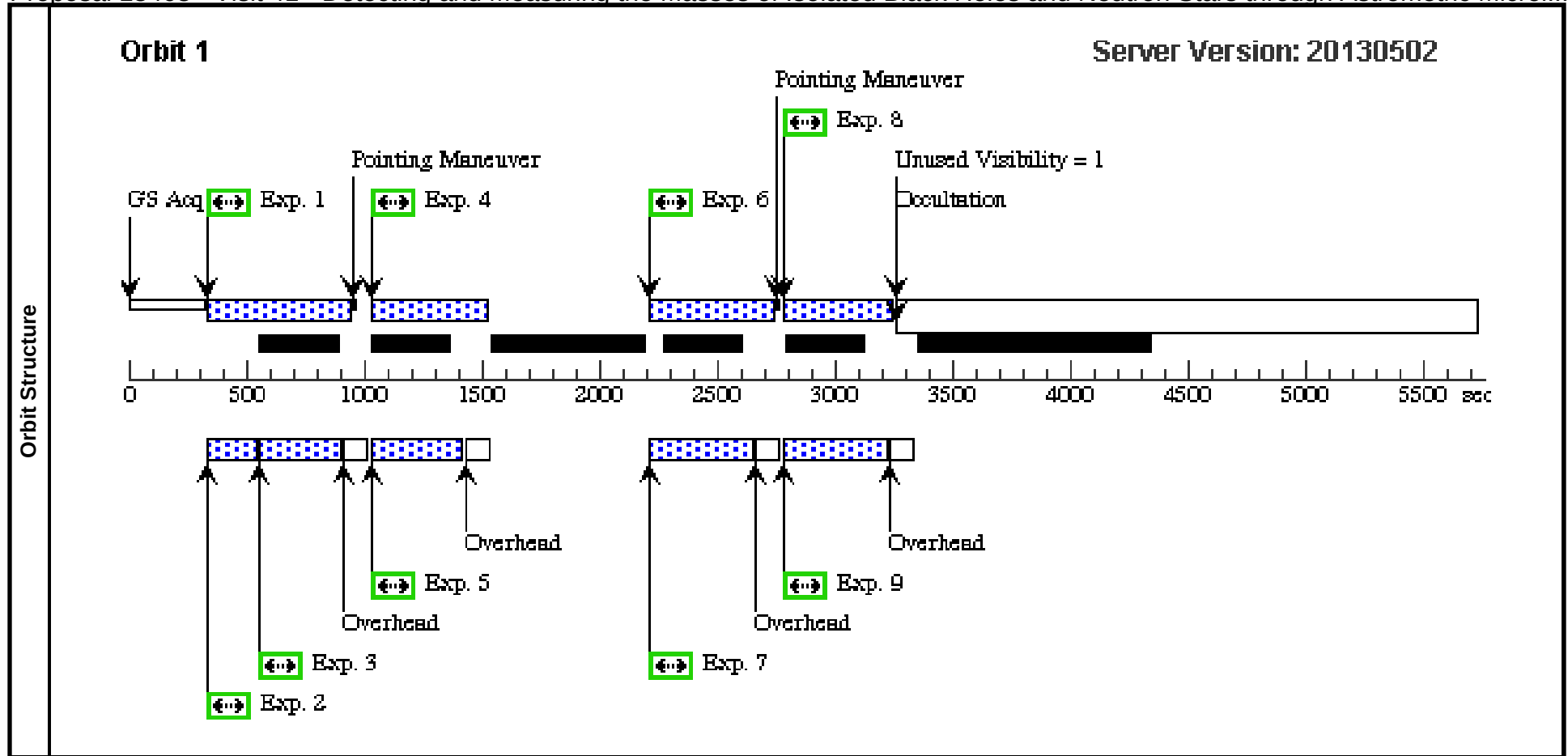
# Proposal 13463 - Visit 40 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                        |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 40, implementation <span style="float: right;">Tue Jun 25 03:51:51 GMT 2013</span>                                                                             |                |                                                                                      |                               |               |              |                        |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 39 BY 0 H TO 2 H; VISIBILITY INTERVAL 58.80 M |                |                                                                                      |                               |               |              |                        |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous          |                                        |                                 |       |
|               | (6)                                                                                                                                                                                  | SWEEPS-R1      | RA: 17 58 47.6030 (269.6983458d)<br>Dec: -29 15 28.64 (-29.25796d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS  |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.          | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         | FLASH=50     | POS TARG -0.175,-0.175 | Prime + Parallel Group 1-3 in Visit 40 | 50 Secs (50 Secs)<br>[==>]      | [1]   |
|               | 2                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.175,-0.175 | Prime + Parallel Group 1-3 in Visit 40 | 375 Secs (375 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                        | Prime + Parallel Group 1-3 in Visit 40 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.175,3.575  | Prime + Parallel Group 4-5 in Visit 40 | 385 Secs (385 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                        | Prime + Parallel Group 4-5 in Visit 40 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 4          | Prime + Parallel Group 6-7 in Visit 40 | 385 Secs (385 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                        | Prime + Parallel Group 6-7 in Visit 40 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 1          | Prime + Parallel Group 8-9 in Visit 40 | 385 Secs (385 Secs)<br>[==>]    | [1]   |
|               | 9                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                        | Prime + Parallel Group 8-9 in Visit 40 | 450 Secs (450 Secs)<br>[==>]    | [1]   |



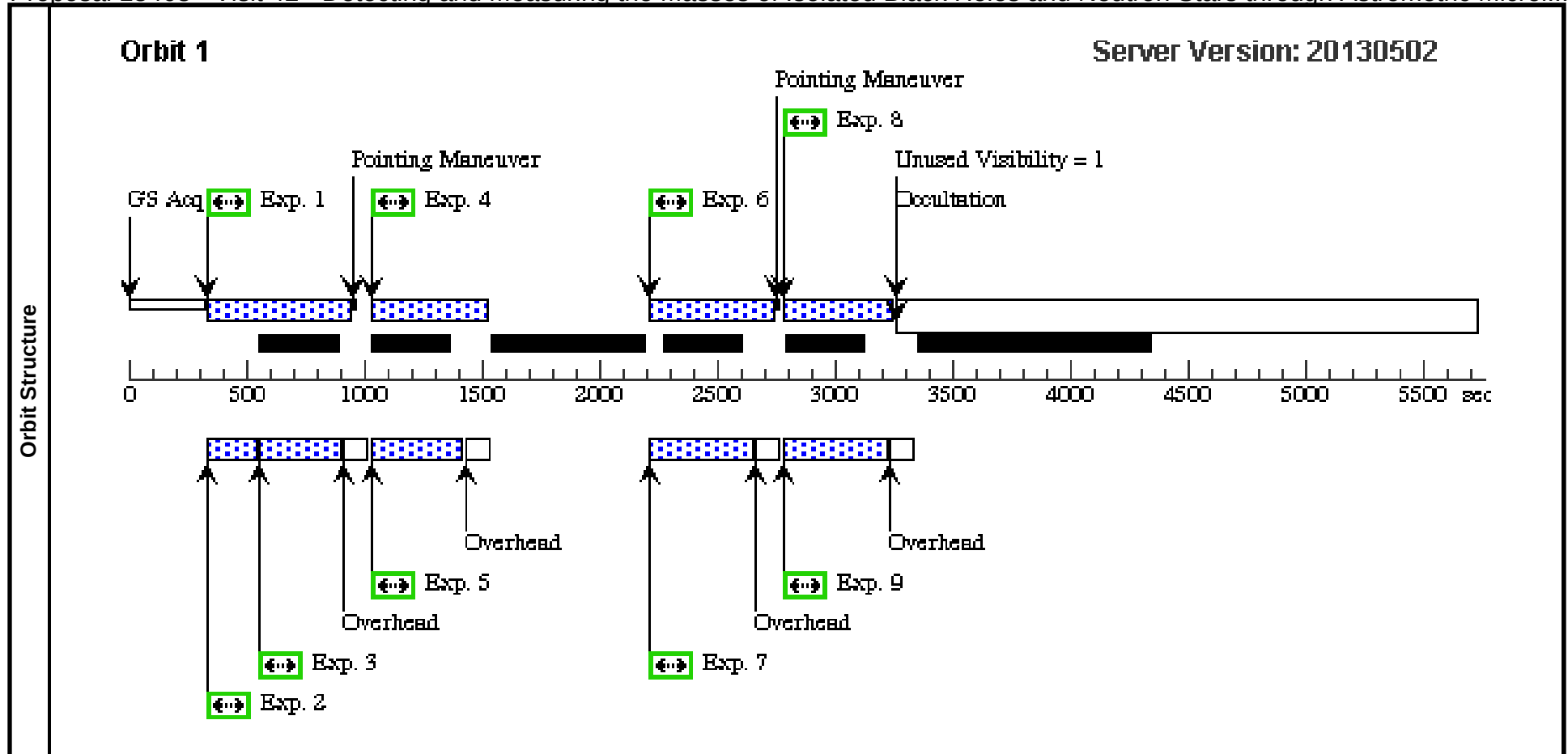
# Proposal 13463 - Visit 41 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |                       |                       |                                        |                                 |       |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 41, implementation <span style="float: right;">Tue Jun 25 03:51:52 GMT 2013</span>                                                                                          |                |                                                                                    |                               |               |                       |                       |                                        |                                 |       |
|               | <b>Diagnostic Status: Warning</b><br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; BETWEEN 05-AUG-2014 AND 08-AUG-2014; VISIBILITY INTERVAL 54.36 M |                |                                                                                    |                               |               |                       |                       |                                        |                                 |       |
| Diagnostics   | (Visit 41) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME                                                                                                                 |                |                                                                                    |                               |               |                       |                       |                                        |                                 |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |                       |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                                 | Name           | Target Coordinates                                                                 | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                       |                                        |                                 |       |
|               | (5)                                                                                                                                                                                               | SWEEPS         | RA: 17 59 0.8000 (269.7533333d)<br>Dec: -29 12 0.00 (-29.20000d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                       |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                                 | Label          | Target                                                                             | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.175,3.575  | Prime + Parallel Group 1-3 in Visit 41 | 400 Secs (400 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |                       |                       | [==>]                                  |                                 | [1]   |
|               | 2                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         | FLASH=8               |                       | Prime + Parallel Group 1-3 in Visit 41 | 50 Secs (50 Secs)               |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |                       |                       | [==>]                                  |                                 | [1]   |
|               | 3                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                       | Prime + Parallel Group 1-3 in Visit 41 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |                       |                       | [==>]                                  |                                 | [1]   |
|               | 4                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.175,-0.175 | Prime + Parallel Group 4-5 in Visit 41 | 365 Secs (365 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |                       |                       | [==>]                                  |                                 | [1]   |
|               | 5                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                       | Prime + Parallel Group 4-5 in Visit 41 | 387 Secs (387 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |                       |                       | [==>]                                  |                                 | [1]   |
|               | 6                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 4         | Prime + Parallel Group 6-7 in Visit 41 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |                       |                       | [==>]                                  |                                 | [1]   |
|               | 7                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                       | Prime + Parallel Group 6-7 in Visit 41 | 418 Secs (418 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |                       |                       | [==>]                                  |                                 | [1]   |
|               | 8                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 1         | Prime + Parallel Group 8-9 in Visit 41 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |                       |                       | [==>]                                  |                                 | [1]   |
|               | 9                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                       | Prime + Parallel Group 8-9 in Visit 41 | 440 Secs (440 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |                       |                       | [==>]                                  |                                 | [1]   |



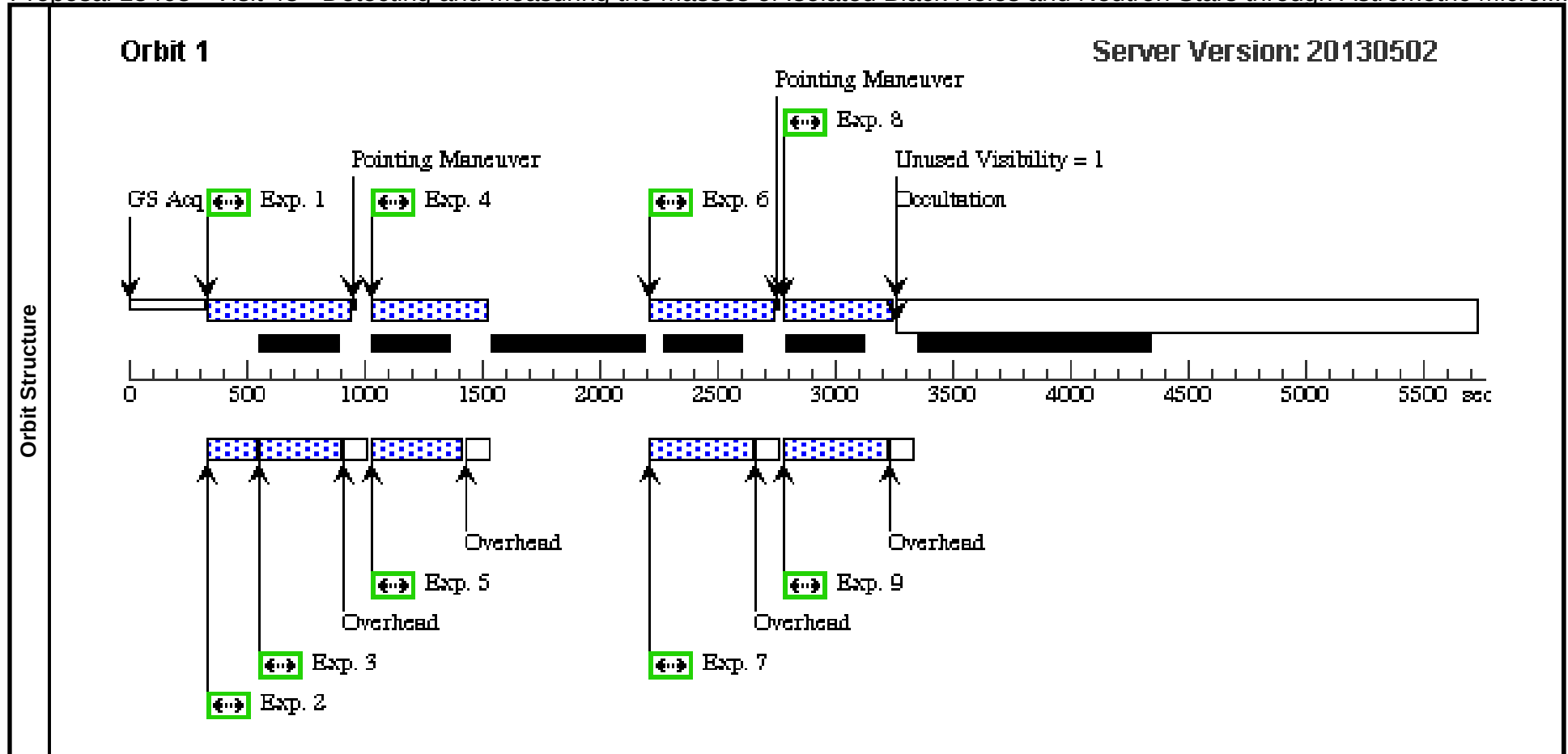
# Proposal 13463 - Visit 42 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |                       |                       |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | <b>Proposal 13463, Visit 42, implementation</b> <span style="float: right;">Tue Jun 25 03:51:53 GMT 2013</span>                                                                      |                |                                                                                      |                               |               |                       |                       |                                        |                                 |       |
|               | <b>Diagnostic Status: Warning</b><br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 41 BY 0 D TO 2 H; VISIBILITY INTERVAL 54.36 M |                |                                                                                      |                               |               |                       |                       |                                        |                                 |       |
| Diagnostics   | (Visit 42) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME                                                                                                    |                |                                                                                      |                               |               |                       |                       |                                        |                                 |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |                       |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                       |                                        |                                 |       |
|               | (7)                                                                                                                                                                                  | SWEEPS-L1      | RA: 17 59 16.2271 (269.8176129d)<br>Dec: -29 11 51.36 (-29.19760d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                       |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.175,3.575  | Prime + Parallel Group 1-3 in Visit 42 | 400 Secs (400 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         | FLASH=8               |                       | Prime + Parallel Group 1-3 in Visit 42 | 50 Secs (50 Secs)<br>[==>]      | [1]   |
|               | 3                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                       | Prime + Parallel Group 1-3 in Visit 42 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.175,-0.175 | Prime + Parallel Group 4-5 in Visit 42 | 365 Secs (365 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                       | Prime + Parallel Group 4-5 in Visit 42 | 387 Secs (387 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 4         | Prime + Parallel Group 6-7 in Visit 42 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                       | Prime + Parallel Group 6-7 in Visit 42 | 418 Secs (418 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 1         | Prime + Parallel Group 8-9 in Visit 42 | 340 Secs (340 Secs)<br>[==>]    | [1]   |
|               | 9                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                       | Prime + Parallel Group 8-9 in Visit 42 | 440 Secs (440 Secs)<br>[==>]    | [1]   |



