# 14105 - Observing Jupiter's FUV auroras near Juno orbit insertion

Cycle: 23, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

**INVESTIGATORS**


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**VISITS**

| *Visit* | *Targets used in Visit* | *Configurations used in Visit* | *Orbits Used* | *Last Orbit Planner Run* | *OP Current with Visit?* |
|---|---|---|---|---|---|
| 01 | (1) JUPITER-AURORA-SW-IM1 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:33.0 | yes |
| 02 | (2) JUPITER-AURORA-SW-IM2 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:34.0 | yes |
| 03 | (3) JUPITER-AURORA-SW-IM3 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:35.0 | yes |
| 04 | (4) JUPITER-AURORA-SW-IM4 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:36.0 | yes |
| 05 | (5) JUPITER-AURORA-SW-IM5A | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:37.0 | yes |
| 06 | (31) JUPITER-AURORA-SW-SP5 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:38.0 | yes |
| 07 | (6) JUPITER-AURORA-SW-IM5B | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:39.0 | yes |
| 08 | (7) JUPITER-AURORA-SW-IM6 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:40.0 | yes |
| 09 | (8) JUPITER-AURORA-SW-IM7 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:41.0 | yes |
| 10 | (9) JUPITER-AURORA-SW-IM8 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:42.0 | yes |
| 11 | (10) JUPITER-AURORA-SW-IM9 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:43.0 | yes |
| 12 | (11) JUPITER-AURORA-SW-IM10 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:44.0 | yes |
| 13 | (12) JUPITER-AURORA-SW-IM11A | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:45.0 | yes |
| 14 | (32) JUPITER-AURORA-SW-SP11 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:46.0 | yes |
| 15 | (13) JUPITER-AURORA-SW-IM11B | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:47.0 | yes |
| 16 | (14) JUPITER-AURORA-SW-IM12 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:48.0 | yes |
| 17 | (15) JUPITER-AURORA-SW-IM13 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:48.0 | yes |
| 18 | (16) JUPITER-AURORA-SW-IM14 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:49.0 | yes |
| 19 | (17) JUPITER-AURORA-SW-IM15 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:50.0 | yes |
| 20 | (18) JUPITER-AURORA-SW-IM16 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:51.0 | yes |

| *Visit* | *Targets used in Visit* | *Configurations used in Visit* | *Orbits Used* | *Last Orbit Planner Run* | *OP Current with Visit?* |
|---|---|---|---|---|---|
| 21 | (19) JUPITER-AURORA-SW-IM17A | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:52.0 | yes |
| 22 | (33) JUPITER-AURORA-SW-SP17 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:53.0 | yes |
| 23 | (20) JUPITER-AURORA-SW-IM17B | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:54.0 | yes |
| 24 | (21) JUPITER-AURORA-SW-IM18 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:54.0 | yes |
| 25 | (22) JUPITER-AURORA-SW-IM19 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:55.0 | yes |
| 26 | (23) JUPITER-AURORA-SW-IM20 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:56.0 | yes |
| 27 | (24) JUPITER-AURORA-SW-IM21 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:57.0 | yes |
| 28 | (25) JUPITER-AURORA-SW-IM22 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:05:59.0 | yes |
| 29 | (26) JUPITER-AURORA-SW-IM23 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:00.0 | yes |
| 30 | (27) JUPITER-AURORA-SW-IM24 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:00.0 | yes |
| 31 | (28) JUPITER-AURORA-SW-IM25 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:01.0 | yes |
| 32 | (29) JUPITER-AURORA-SW-IM26 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:02.0 | yes |
| 33 | (30) JUPITER-AURORA-SW-IM27 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:03.0 | yes |
| 34 | (34) JUPITER-AURORA-IN-IM28 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:04.0 | yes |
| 35 | (35) JUPITER-AURORA-IN-IM29 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:05.0 | yes |
| 36 | (36) JUPITER-AURORA-IN-IM30 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:05.0 | yes |
| 37 | (37) JUPITER-AURORA-IN-IM31 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:06.0 | yes |
| 38 | (38) JUPITER-AURORA-IN-IM32 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:07.0 | yes |
| 39 | (39) JUPITER-AURORA-IN-IM33 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:08.0 | yes |
| 40 | (40) JUPITER-AURORA-IN-IM34 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:09.0 | yes |
| 41 | (41) JUPITER-AURORA-CO-IM35 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:10.0 | yes |
| 42 | (42) JUPITER-AURORA-CO-IM36 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:10.0 | yes |
| 43 | (43) JUPITER-AURORA-CO-IM37 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:11.0 | yes |
| 44 | (44) JUPITER-AURORA-CO-IM38 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:12.0 | yes |

| *Visit* | *Targets used in Visit* | *Configurations used in Visit* | *Orbits Used* | *Last Orbit Planner Run* | *OP Current with Visit?* |
|---|---|---|---|---|---|
| 45 | (45) JUPITER-AURORA-CO-IM39 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:13.0 | yes |
| 46 | (46) JUPITER-AURORA-CO-IM40 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:14.0 | yes |
| 47 | (47) JUPITER-AURORA-CO-IM41 | STIS/FUV-MAMA | 1 | 29-Jul-2016 13:06:15.0 | yes |

47 Total Orbits Used

**ABSTRACT**

In Cycle 23, the NASA Juno spacecraft will approach and enter orbit around Jupiter. This allows a unique opportunity to obtain HST observations of Jupiter's FUV auroras responding to measured conditions in the solar wind near Jupiter, along with the first with simultaneous in situ magnetic field and plasma measurements within the dawnside outer jovian magnetosphere. These HST observations will exclusively allow us to discover the solution to some of the most pressing and widely-debated open questions in planetary science. Specifically, the science objectives are to:

(1) Discover the nature of the solar wind interaction at Jupiter
(2) Determine how the solar wind modulates internal dynamics in Jupiter's magnetosphere
(3) Determine mass and energy flow of internal processes

We will utilise a Medium program of STIS/FUV imaging and spectroscopic observations, obtained simultaneously with Juno near-Jupiter solar wind data over a solar rotation, along with observations whilst the spacecraft is in the crucial dawn-side magnetosphere. This will reveal what drives the largest magnetosphere in the solar system. This program, which responds to the UV initiative, is only possible during Cycle 23, and HST is the only observatory capable of making these FUV observations, which will yield high-impact results and significantly augment the science return of the NASA Juno mission.

**OBSERVING DESCRIPTION**

We will take observations in 3 intervals: (1) 27 visits (comprising 24 one-orbit visits and 3 groups of 3 visits evenly spaced throughout the interval) at a cadence of 1 visit per day over 16 May - 11 June, i.e. while Juno is in the solar wind near Jupiter; (2) daily 1-orbit visits over 23-29 June, i.e. covering the inbound traversal of the dawnside magnetosphere; and (3) daily 1-orbit visits over 11-17 July during the first capture orbit in the dawnside magnetosphere, for a total of 47 orbits. We note that there are ~5 SAA-free orbits per day, and Jupiter has been observed in the SAA-free orbits once per day successfully in the past, although the above intervals could be adjusted by a few days either way for ease of scheduling and the

avoidance of bright stars. These observations will be obtained using the STIS/FUV-MAMA instrument. Auroral images will be obtained using the F25SRF2 filter, in order to observe the H2 Lyman and Werner emission whilst removing contamination from the geocoronal Lyman-alpha. We will concentrate on the northern auroras, as these exhibit the brightest polar emission and are tilted further equatorward than the southern, and hence present the best view from Earth. Jupiter will be positioned such that only the auroral region and nearby disc will be in the 25x25" field of view, and thus <1/4 of the detector is filled with the planet. We will obtain ~3000 s time-tagged exposures, from which images integrated over smaller intervals (e.g. 10-100 s) will be extracted. During one orbit we will also obtain a 100 s image with the F25QTZ filter to determine the planet's background disc and aid its subtraction from the auroral images. During each 3-orbit group of visits, a spectral pseudo-image will be built by slewing the 52X0.5 long slit with the G140L grating across the auroral region. In the event of STIS not being available, we will obtain these observations with the Solar Blind Channel of the Advanced Camera for Surveys. If we use ACS we will obtain images with the F125LP and F115LP filters in order to estimate the color ratio.

## Visit

**Proposal 14105, SW1 (01), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 100.4D TO 100.4 D; BETWEEN 16-MAY-2016:00:00:00 AND 17-MAY-2016:00:00:00

*Comments: This is the first visit of the program. We will start observations on 16 May, to use the moon-free interval starting on this day. Observations will ideally be scheduled with a ~24 h cadence, as specified by the BETWEEN dates, but this can be slightly relaxed if necessary. The 3-orbit visit groups have been nominally positioned evenly spaced throughout the interval before 3 June, i.e. with an allowed ROLL of 135 deg for the spectral scans. However, these would ideally occur when the northern hemisphere visiblitiy is maximum within the SAA-free intervals, and hence could be swapped for appropriate 1-orbit intervals when the HST orbit is known.*

## Solar System Targets

| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (1) | JUPITER-AURORA-SW-IM1 | STD=JUPITER | TYPE=POS_ANGLE,RAD=22,ANG=35,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. Observation criteria are, in order of priority:*

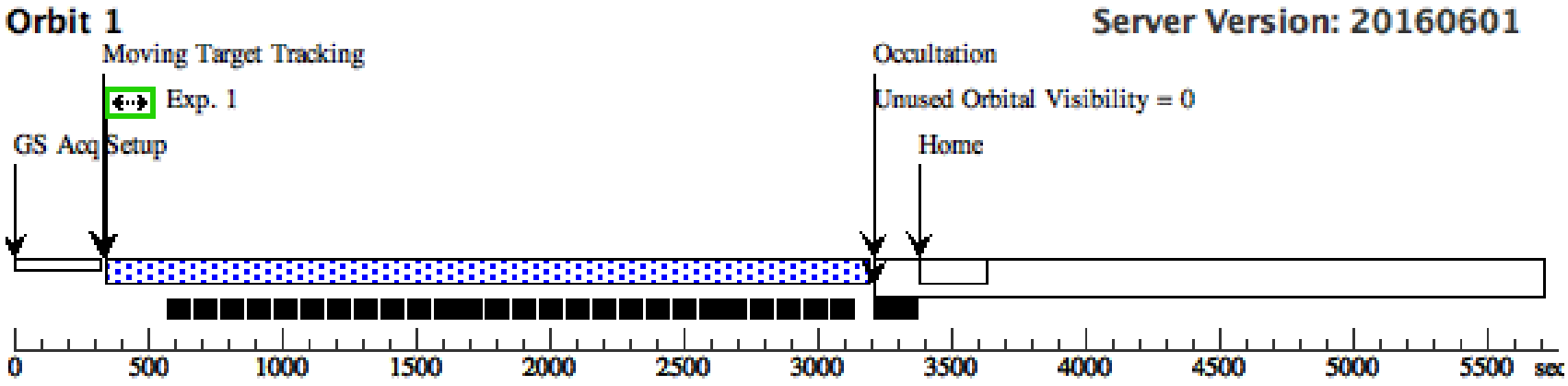
*Daily observations*
*Northern hemisphere*
*Avoidance of repeller wire and blotch region*

*Given the above constraints, it is desirable for ROLL to be as low as possible within the limited range at this time of year. For this and all other imaging targets here, the values of RAD and ANG that will centre the auroral region in the lower half of the detector, away from the repeller wire if possible, will depend in principle on ROLL (although this is specified in the visit) and the CML range of the observations. We will work with the PC to update these once the orbit of HST is known. The values entered here are for the northern hemisphere. If the north is not visible during the SAA free orbits on a given day, we will either slightly relax the ~24 h cadence or observe the south. For the south, the values of ANG will be essentially these plus 180 degrees (with minor adjustements to avoid the repeller wire), and the CML range would be 310-110 deg.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (1) JUPITER-AURORA-SW-IM1 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW2 (02), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 123.7D TO 123.8 D; BETWEEN 17-MAY-2016:00:00:00 AND 18-MAY-2016:00:00:00

## Solar System Targets

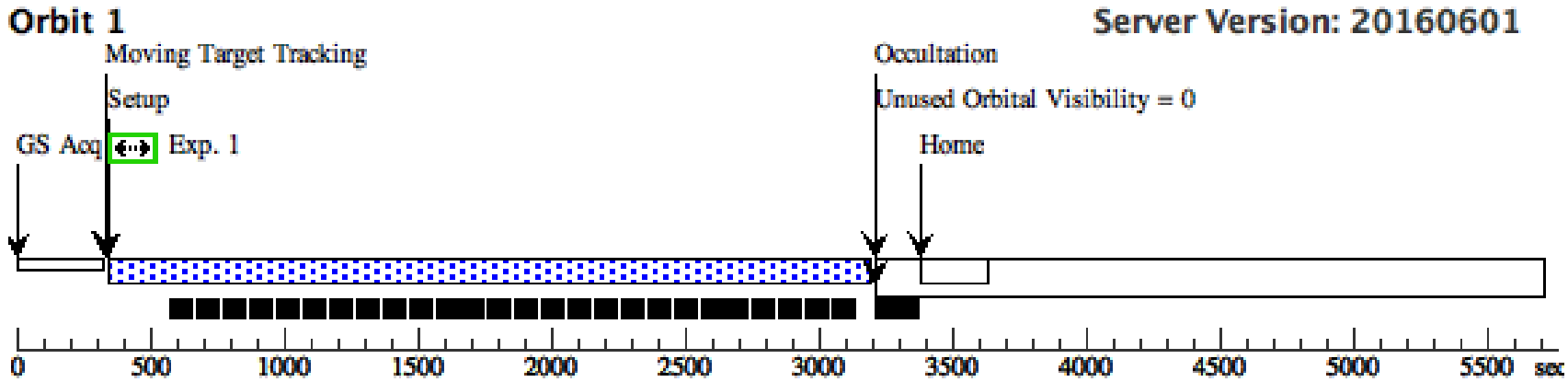
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (2) | JUPITER-AURORA-SW-IM2 | STD=JUPITER | TYPE=POS_ANGLE,RAD=22,ANG=24,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (2) JUPITER-AURORA-SW-IM2 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW3 (03), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 109D TO 110 D; BETWEEN 21-MAY-2016:00:00:00 AND 22-MAY-2016:00:00:00

## Solar System Targets

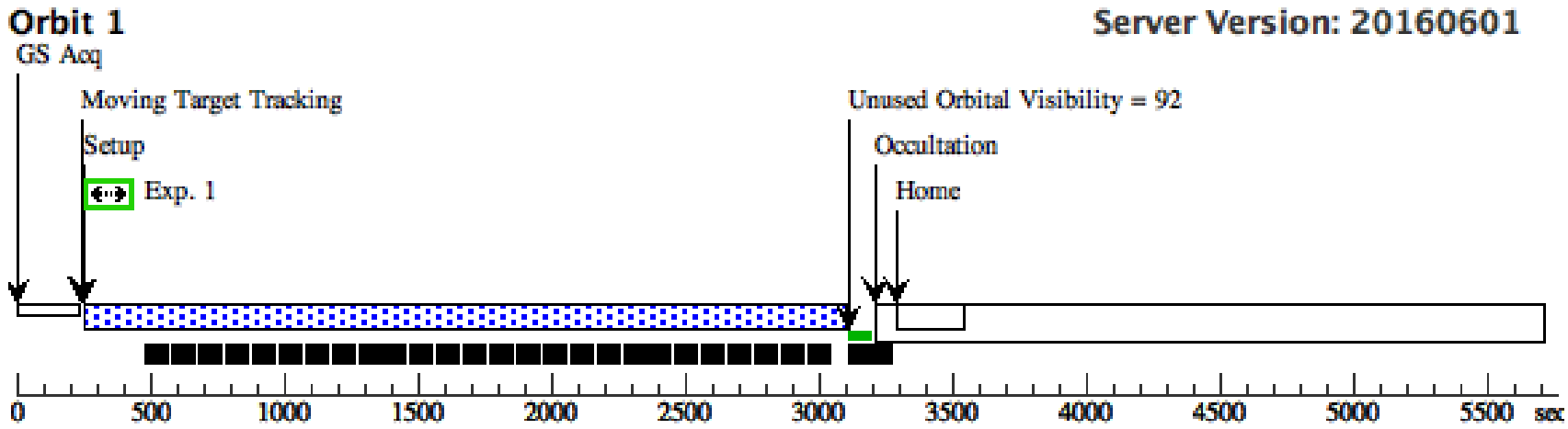
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (3) | JUPITER-AURORA-SW-IM3 | STD=JUPITER | TYPE=POS_ANGLE,RAD=21,ANG=23,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 110 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (3) JUPITER-AURORA-SW-IM3 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO SINGLE | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW4 (04), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 90D TO 91 D; BETWEEN 19-MAY-2016:00:00:00 AND 20-MAY-2016:00:00:00

## Solar System Targets

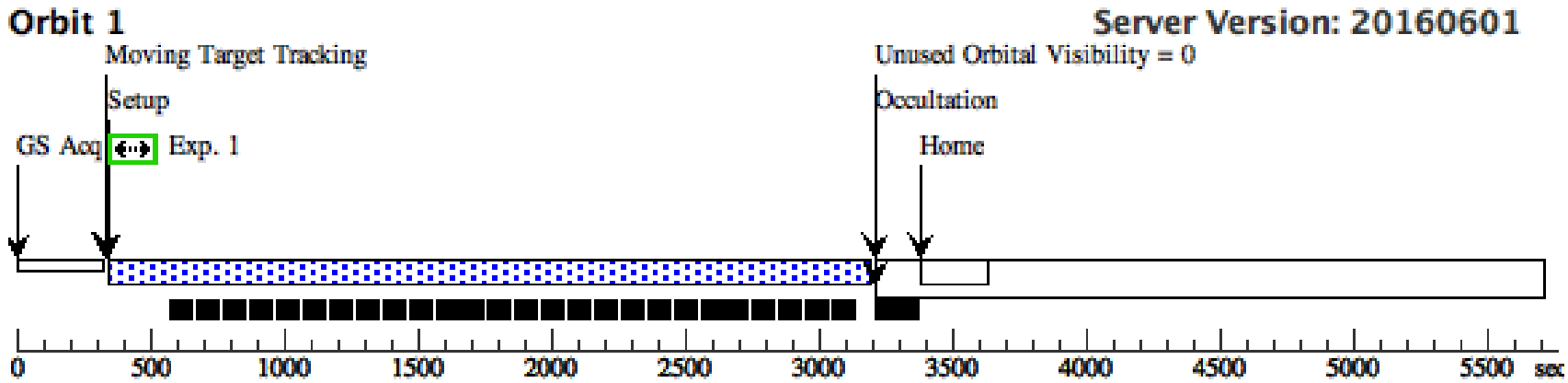
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (4) | JUPITER-AURORA-SW-IM4 | STD=JUPITER | TYPE=POS_ANGLE,RAD=22,ANG=28,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (4) JUPITER-AURORA-SW-IM4 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW5A (05), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 90D TO 91 D; BETWEEN 18-MAY-2016:00:00:00 AND 20-MAY-2016:00:00:00; SEQ 05,06,07 WITHIN 6 H

*Comments: This is a 3-orbit visit group, with 2 imaging and one spectral visit.*

## Solar System Targets

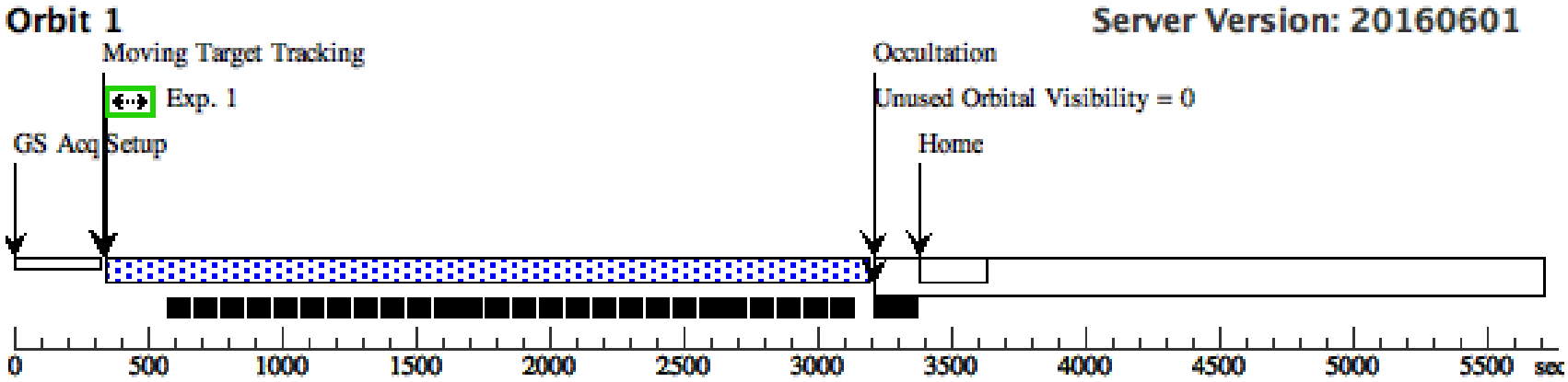
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (5) | JUPITER-AURORA-SW-IM5A | STD=JUPITER | TYPE=POS_ANGLE,RAD=23,ANG=36,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 100 240 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known. For this 3 orbit group, the CML range is slightly expanded to aid scheduling.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (5) JUPITER-AURORA-SW-IM5A | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW5B (06), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 123D TO 124 D; BETWEEN 18-MAY-2016:00:00:00 AND 20-MAY-2016:00:00:00; SEQ 05,06,07 WITHIN 6 H

*Comments: This is a 3-orbit visit group, with 2 imaging and one spectral visit. This visit is a spectral scan of the auroral region, hence ROLL is as high as possible within the allowed limit to align the slit as near to parallel with the equator as possible.*

## Diagnostics

(SW5B (06)) Warning (Form): A target acquisition should probably be performed before doing spectroscopy or coronography with STIS or COS.

## Solar System Targets

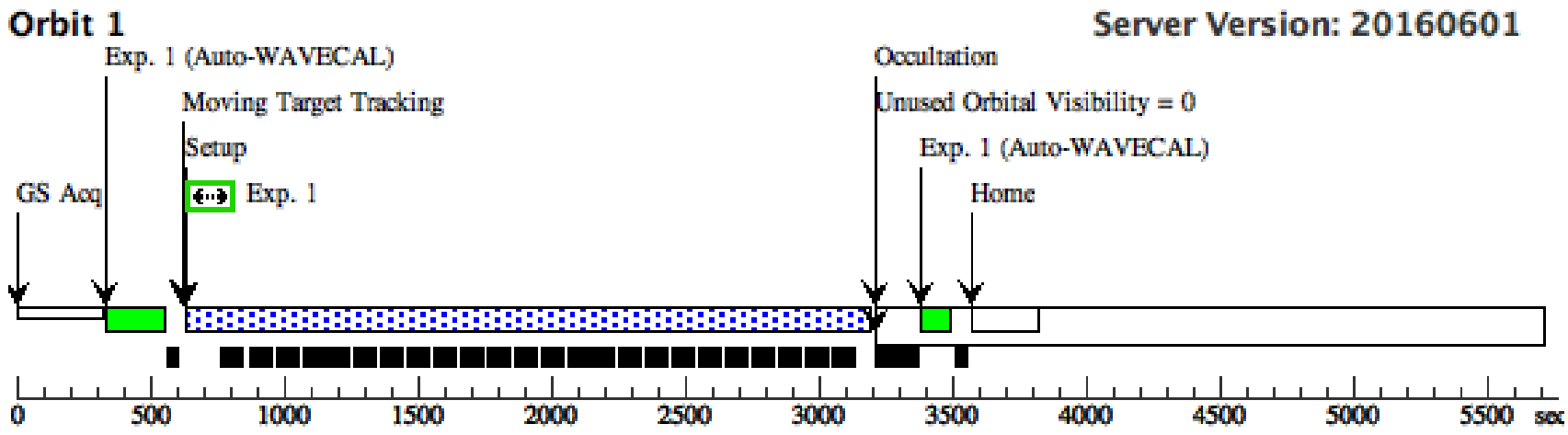
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (31) | JUPITER-AURORA-SW-SP5 | STD=JUPITER | TYPE=POS_ANGLE,RAD=23,ANG=20,REF=NORTH,R_RAD=-240,R_ANG=420,EPOCH=19-MAY-2016:00:52:00,EpochTimeScale=UTC | | CML OF JUPITER FROM EARTH BETWEEN 100 240 | EARTH |

*Comments: This target is for taking a spectral scan of Jupiter's northern auroras. RAD, ANG, and R_RAD will depend on ROLL, and the date and time of the observations - we will work with our PC to update these once the orbit of HST is known. R_RAD is negative to slew the slit from just above the northern auroras in toward the equator. For this 3 orbit group, the CML range is slightly expanded to aid scheduling.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (31) JUPITER-AURORA-SW-SP5 | STIS/FUV-MAMA, TIME-TAG, 52X0.5 | G140L 1425 A | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2909 Secs (2509 Secs)<br>*[==>2509.0 Secs ]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW5C (07), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 90D TO 91 D; BETWEEN 18-MAY-2016:00:00:00 AND 20-MAY-2016:00:00:00; SEQ 05,06,07 WITHIN 6 H

*Comments: This is a 3-orbit visit group, with 2 imaging and one spectral visit.*

## Solar System Targets

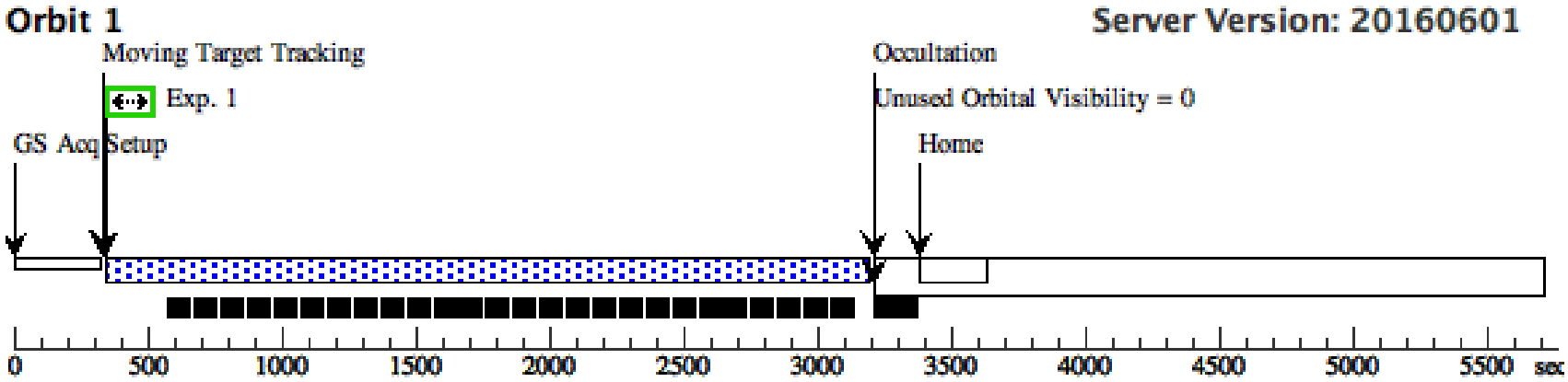
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (6) | JUPITER-AURORA-SW-IM5B | STD=JUPITER | TYPE=POS_ANGLE,RAD=22,ANG=15,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 100 260 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known. For this 3 orbit group, the CML range is slightly expanded to aid scheduling.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (6) JUPITER-AURORA-SW-IM5B | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2813 Secs (2702 Secs)<br>*[==>2702.0 Secs ]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW6 (08), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 97D TO 97 D; BETWEEN 21-MAY-2016:00:00:00 AND 22-MAY-2016:00:00:00

## Solar System Targets

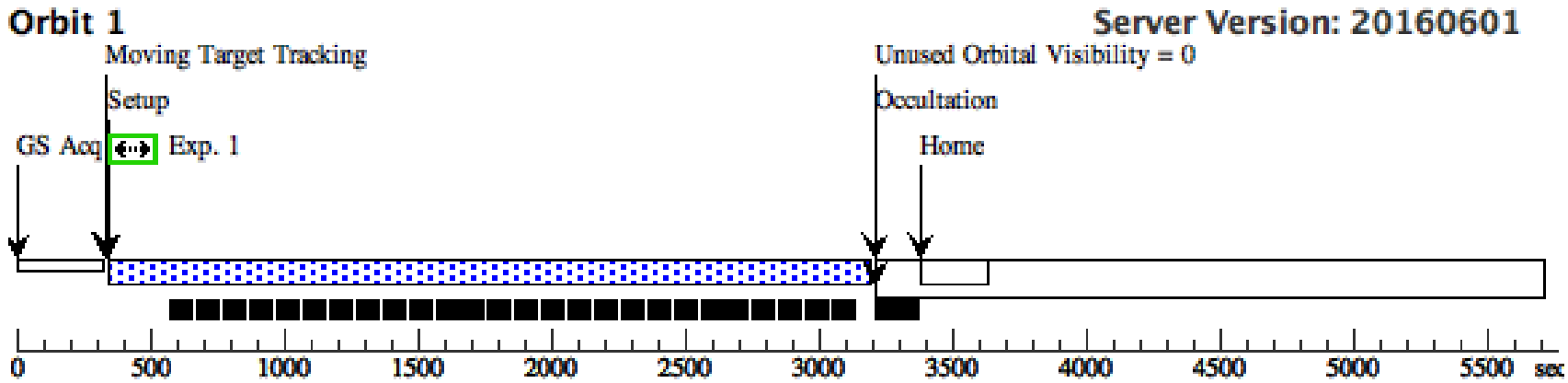
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (7) | JUPITER-AURORA-SW-IM6 | STD=JUPITER | TYPE=POS_ANGLE,RAD=22,ANG=32,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (7) JUPITER-AURORA-SW-IM6 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW7 (09), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 22-MAY-2016:00:00:00 AND 23-MAY-2016:00:00:00