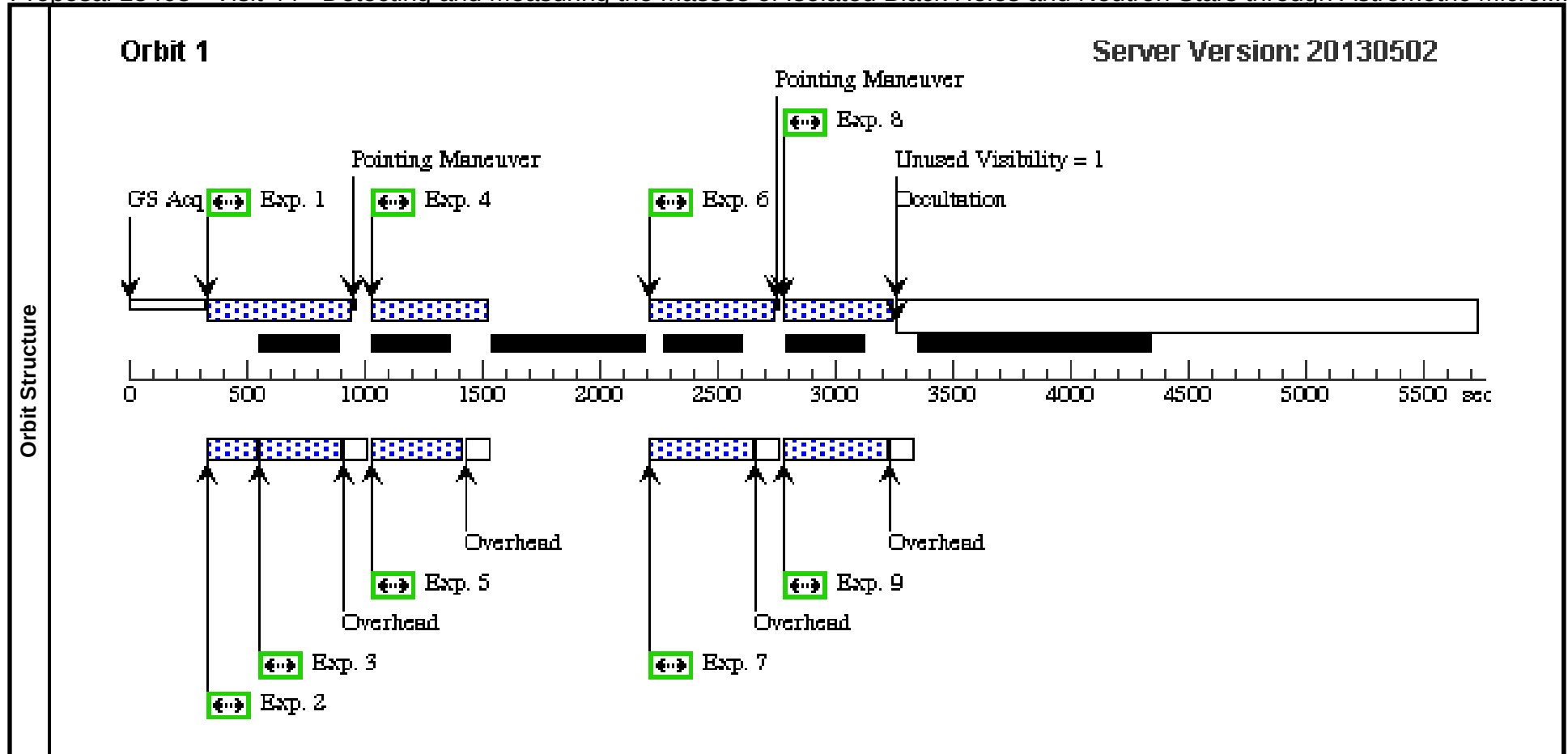
# Proposal 13463 - Visit 43 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                               |                |                                                                                     |                               |               |                       |                                                   |                                        |                                 |       |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|---------------------------------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 43, implementation <span style="float: right;">Tue Jun 25 03:51:54 GMT 2013</span>                                                                      |                |                                                                                     |                               |               |                       |                                                   |                                        |                                 |       |
|               | Diagnostic Status: Warning<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 42 BY 0 D TO 2 H; VISIBILITY INTERVAL 54.36 M |                |                                                                                     |                               |               |                       |                                                   |                                        |                                 |       |
| Diagnostics   | (Visit 43) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME                                                                                             |                |                                                                                     |                               |               |                       |                                                   |                                        |                                 |       |
|               |                                                                                                                                                                               |                |                                                                                     |                               |               |                       |                                                   |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                             | Name           | Target Coordinates                                                                  | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                                                   |                                        |                                 |       |
|               | (8)                                                                                                                                                                           | SWEEPS-L2      | RA: 17 59 3.0300 (269.7626250d)<br>Dec: -29 15 20.00 (-29.25556d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                                                   |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                             | Label          | Target                                                                              | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.                                     | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                             |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.175,3.575                              | Prime + Parallel Group 1-3 in Visit 43 | 400 Secs (400 Secs)             |       |
|               |                                                                                                                                                                               |                |                                                                                     |                               |               |                       |                                                   | [==>]                                  |                                 | [1]   |
|               | 2                                                                                                                                                                             | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         | FLASH=8               |                                                   | Prime + Parallel Group 1-3 in Visit 43 | 50 Secs (50 Secs)               |       |
|               |                                                                                                                                                                               |                |                                                                                     |                               |               |                       |                                                   | [==>]                                  |                                 | [1]   |
|               | 3                                                                                                                                                                             | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                                                   | Prime + Parallel Group 1-3 in Visit 43 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                               |                |                                                                                     |                               |               |                       |                                                   | [==>]                                  |                                 | [1]   |
|               | 4                                                                                                                                                                             |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.175,-0.175;<br>GS ACQ SCENARIO BASE1B3 | Prime + Parallel Group 4-5 in Visit 43 | 365 Secs (365 Secs)             |       |
|               |                                                                                                                                                                               |                |                                                                                     |                               |               |                       |                                                   | [==>]                                  |                                 | [1]   |
|               | 5                                                                                                                                                                             | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                                                   | Prime + Parallel Group 4-5 in Visit 43 | 387 Secs (387 Secs)             |       |
|               |                                                                                                                                                                               |                |                                                                                     |                               |               |                       |                                                   | [==>]                                  |                                 | [1]   |
|               | 6                                                                                                                                                                             |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 4                                     | Prime + Parallel Group 6-7 in Visit 43 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                               |                |                                                                                     |                               |               |                       |                                                   | [==>]                                  |                                 | [1]   |
|               | 7                                                                                                                                                                             | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                                                   | Prime + Parallel Group 6-7 in Visit 43 | 418 Secs (418 Secs)             |       |
|               |                                                                                                                                                                               |                |                                                                                     |                               |               |                       |                                                   | [==>]                                  |                                 | [1]   |
|               | 8                                                                                                                                                                             |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 1                                     | Prime + Parallel Group 8-9 in Visit 43 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                               |                |                                                                                     |                               |               |                       |                                                   | [==>]                                  |                                 | [1]   |
|               | 9                                                                                                                                                                             | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                                                   | Prime + Parallel Group 8-9 in Visit 43 | 440 Secs (440 Secs)             |       |
|               |                                                                                                                                                                               |                |                                                                                     |                               |               |                       |                                                   | [==>]                                  |                                 | [1]   |



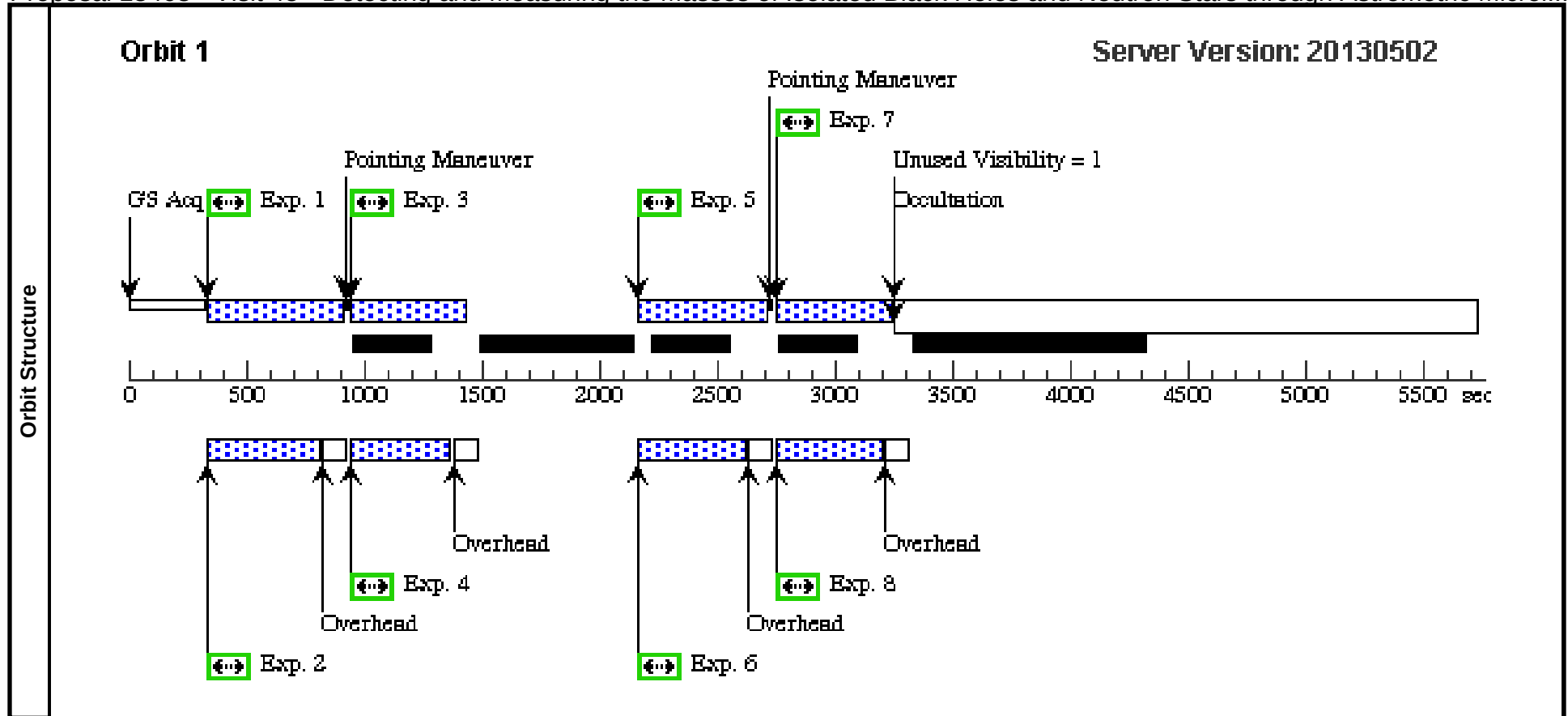
# Proposal 13463 - Visit 44 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |                       |                       |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 44, implementation <span style="float: right;">Tue Jun 25 03:51:56 GMT 2013</span>                                                                             |                |                                                                                      |                               |               |                       |                       |                                        |                                 |       |
|               | <b>Diagnostic Status: Warning</b><br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 43 BY 0 H TO 2 H; VISIBILITY INTERVAL 54.36 M |                |                                                                                      |                               |               |                       |                       |                                        |                                 |       |
| Diagnostics   | (Visit 44) Warning (Orbit Planner): PARALLELS SIGNIFICANTLY EXTEND ALIGNMENT TIME                                                                                                    |                |                                                                                      |                               |               |                       |                       |                                        |                                 |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |                       |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                       |                                        |                                 |       |
|               | (6)                                                                                                                                                                                  | SWEEPS-R1      | RA: 17 58 47.6030 (269.6983458d)<br>Dec: -29 15 28.64 (-29.25796d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                       |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.175,3.575  | Prime + Parallel Group 1-3 in Visit 44 | 400 Secs (400 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |                       |                       | [==>]                                  |                                 | [1]   |
|               | 2                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         | FLASH=8               |                       | Prime + Parallel Group 1-3 in Visit 44 | 50 Secs (50 Secs)               |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |                       |                       | [==>]                                  |                                 | [1]   |
|               | 3                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                       | Prime + Parallel Group 1-3 in Visit 44 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |                       |                       | [==>]                                  |                                 | [1]   |
|               | 4                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.175,-0.175 | Prime + Parallel Group 4-5 in Visit 44 | 365 Secs (365 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |                       |                       | [==>]                                  |                                 | [1]   |
|               | 5                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                       | Prime + Parallel Group 4-5 in Visit 44 | 387 Secs (387 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |                       |                       | [==>]                                  |                                 | [1]   |
|               | 6                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 4         | Prime + Parallel Group 6-7 in Visit 44 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |                       |                       | [==>]                                  |                                 | [1]   |
|               | 7                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                       | Prime + Parallel Group 6-7 in Visit 44 | 418 Secs (418 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |                       |                       | [==>]                                  |                                 | [1]   |
|               | 8                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 1         | Prime + Parallel Group 8-9 in Visit 44 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |                       |                       | [==>]                                  |                                 | [1]   |
|               | 9                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                       | Prime + Parallel Group 8-9 in Visit 44 | 440 Secs (440 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |                       |                       | [==>]                                  |                                 | [1]   |



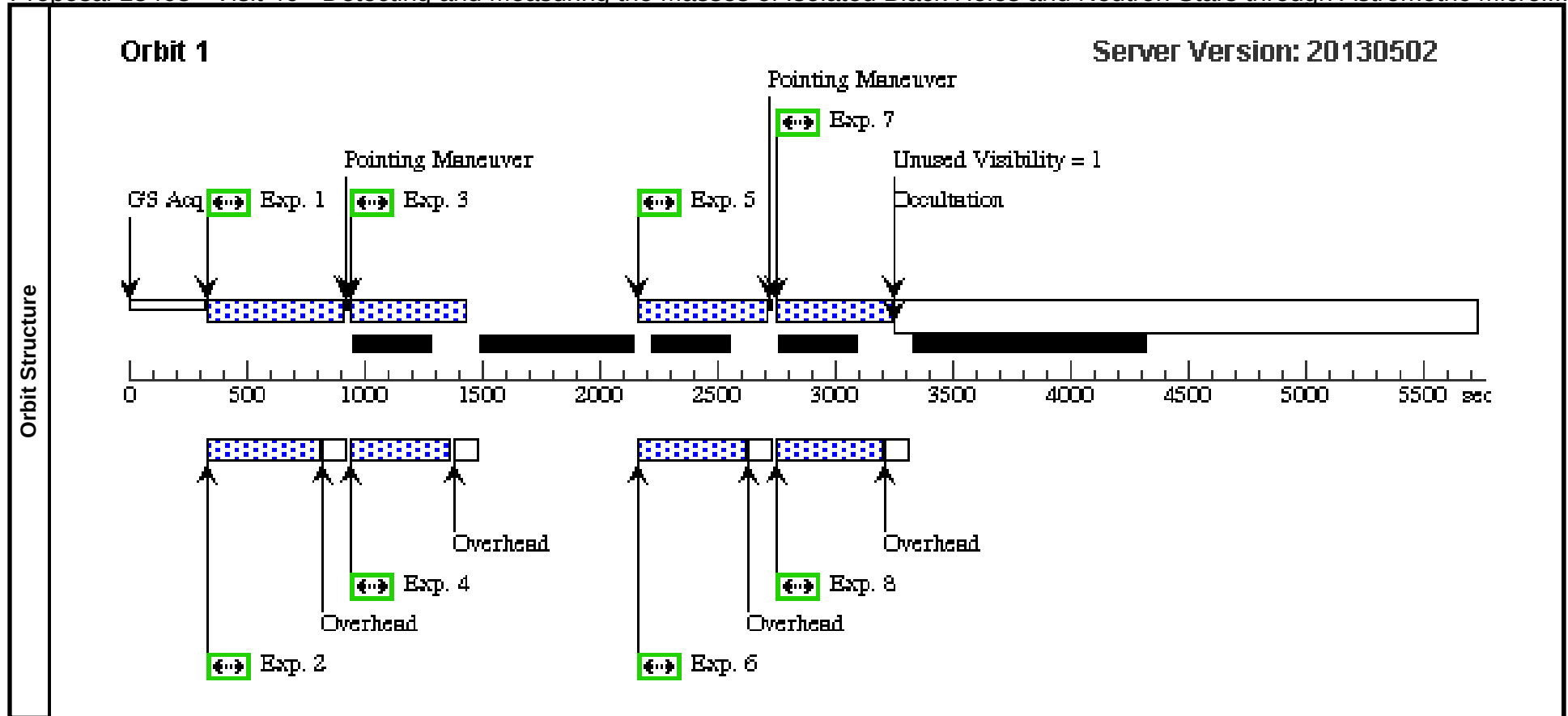
# Proposal 13463 - Visit 45 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |                       |                      |                                        |                                 |       |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 45, implementation <span style="float: right;">Tue Jun 25 03:51:57 GMT 2013</span>                                                                                          |                |                                                                                    |                               |               |                       |                      |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; BETWEEN 22-AUG-2014 AND 25-AUG-2014; VISIBILITY INTERVAL 54.26 M |                |                                                                                    |                               |               |                       |                      |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                                 | Name           | Target Coordinates                                                                 | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                      |                                        |                                 |       |
|               | (5)                                                                                                                                                                                               | SWEEPS         | RA: 17 59 0.8000 (269.7533333d)<br>Dec: -29 12 0.00 (-29.20000d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                      |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                                 | Label          | Target                                                                             | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.        | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG 0.225,3.975 | Prime + Parallel Group 1-2 in Visit 45 | 370 Secs (370 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                      | Prime + Parallel Group 1-2 in Visit 45 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG 0.225,0.225 | Prime + Parallel Group 3-4 in Visit 45 | 370 Secs (370 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                      | Prime + Parallel Group 3-4 in Visit 45 | 420 Secs (420 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 3        | Prime + Parallel Group 5-6 in Visit 45 | 370 Secs (370 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                      | Prime + Parallel Group 5-6 in Visit 45 | 435 Secs (435 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 1        | Prime + Parallel Group 7-8 in Visit 45 | 365 Secs (365 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                      | Prime + Parallel Group 7-8 in Visit 45 | 450 Secs (450 Secs)<br>[==>]    | [1]   |