## Solar System Targets

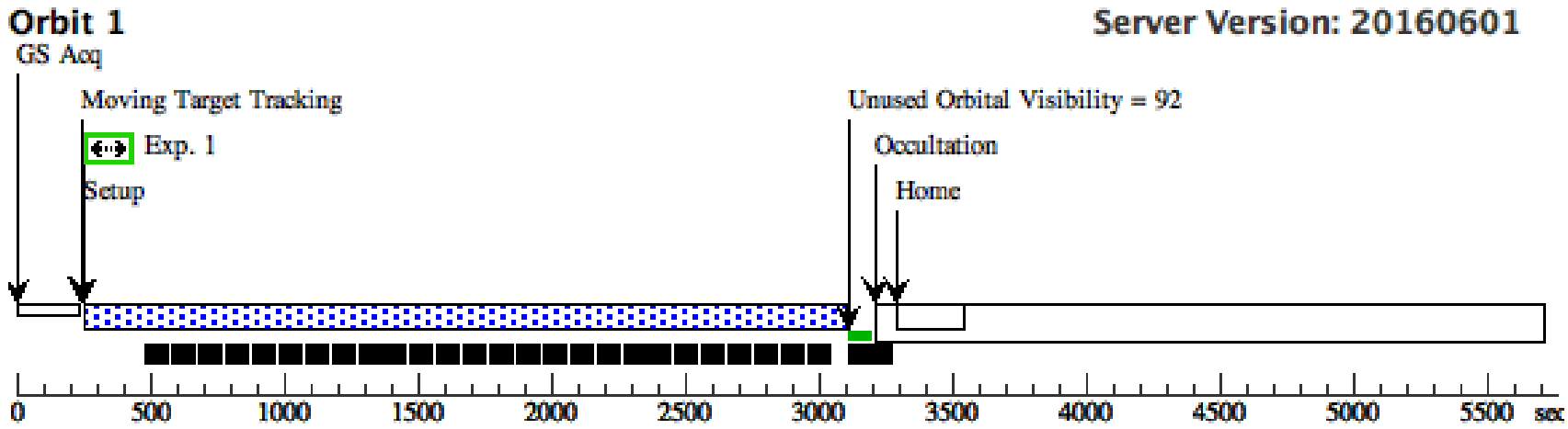
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (8) | JUPITER-AURORA-SW-IM7 | STD=JUPITER | TYPE=POS_ANGLE,RAD=22,ANG=24,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (8) JUPITER-AURORA-SW-IM7 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO SINGLE | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW8 (10), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 23-MAY-2016:00:00:00 AND 24-MAY-2016:00:00:00

## Solar System Targets

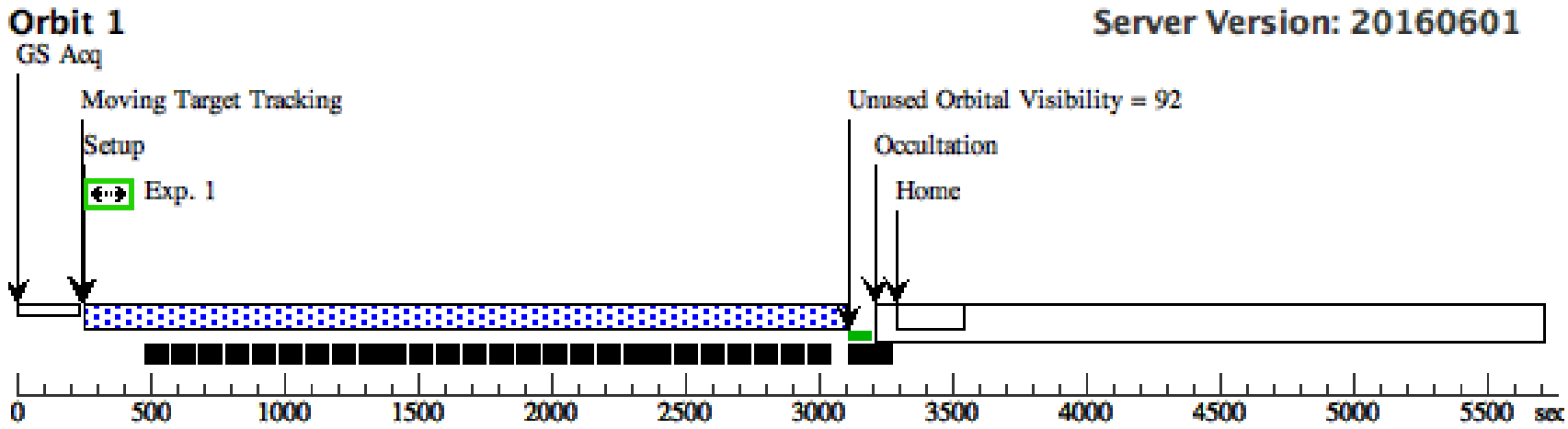
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (9) | JUPITER-AURORA-SW-IM8 | STD=JUPITER | TYPE=POS_ANGLE,RAD=22,ANG=34,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (9) JUPITER-AURORA-SW-IM8 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO SINGLE | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW9 (11), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 25-MAY-2016:00:00:00 AND 26-MAY-2016:00:00:00

## Solar System Targets

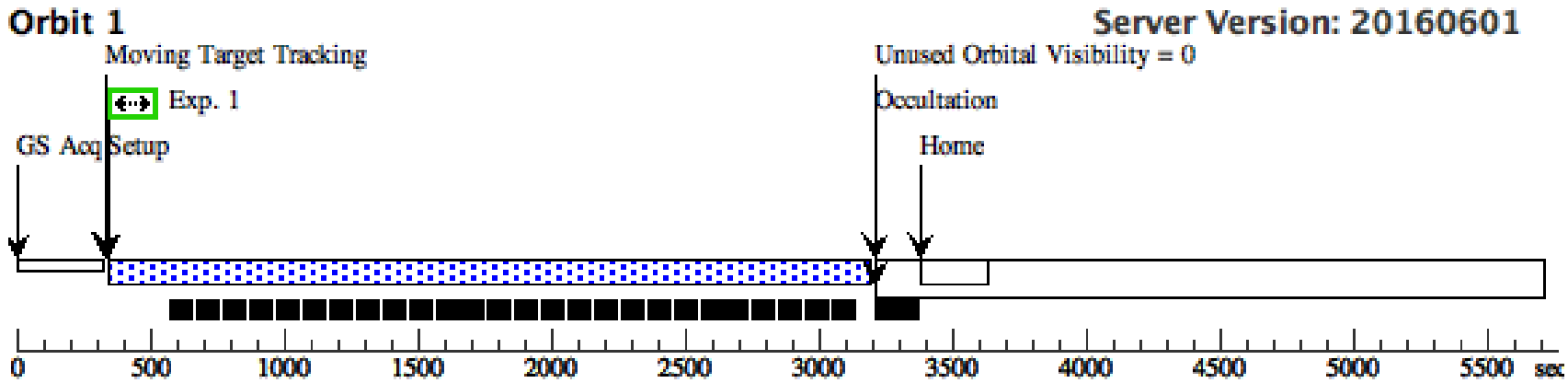
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (10) | JUPITER-AURORA-SW-IM9 | STD=JUPITER | TYPE=POS_ANGLE,RAD=21,ANG=18,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (10) JUPITER-AURORA-SW-IM9 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW10 (12), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 116D TO 116 D; BETWEEN 26-MAY-2016:00:00:00 AND 27-MAY-2016:00:00:00

## Solar System Targets

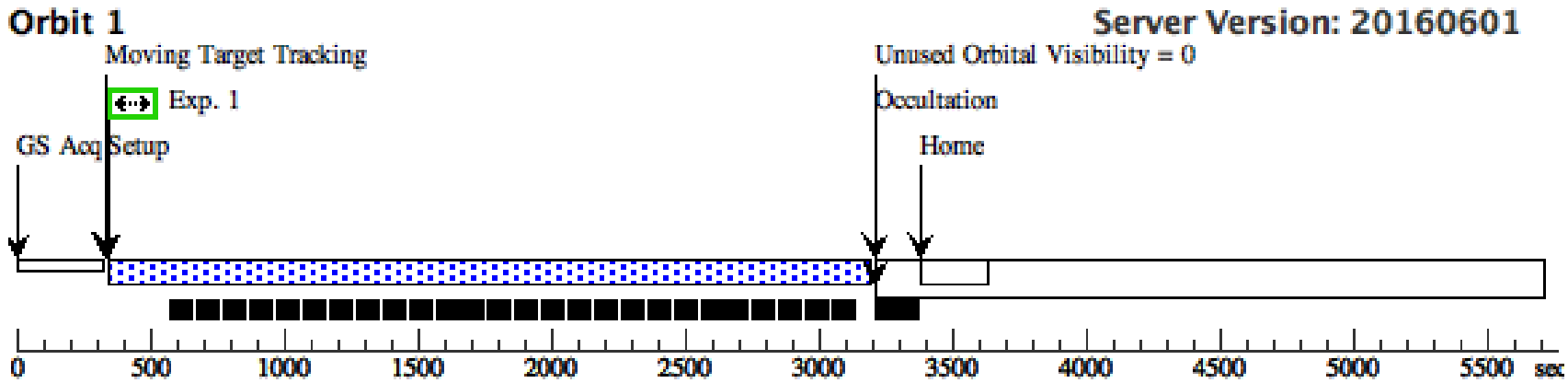
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (11) | JUPITER-AURORA-SW-IM10 | STD=JUPITER | TYPE=POS_ANGLE,RAD=21.5,ANG=14,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 230 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (11) JUPITER-AURORA-SW-IM10 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW11A (13), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 107D TO 108 D; BETWEEN 24-MAY-2016:00:00:00 AND 25-MAY-2016:00:00:00; SEQ 13,14,15 WITHIN 6 H

*Comments: This is a 3-orbit visit group, with 2 imaging and one spectral visit.*

## Solar System Targets

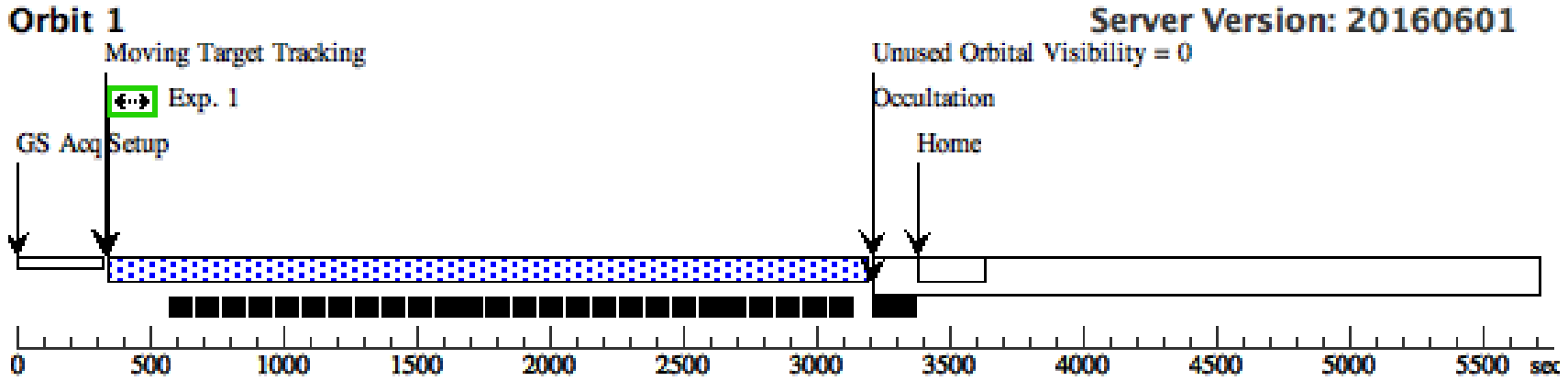
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (12) | JUPITER-AURORA-SW-IM11A | STD=JUPITER | TYPE=POS_ANGLE,RAD=23,ANG=40,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 80 240 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known. For this 3 orbit group, the CML range is slightly expanded to aid scheduling.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (12) JUPITER-AURORA-SW-IM11A | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW11B (14), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 109D TO 110 D; BETWEEN 24-MAY-2016:00:00:00 AND 25-MAY-2016:00:00:00; SEQ 13,14,15 WITHIN 6 H

*Comments: This is a 3-orbit visit group, with 2 imaging and one spectral visit. This visit is a spectral scan of the auroral region, hence ROLL is as high as possible within the allowed limit to align the slit as near to parallel with the equator as possible.*

## Diagnostics

(SW11B (14)) Warning (Form): A target acquisition should probably be performed before doing spectroscopy or coronography with STIS or COS.

## Solar System Targets

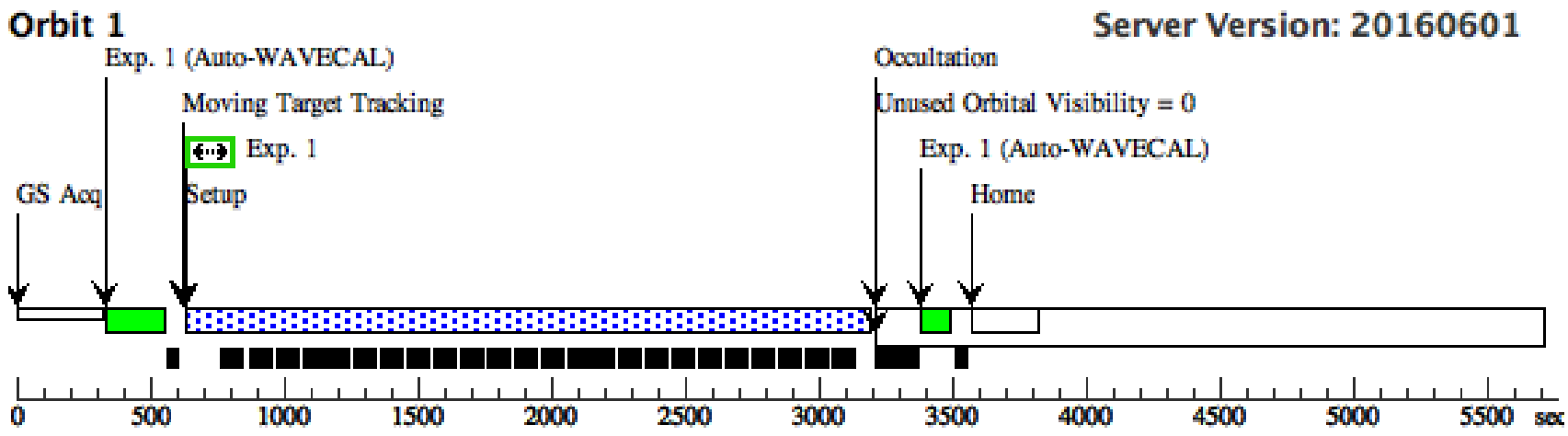
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (32) | JUPITER-AURORA-SW-SP11 | STD=JUPITER | TYPE=POS_ANGLE,RAD=23,ANG=23,REF=NORTH,R_RAD=-240,R_ANG=570,EPOCH=24-MAY-2016:19:07:00,EpochTimeScale=UTC | | CML OF JUPITER FROM EARTH BETWEEN 100 240 | EARTH |

*Comments: This target is for taking a spectral scan of Jupiter's northern auroras. RAD, ANG, and R_RAD will depend on ROLL, and the date and time of the observations - we will work with our PC to update these once the orbit of HST is known. R_RAD is negative to slew the slit from just above the northern auroras in toward the equator. For this 3 orbit group, the CML range is slightly expanded to aid scheduling.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (32) JUPITER-AURORA-SW-SP11 | STIS/FUV-MAMA, TIME-TAG, 52X0.5 | G140L 1425 A | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2909 Secs (2509 Secs)<br>*[==>2509.0 Secs ]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW11C (15), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 109D TO 110 D; BETWEEN 24-MAY-2016:00:00:00 AND 25-MAY-2016:00:00:00; SEQ 13,14,15 WITHIN 6 H

*Comments: This is a 3-orbit visit group, with 2 imaging and one spectral visit.*

## Solar System Targets

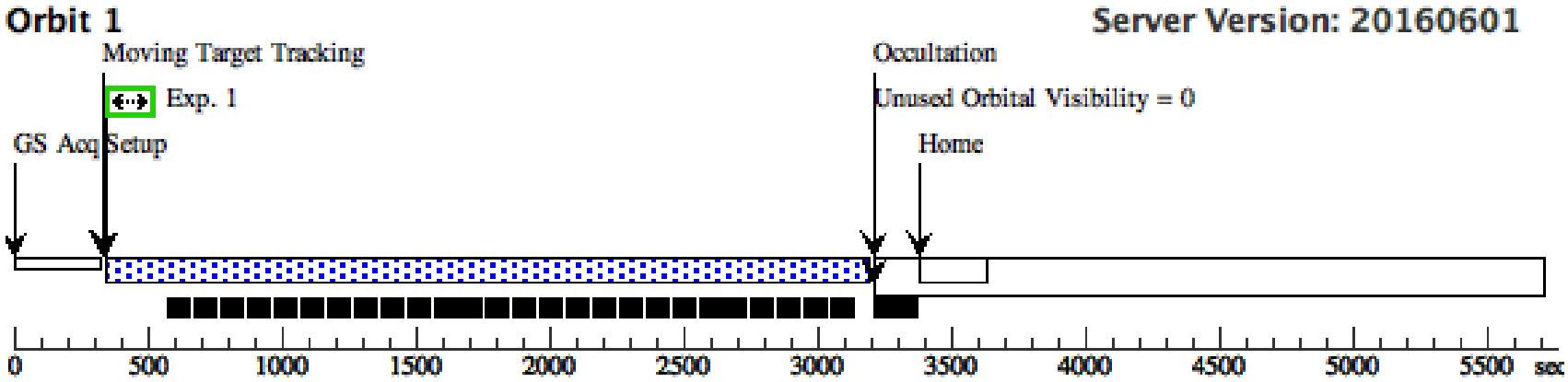
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (13) | JUPITER-AURORA-SW-IM11B | STD=JUPITER | TYPE=POS_ANGLE,RAD=21,ANG=13,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 100 240 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known. For this 3 orbit group, the CML range is slightly expanded to aid scheduling.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (13) JUPITER-AURORA-SW-IM11B | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2813 Secs (2702 Secs)<br>*[==>2702.0 Secs ]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW12 (16), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 95D TO 95 D; BETWEEN 27-MAY-2016:00:00:00 AND 28-MAY-2016:00:00:00

## Solar System Targets

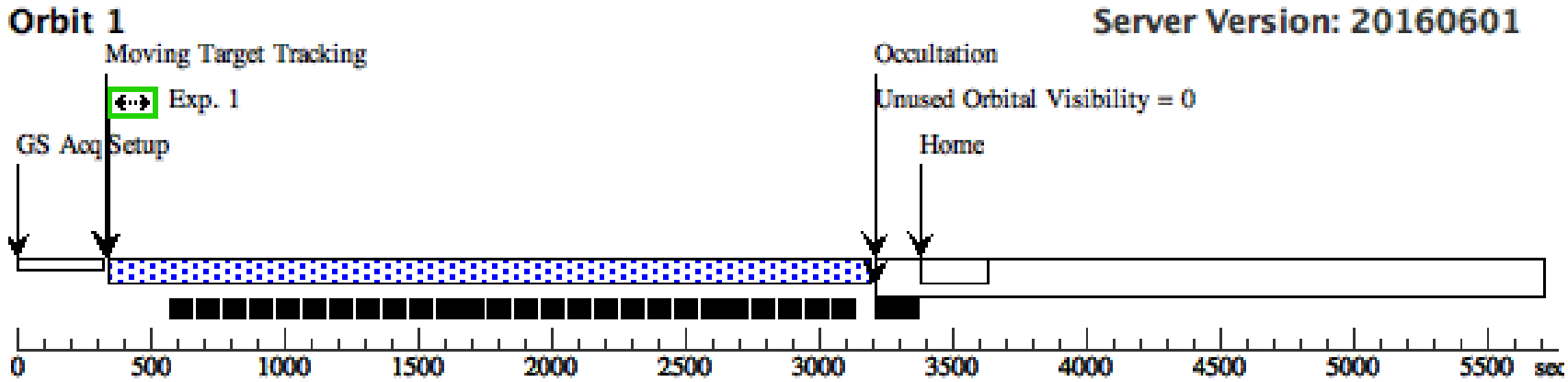
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (14) | JUPITER-AURORA-SW-IM12 | STD=JUPITER | TYPE=POS_ANGLE,RAD=21,ANG=23,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (14) JUPITER-AURORA-SW-IM12 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW13 (17), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 105D TO 105 D; BETWEEN 28-MAY-2016:00:00:00 AND 29-MAY-2016:00:00:00

## Solar System Targets

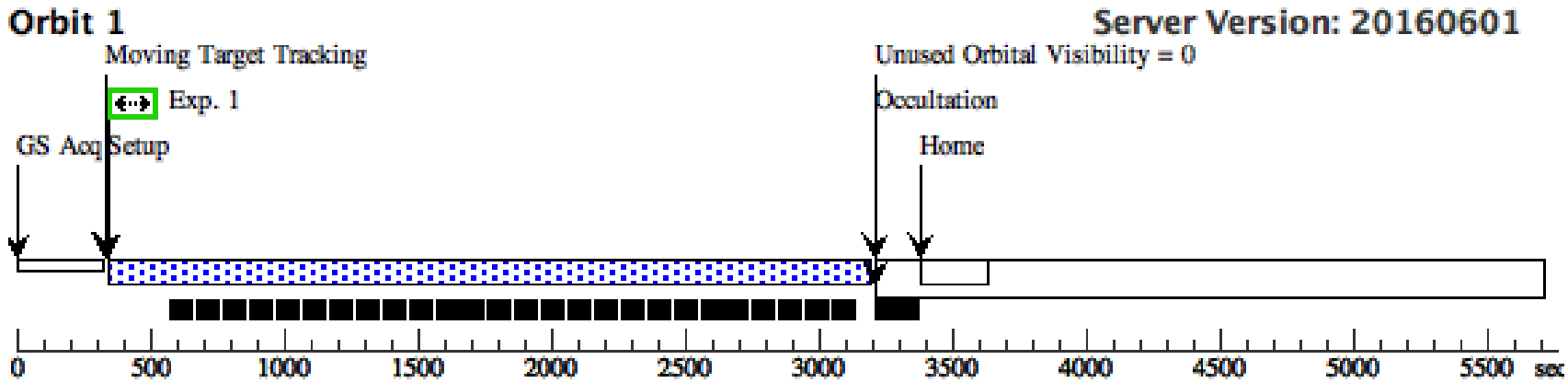
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (15) | JUPITER-AURORA-SW-IM13 | STD=JUPITER | TYPE=POS_ANGLE,RAD=22,ANG=33,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (15) JUPITER-AURORA-SW-IM13 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW14 (18), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 118D TO 119 D; BETWEEN 29-MAY-2016:00:00:00 AND 30-MAY-2016:00:00:00

## Solar System Targets

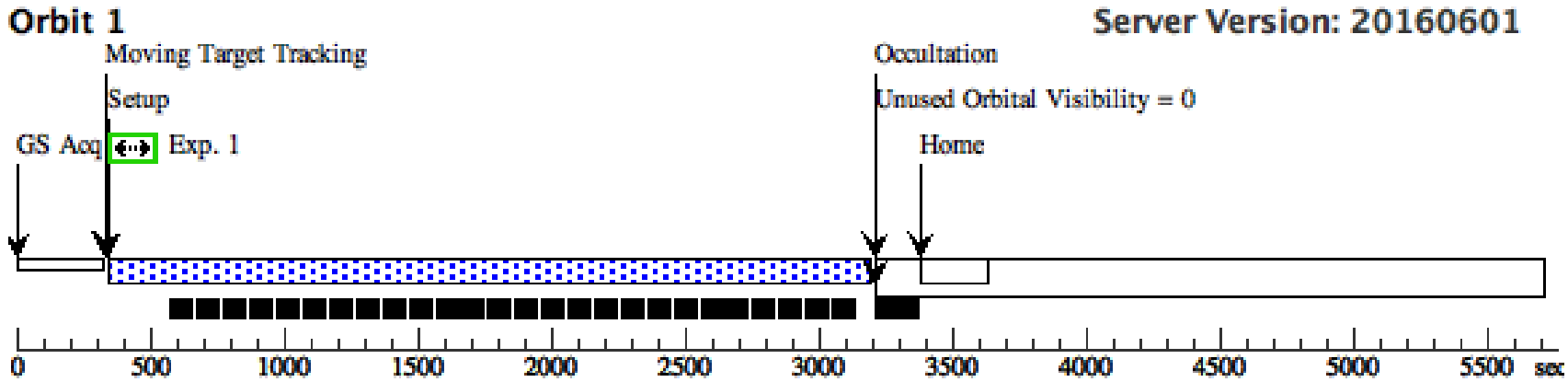
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (16) | JUPITER-AURORA-SW-IM14 | STD=JUPITER | TYPE=POS_ANGLE,RAD=22,ANG=25,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (16) JUPITER-AURORA-SW-IM14 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW15 (19), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 100D TO 101 D; BETWEEN 30-MAY-2016:00:00:00 AND 31-MAY-2016:00:00:00

## Solar System Targets

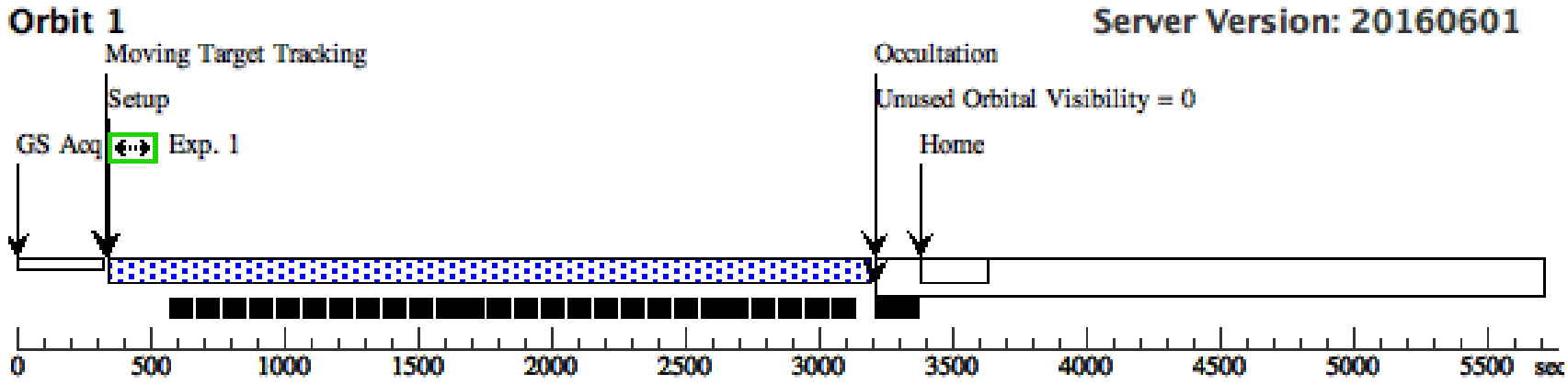
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (17) | JUPITER-AURORA-SW-IM15 | STD=JUPITER | TYPE=POS_ANGLE,RAD=22,ANG=32,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (17) JUPITER-AURORA-SW-IM15 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW16 (20), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 96D TO 97 D; BETWEEN 31-MAY-2016:00:00:00 AND 01-JUN-2016:00:00:00

## Solar System Targets

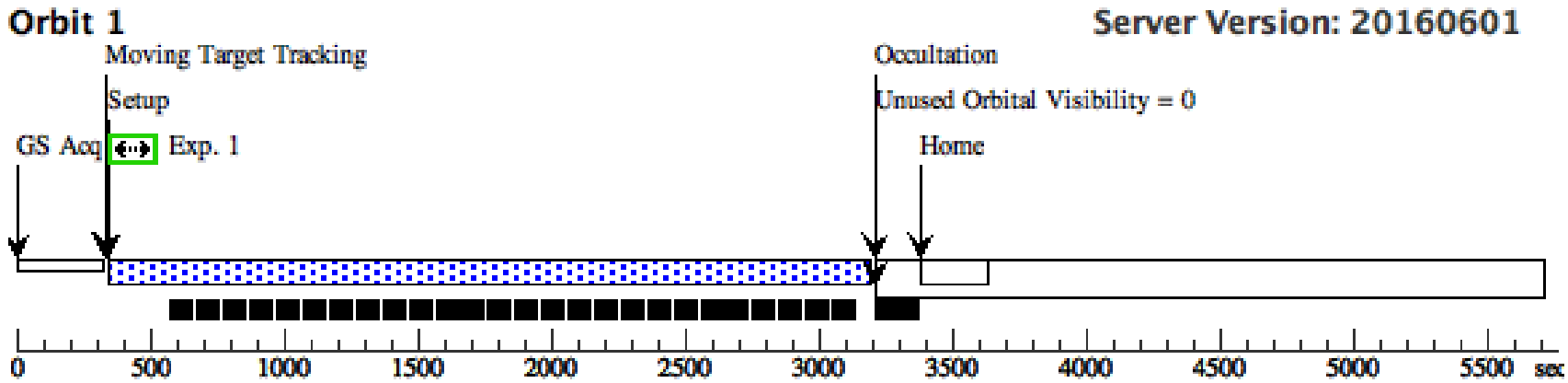
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (18) | JUPITER-AURORA-SW-IM16 | STD=JUPITER | TYPE=POS_ANGLE,RAD=22,ANG=29,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (18) JUPITER-AURORA-SW-IM16 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW17A (21), completed** Fri Jul 29 17:06:17 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 102D TO 103 D; BETWEEN 01-JUN-2016:00:00:00 AND 02-JUN-2016:00:00:00; SEQ 21,22,23 WITHIN 6 H

*Comments: This is a 3-orbit visit group, with 2 imaging and one spectral visit.*

## Solar System Targets

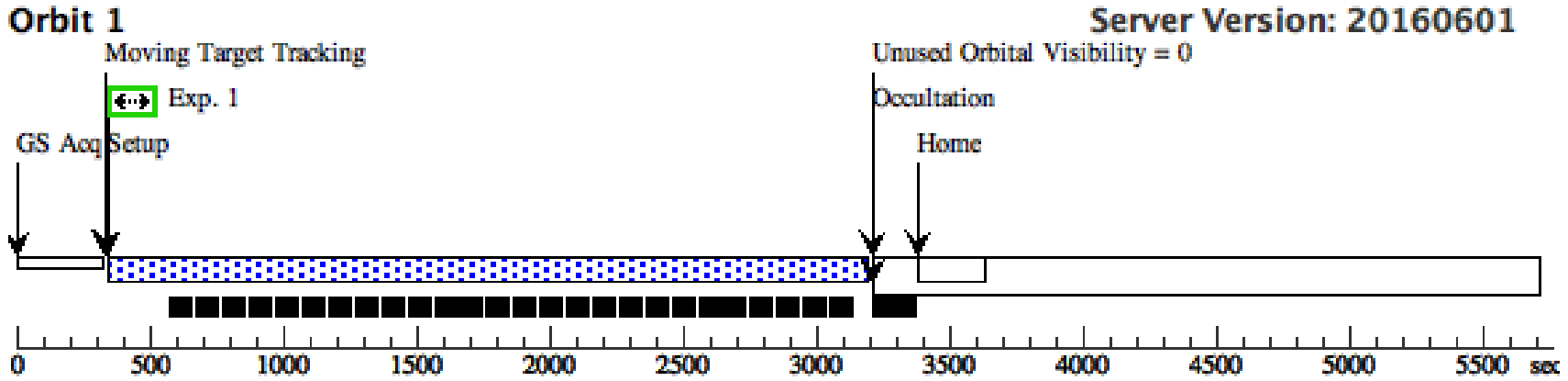
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (19) | JUPITER-AURORA-SW-IM17A | STD=JUPITER | TYPE=POS_ANGLE,RAD=22,ANG=35,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 100 240 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known. For this 3 orbit group, the CML range is slightly expanded to aid scheduling.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (19) JUPITER-AURORA-SW-IM17A | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW17B (22), completed** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 96D TO 96.5 D; BETWEEN 01-JUN-2016:00:00:00 AND 02-JUN-2016:00:00:00; SEQ 21,22,23 WITHIN 6 H

*Comments: This is a 3-orbit visit group, with 2 imaging and one spectral visit. This visit is a spectral scan of the auroral region, hence ROLL is as high as possible within the allowed limit to align the slit as near to parallel with the equator as possible.*

## Diagnostics

(SW17B (22)) Warning (Form): A target acquisition should probably be performed before doing spectroscopy or coronography with STIS or COS.