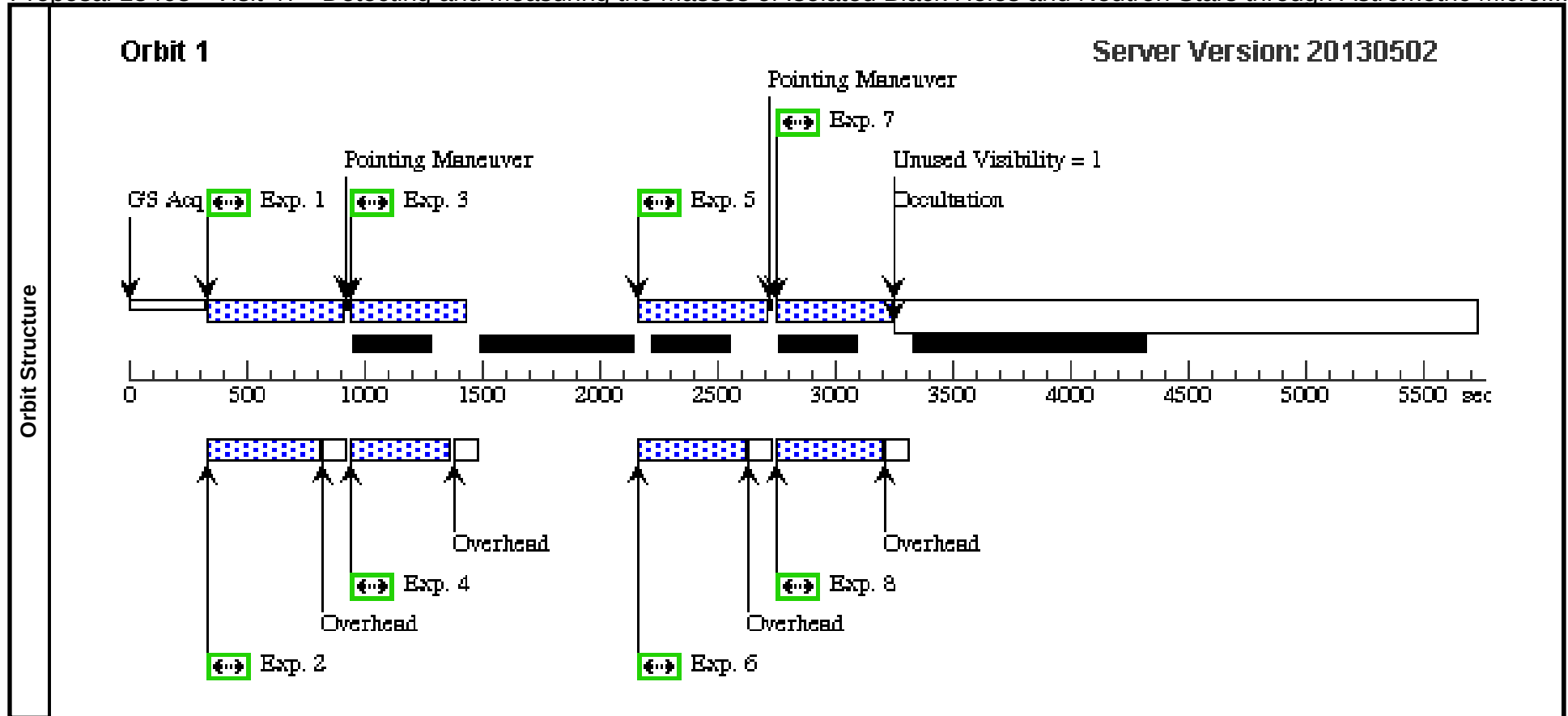
# Proposal 13463 - Visit 46 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 46, implementation <span style="float: right;">Tue Jun 25 03:51:58 GMT 2013</span>                                                                             |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 45 BY 0 D TO 2 H; VISIBILITY INTERVAL 54.26 M |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous         |                                        |                                 |       |
|               | (7)                                                                                                                                                                                  | SWEEPS-L1      | RA: 17 59 16.2271 (269.8176129d)<br>Dec: -29 11 51.36 (-29.19760d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.225,3.975  | Prime + Parallel Group 1-2 in Visit 46 | 370 Secs (370 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 1-2 in Visit 46 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.225,0.225  | Prime + Parallel Group 3-4 in Visit 46 | 370 Secs (370 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 3-4 in Visit 46 | 420 Secs (420 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 3         | Prime + Parallel Group 5-6 in Visit 46 | 370 Secs (370 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 5-6 in Visit 46 | 435 Secs (435 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 1         | Prime + Parallel Group 7-8 in Visit 46 | 365 Secs (365 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 7-8 in Visit 46 | 450 Secs (450 Secs)<br>[==>]    | [1]   |



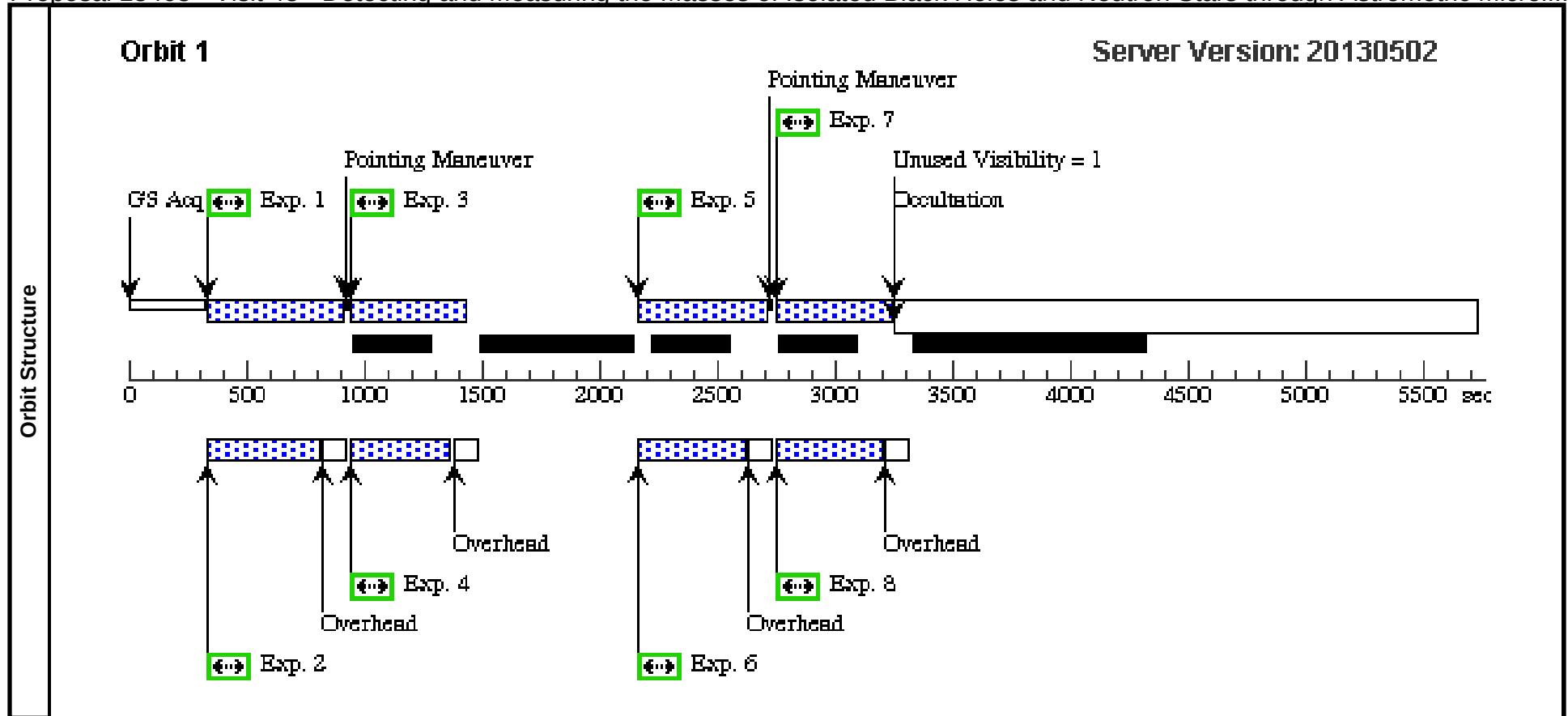
# Proposal 13463 - Visit 47 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                      |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|------------------------------------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 47, implementation <span style="float: right;">Tue Jun 25 03:51:59 GMT 2013</span>                                                                             |                |                                                                                     |                               |               |                       |                                                      |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 46 BY 0 D TO 2 H; VISIBILITY INTERVAL 54.26 M |                |                                                                                     |                               |               |                       |                                                      |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                  | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                                                      |                                        |                                 |       |
|               | (8)                                                                                                                                                                                  | SWEEPS-L2      | RA: 17 59 3.0300 (269.7626250d)<br>Dec: -29 15 20.00 (-29.25556d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                                                      |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                              | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.                                        | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG 0.225,3.975;<br>GS ACQ SCENARI<br>O BASE1B3 | Prime + Parallel Group 1-2 in Visit 47 | 370 Secs (370 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                                                      | Prime + Parallel Group 1-2 in Visit 47 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG 0.225,0.225                                 | Prime + Parallel Group 3-4 in Visit 47 | 370 Secs (370 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                                                      | Prime + Parallel Group 3-4 in Visit 47 | 420 Secs (420 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 3                                        | Prime + Parallel Group 5-6 in Visit 47 | 370 Secs (370 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                                                      | Prime + Parallel Group 5-6 in Visit 47 | 435 Secs (435 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 1                                        | Prime + Parallel Group 7-8 in Visit 47 | 365 Secs (365 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                                                      | Prime + Parallel Group 7-8 in Visit 47 | 450 Secs (450 Secs)<br>[==>]    | [1]   |



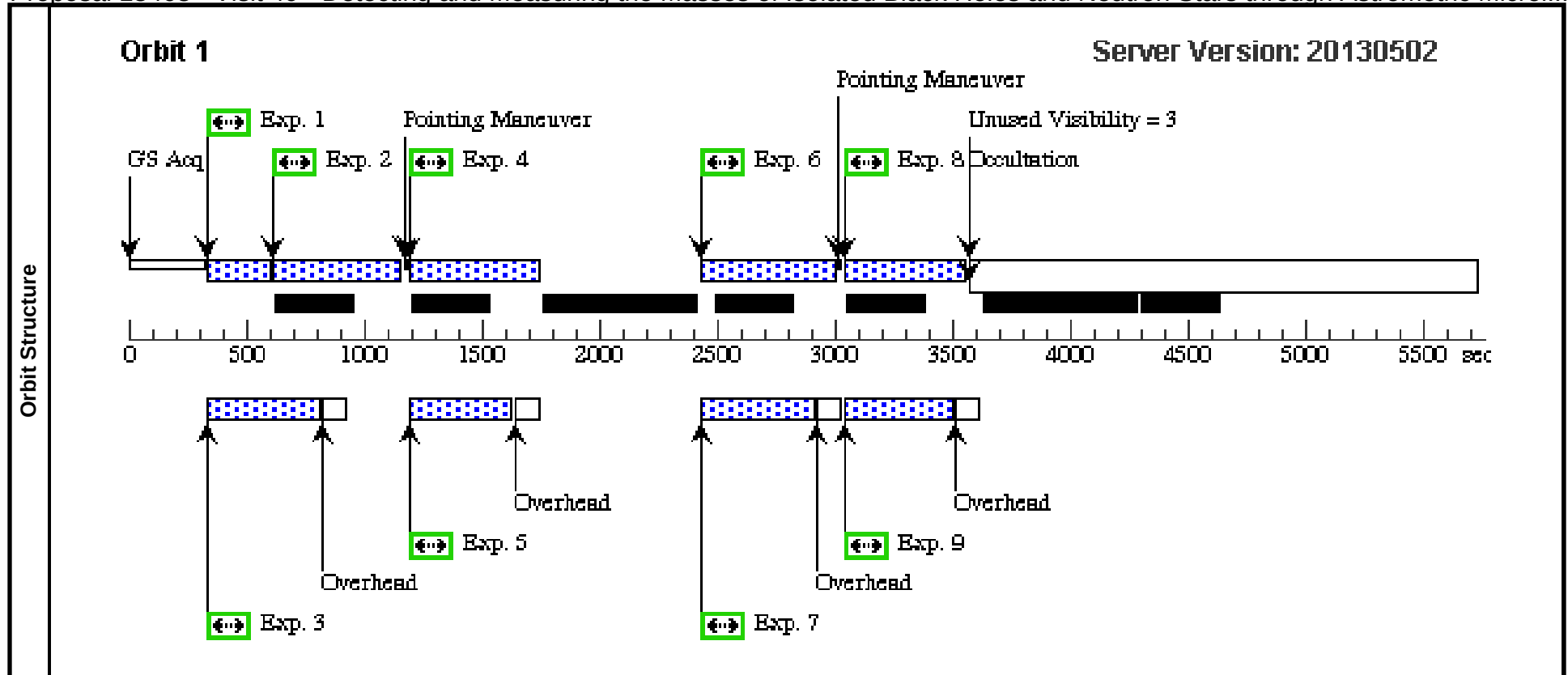
# Proposal 13463 - Visit 48 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 48, implementation <span style="float: right;">Tue Jun 25 03:52:00 GMT 2013</span>                                                                             |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 47 BY 0 H TO 2 H; VISIBILITY INTERVAL 54.26 M |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous         |                                        |                                 |       |
|               | (6)                                                                                                                                                                                  | SWEEPS-R1      | RA: 17 58 47.6030 (269.6983458d)<br>Dec: -29 15 28.64 (-29.25796d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.225,3.975  | Prime + Parallel Group 1-2 in Visit 48 | 370 Secs (370 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 1-2 in Visit 48 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.225,0.225  | Prime + Parallel Group 3-4 in Visit 48 | 370 Secs (370 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 3-4 in Visit 48 | 420 Secs (420 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 3         | Prime + Parallel Group 5-6 in Visit 48 | 370 Secs (370 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 5-6 in Visit 48 | 435 Secs (435 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 1         | Prime + Parallel Group 7-8 in Visit 48 | 365 Secs (365 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 7-8 in Visit 48 | 450 Secs (450 Secs)<br>[==>]    | [1]   |