## Solar System Targets

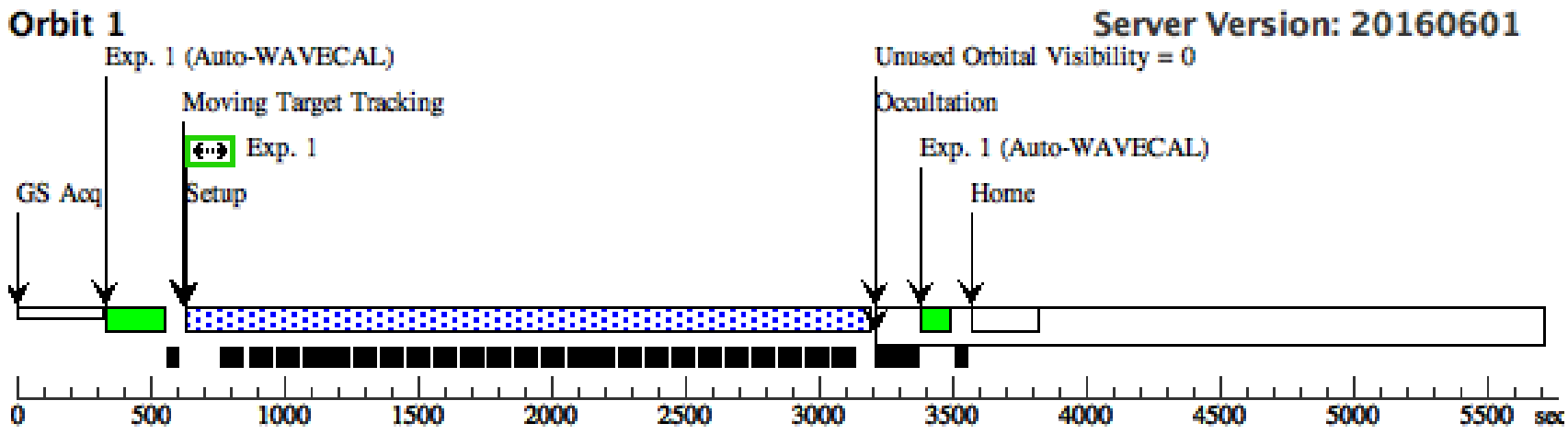
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (33) | JUPITER-AURORA-SW-SP17 | STD=JUPITER | TYPE=POS_ANGLE,RAD=23,ANG=15,REF=NORTH,R_RAD=-120,R_ANG=830,EPOCH=01-JUN-2016:16:29:00,EpochTimeScale=UTC | | CML OF JUPITER FROM EARTH BETWEEN 100 240 | EARTH |

*Comments: This target is for taking a spectral scan of Jupiter's northern auroras. RAD, ANG, and R_RAD will depend on ROLL, and the date and time of the observations - we will work with our PC to update these once the orbit of HST is known. R_RAD is negative to slew the slit from just above the northern auroras in toward the equator. For this 3 orbit group, the CML range is slightly expanded to aid scheduling.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (33) JUPITER-AURORA-SW-SP17 | STIS/FUV-MAMA, TIME-TAG, 52X0.5 | G140L 1425 A | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2909 Secs (2509 Secs)<br>*[==>2509.0 Secs ]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW17C (23), completed** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 101D TO 102 D; BETWEEN 01-JUN-2016:00:00:00 AND 02-JUN-2016:00:00:00; SEQ 21,22,23 WITHIN 6 H

*Comments: This is a 3-orbit visit group, with 2 imaging and one spectral visit.*

## Solar System Targets

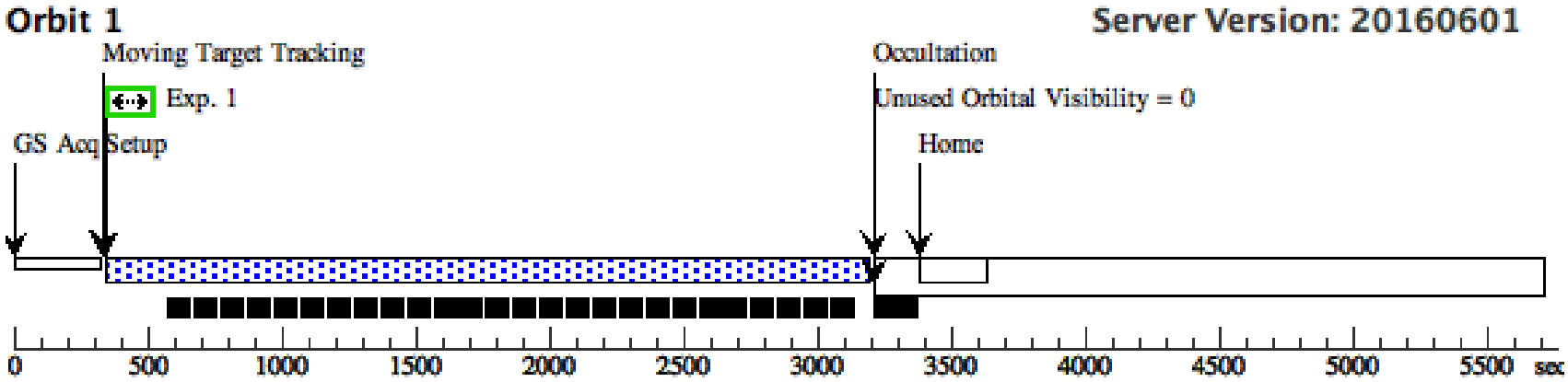
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (20) | JUPITER-AURORA-SW-IM17B | STD=JUPITER | TYPE=POS_ANGLE,RAD=21,ANG=12,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 100 260 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known. For this 3 orbit group, the CML range is slightly expanded to aid scheduling.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (20) JUPITER-AURORA-SW-IM17B | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | | | 2813 Secs (2702 Secs)<br>*[==>2702.0 Secs ]* | ***[1]*** |

## Orbit Structure



## Visit

**Proposal 14105, SW18 (24), completed** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 96.0D TO 96.0 D; BETWEEN 02-JUN-2016:00:00:00 AND 03-JUN-2016:00:00:00

## Solar System Targets

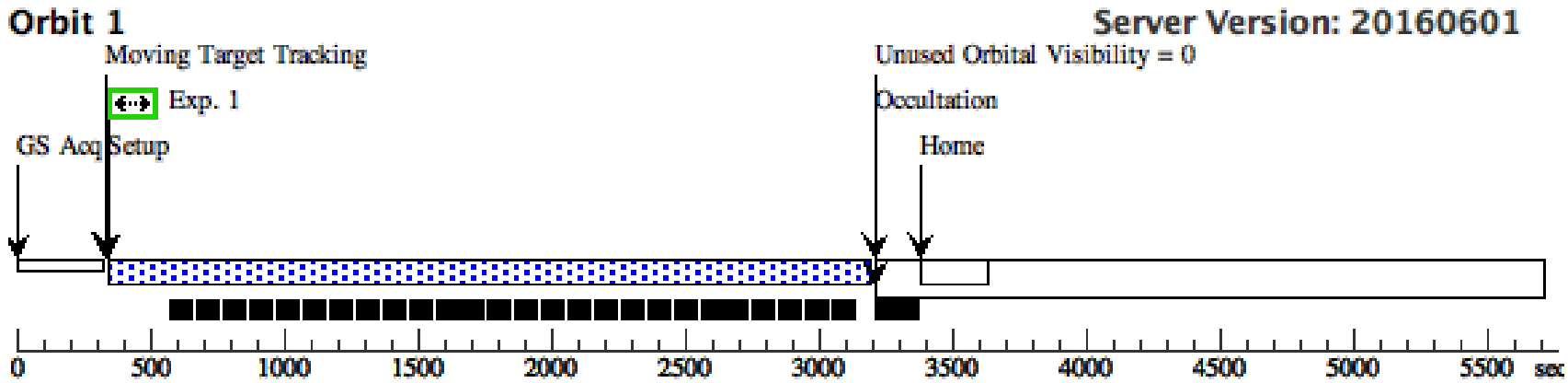
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (21) | JUPITER-AURORA-SW-IM18 | STD=JUPITER | TYPE=POS_ANGLE,RAD=22,ANG=28,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (21) JUPITER-AURORA-SW-IM18 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW19 (25), completed** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 119D TO 120 D; BETWEEN 03-JUN-2016:00:00:00 AND 04-JUN-2016:00:00:00

## Solar System Targets

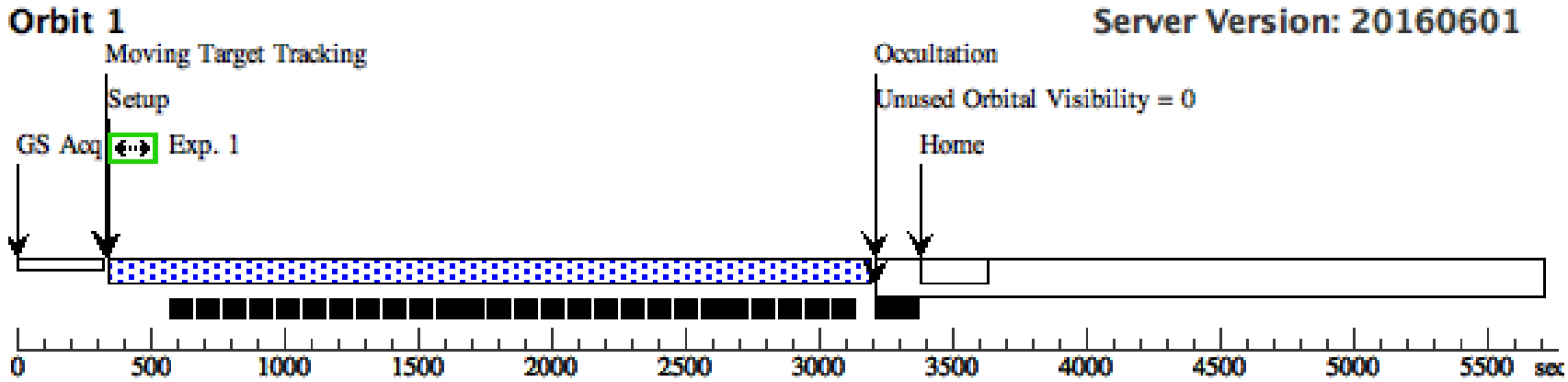
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (22) | JUPITER-AURORA-SW-IM19 | STD=JUPITER | TYPE=POS_ANGLE,RAD=22,ANG=23,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (22) JUPITER-AURORA-SW-IM19 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW20 (26), completed** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 111D TO 112 D; BETWEEN 04-JUN-2016:00:00:00 AND 05-JUN-2016:00:00:00

## Solar System Targets

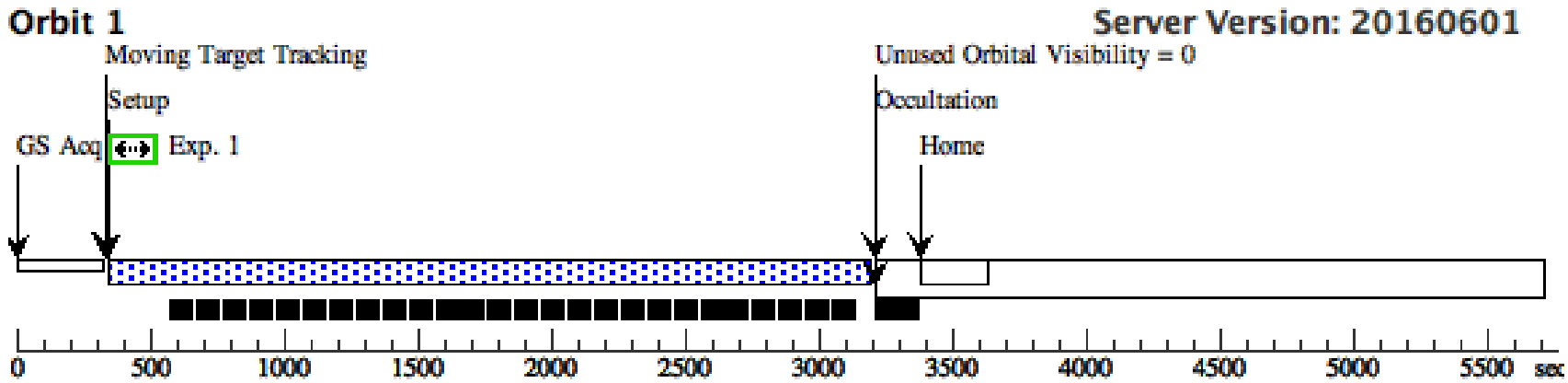
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (23) | JUPITER-AURORA-SW-IM20 | STD=JUPITER | TYPE=POS_ANGLE,RAD=21,ANG=17,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (23) JUPITER-AURORA-SW-IM20 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW21 (27), completed** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 111D TO 112 D; BETWEEN 05-JUN-2016:00:00:00 AND 06-JUN-2016:00:00:00

## Solar System Targets

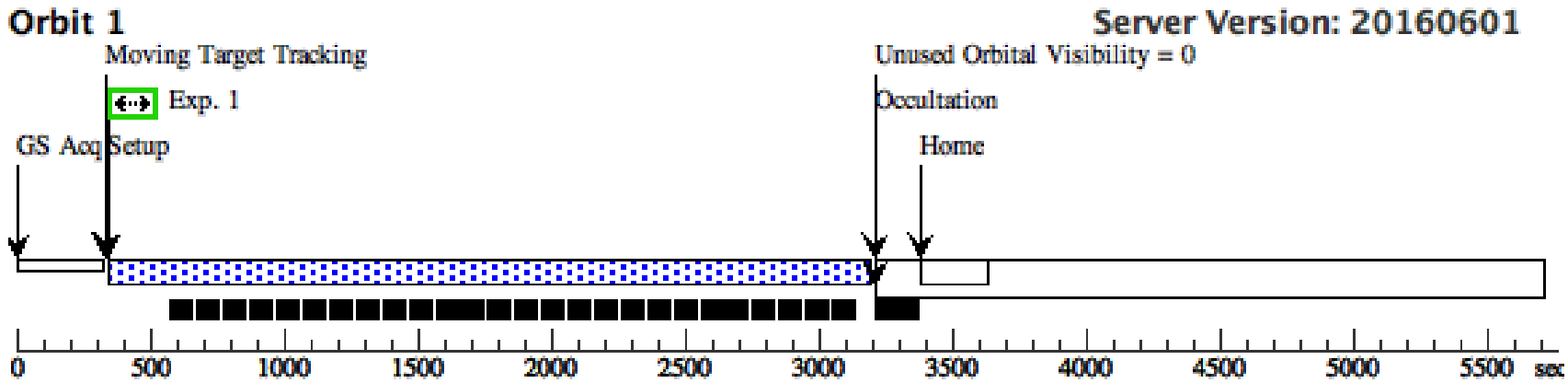
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (24) | JUPITER-AURORA-SW-IM21 | STD=JUPITER | TYPE=POS_ANGLE,RAD=21,ANG=22,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (24) JUPITER-AURORA-SW-IM21 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW22 (28), completed** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 116D TO 117 D; BETWEEN 06-JUN-2016:00:00:00 AND 07-JUN-2016:00:00:00

## Solar System Targets

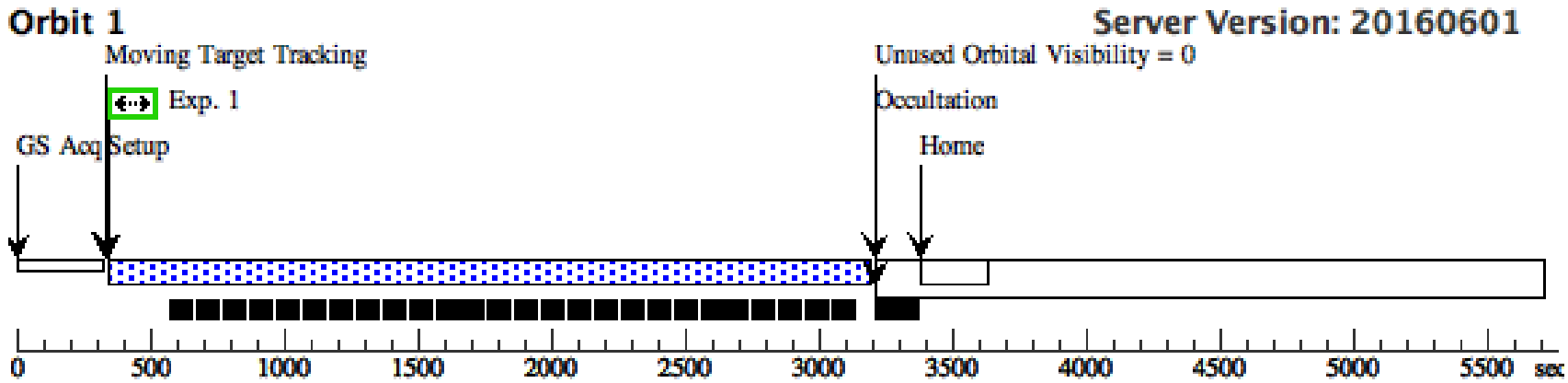
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (25) | JUPITER-AURORA-SW-IM22 | STD=JUPITER | TYPE=POS_ANGLE,RAD=21,ANG=18,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (25) JUPITER-AURORA-SW-IM22 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW23 (29), completed** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 117D TO 117 D; BETWEEN 07-JUN-2016:00:00:00 AND 08-JUN-2016:00:00:00

## Solar System Targets

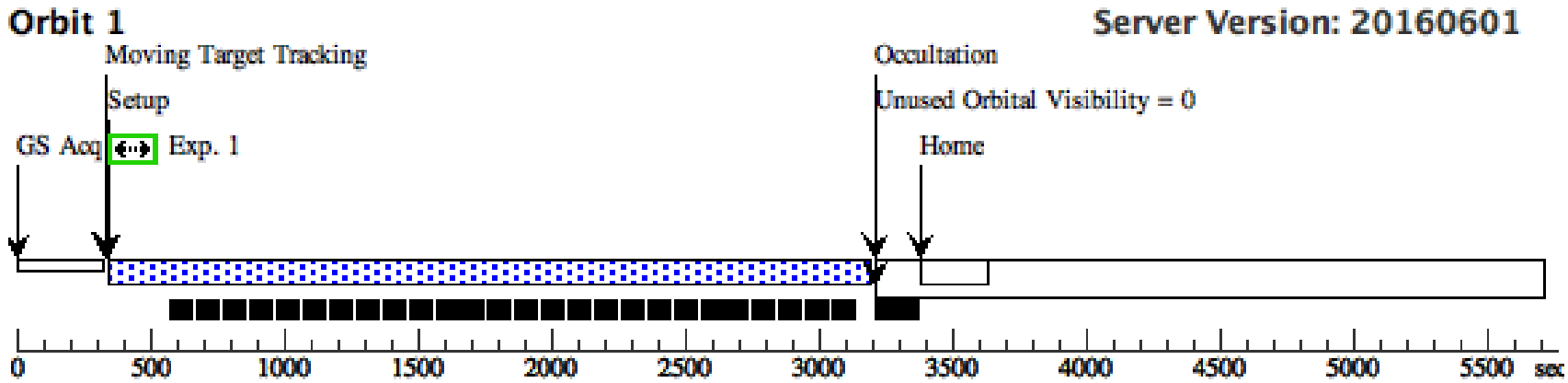
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (26) | JUPITER-AURORA-SW-IM23 | STD=JUPITER | TYPE=POS_ANGLE,RAD=21,ANG=205,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 310 110 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (26) JUPITER-AURORA-SW-IM23 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW24 (30), scheduled** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 22-JUN-2016:00:00:00 AND 23-JUN-2016:00:00:00

## Solar System Targets

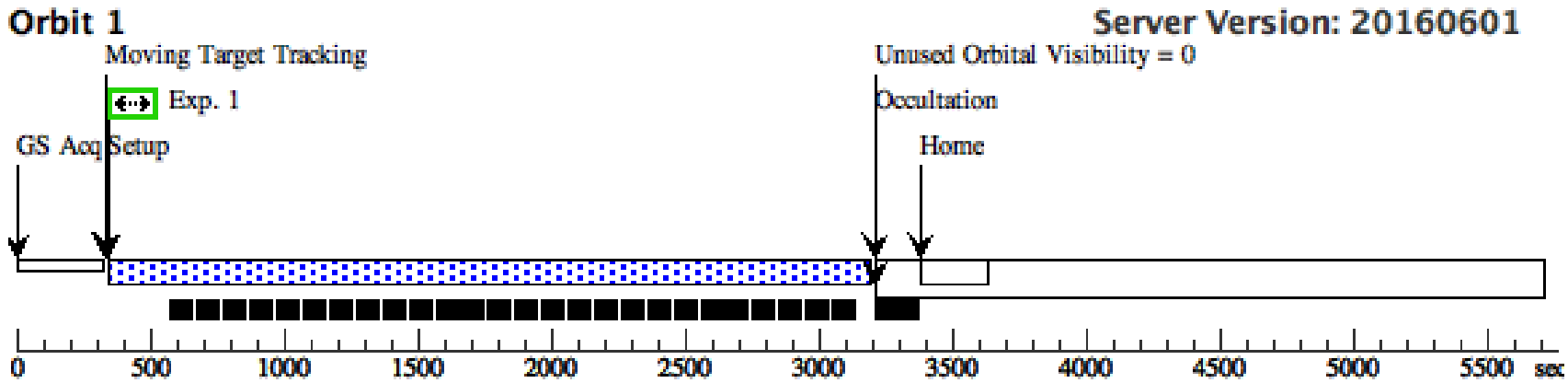
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (27) | JUPITER-AURORA-SW-IM24 | STD=JUPITER | TYPE=POS_ANGLE,RAD=21,ANG=208,REF=NORTH | | | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (27) JUPITER-AURORA-SW-IM24 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW25 (31), scheduled** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 25-JUN-2016:00:00:00 AND 26-JUN-2016:00:00:00

## Solar System Targets

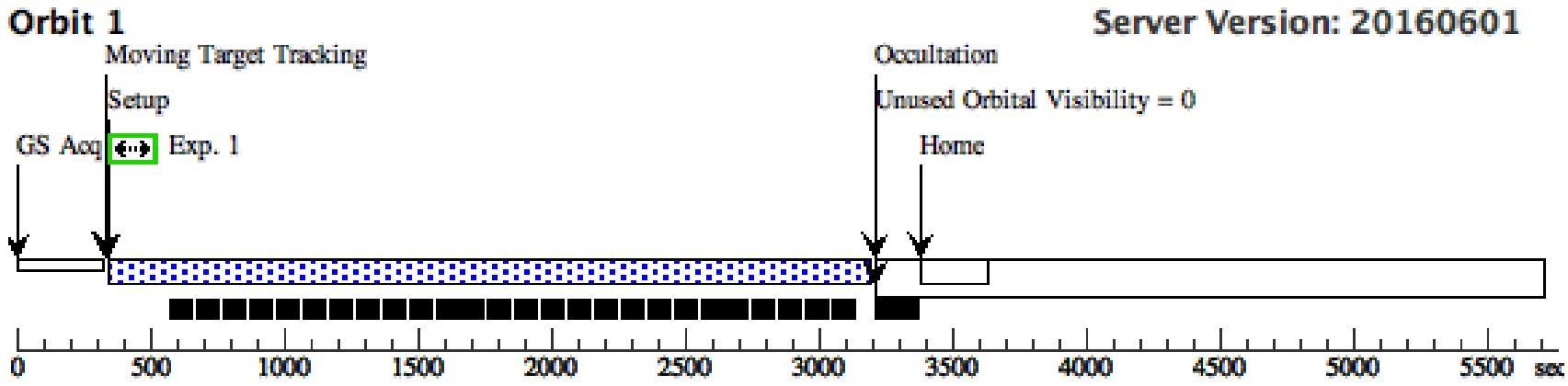
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (28) | JUPITER-AURORA-SW-IM25 | STD=JUPITER | TYPE=POS_ANGLE,RAD=19,ANG=208,REF=NORTH | | | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (28) JUPITER-AURORA-SW-IM25 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW26 (32), scheduling** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 27-JUN-2016:00:00:00 AND 28-JUN-2016:00:00:00

## Solar System Targets

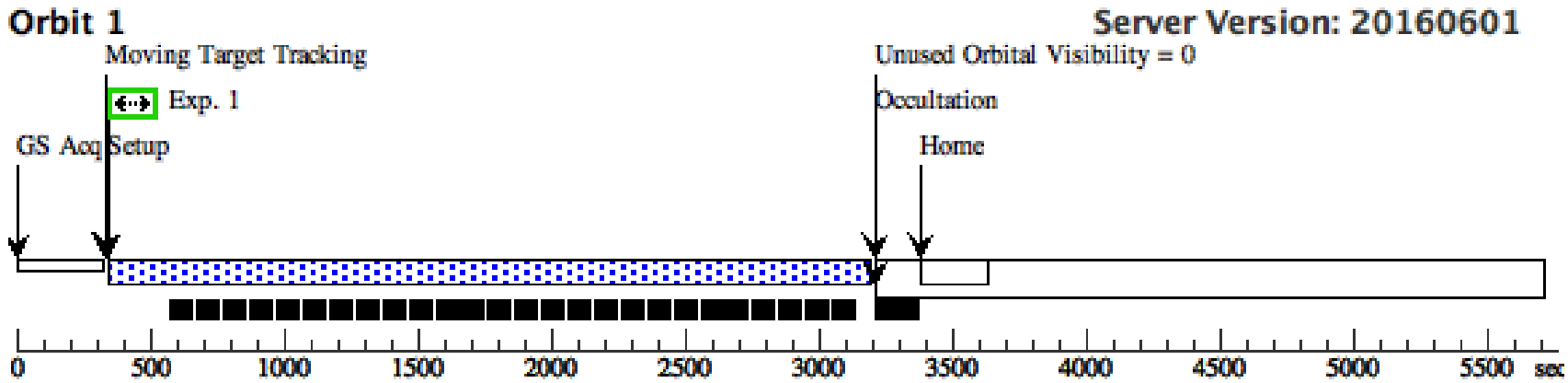
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (29) | JUPITER-AURORA-SW-IM26 | STD=JUPITER | TYPE=POS_ANGLE,RAD=19,ANG=208,REF=NORTH | | | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (29) JUPITER-AURORA-SW-IM26 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, SW27 (33), scheduling** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 30-JUN-2016:12:00:00 AND 01-JUL-2016:00:00:00

*Comments: The BETWEEN of this visit is slightly extended to ease schedulability near the end of the MOON schedulable interval*

## Solar System Targets

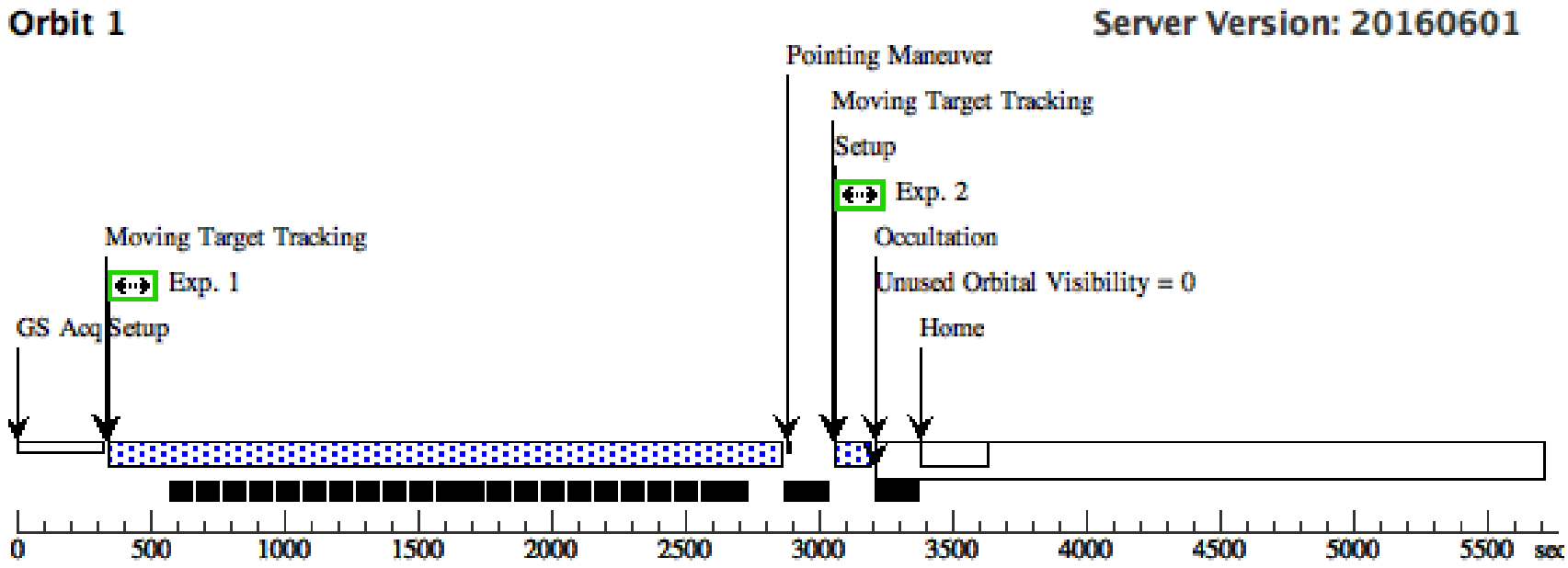
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (30) | JUPITER-AURORA-SW-IM27 | STD=JUPITER | TYPE=POS_ANGLE,RAD=19,ANG=208,REF=NORTH | | | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (30) JUPITER-AURORA-SW-IM27 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2369 Secs (2369 Secs)<br>*[==>]* | <br>*[1]* |
| 2 | (STIS.im.733411) | (30) JUPITER-AURORA-SW-IM27 | STIS/FUV-MAMA, TIME-TAG, F25QTZ | MIRROR | BUFFER-TIME=99 | | | 100 Secs (100 Secs)<br>*[==>]* | <br>*[1]* |