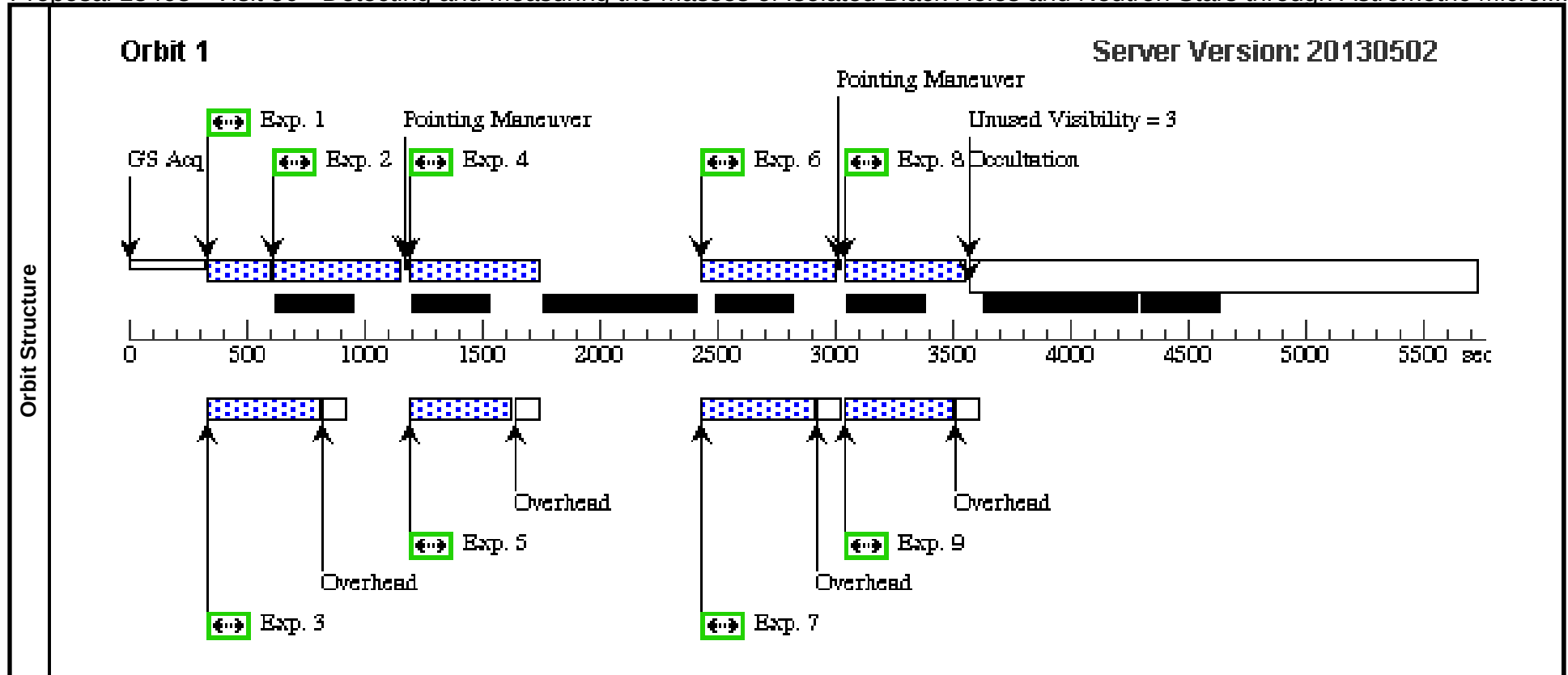
# Proposal 13463 - Visit 49 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        |                                 |       |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 49, implementation <span style="float: right;">Tue Jun 25 03:52:00 GMT 2013</span>                                                                                          |                |                                                                                    |                               |               |              |                        |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; BETWEEN 09-SEP-2014 AND 12-SEP-2014; VISIBILITY INTERVAL 59.60 M |                |                                                                                    |                               |               |              |                        |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                                 | Name           | Target Coordinates                                                                 | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous          |                                        |                                 |       |
|               | (5)                                                                                                                                                                                               | SWEEPS         | RA: 17 59 0.8000 (269.7533333d)<br>Dec: -29 12 0.00 (-29.20000d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS  |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                                 | Label          | Target                                                                             | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.          | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         | FLASH=50     | POS TARG -0.225,0 .225 | Prime + Parallel Group 1-3 in Visit 49 | 50 Secs (50 Secs)               |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 2                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG -0.225,0 .225 | Prime + Parallel Group 1-3 in Visit 49 | 420 Secs (420 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 3                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                        | Prime + Parallel Group 1-3 in Visit 49 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 4                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG -0.225,3 .975 | Prime + Parallel Group 4-5 in Visit 49 | 430 Secs (430 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 5                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                        | Prime + Parallel Group 4-5 in Visit 49 | 430 Secs (430 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 6                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | SAME POS AS 4          | Prime + Parallel Group 6-7 in Visit 49 | 390 Secs (390 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 7                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                        | Prime + Parallel Group 6-7 in Visit 49 | 460 Secs (460 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 8                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | SAME POS AS 1          | Prime + Parallel Group 8-9 in Visit 49 | 390 Secs (390 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 9                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                        | Prime + Parallel Group 8-9 in Visit 49 | 460 Secs (460 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |



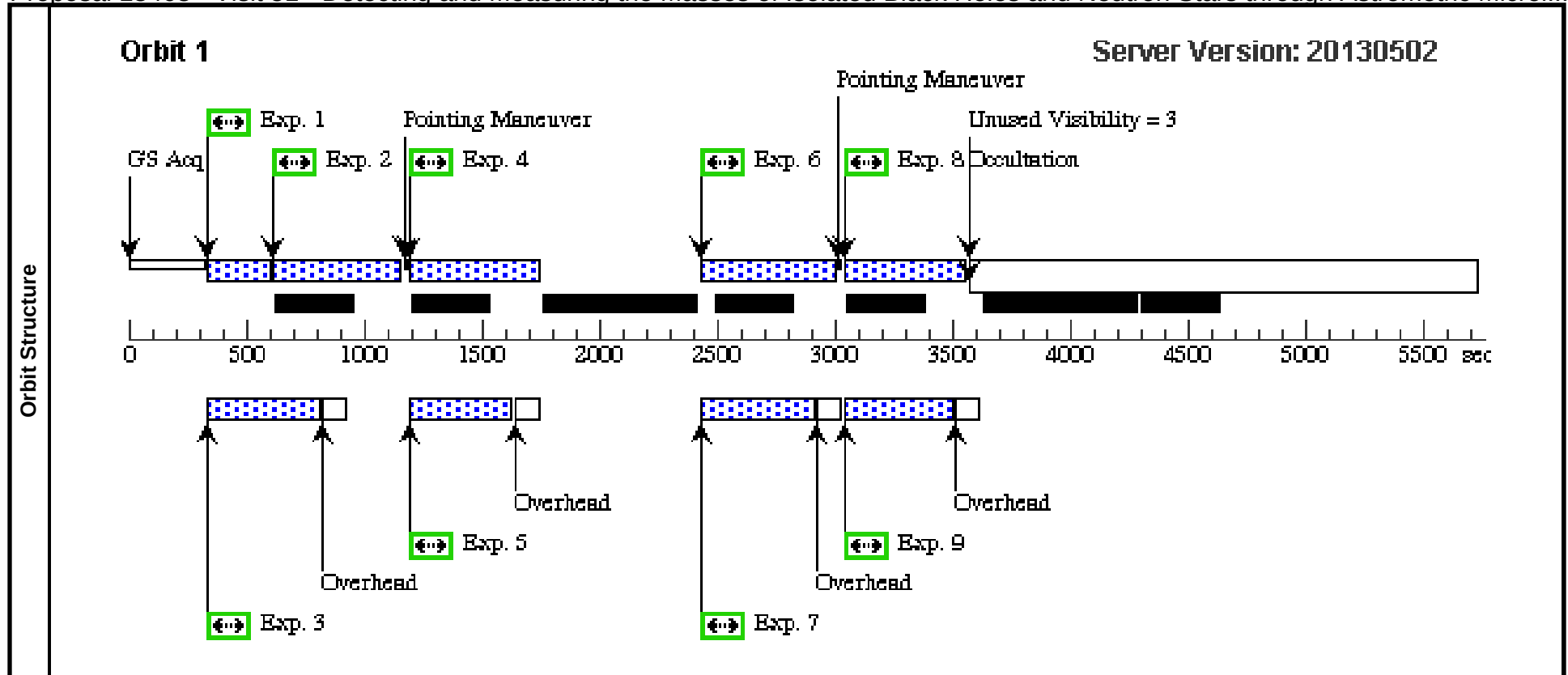
# Proposal 13463 - Visit 50 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                        |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 50, implementation <span style="float: right;">Tue Jun 25 03:52:01 GMT 2013</span>                                                                             |                |                                                                                      |                               |               |              |                        |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 49 BY 0 D TO 2 H; VISIBILITY INTERVAL 59.60 M |                |                                                                                      |                               |               |              |                        |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous          |                                        |                                 |       |
|               | (7)                                                                                                                                                                                  | SWEEPS-L1      | RA: 17 59 16.2271 (269.8176129d)<br>Dec: -29 11 51.36 (-29.19760d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS  |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.          | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         | FLASH=50     | POS TARG -0.225,0 .225 | Prime + Parallel Group 1-3 in Visit 50 | 50 Secs (50 Secs)<br>[==>]      | [1]   |
|               | 2                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG -0.225,0 .225 | Prime + Parallel Group 1-3 in Visit 50 | 420 Secs (420 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                        | Prime + Parallel Group 1-3 in Visit 50 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG -0.225,3 .975 | Prime + Parallel Group 4-5 in Visit 50 | 430 Secs (430 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                        | Prime + Parallel Group 4-5 in Visit 50 | 430 Secs (430 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | SAME POS AS 4          | Prime + Parallel Group 6-7 in Visit 50 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                        | Prime + Parallel Group 6-7 in Visit 50 | 460 Secs (460 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | SAME POS AS 1          | Prime + Parallel Group 8-9 in Visit 50 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 9                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                        | Prime + Parallel Group 8-9 in Visit 50 | 460 Secs (460 Secs)<br>[==>]    | [1]   |



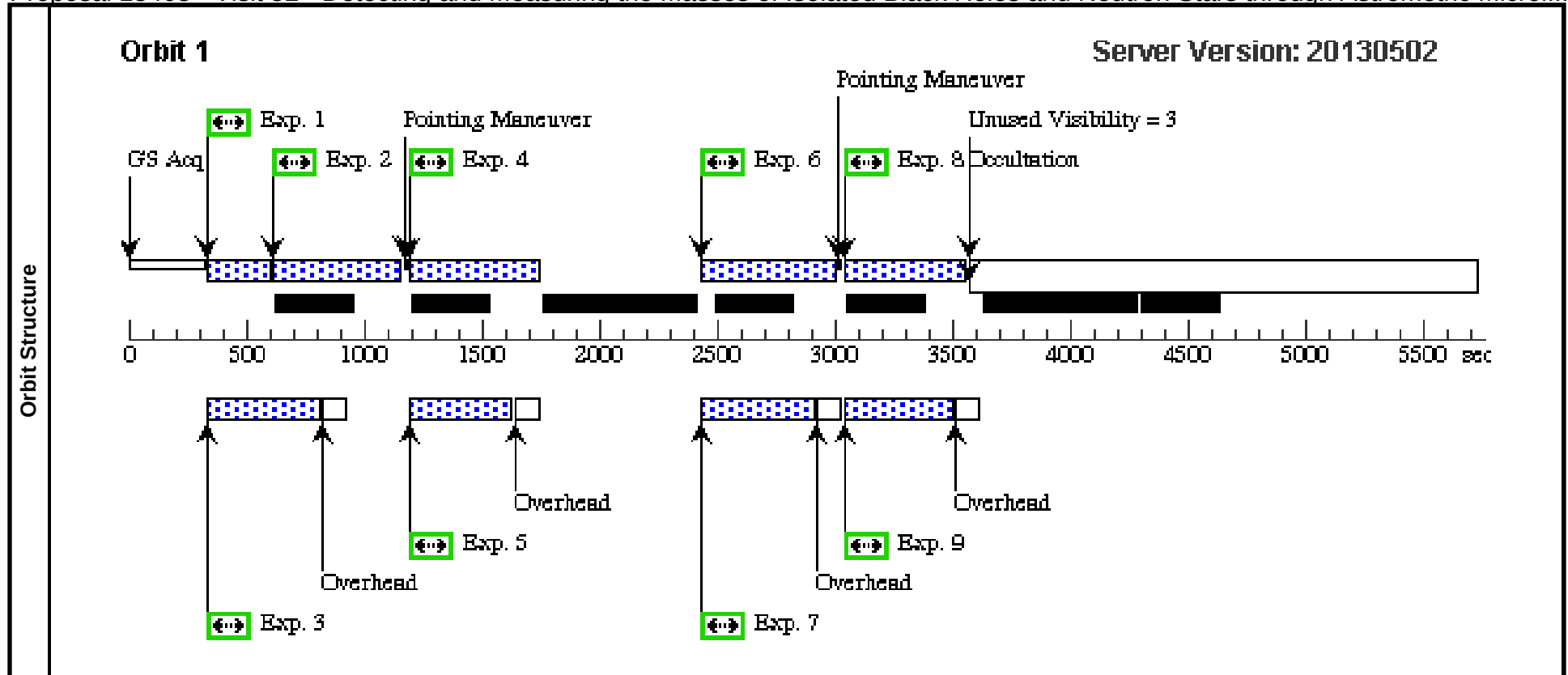
# Proposal 13463 - Visit 51 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |              |                                                        |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|--------------------------------------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 51, implementation <span style="float: right;">Tue Jun 25 03:52:02 GMT 2013</span>                                                                             |                |                                                                                     |                               |               |              |                                                        |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 50 BY 0 D TO 2 H; VISIBILITY INTERVAL 59.60 M |                |                                                                                     |                               |               |              |                                                        |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                  | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous                                          |                                        |                                 |       |
|               | (8)                                                                                                                                                                                  | SWEEPS-L2      | RA: 17 59 3.0300 (269.7626250d)<br>Dec: -29 15 20.00 (-29.25556d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS                                  |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                              | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.                                          | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         | FLASH=50     | POS TARG -0.225,0 .225;<br>GS ACQ SCENARI<br>O BASE1B3 | Prime + Parallel Group 1-3 in Visit 51 | 50 Secs (50 Secs)<br>[==>]      | [1]   |
|               | 2                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG -0.225,0 .225                                 | Prime + Parallel Group 1-3 in Visit 51 | 420 Secs (420 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                                                        | Prime + Parallel Group 1-3 in Visit 51 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG -0.225,3 .975                                 | Prime + Parallel Group 4-5 in Visit 51 | 430 Secs (430 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                                                        | Prime + Parallel Group 4-5 in Visit 51 | 430 Secs (430 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | SAME POS AS 4                                          | Prime + Parallel Group 6-7 in Visit 51 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                                                        | Prime + Parallel Group 6-7 in Visit 51 | 460 Secs (460 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | SAME POS AS 1                                          | Prime + Parallel Group 8-9 in Visit 51 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 9                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                                                        | Prime + Parallel Group 8-9 in Visit 51 | 460 Secs (460 Secs)<br>[==>]    | [1]   |



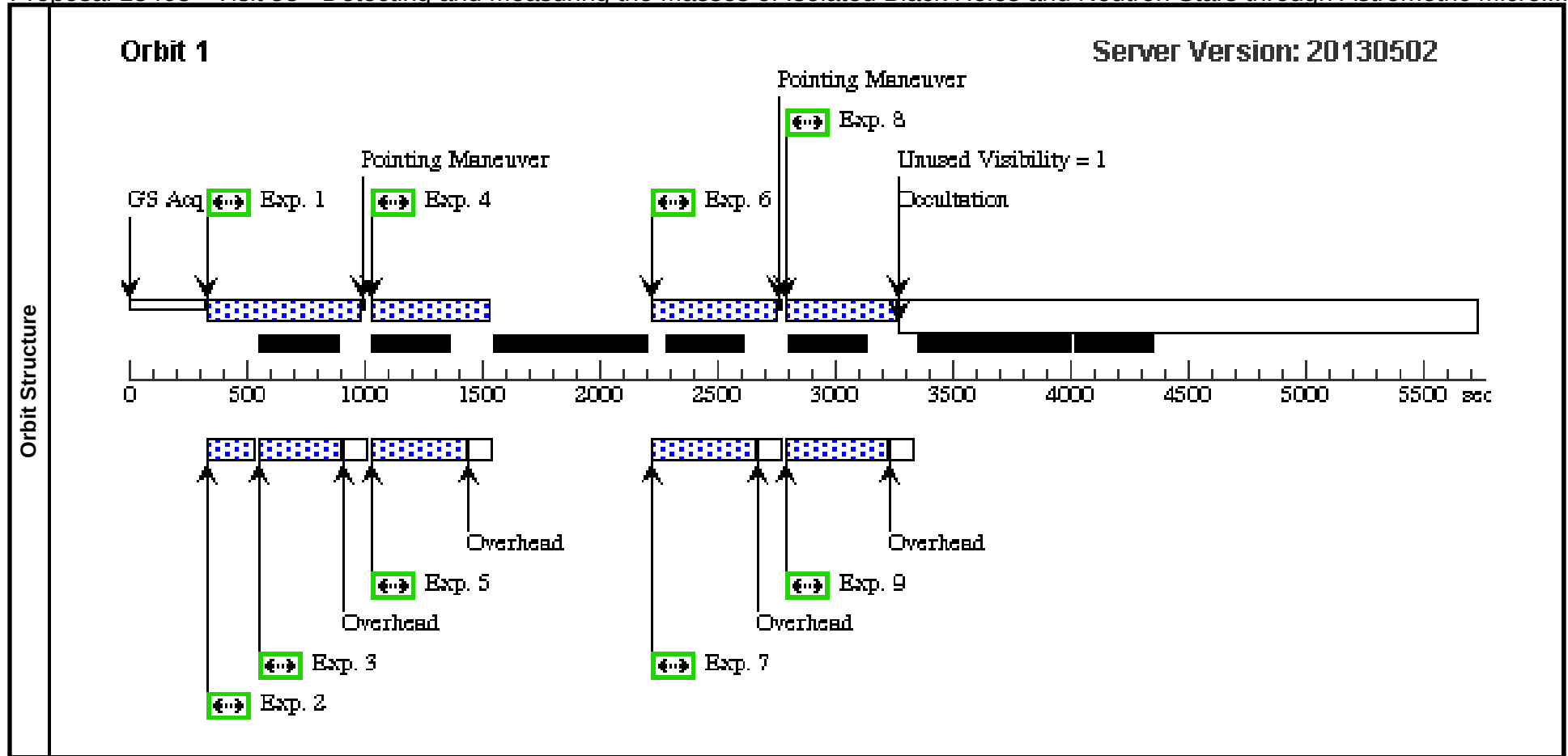
# Proposal 13463 - Visit 52 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                             |                |                                                                                      |                               |               |              |                        |                                        |                                 |       |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | <b>Proposal 13463, Visit 52, implementation</b> <span style="float: right;">Tue Jun 25 03:52:03 GMT 2013</span>                                                                             |                |                                                                                      |                               |               |              |                        |                                        |                                 |       |
|               | <b>Diagnostic Status: No Diagnostics</b><br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 51 BY 0 H TO 2 H; VISIBILITY INTERVAL 59.60 M |                |                                                                                      |                               |               |              |                        |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                           | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous          |                                        |                                 |       |
|               | (6)                                                                                                                                                                                         | SWEEPS-R1      | RA: 17 58 47.6030 (269.6983458d)<br>Dec: -29 15 28.64 (-29.25796d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS  |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                           | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.          | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                           |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         | FLASH=50     | POS TARG -0.225,0 .225 | Prime + Parallel Group 1-3 in Visit 52 | 50 Secs (50 Secs)<br>[==>]      | [1]   |
|               | 2                                                                                                                                                                                           |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG -0.225,0 .225 | Prime + Parallel Group 1-3 in Visit 52 | 420 Secs (420 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                           | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                        | Prime + Parallel Group 1-3 in Visit 52 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                           |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG -0.225,3 .975 | Prime + Parallel Group 4-5 in Visit 52 | 430 Secs (430 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                           | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                        | Prime + Parallel Group 4-5 in Visit 52 | 430 Secs (430 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                           |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | SAME POS AS 4          | Prime + Parallel Group 6-7 in Visit 52 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                           | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                        | Prime + Parallel Group 6-7 in Visit 52 | 460 Secs (460 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                           |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | SAME POS AS 1          | Prime + Parallel Group 8-9 in Visit 52 | 390 Secs (390 Secs)<br>[==>]    | [1]   |
|               | 9                                                                                                                                                                                           | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                        | Prime + Parallel Group 8-9 in Visit 52 | 460 Secs (460 Secs)<br>[==>]    | [1]   |



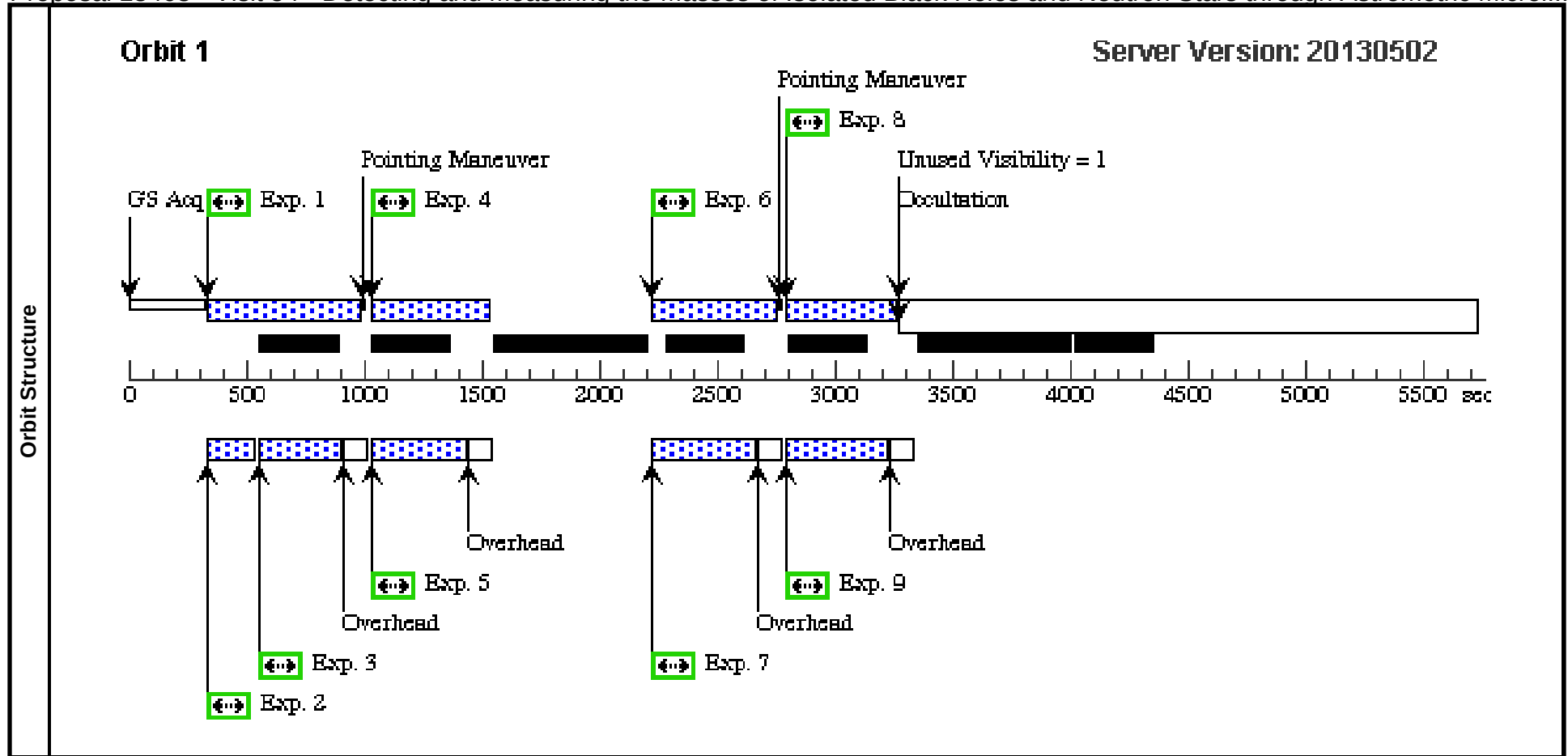
# Proposal 13463 - Visit 53 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                                          |                |                                                                                    |                               |               |              |                        |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | <b>Proposal 13463, Visit 53, implementation</b> <span style="float: right;">Tue Jun 25 03:52:04 GMT 2013</span>                                                                                          |                |                                                                                    |                               |               |              |                        |                                        |                                 |       |
|               | <b>Diagnostic Status: No Diagnostics</b><br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; BETWEEN 26-SEP-2014 AND 29-SEP-2014; VISIBILITY INTERVAL 54.64 M |                |                                                                                    |                               |               |              |                        |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                                        | Name           | Target Coordinates                                                                 | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous          |                                        |                                 |       |
|               | (5)                                                                                                                                                                                                      | SWEEPS         | RA: 17 59 0.8000 (269.7533333d)<br>Dec: -29 12 0.00 (-29.20000d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS  |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                                        | Label          | Target                                                                             | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.          | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                                        |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.225,-0.225 | Prime + Parallel Group 1-3 in Visit 53 | 445 Secs (445 Secs)             |       |
|               |                                                                                                                                                                                                          |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 2                                                                                                                                                                                                        | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         | FLASH=7      |                        | Prime + Parallel Group 1-3 in Visit 53 | 50 Secs (50 Secs)               |       |
|               |                                                                                                                                                                                                          |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 3                                                                                                                                                                                                        | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                        | Prime + Parallel Group 1-3 in Visit 53 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                                          |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 4                                                                                                                                                                                                        |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.225,3.525  | Prime + Parallel Group 4-5 in Visit 53 | 380 Secs (380 Secs)             |       |
|               |                                                                                                                                                                                                          |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 5                                                                                                                                                                                                        | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                        | Prime + Parallel Group 4-5 in Visit 53 | 400 Secs (400 Secs)             |       |
|               |                                                                                                                                                                                                          |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 6                                                                                                                                                                                                        |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 4          | Prime + Parallel Group 6-7 in Visit 53 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                                          |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 7                                                                                                                                                                                                        | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                        | Prime + Parallel Group 6-7 in Visit 53 | 415 Secs (415 Secs)             |       |
|               |                                                                                                                                                                                                          |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 8                                                                                                                                                                                                        |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 1          | Prime + Parallel Group 8-9 in Visit 53 | 345 Secs (345 Secs)             |       |
|               |                                                                                                                                                                                                          |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |
|               | 9                                                                                                                                                                                                        | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                        | Prime + Parallel Group 8-9 in Visit 53 | 430 Secs (430 Secs)             |       |
|               |                                                                                                                                                                                                          |                |                                                                                    |                               |               |              |                        |                                        | [==>]                           | [1]   |



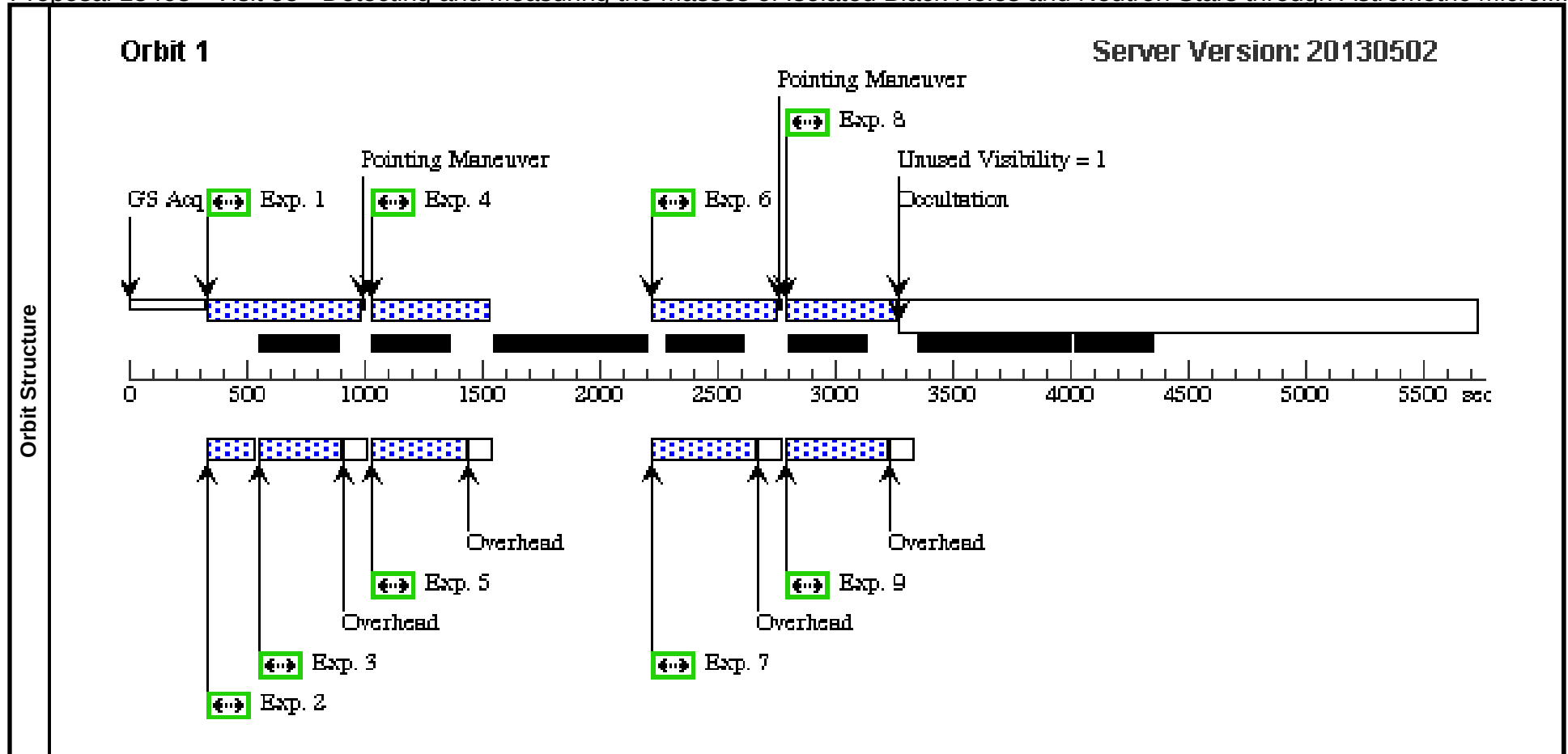
# Proposal 13463 - Visit 54 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                        |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 54, implementation <span style="float: right;">Tue Jun 25 03:52:05 GMT 2013</span>                                                                             |                |                                                                                      |                               |               |              |                        |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 53 BY 0 D TO 2 H; VISIBILITY INTERVAL 54.64 M |                |                                                                                      |                               |               |              |                        |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous          |                                        |                                 |       |
|               | (7)                                                                                                                                                                                  | SWEEPS-L1      | RA: 17 59 16.2271 (269.8176129d)<br>Dec: -29 11 51.36 (-29.19760d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS  |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.          | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.225,-0.225 | Prime + Parallel Group 1-3 in Visit 54 | 445 Secs (445 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         | FLASH=7      |                        | Prime + Parallel Group 1-3 in Visit 54 | 50 Secs (50 Secs)<br>[==>]      | [1]   |
|               | 3                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                        | Prime + Parallel Group 1-3 in Visit 54 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.225,3.525  | Prime + Parallel Group 4-5 in Visit 54 | 380 Secs (380 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                        | Prime + Parallel Group 4-5 in Visit 54 | 400 Secs (400 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 4          | Prime + Parallel Group 6-7 in Visit 54 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                        | Prime + Parallel Group 6-7 in Visit 54 | 415 Secs (415 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 1          | Prime + Parallel Group 8-9 in Visit 54 | 345 Secs (345 Secs)<br>[==>]    | [1]   |
|               | 9                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                        | Prime + Parallel Group 8-9 in Visit 54 | 430 Secs (430 Secs)<br>[==>]    | [1]   |



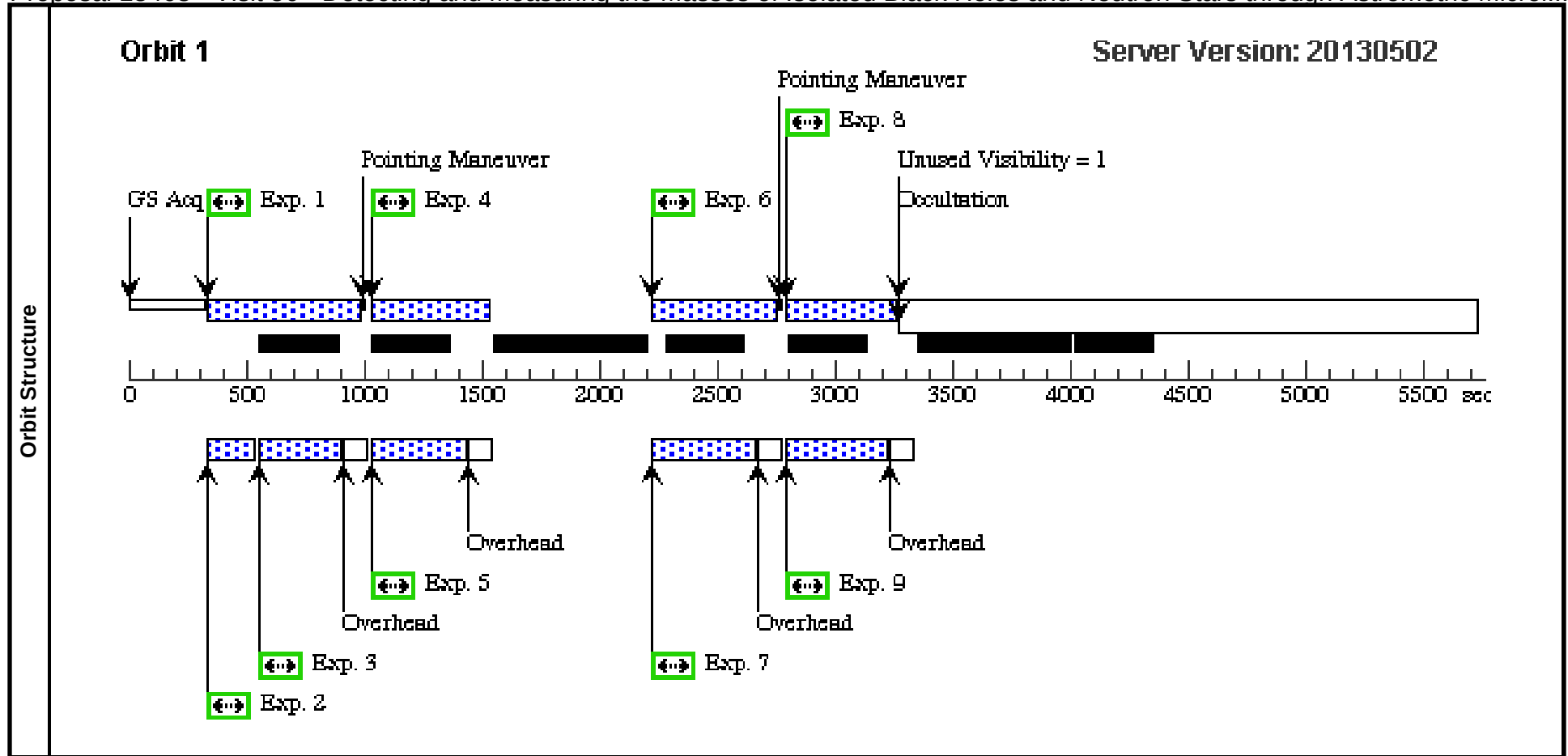
# Proposal 13463 - Visit 55 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                                                              |                |                                                                                     |                               |               |                       |                                                    |                                        |                                 |       |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|----------------------------------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | <div> <div>Proposal 13463, Visit 55, implementation</div> <div>Tue Jun 25 03:52:05 GMT 2013</div> </div>                                                                                                                     |                |                                                                                     |                               |               |                       |                                                    |                                        |                                 |       |
|               | <div> <div>Diagnostic Status: No Diagnostics</div> <div>Scientific Instruments: WFC3/UVIS, ACS/WFC</div> <div>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 54 BY 0 D TO 2 H; VISIBILITY INTERVAL 54.64 M</div> </div> |                |                                                                                     |                               |               |                       |                                                    |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                                                            | Name           | Target Coordinates                                                                  | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                                                    |                                        |                                 |       |
|               | (8)                                                                                                                                                                                                                          | SWEEPS-L2      | RA: 17 59 3.0300 (269.7626250d)<br>Dec: -29 15 20.00 (-29.25556d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                                                    |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                                                            | Label          | Target                                                                              | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.                                      | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                                                            |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG -0.225,-0.225;<br>GS ACQ SCENARIO BASE1B3 | Prime + Parallel Group 1-3 in Visit 55 | 445 Secs (445 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                                                            | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         | FLASH=7               |                                                    | Prime + Parallel Group 1-3 in Visit 55 | 50 Secs (50 Secs)<br>[==>]      | [1]   |
|               | 3                                                                                                                                                                                                                            | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                                                    | Prime + Parallel Group 1-3 in Visit 55 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                                                            |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG -0.225,3.525                              | Prime + Parallel Group 4-5 in Visit 55 | 380 Secs (380 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                                                            | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                                                    | Prime + Parallel Group 4-5 in Visit 55 | 400 Secs (400 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                                                            |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 4                                      | Prime + Parallel Group 6-7 in Visit 55 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                                                            | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                                                    | Prime + Parallel Group 6-7 in Visit 55 | 415 Secs (415 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                                                            |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 1                                      | Prime + Parallel Group 8-9 in Visit 55 | 345 Secs (345 Secs)<br>[==>]    | [1]   |
|               | 9                                                                                                                                                                                                                            | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                                                    | Prime + Parallel Group 8-9 in Visit 55 | 430 Secs (430 Secs)<br>[==>]    | [1]   |



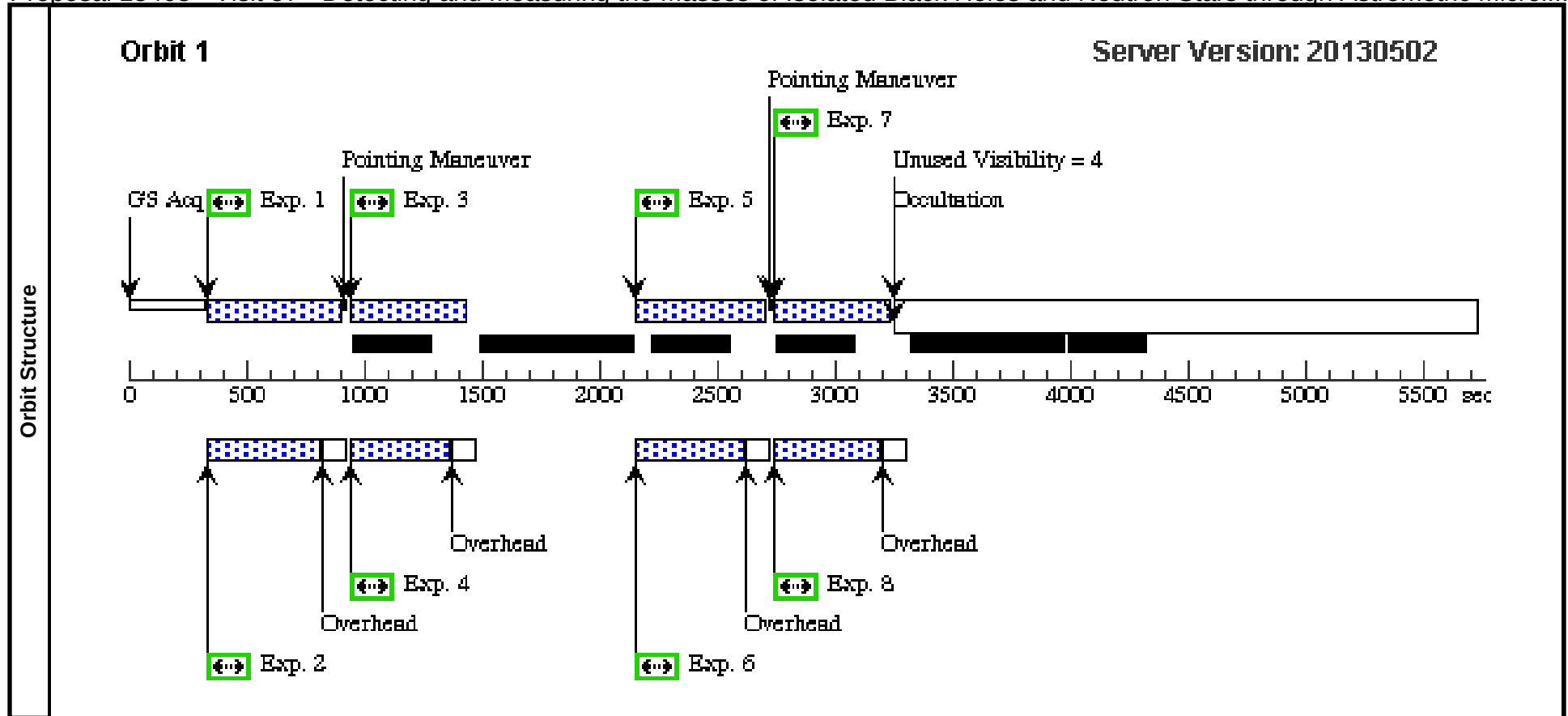
# Proposal 13463 - Visit 56 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                        |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 56, implementation <span style="float: right;">Tue Jun 25 03:52:06 GMT 2013</span>                                                                             |                |                                                                                      |                               |               |              |                        |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 55 BY 0 H TO 2 H; VISIBILITY INTERVAL 54.64 M |                |                                                                                      |                               |               |              |                        |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous          |                                        |                                 |       |
|               | (6)                                                                                                                                                                                  | SWEEPS-R1      | RA: 17 58 47.6030 (269.6983458d)<br>Dec: -29 15 28.64 (-29.25796d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS  |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.          | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.225,-0.225 | Prime + Parallel Group 1-3 in Visit 56 | 445 Secs (445 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         | FLASH=7      |                        | Prime + Parallel Group 1-3 in Visit 56 | 50 Secs (50 Secs)<br>[==>]      | [1]   |
|               | 3                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                        | Prime + Parallel Group 1-3 in Visit 56 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG -0.225,3.525  | Prime + Parallel Group 4-5 in Visit 56 | 380 Secs (380 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                        | Prime + Parallel Group 4-5 in Visit 56 | 400 Secs (400 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 4          | Prime + Parallel Group 6-7 in Visit 56 | 350 Secs (350 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                        | Prime + Parallel Group 6-7 in Visit 56 | 415 Secs (415 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 1          | Prime + Parallel Group 8-9 in Visit 56 | 345 Secs (345 Secs)<br>[==>]    | [1]   |
|               | 9                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                        | Prime + Parallel Group 8-9 in Visit 56 | 430 Secs (430 Secs)<br>[==>]    | [1]   |



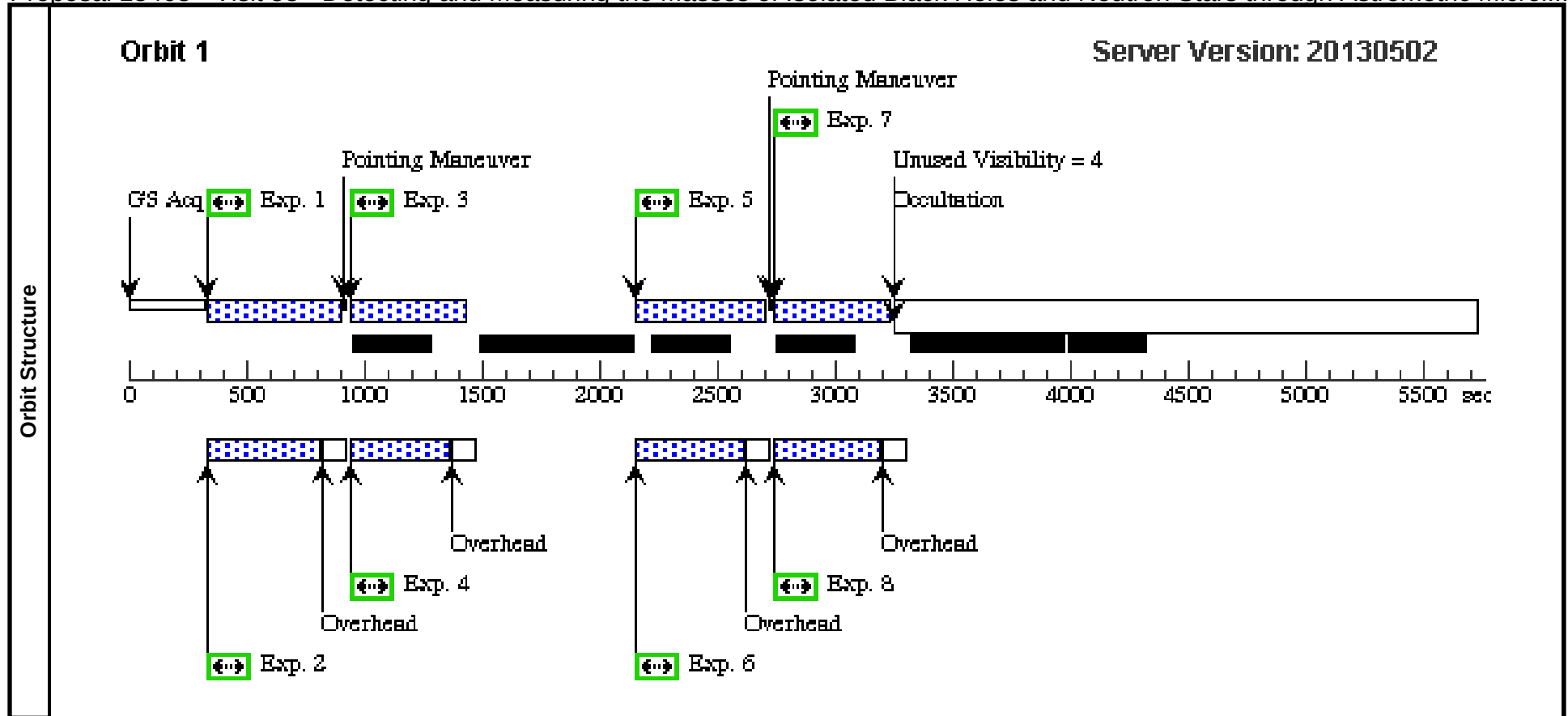
# Proposal 13463 - Visit 57 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                                          |                |                                                                                    |                               |               |                       |                       |                                        |                                 |       |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | <b>Proposal 13463, Visit 57, implementation</b> <span style="float: right;">Tue Jun 25 03:52:07 GMT 2013</span>                                                                                          |                |                                                                                    |                               |               |                       |                       |                                        |                                 |       |
|               | <b>Diagnostic Status: No Diagnostics</b><br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; BETWEEN 12-OCT-2014 AND 15-OCT-2014; VISIBILITY INTERVAL 54.23 M |                |                                                                                    |                               |               |                       |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                                        | Name           | Target Coordinates                                                                 | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                       |                                        |                                 |       |
|               | (5)                                                                                                                                                                                                      | SWEEPS         | RA: 17 59 0.8000 (269.7533333d)<br>Dec: -29 12 0.00 (-29.20000d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                       |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                                        | Label          | Target                                                                             | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                                        |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 7         | Prime + Parallel Group 1-2 in Visit 57 | 365 Secs (365 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                                        | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                       | Prime + Parallel Group 1-2 in Visit 57 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                                        |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 5         | Prime + Parallel Group 3-4 in Visit 57 | 370 Secs (370 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                                        | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                       | Prime + Parallel Group 3-4 in Visit 57 | 420 Secs (420 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                                        |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.225,-0.225 | Prime + Parallel Group 5-6 in Visit 57 | 370 Secs (370 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                                        | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                       | Prime + Parallel Group 5-6 in Visit 57 | 435 Secs (435 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                                        |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.225,3.525  | Prime + Parallel Group 7-8 in Visit 57 | 365 Secs (365 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                                        | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                       | Prime + Parallel Group 7-8 in Visit 57 | 450 Secs (450 Secs)<br>[==>]    | [1]   |



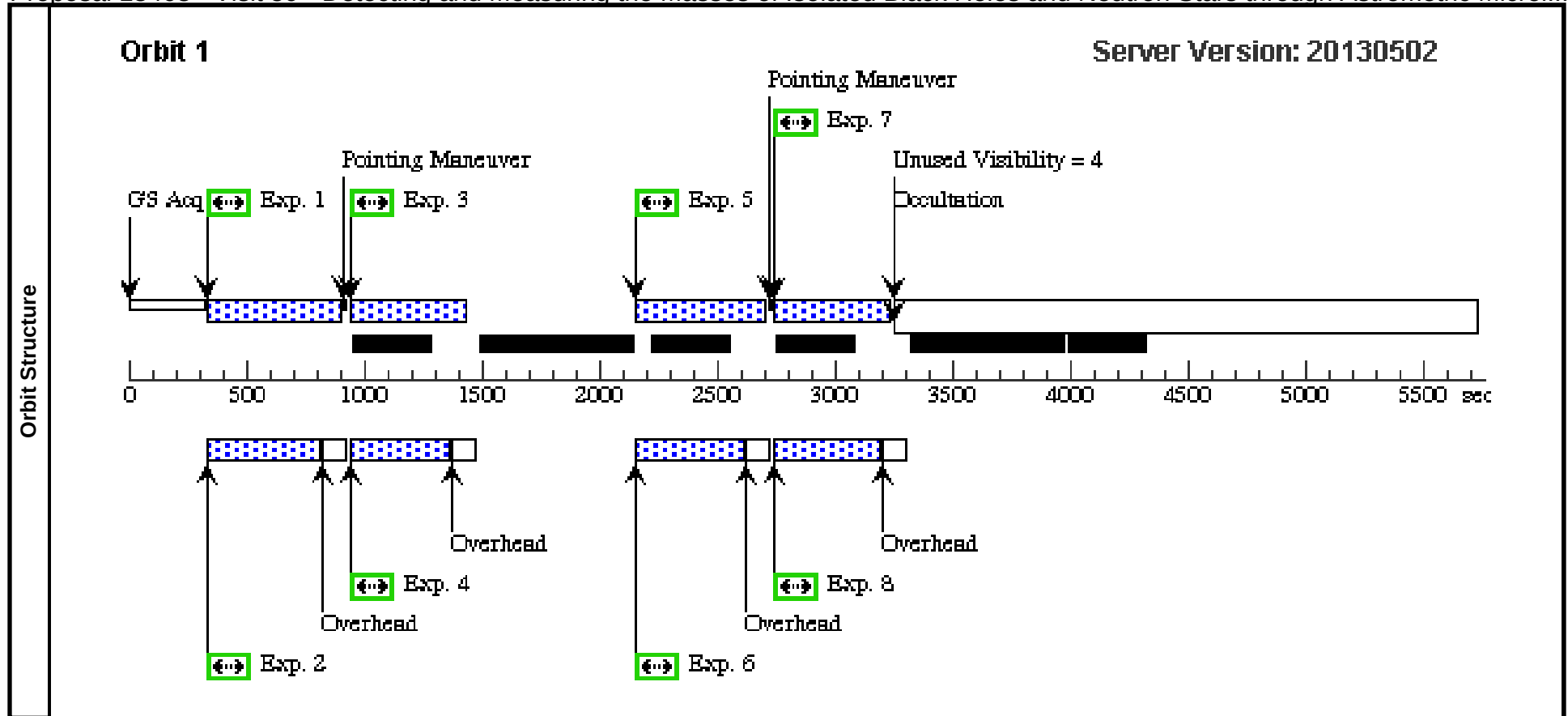
# Proposal 13463 - Visit 58 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |                       |                       |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 58, implementation <span style="float: right;">Tue Jun 25 03:52:08 GMT 2013</span>                                                                             |                |                                                                                      |                               |               |                       |                       |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 57 BY 0 D TO 2 H; VISIBILITY INTERVAL 54.23 M |                |                                                                                      |                               |               |                       |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                       |                                        |                                 |       |
|               | (7)                                                                                                                                                                                  | SWEEPS-L1      | RA: 17 59 16.2271 (269.8176129d)<br>Dec: -29 11 51.36 (-29.19760d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                       |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 7         | Prime + Parallel Group 1-2 in Visit 58 | 365 Secs (365 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                       | Prime + Parallel Group 1-2 in Visit 58 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 5         | Prime + Parallel Group 3-4 in Visit 58 | 370 Secs (370 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                       | Prime + Parallel Group 3-4 in Visit 58 | 420 Secs (420 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.225,-0.225 | Prime + Parallel Group 5-6 in Visit 58 | 370 Secs (370 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                       | Prime + Parallel Group 5-6 in Visit 58 | 435 Secs (435 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                    |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.225,3.525  | Prime + Parallel Group 7-8 in Visit 58 | 365 Secs (365 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                       | Prime + Parallel Group 7-8 in Visit 58 | 450 Secs (450 Secs)<br>[==>]    | [1]   |



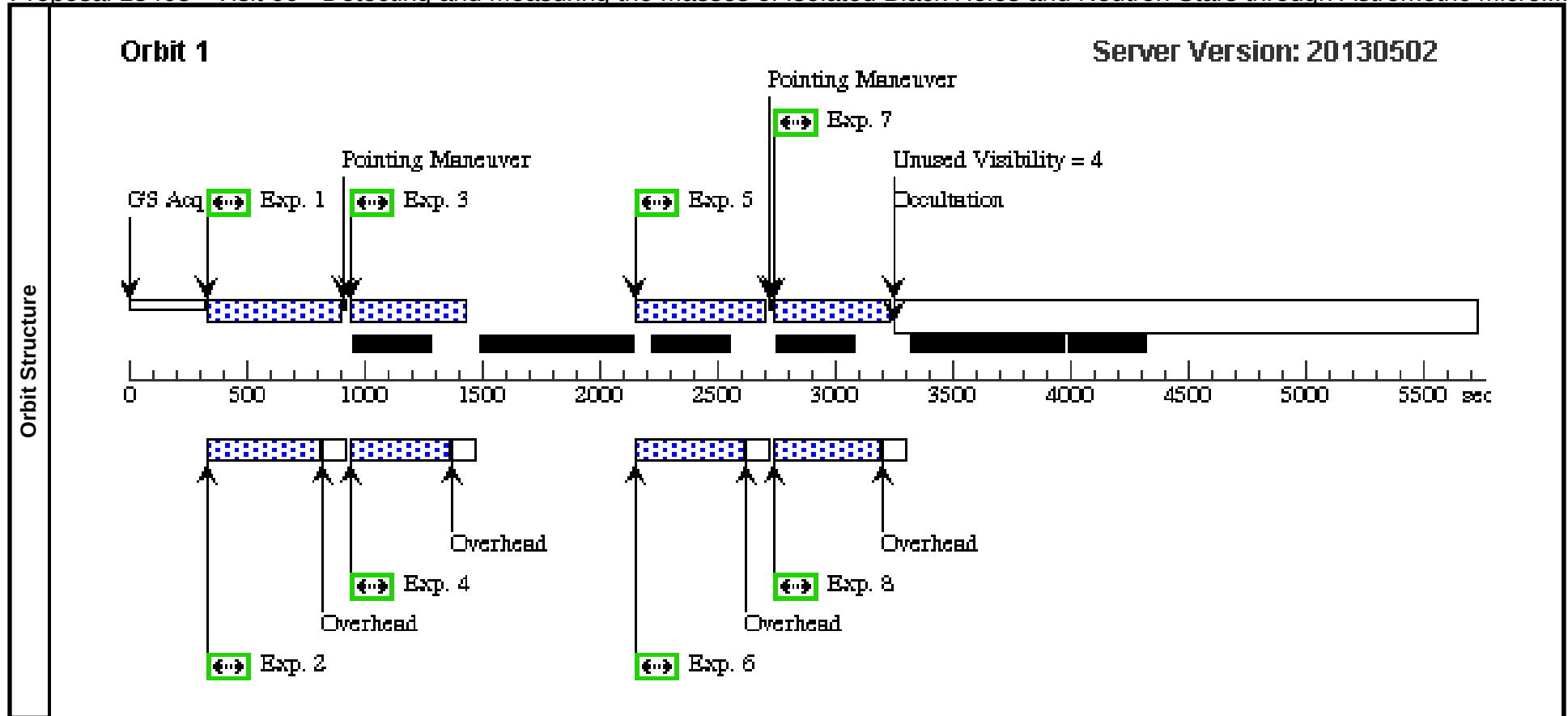
# Proposal 13463 - Visit 59 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                   |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|---------------------------------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 59, implementation <span style="float: right;">Tue Jun 25 03:52:09 GMT 2013</span>                                                                             |                |                                                                                     |                               |               |                       |                                                   |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 58 BY 0 D TO 2 H; VISIBILITY INTERVAL 54.23 M |                |                                                                                     |                               |               |                       |                                                   |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                  | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                                                   |                                        |                                 |       |
|               | (8)                                                                                                                                                                                  | SWEEPS-L2      | RA: 17 59 3.0300 (269.7626250d)<br>Dec: -29 15 20.00 (-29.25556d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                                                   |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                              | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.                                     | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 7                                     | Prime + Parallel Group 1-2 in Visit 59 | 365 Secs (365 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                   | [==>]                                  |                                 | [1]   |
|               | 2                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                                                   | Prime + Parallel Group 1-2 in Visit 59 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                   | [==>]                                  |                                 | [1]   |
|               | 3                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | SAME POS AS 5                                     | Prime + Parallel Group 3-4 in Visit 59 | 370 Secs (370 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                   | [==>]                                  |                                 | [1]   |
|               | 4                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                                                   | Prime + Parallel Group 3-4 in Visit 59 | 420 Secs (420 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                   | [==>]                                  |                                 | [1]   |
|               | 5                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.225,-0.225;<br>GS ACQ SCENARIO BASE1B3 | Prime + Parallel Group 5-6 in Visit 59 | 370 Secs (370 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                   | [==>]                                  |                                 | [1]   |
|               | 6                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                                                   | Prime + Parallel Group 5-6 in Visit 59 | 435 Secs (435 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                   | [==>]                                  |                                 | [1]   |
|               | 7                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | POS TARG 0.225,3.525                              | Prime + Parallel Group 7-8 in Visit 59 | 365 Secs (365 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                   | [==>]                                  |                                 | [1]   |
|               | 8                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                                                   | Prime + Parallel Group 7-8 in Visit 59 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                   | [==>]                                  |                                 | [1]   |



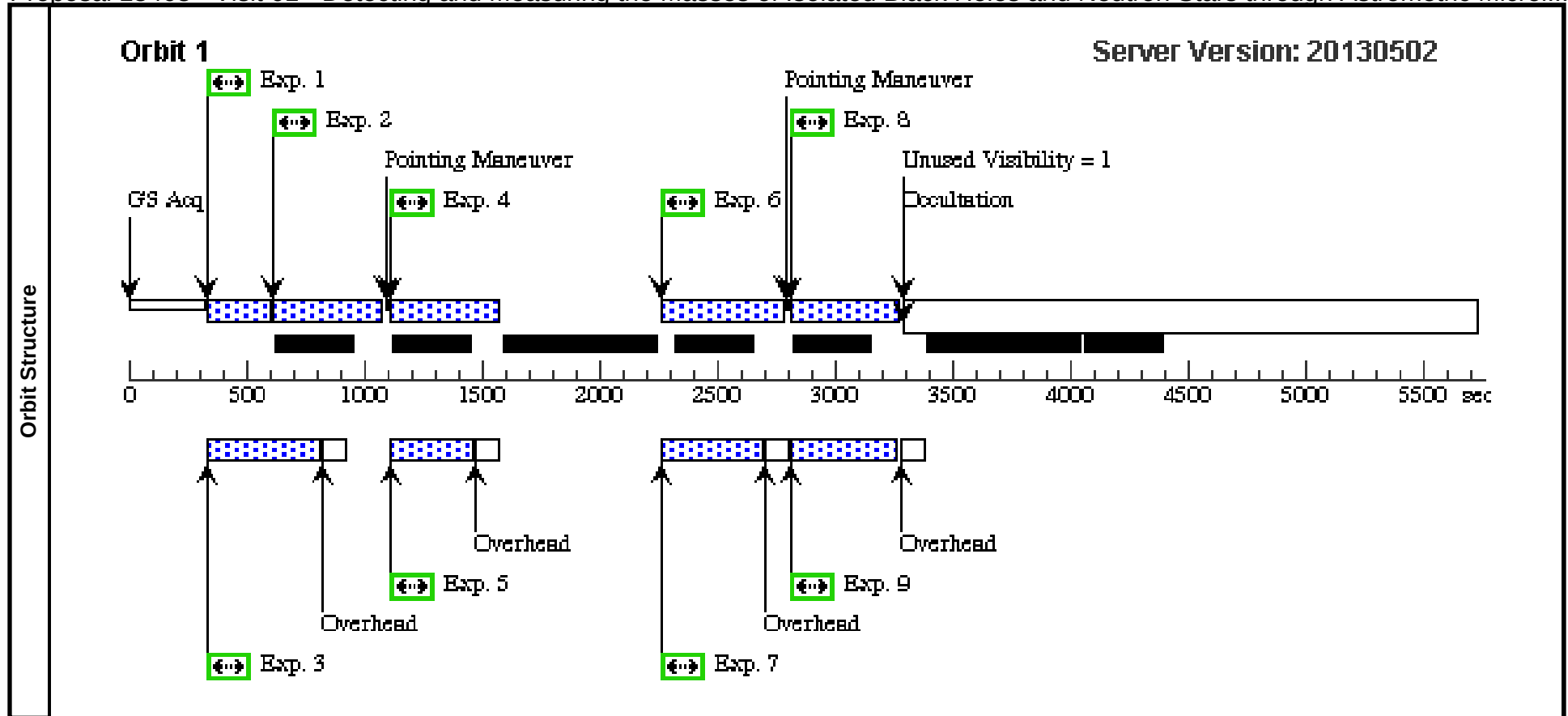
# Proposal 13463 - Visit 60 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 60, implementation <span style="float: right;">Tue Jun 25 03:52:10 GMT 2013</span>                                                                             |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 59 BY 0 H TO 2 H; VISIBILITY INTERVAL 54.23 M |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous         |                                        |                                 |       |
|               | (6)                                                                                                                                                                                  | SWEEPS-R1      | RA: 17 58 47.6030 (269.6983458d)<br>Dec: -29 15 28.64 (-29.25796d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | SAME POS AS 7         | Prime + Parallel Group 1-2 in Visit 60 | 365 Secs (365 Secs)<br>[==>]    | [1]   |
|               | 2                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 1-2 in Visit 60 | 450 Secs (450 Secs)<br>[==>]    | [1]   |
|               | 3                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | SAME POS AS 5         | Prime + Parallel Group 3-4 in Visit 60 | 370 Secs (370 Secs)<br>[==>]    | [1]   |
|               | 4                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 3-4 in Visit 60 | 420 Secs (420 Secs)<br>[==>]    | [1]   |
|               | 5                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG 0.225,-0.225 | Prime + Parallel Group 5-6 in Visit 60 | 370 Secs (370 Secs)<br>[==>]    | [1]   |
|               | 6                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 5-6 in Visit 60 | 435 Secs (435 Secs)<br>[==>]    | [1]   |
|               | 7                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | POS TARG 0.225,3.525  | Prime + Parallel Group 7-8 in Visit 60 | 365 Secs (365 Secs)<br>[==>]    | [1]   |
|               | 8                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 7-8 in Visit 60 | 450 Secs (450 Secs)<br>[==>]    | [1]   |



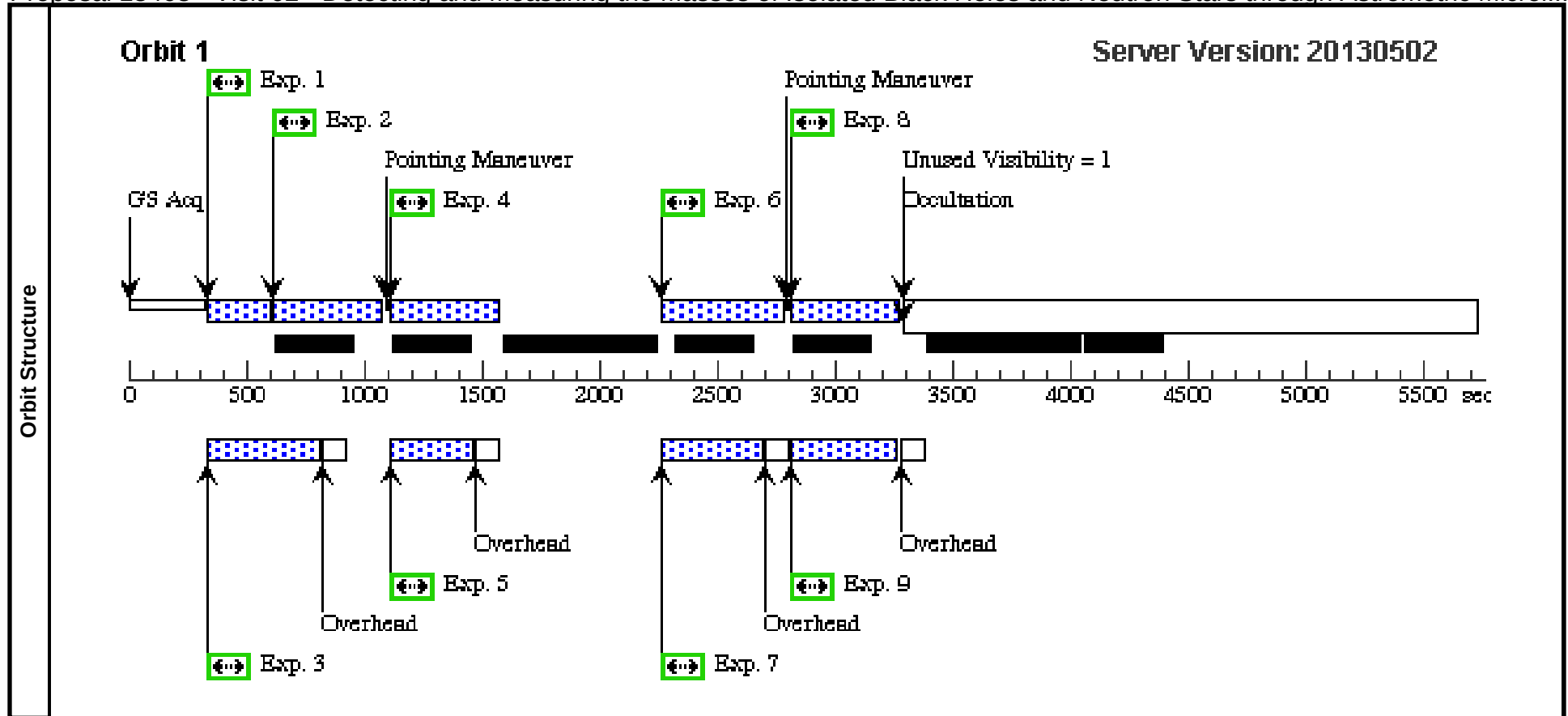
# Proposal 13463 - Visit 61 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                      |                                        |                                 |       |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 61, implementation <span style="float: right;">Tue Jun 25 03:52:10 GMT 2013</span>                                                                                          |                |                                                                                    |                               |               |              |                      |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; BETWEEN 23-OCT-2014 AND 26-OCT-2014; VISIBILITY INTERVAL 54.92 M |                |                                                                                    |                               |               |              |                      |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                                 | Name           | Target Coordinates                                                                 | Targ. Coord. Corrections      |               | Fluxes       |                      | Miscellaneous                          |                                 |       |
|               | (5)                                                                                                                                                                                               | SWEEPS         | RA: 17 59 0.8000 (269.7533333d)<br>Dec: -29 12 0.00 (-29.20000d)<br>Equinox: J2000 |                               |               | V=25         |                      | Reference Frame: ICRS                  |                                 |       |
| Exposures     | #                                                                                                                                                                                                 | Label          | Target                                                                             | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.        | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         | FLASH=50     | SAME POS AS 8        | Prime + Parallel Group 1-3 in Visit 61 | 50 Secs (50 Secs)               |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                      |                                        | [==>]                           | [1]   |
|               | 2                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 8        | Prime + Parallel Group 1-3 in Visit 61 | 337 Secs (337 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                      |                                        | [==>]                           | [1]   |
|               | 3                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                      | Prime + Parallel Group 1-3 in Visit 61 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                      |                                        | [==>]                           | [1]   |
|               | 4                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 6        | Prime + Parallel Group 4-5 in Visit 61 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                      |                                        | [==>]                           | [1]   |
|               | 5                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                      | Prime + Parallel Group 4-5 in Visit 61 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                      |                                        | [==>]                           | [1]   |
|               | 6                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.275,0.275 | Prime + Parallel Group 6-7 in Visit 61 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                      |                                        | [==>]                           | [1]   |
|               | 7                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                      | Prime + Parallel Group 6-7 in Visit 61 | 407 Secs (407 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                      |                                        | [==>]                           | [1]   |
|               | 8                                                                                                                                                                                                 |                | (5) SWEEPS                                                                         | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.275,4.025 | Prime + Parallel Group 8-9 in Visit 61 | 337 Secs (337 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                      |                                        | [==>]                           | [1]   |
|               | 9                                                                                                                                                                                                 | WFC3 parall el | ANY                                                                                | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                      | Prime + Parallel Group 8-9 in Visit 61 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                                   |                |                                                                                    |                               |               |              |                      |                                        | [==>]                           | [1]   |



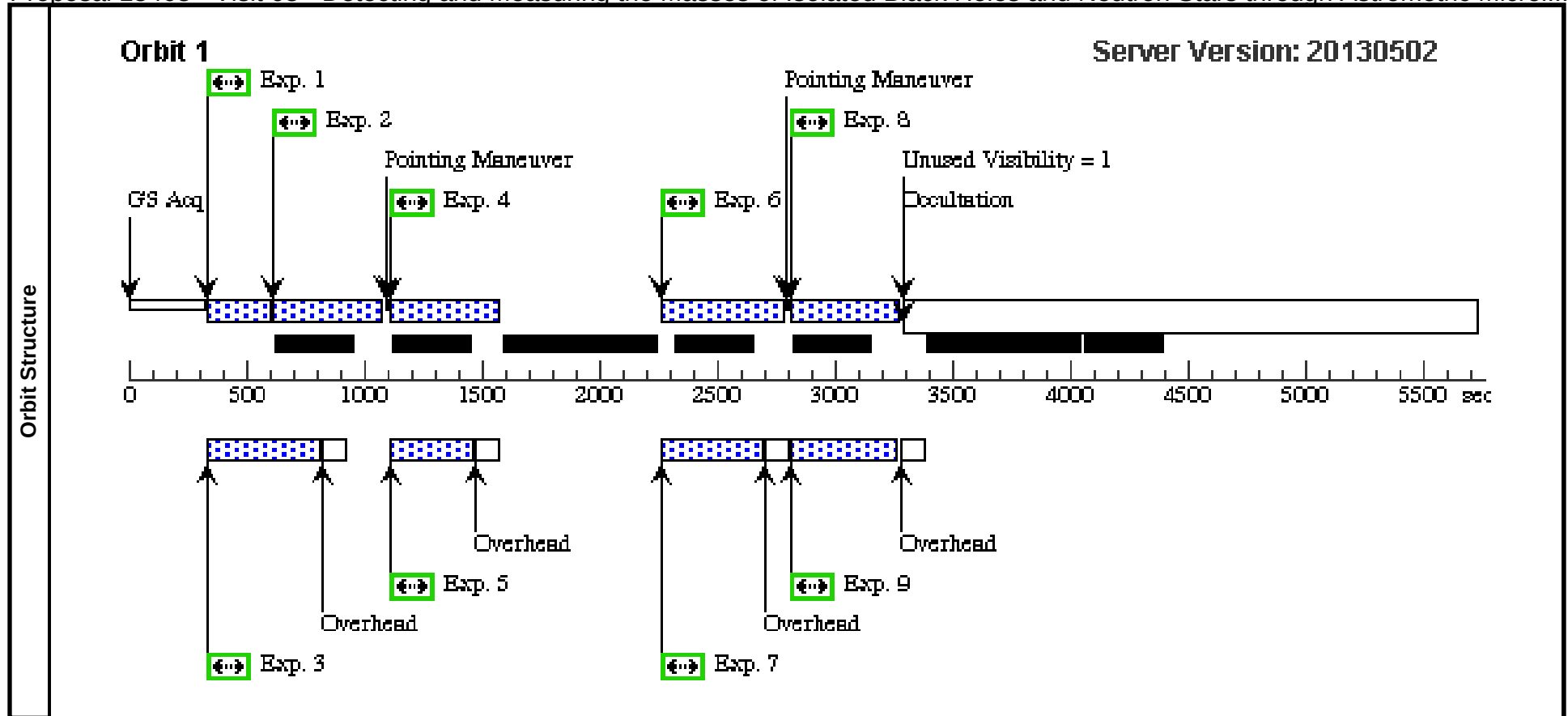
# Proposal 13463 - Visit 62 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                             |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|-----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | <b>Proposal 13463, Visit 62, implementation</b> <span style="float: right;">Tue Jun 25 03:52:11 GMT 2013</span>                                                                             |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
|               | <b>Diagnostic Status: No Diagnostics</b><br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 61 BY 0 D TO 2 H; VISIBILITY INTERVAL 54.92 M |                |                                                                                      |                               |               |              |                       |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                           | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       | Miscellaneous         |                                        |                                 |       |
|               | (7)                                                                                                                                                                                         | SWEEPS-L1      | RA: 17 59 16.2271 (269.8176129d)<br>Dec: -29 11 51.36 (-29.19760d)<br>Equinox: J2000 |                               |               | V=25         | Reference Frame: ICRS |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                           | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.         | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                           |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         | FLASH=50     | SAME POS AS 8         | Prime + Parallel Group 1-3 in Visit 62 | 50 Secs (50 Secs)               |       |
|               |                                                                                                                                                                                             |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 2                                                                                                                                                                                           |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 8         | Prime + Parallel Group 1-3 in Visit 62 | 337 Secs (337 Secs)             |       |
|               |                                                                                                                                                                                             |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 3                                                                                                                                                                                           | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 1-3 in Visit 62 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                             |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 4                                                                                                                                                                                           |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 6         | Prime + Parallel Group 4-5 in Visit 62 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                             |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 5                                                                                                                                                                                           | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                       | Prime + Parallel Group 4-5 in Visit 62 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                             |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 6                                                                                                                                                                                           |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.275,0.275  | Prime + Parallel Group 6-7 in Visit 62 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                             |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 7                                                                                                                                                                                           | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 6-7 in Visit 62 | 407 Secs (407 Secs)             |       |
|               |                                                                                                                                                                                             |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 8                                                                                                                                                                                           |                | (7) SWEEPS-L1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.275,4.025  | Prime + Parallel Group 8-9 in Visit 62 | 337 Secs (337 Secs)             |       |
|               |                                                                                                                                                                                             |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |
|               | 9                                                                                                                                                                                           | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                       | Prime + Parallel Group 8-9 in Visit 62 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                             |                |                                                                                      |                               |               |              |                       |                                        | [==>]                           | [1]   |



# Proposal 13463 - Visit 63 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                  |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------|--------------------------------------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 63, implementation <span style="float: right;">Tue Jun 25 03:52:12 GMT 2013</span>                                                                             |                |                                                                                     |                               |               |                       |                                                  |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 62 BY 0 D TO 2 H; VISIBILITY INTERVAL 54.92 M |                |                                                                                     |                               |               |                       |                                                  |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                  | Targ. Coord. Corrections      | Fluxes        | Miscellaneous         |                                                  |                                        |                                 |       |
|               | (8)                                                                                                                                                                                  | SWEEPS-L2      | RA: 17 59 3.0300 (269.7626250d)<br>Dec: -29 15 20.00 (-29.25556d)<br>Equinox: J2000 |                               | V=25          | Reference Frame: ICRS |                                                  |                                        |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                              | Config,Mode,Aperture          | Spectral Els. | Opt. Params.          | Special Reqs.                                    | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         | FLASH=50              | SAME POS AS 8                                    | Prime + Parallel Group 1-3 in Visit 63 | 50 Secs (50 Secs)               |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                  |                                        | [==>]                           | [1]   |
|               | 2                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 8                                    | Prime + Parallel Group 1-3 in Visit 63 | 337 Secs (337 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                  |                                        | [==>]                           | [1]   |
|               | 3                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                                                  | Prime + Parallel Group 1-3 in Visit 63 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                  |                                        | [==>]                           | [1]   |
|               | 4                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F814W         |                       | SAME POS AS 6                                    | Prime + Parallel Group 4-5 in Visit 63 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                  |                                        | [==>]                           | [1]   |
|               | 5                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |                       |                                                  | Prime + Parallel Group 4-5 in Visit 63 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                  |                                        | [==>]                           | [1]   |
|               | 6                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG 0.275,0.275                             | Prime + Parallel Group 6-7 in Visit 63 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                  |                                        | [==>]                           | [1]   |
|               | 7                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                                                  | Prime + Parallel Group 6-7 in Visit 63 | 407 Secs (407 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                  |                                        | [==>]                           | [1]   |
|               | 8                                                                                                                                                                                    |                | (8) SWEEPS-L2                                                                       | ACS/WFC, ACCUM, WFCENTER      | F606W         |                       | POS TARG 0.275,4.025;<br>GS ACQ SCENARIO BASE1B3 | Prime + Parallel Group 8-9 in Visit 63 | 337 Secs (337 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                  |                                        | [==>]                           | [1]   |
|               | 9                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                 | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |                       |                                                  | Prime + Parallel Group 8-9 in Visit 63 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                     |                               |               |                       |                                                  |                                        | [==>]                           | [1]   |



# Proposal 13463 - Visit 64 - Detecting and Measuring the Masses of Isolated Black Holes and Neutron Stars through Astrometric Microl...

|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                      |                                        |                                 |       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------|-------------------------------|---------------|--------------|----------------------|----------------------------------------|---------------------------------|-------|
| Visit         | Proposal 13463, Visit 64, implementation <span style="float: right;">Tue Jun 25 03:52:13 GMT 2013</span>                                                                             |                |                                                                                      |                               |               |              |                      |                                        |                                 |       |
|               | Diagnostic Status: No Diagnostics<br>Scientific Instruments: WFC3/UVIS, ACS/WFC<br>Special Requirements: ORIENT 90.0D TO 90.0 D; AFTER 63 BY 0 H TO 2 H; VISIBILITY INTERVAL 54.92 M |                |                                                                                      |                               |               |              |                      |                                        |                                 |       |
| Fixed Targets | #                                                                                                                                                                                    | Name           | Target Coordinates                                                                   | Targ. Coord. Corrections      |               | Fluxes       |                      | Miscellaneous                          |                                 |       |
|               | (6)                                                                                                                                                                                  | SWEEPS-R1      | RA: 17 58 47.6030 (269.6983458d)<br>Dec: -29 15 28.64 (-29.25796d)<br>Equinox: J2000 |                               |               | V=25         |                      | Reference Frame: ICRS                  |                                 |       |
| Exposures     | #                                                                                                                                                                                    | Label          | Target                                                                               | Config,Mode,Aperture          | Spectral Els. | Opt. Params. | Special Reqs.        | Groups                                 | Exp. Time (Total)/[Actual Dur.] | Orbit |
|               | 1                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         | FLASH=50     | SAME POS AS 8        | Prime + Parallel Group 1-3 in Visit 64 | 50 Secs (50 Secs)               |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                      |                                        | [==>]                           | [1]   |
|               | 2                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 8        | Prime + Parallel Group 1-3 in Visit 64 | 337 Secs (337 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                      |                                        | [==>]                           | [1]   |
|               | 3                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                      | Prime + Parallel Group 1-3 in Visit 64 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                      |                                        | [==>]                           | [1]   |
|               | 4                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F814W         |              | SAME POS AS 6        | Prime + Parallel Group 4-5 in Visit 64 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                      |                                        | [==>]                           | [1]   |
|               | 5                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F814W         |              |                      | Prime + Parallel Group 4-5 in Visit 64 | 350 Secs (350 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                      |                                        | [==>]                           | [1]   |
|               | 6                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.275,0.275 | Prime + Parallel Group 6-7 in Visit 64 | 340 Secs (340 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                      |                                        | [==>]                           | [1]   |
|               | 7                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                      | Prime + Parallel Group 6-7 in Visit 64 | 407 Secs (407 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                      |                                        | [==>]                           | [1]   |
|               | 8                                                                                                                                                                                    |                | (6) SWEEPS-R1                                                                        | ACS/WFC, ACCUM, WFCENTER      | F606W         |              | POS TARG 0.275,4.025 | Prime + Parallel Group 8-9 in Visit 64 | 337 Secs (337 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                      |                                        | [==>]                           | [1]   |
|               | 9                                                                                                                                                                                    | WFC3 parall el | ANY                                                                                  | WFC3/UVIS, ACCUM, UVIS-CENTER | F606W         |              |                      | Prime + Parallel Group 8-9 in Visit 64 | 450 Secs (450 Secs)             |       |
|               |                                                                                                                                                                                      |                |                                                                                      |                               |               |              |                      |                                        | [==>]                           | [1]   |