## Orbit Structure



## Visit

**Proposal 14105, IN1 (34), scheduled** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 23-JUN-2016:00:00:00 AND 24-JUN-2016:00:00:00

*Comments: This is the first visit of the inbound magnetosphere phase of the program, starting on 23 June*

## Solar System Targets

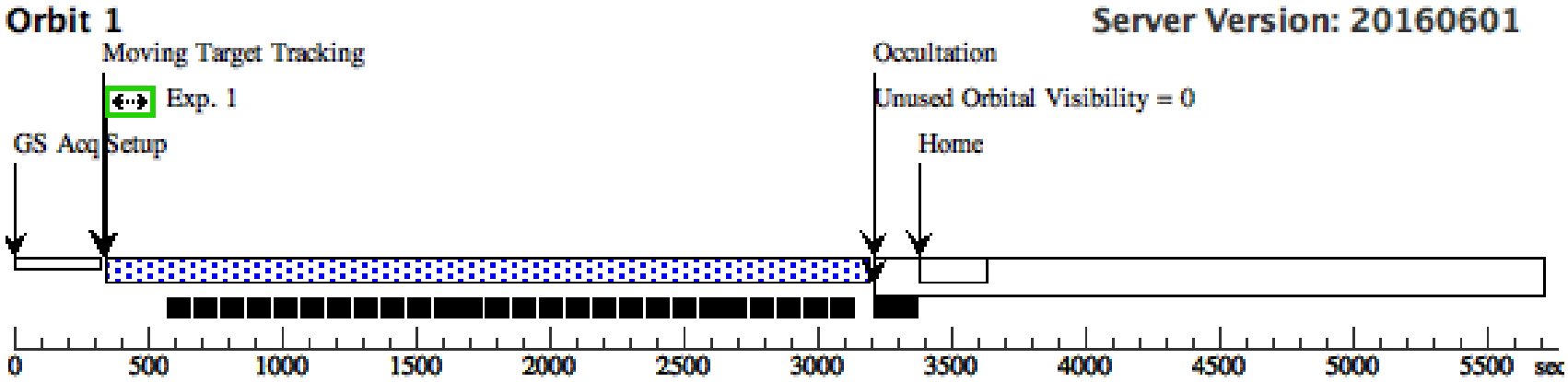
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (34) | JUPITER-AURORA-IN-IM28 | STD=JUPITER | TYPE=POS_ANGLE,RAD=21,ANG=30,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (34) JUPITER-AURORA-IN-IM28 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, IN2 (35), scheduled** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 24-JUN-2016:00:00:00 AND 25-JUN-2016:00:00:00

## Solar System Targets

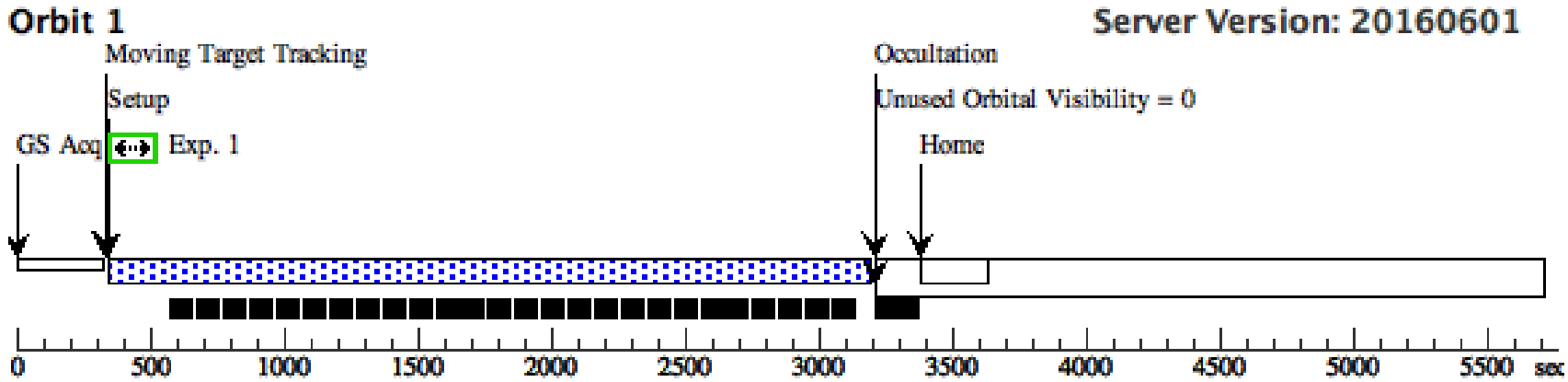
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (35) | JUPITER-AURORA-IN-IM29 | STD=JUPITER | TYPE=POS_ANGLE,RAD=20,ANG=22,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (35) JUPITER-AURORA-IN-IM29 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, IN3 (36), scheduled** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 25-JUN-2016:00:00:00 AND 26-JUN-2016:00:00:00

## Solar System Targets

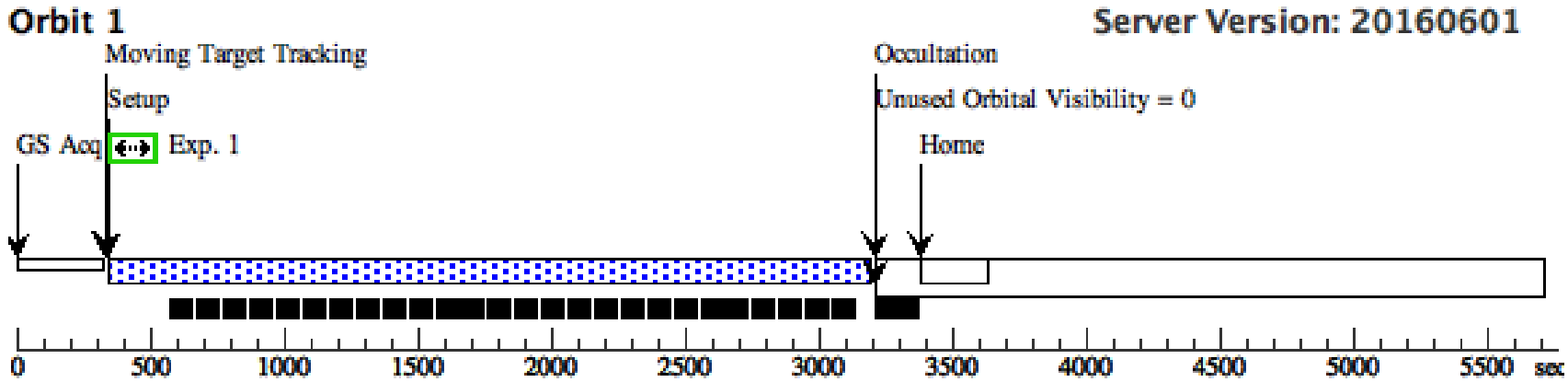
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (36) | JUPITER-AURORA-IN-IM30 | STD=JUPITER | TYPE=POS_ANGLE,RAD=20,ANG=33,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (36) JUPITER-AURORA-IN-IM30 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, IN4 (37), scheduled** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 26-JUN-2016:00:00:00 AND 27-JUN-2016:00:00:00

## Solar System Targets

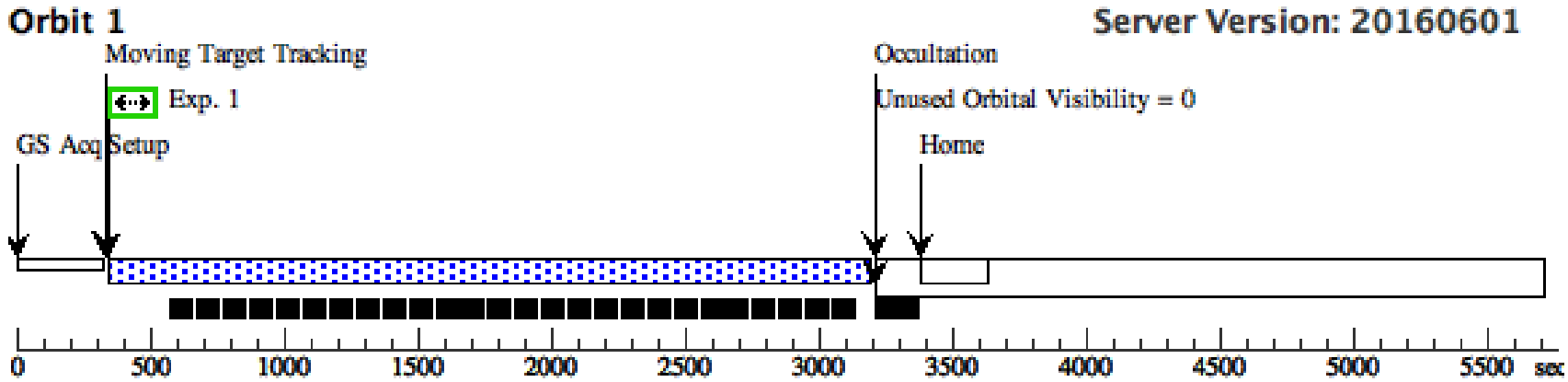
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (37) | JUPITER-AURORA-IN-IM31 | STD=JUPITER | TYPE=POS_ANGLE,RAD=19,ANG=27,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (37) JUPITER-AURORA-IN-IM31 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, IN5 (38), scheduled** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 26-JUN-2016:21:00:00 AND 28-JUN-2016:00:00:00

## Solar System Targets

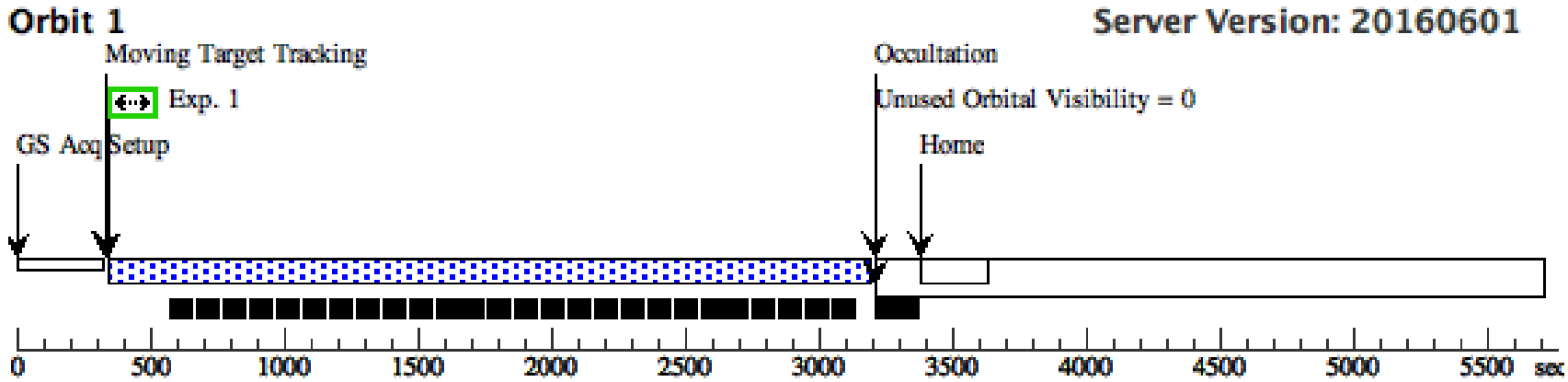
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (38) | JUPITER-AURORA-IN-IM32 | STD=JUPITER | TYPE=POS_ANGLE,RAD=19,ANG=20,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (38) JUPITER-AURORA-IN-IM32 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, IN6 (39), scheduling** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 28-JUN-2016:00:00:00 AND 29-JUN-2016:00:00:00

## Solar System Targets

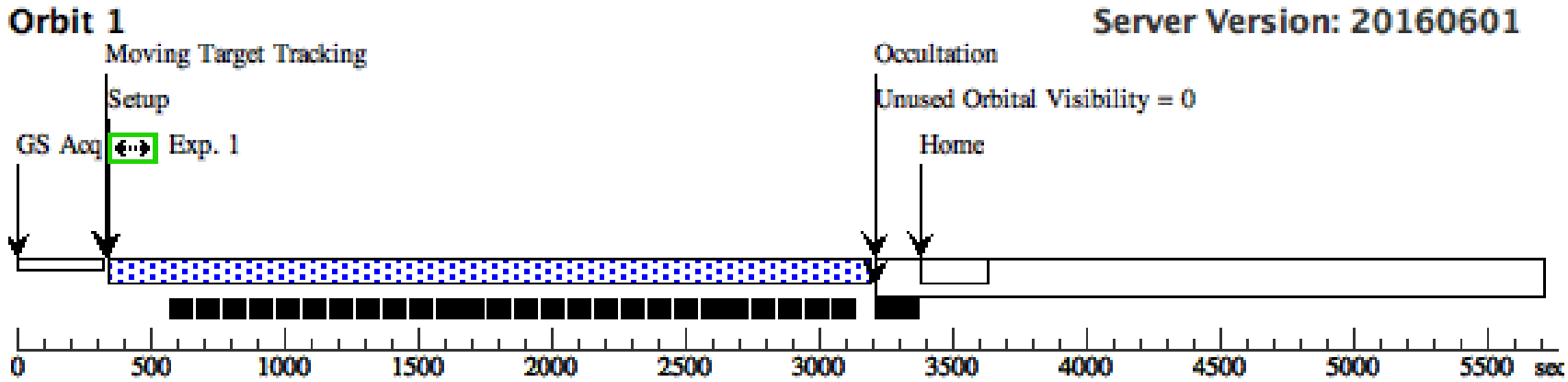
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (39) | JUPITER-AURORA-IN-IM33 | STD=JUPITER | TYPE=POS_ANGLE,RAD=19,ANG=30,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (39) JUPITER-AURORA-IN-IM33 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, IN7 (40), scheduling** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 29-JUN-2016:00:00:00 AND 01-JUL-2016:00:00:00

## Solar System Targets

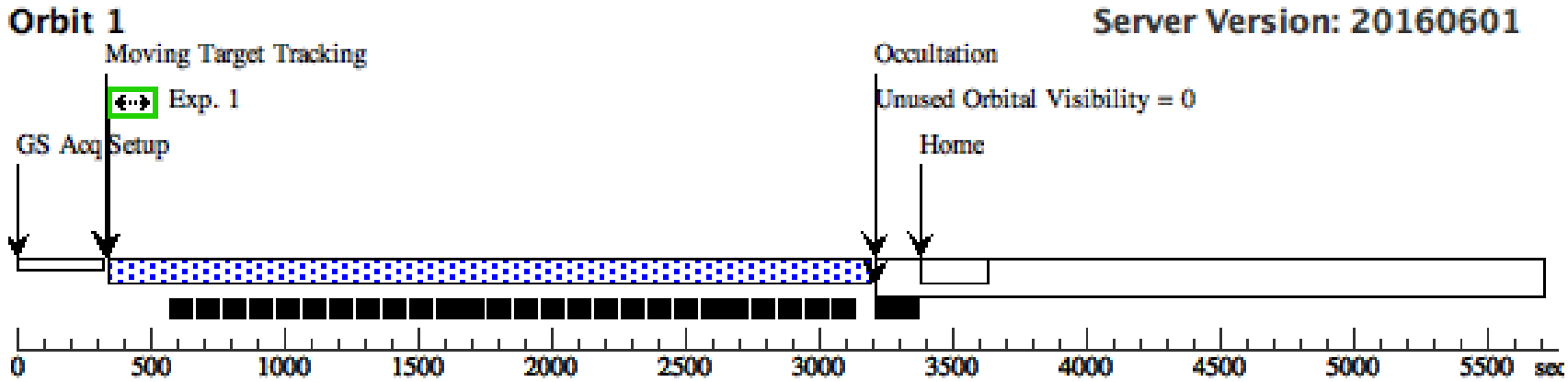
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (40) | JUPITER-AURORA-IN-IM34 | STD=JUPITER | TYPE=POS_ANGLE,RAD=19,ANG=28,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (40) JUPITER-AURORA-IN-IM34 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, CO1 (41), implementation** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 11-JUL-2016:00:00:00 AND 12-JUL-2016:00:00:00

*Comments: This is the first visit of the capture orbit phase of the program, starting on 11 July*

## Solar System Targets

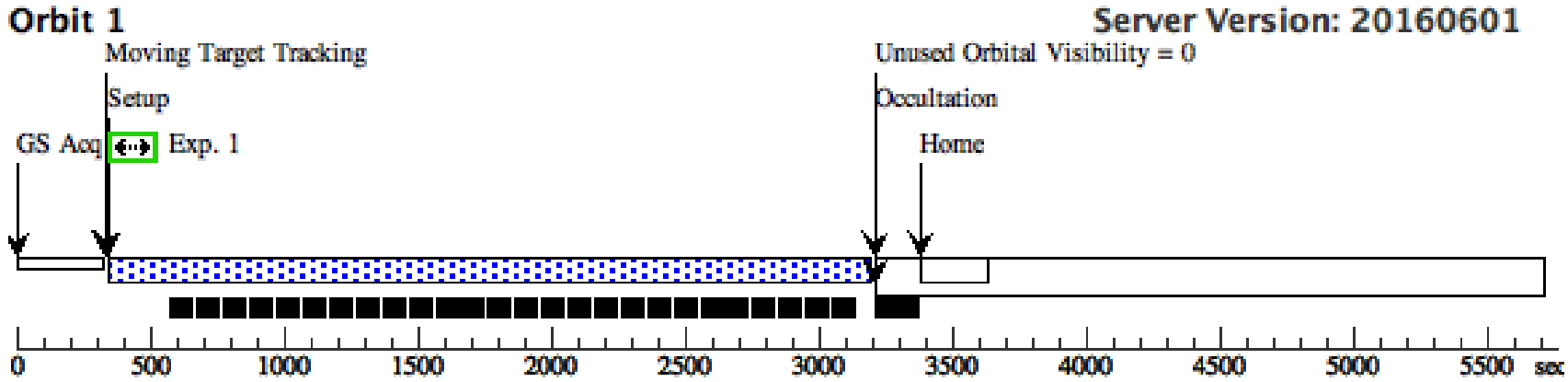
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (41) | JUPITER-AURORA-CO-IM35 | STD=JUPITER | TYPE=POS_ANGLE,RAD=18,ANG=28,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (41) JUPITER-AURORA-CO-IM35 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, CO2 (42), implementation** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 18-JUL-2016:00:00:00 AND 19-JUL-2016:00:00:00

## Solar System Targets

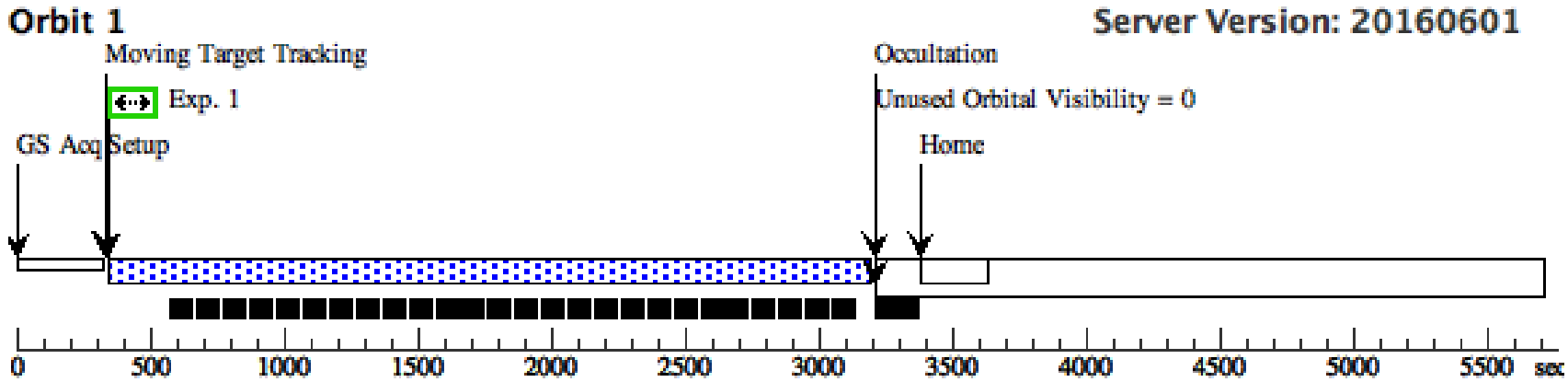
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (42) | JUPITER-AURORA-CO-IM36 | STD=JUPITER | TYPE=POS_ANGLE,RAD=18,ANG=32,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (42) JUPITER-AURORA-CO-IM36 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, CO3 (43), implementation** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 13-JUL-2016:00:00:00 AND 14-JUL-2016:00:00:00

## Solar System Targets

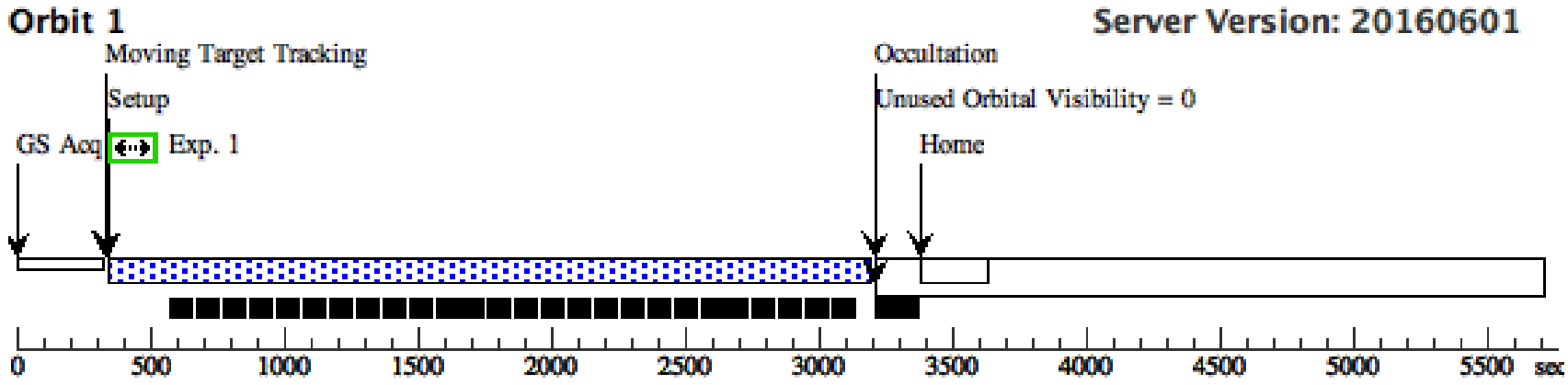
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (43) | JUPITER-AURORA-CO-IM37 | STD=JUPITER | TYPE=POS_ANGLE,RAD=18,ANG=35,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (43) JUPITER-AURORA-CO-IM37 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, CO4 (44), implementation** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 14-JUL-2016:00:00:00 AND 15-JUL-2016:00:00:00

## Solar System Targets

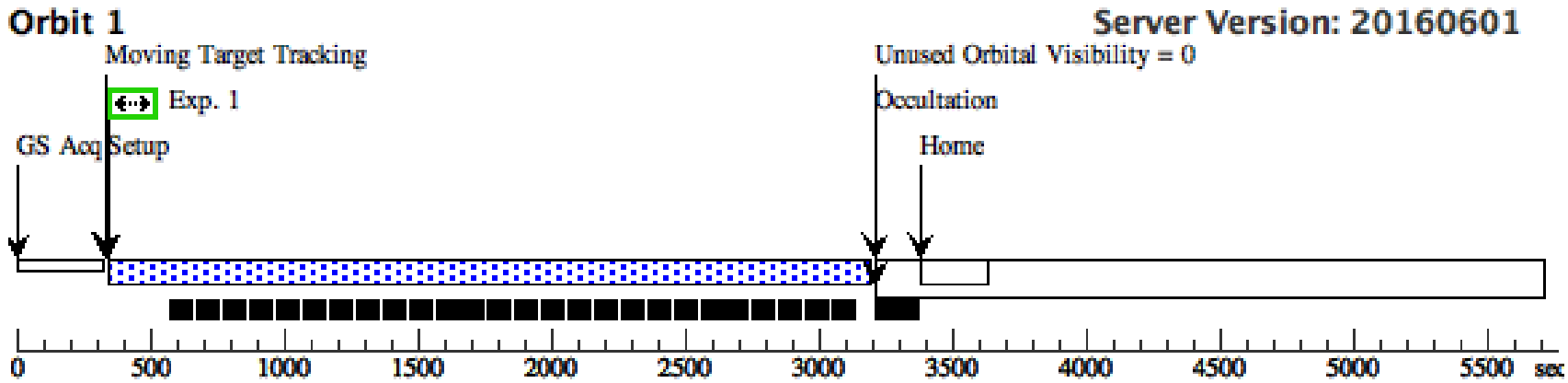
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (44) | JUPITER-AURORA-CO-IM38 | STD=JUPITER | TYPE=POS_ANGLE,RAD=18,ANG=28,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (44) JUPITER-AURORA-CO-IM38 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, CO5 (45), implementation** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: BETWEEN 13-JUL-2016:00:00:00 AND 14-JUL-2016:00:00:00

## Solar System Targets

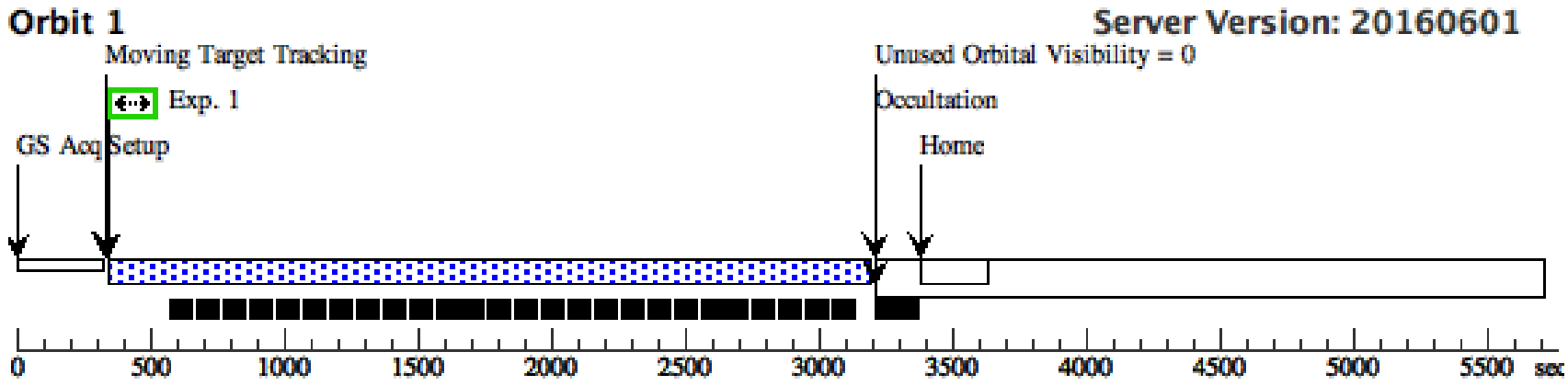
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (45) | JUPITER-AURORA-CO-IM39 | STD=JUPITER | TYPE=POS_ANGLE,RAD=18,ANG=20,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (45) JUPITER-AURORA-CO-IM39 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, CO6 (46), implementation** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 112D TO 113 D; BETWEEN 17-JUL-2016:00:00:00 AND 18-JUL-2016:00:00:00

## Solar System Targets

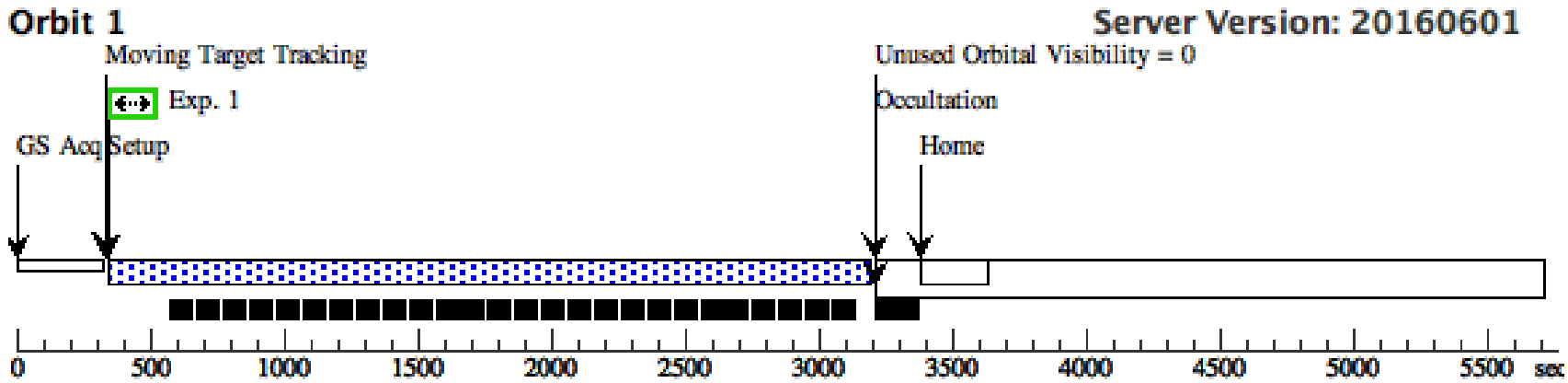
| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (46) | JUPITER-AURORA-CO-IM40 | STD=JUPITER | TYPE=POS_ANGLE,RAD=18,ANG=22,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (46) JUPITER-AURORA-CO-IM40 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 14105, CO7 (47), implementation** Fri Jul 29 17:06:18 GMT 2016

**Diagnostic Status: No Diagnostics**

Scientific Instruments: STIS/FUV-MAMA

Special Requirements: ORIENT 109.8D TO 111 D; BETWEEN 18-JUL-2016:00:00:00 AND 19-JUL-2016:00:00:00

## Solar System Targets

| # | Name | Level 1 | Level 2 | Level 3 | Window | Ephem Center |
|---|---|---|---|---|---|---|
| (47) | JUPITER-AURORA-CO-IM41 | STD=JUPITER | TYPE=POS_ANGLE,RAD=18,ANG=20,REF=NORTH | | CML OF JUPITER FROM EARTH BETWEEN 120 220 | EARTH |

*Comments: This target is for imaging Jupiter's northern auroras. The values of RAD and ANG are dependent on ROLL and the date and time of the observations. We will work with our PC to update these once the orbit of HST is known.*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (STIS.im.733411) | (47) JUPITER-AURORA-CO-IM41 | STIS/FUV-MAMA, TIME-TAG, F25SRF2 | MIRROR | BUFFER-TIME=99 | GS ACQ SCENARIO BASE1B3 | | 2702 Secs (2702 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure