



## 17852 - Cycle 32 COS FUV Split-Wavecal Calibration Program

Cycle: 32, Proposal Category: CAL/COS

(Availability Mode: RESTRICTED)

### INVESTIGATORS

| <i>Name</i>                                       | <i>Institution</i>                             |
|---|--|
| <b>Dr. Leonardo Dos Santos (PI) (Contact)</b>     | <b>Space Telescope Science Institute</b>       |
| Dr. Marc Rafelski (CoI) (Contact)                 | Space Telescope Science Institute              |
| Dr. Svea S Hernandez (CoI) (ESA Member) (Contact) | Space Telescope Science Institute - ESA - JWST |
| Jacqueline Hernandez (CoI) (Contact)              | Space Telescope Science Institute              |

### VISITS

| <i>Visit</i> | <i>Targets used in Visit</i> | <i>Configurations used in Visit</i> | <i>Orbits Used</i> | <i>Last Orbit Planner Run</i> | <i>OP Current with Visit?</i> |
|--------------|------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------------|
| 01           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:16.0        | yes                           |
| 02           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:17.0        | yes                           |
| 03           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:18.0        | yes                           |
| 04           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:18.0        | yes                           |
| 05           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:19.0        | yes                           |
| 06           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:20.0        | yes                           |

Proposal 17852 (STScI Edit Number: 1, Created: Wednesday, September 10, 2025, 11:00:34AM Eastern Standard Time) - Overview

| <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> |
|--------------|------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------------|
| 07           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:20.0        | yes                           |
| 08           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:21.0        | yes                           |
| 09           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:22.0        | yes                           |
| 10           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:23.0        | yes                           |
| 11           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:23.0        | yes                           |
| 12           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:24.0        | yes                           |
| 13           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:25.0        | yes                           |
| 14           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:25.0        | yes                           |
| 15           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:26.0        | yes                           |
| 16           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:26.0        | yes                           |
| 17           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:27.0        | yes                           |
| 18           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:28.0        | yes                           |
| 19           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:29.0        | yes                           |
| 20           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:29.0        | 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> |
|--------------|------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------------|
| 21           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:30.0        | yes                           |
| 22           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:31.0        | yes                           |
| 23           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:31.0        | yes                           |
| 24           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:32.0        | yes                           |
| 25           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:33.0        | yes                           |
| 26           | WAVE                         | COS/FUV<br>COS/NUV                  | 2                  | 10-Sep-2025 12:00:33.0        | yes                           |

52 Total Orbits Used

### **ABSTRACT**

Rotating the OSM1 mechanism results in substantial drift in the wavelength direction for FUV observations. In a majority of modes, there is a wavelength calibration lampflash taken concurrently with the science spectra at t=600s. However, users cannot take these 600s flashes at lifetime positions (LP) above 5 due to a light leak from the FCA and must move the aperture to a different portion of the detector when taking these wavecals, resulting in substantial overheads. The COS Calibration block has investigated this issue and found that a "simulated" 600s lampflash could be used to remove these overheads, and only slightly increase the uncertainty of the wavelength calibrations. The parameters used to calculate this simulated flash are determined using G160M data; this calibration program will supplement the necessary data to ensure that the current parameters are up to spec.

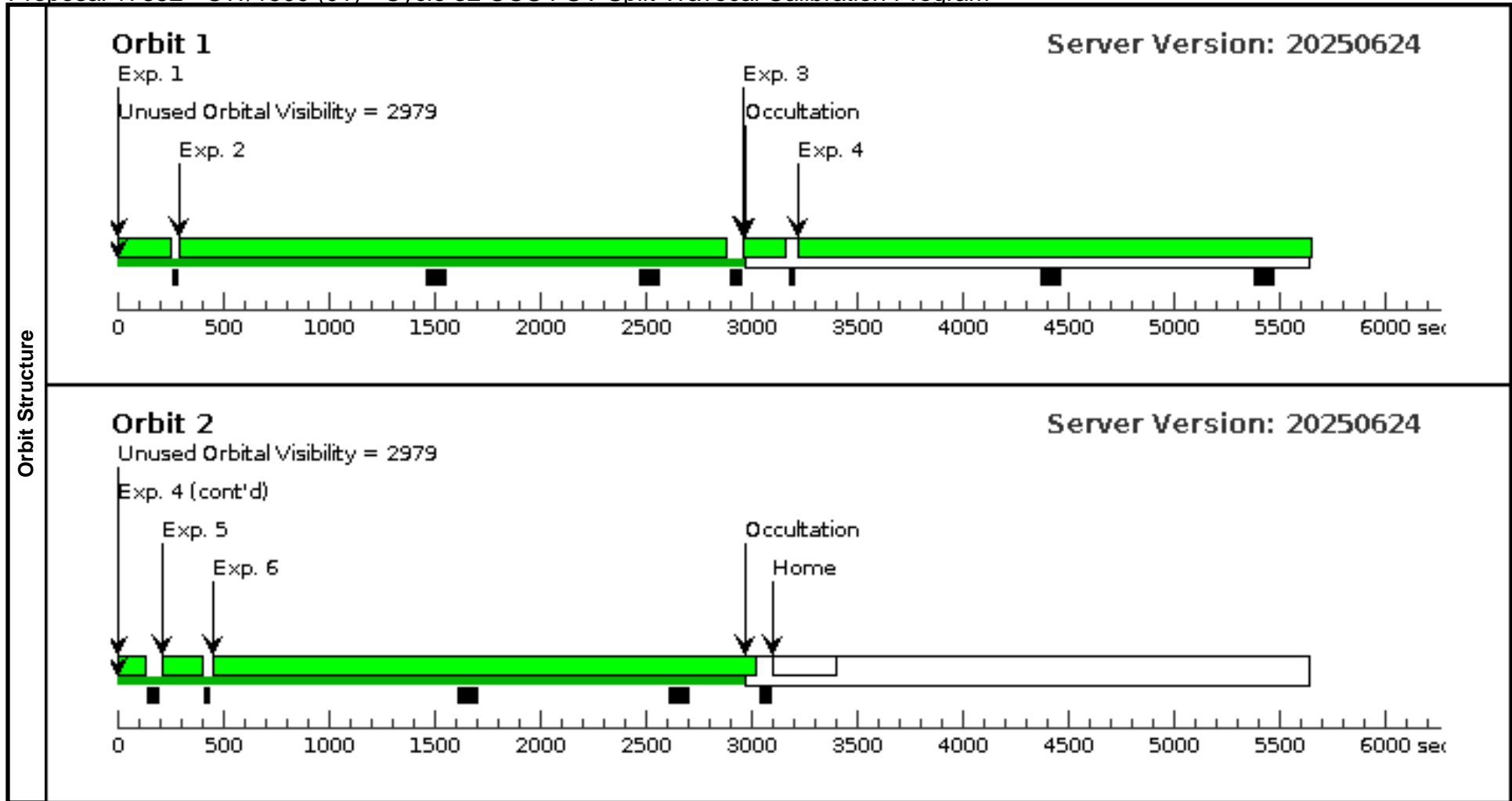
### **OBSERVING DESCRIPTION**

We will observe three LP6 G160M internal wavecals every other week. Each bi-weekly visit will contain three internal wavecal exposures at cycling G160M cenwaves; each exposure will be preceded by an NUV internal wavecal to cause an OSM1 rotation. We will use the FLASH parameter in APT to simulate TAGFLASHES. With an exptime=2400s, we will observe eight flashes at the default length of 12 seconds for G160M with 300 seconds between each flash.

Proposal 17852 - CW/1500 (01) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

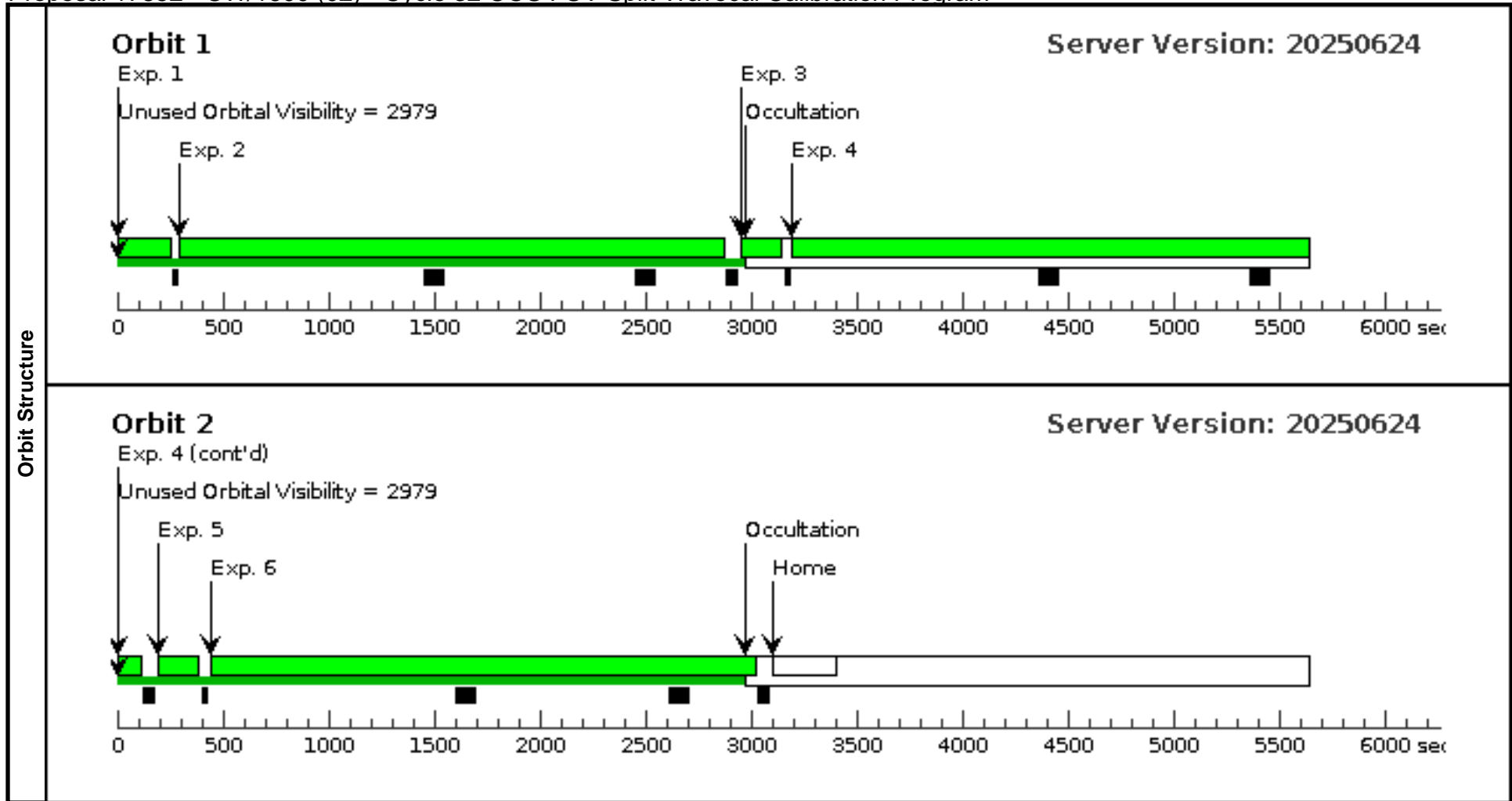
| Visit     | <b>Proposal 17852, CW/1500 (01), completed</b><br><b>Diagnostic Status: Warning</b><br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: BETWEEN 15-NOV-2024:00:00:00 AND 22-NOV-2024:00:00:00 |  |       |                        |                      |  |              |                                      |                                |                                 |
|-----------|--|--|-------|------------------------|----------------------|--|--------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics  | (CW/1500 (01)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (01)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (01)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (01)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |  |              |                                      |                                |                                 |
| Exposures |  | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.  | Opt. Params. | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1  | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 1-2 Non-Int in CW/1500 (01) | [==>]                          | [1]                             |
|           | 2  | G160M/153 3  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1533 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 1-2 Non-Int in CW/1500 (01) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3  | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 3-4 Non-Int in CW/1500 (01) | [==>]                          | [1]                             |
|           | 4  | G160M/157 7  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1577 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 3-4 Non-Int in CW/1500 (01) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5  | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 5-6 Non-Int in CW/1500 (01) | [==>]                          | [2]                             |
|           | 6  | G160M/158 9  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1589 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 5-6 Non-Int in CW/1500 (01) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1600 (02) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

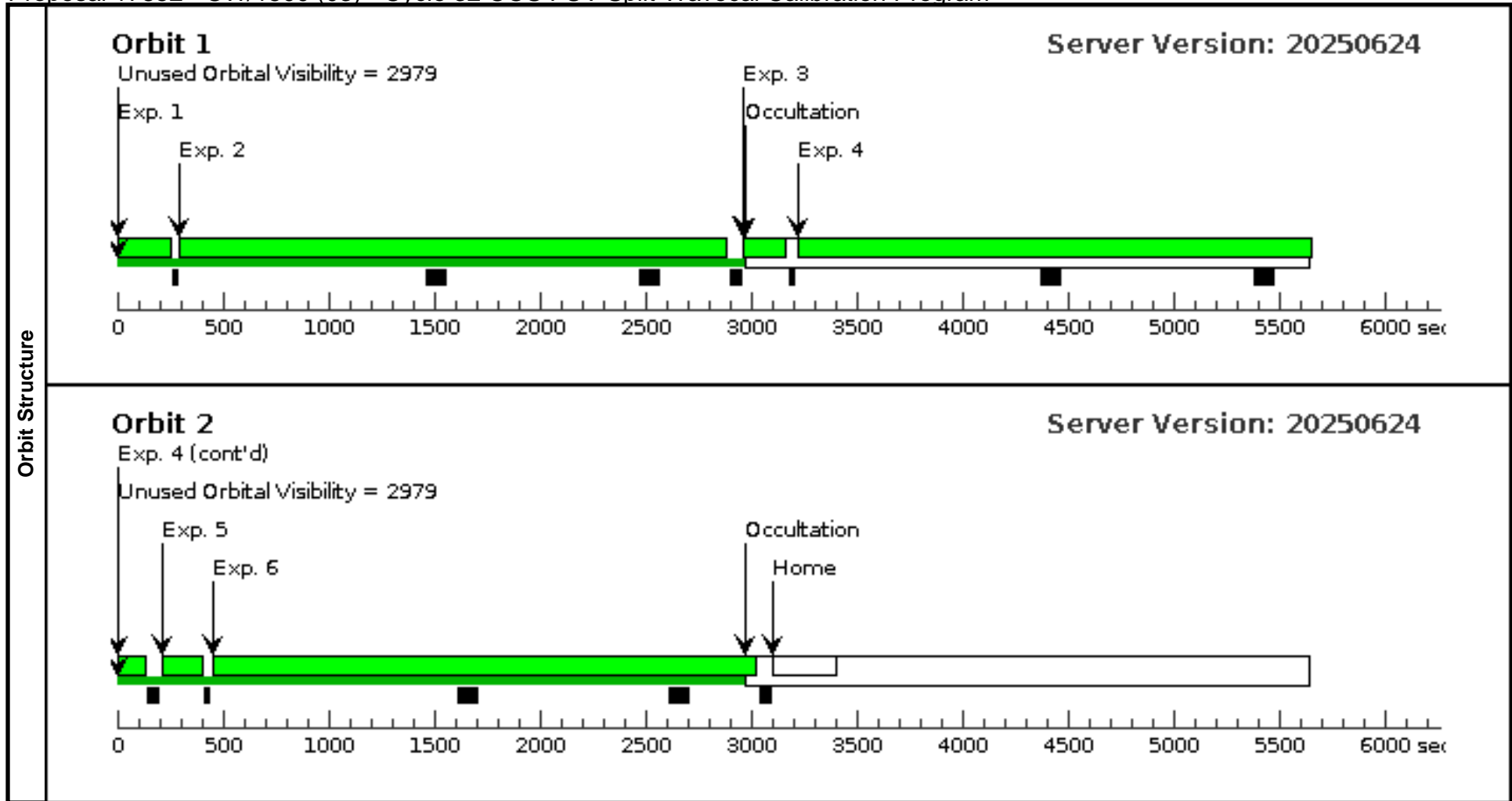
| Visit     | <b>Proposal 17852, CW/1600 (02), completed</b><br><b>Diagnostic Status: Warning</b><br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 01 BY 13 D TO 15 D |  |       |                        |                      |  |              |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|--|--------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1600 (02)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (02)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (02)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (02)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |  |              |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.  | Opt. Params. | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 1-2 Non-Int in CW/1600 (02) | [==>]                          | [1]                             |
|           | 2   | G160M/1600   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1600 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 1-2 Non-Int in CW/1600 (02) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 3-4 Non-Int in CW/1600 (02) | [==>]                          | [1]                             |
|           | 4   | G160M/1611   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1611 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 3-4 Non-Int in CW/1600 (02) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 5-6 Non-Int in CW/1600 (02) | [==>]                          | [2]                             |
|           | 6   | G160M/1623   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1623 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 5-6 Non-Int in CW/1600 (02) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1500 (03) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

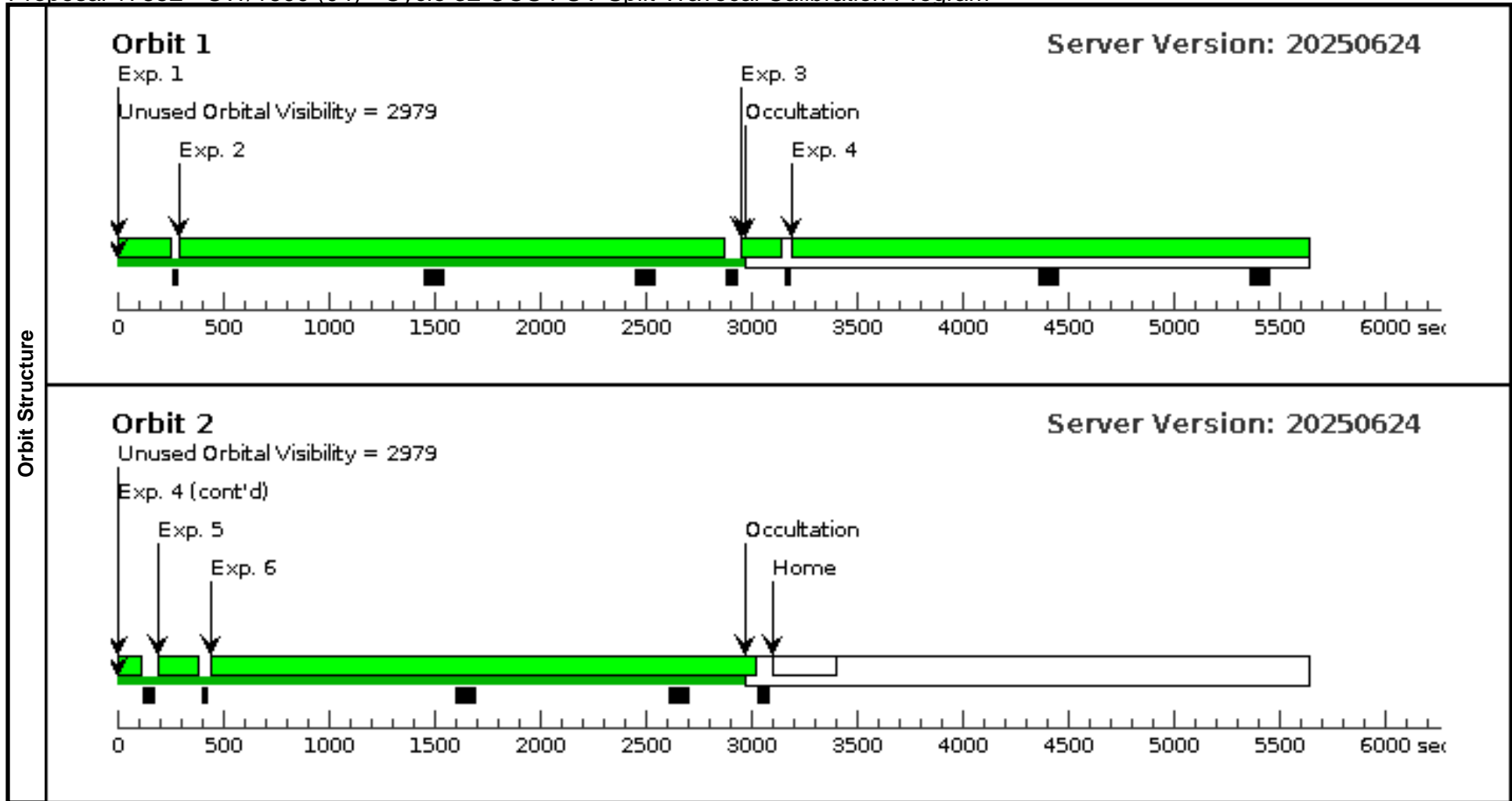
| Visit     | <b>Proposal 17852, CW/1500 (03), completed</b><br><b>Diagnostic Status: Warning</b><br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 02 BY 13 D TO 15 D |  |       |                        |                      |   |              |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|---|--------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1500 (03)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (03)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (03)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (03)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |   |              |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.   | Opt. Params. | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  |              | Sequence 1-2 Non-Int in CW/1500 (03) | [==>]                          | [1]                             |
|           | 2   | G160M/153 3  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1533 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |              | Sequence 1-2 Non-Int in CW/1500 (03) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  |              | Sequence 3-4 Non-Int in CW/1500 (03) | [==>]                          | [1]                             |
|           | 4   | G160M/157 7  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1577 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |              | Sequence 3-4 Non-Int in CW/1500 (03) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  |              | Sequence 5-6 Non-Int in CW/1500 (03) | [==>]                          | [2]                             |
|           | 6   | G160M/158 9  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1589 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |              | Sequence 5-6 Non-Int in CW/1500 (03) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1600 (04) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

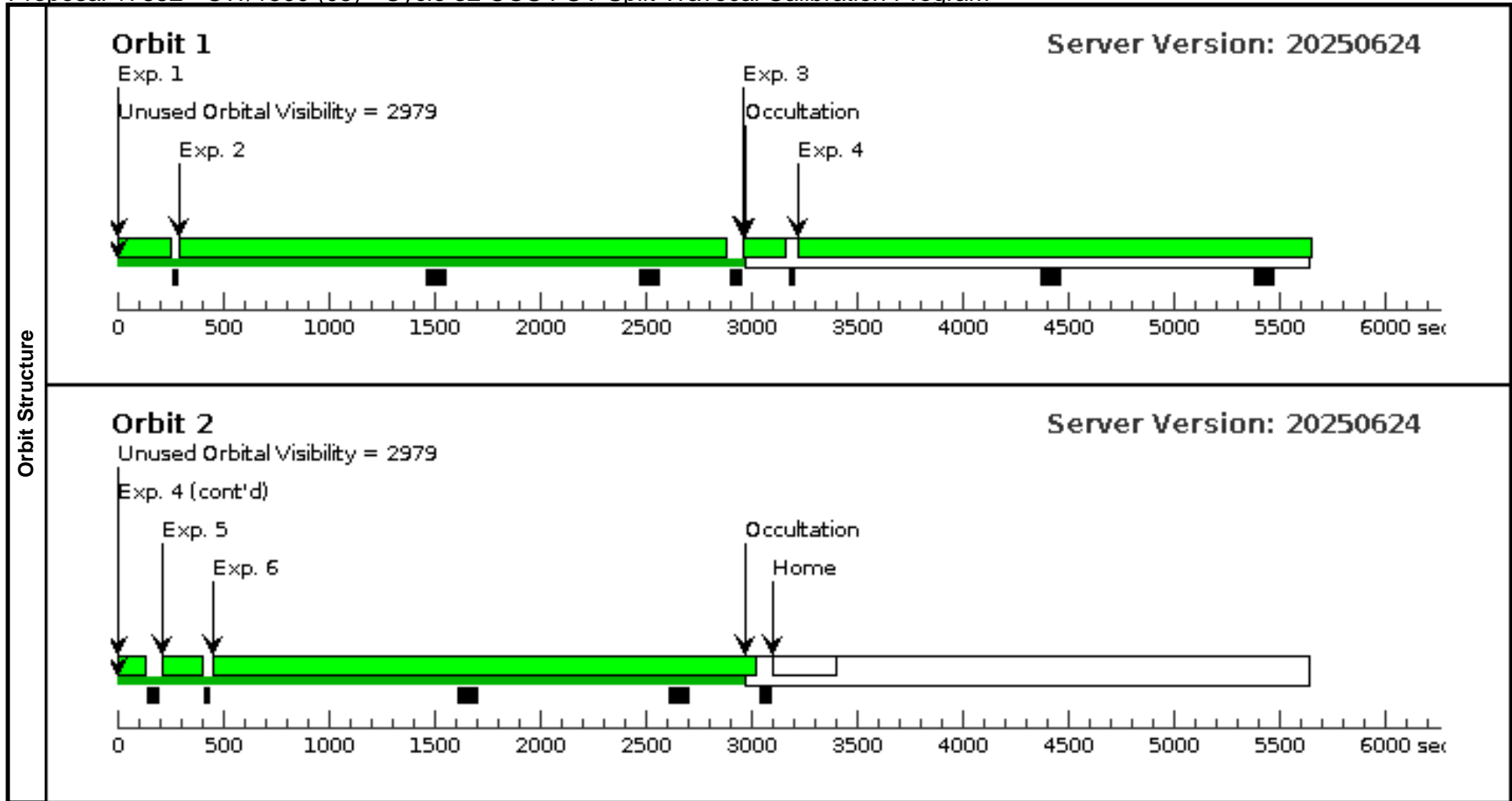
| Visit     | Proposal 17852, CW/1600 (04), completed<br><b>Diagnostic Status: Warning</b><br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 03 BY 13 D TO 15 D |  |       |                        |                      |  |              |                                      |                                |                                 |
|-----------|--|--|-------|------------------------|----------------------|--|--------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics  | (CW/1600 (04)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (04)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (04)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (04)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |  |              |                                      |                                |                                 |
| Exposures |  | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.  | Opt. Params. | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1  | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 1-2 Non-Int in CW/1600 (04) | [==>]                          | [1]                             |
|           | 2  | G160M/1600   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1600 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 1-2 Non-Int in CW/1600 (04) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3  | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 3-4 Non-Int in CW/1600 (04) | [==>]                          | [1]                             |
|           | 4  | G160M/1611   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1611 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 3-4 Non-Int in CW/1600 (04) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5  | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 5-6 Non-Int in CW/1600 (04) | [==>]                          | [2]                             |
|           | 6  | G160M/1623   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1623 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 5-6 Non-Int in CW/1600 (04) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1500 (05) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

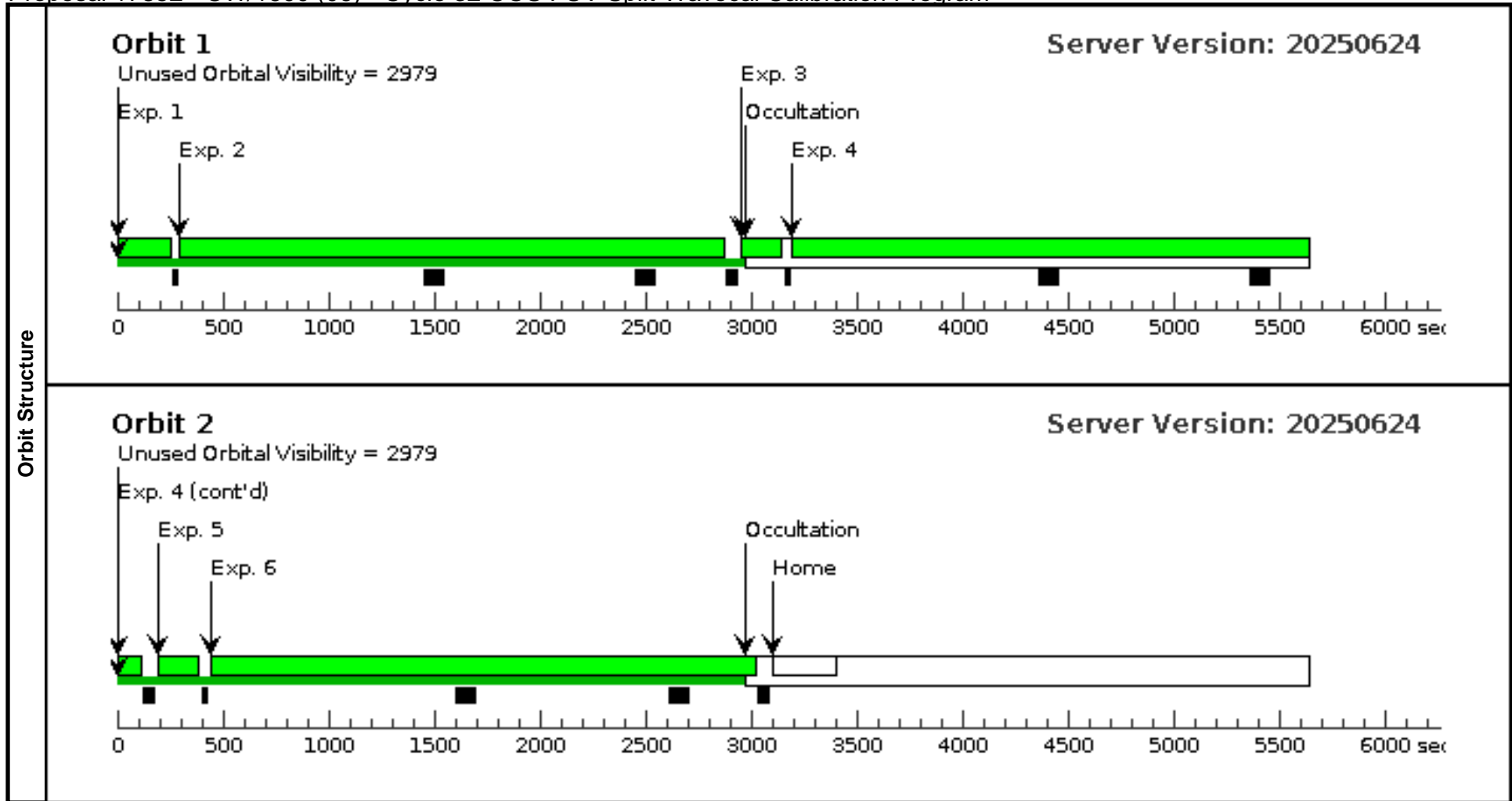
| Visit     | Proposal 17852, CW/1500 (05), completed<br>Diagnostic Status: Warning<br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 04 BY 13 D TO 15 D |  |       |                        |                      |   |              |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|---|--------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1500 (05)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (05)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (05)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (05)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |   |              |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.   | Opt. Params. | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  |              | Sequence 1-2 Non-Int in CW/1500 (05) | [==>]                          | [1]                             |
|           | 2   | G160M/153 3  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1533 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |              | Sequence 1-2 Non-Int in CW/1500 (05) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  |              | Sequence 3-4 Non-Int in CW/1500 (05) | [==>]                          | [1]                             |
|           | 4   | G160M/157 7  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1577 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |              | Sequence 3-4 Non-Int in CW/1500 (05) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  |              | Sequence 5-6 Non-Int in CW/1500 (05) | [==>]                          | [2]                             |
|           | 6   | G160M/158 9  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1589 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |              | Sequence 5-6 Non-Int in CW/1500 (05) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1600 (06) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

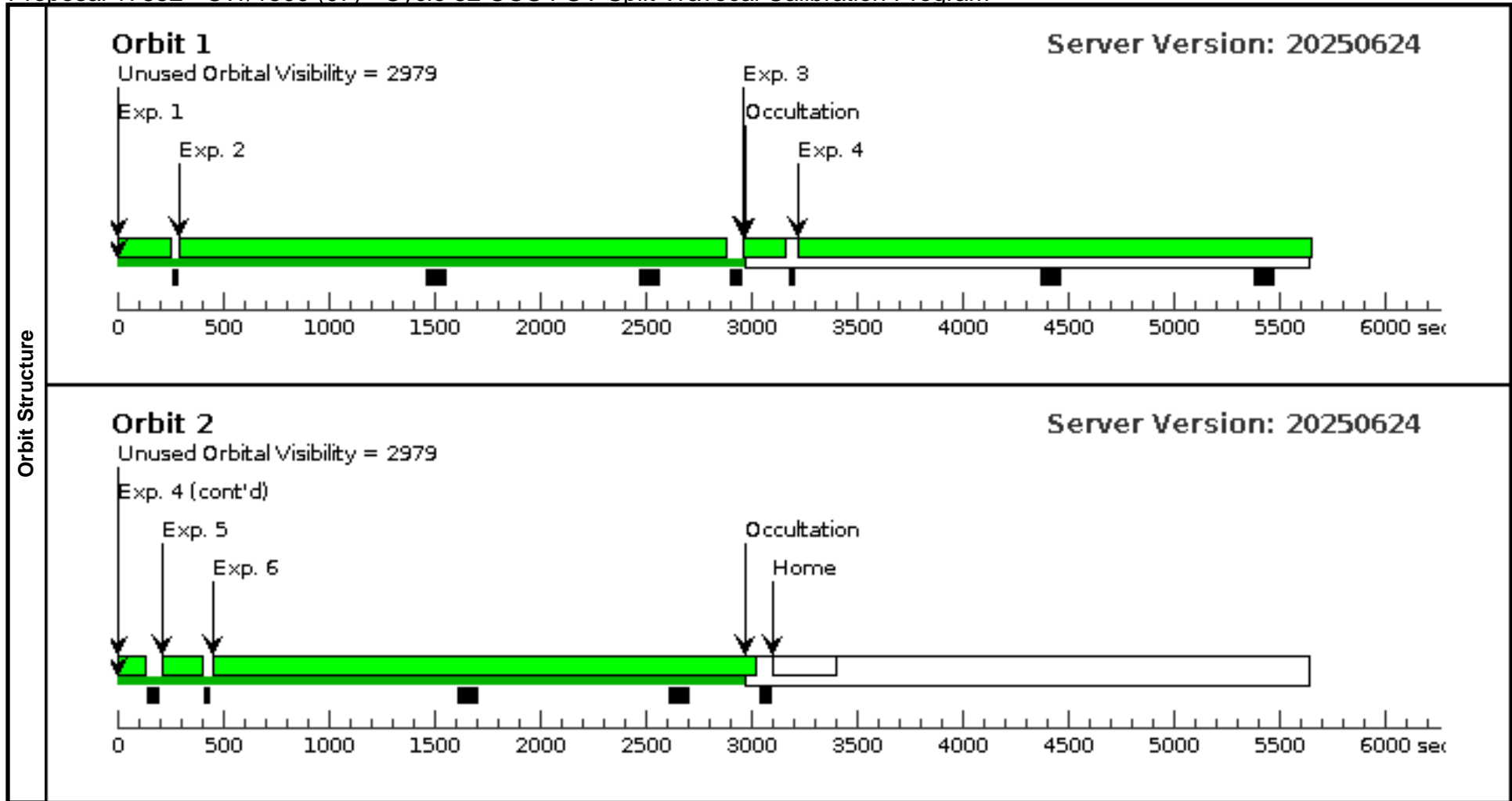
| Visit     | <b>Proposal 17852, CW/1600 (06), completed</b><br><b>Diagnostic Status: Warning</b><br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 05 BY 13 D TO 15 D |  |       |                        |                      |  |              |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|--|--------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1600 (06)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (06)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (06)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (06)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |  |              |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.  | Opt. Params. | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 1-2 Non-Int in CW/1600 (06) | [==>]                          | [1]                             |
|           | 2   | G160M/1600   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1600 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=1000 |              | Sequence 1-2 Non-Int in CW/1600 (06) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 3-4 Non-Int in CW/1600 (06) | [==>]                          | [1]                             |
|           | 4   | G160M/1611   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1611 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=1000 |              | Sequence 3-4 Non-Int in CW/1600 (06) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 5-6 Non-Int in CW/1600 (06) | [==>]                          | [2]                             |
|           | 6   | G160M/1623   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1623 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=1000 |              | Sequence 5-6 Non-Int in CW/1600 (06) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1500 (07) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

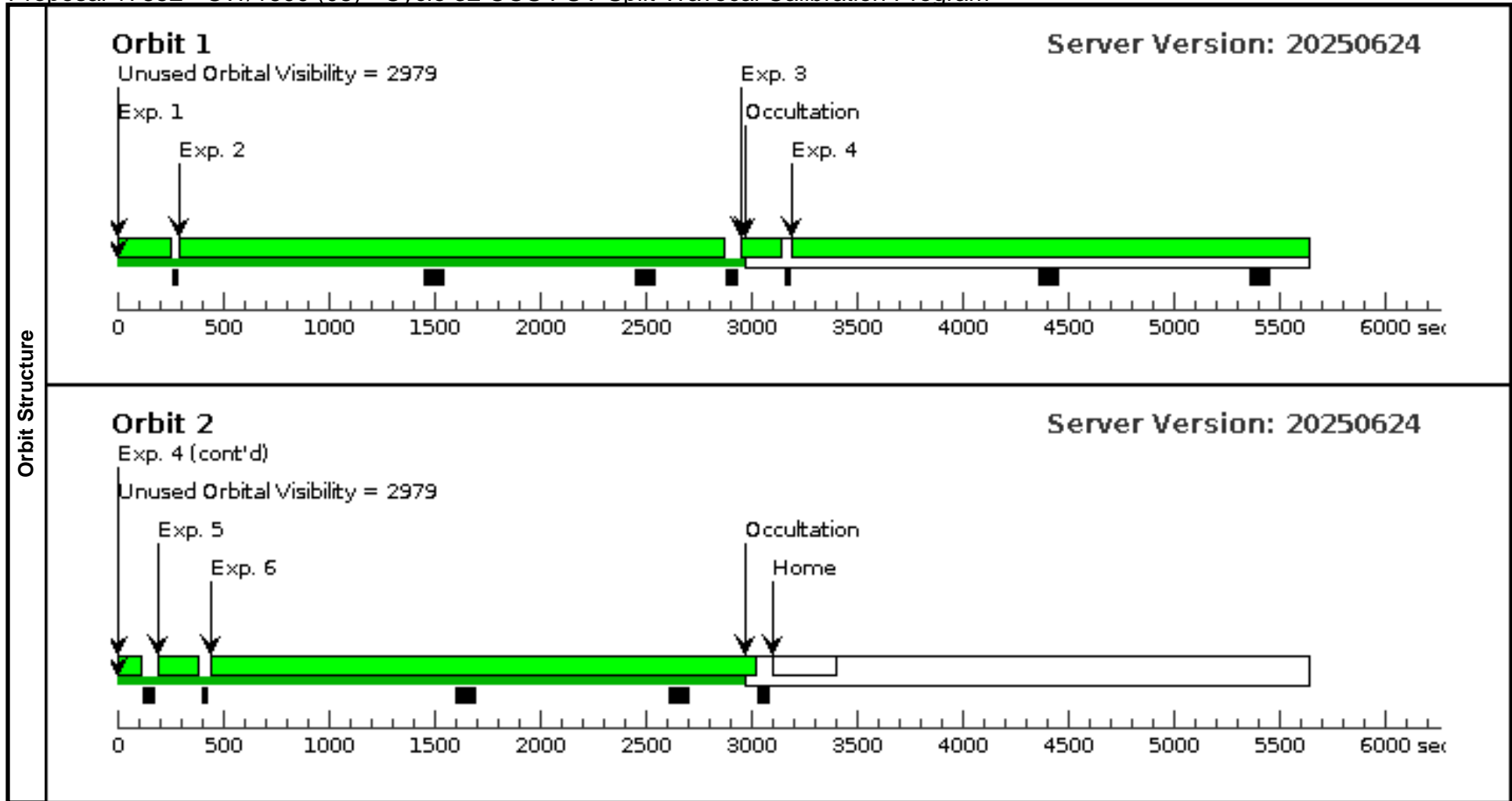
| Visit     | Proposal 17852, CW/1500 (07), completed<br>Diagnostic Status: Warning<br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 06 BY 13 D TO 15 D |  |       |                        |                      |  |              |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|--|--------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1500 (07)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (07)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (07)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (07)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |  |              |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.  | Opt. Params. | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 1-2 Non-Int in CW/1500 (07) | [==>]                          | [1]                             |
|           | 2   | G160M/153 3  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1533 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 1-2 Non-Int in CW/1500 (07) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 3-4 Non-Int in CW/1500 (07) | [==>]                          | [1]                             |
|           | 4   | G160M/157 7  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1577 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 3-4 Non-Int in CW/1500 (07) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 5-6 Non-Int in CW/1500 (07) | [==>]                          | [2]                             |
|           | 6   | G160M/158 9  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1589 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 5-6 Non-Int in CW/1500 (07) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1600 (08) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

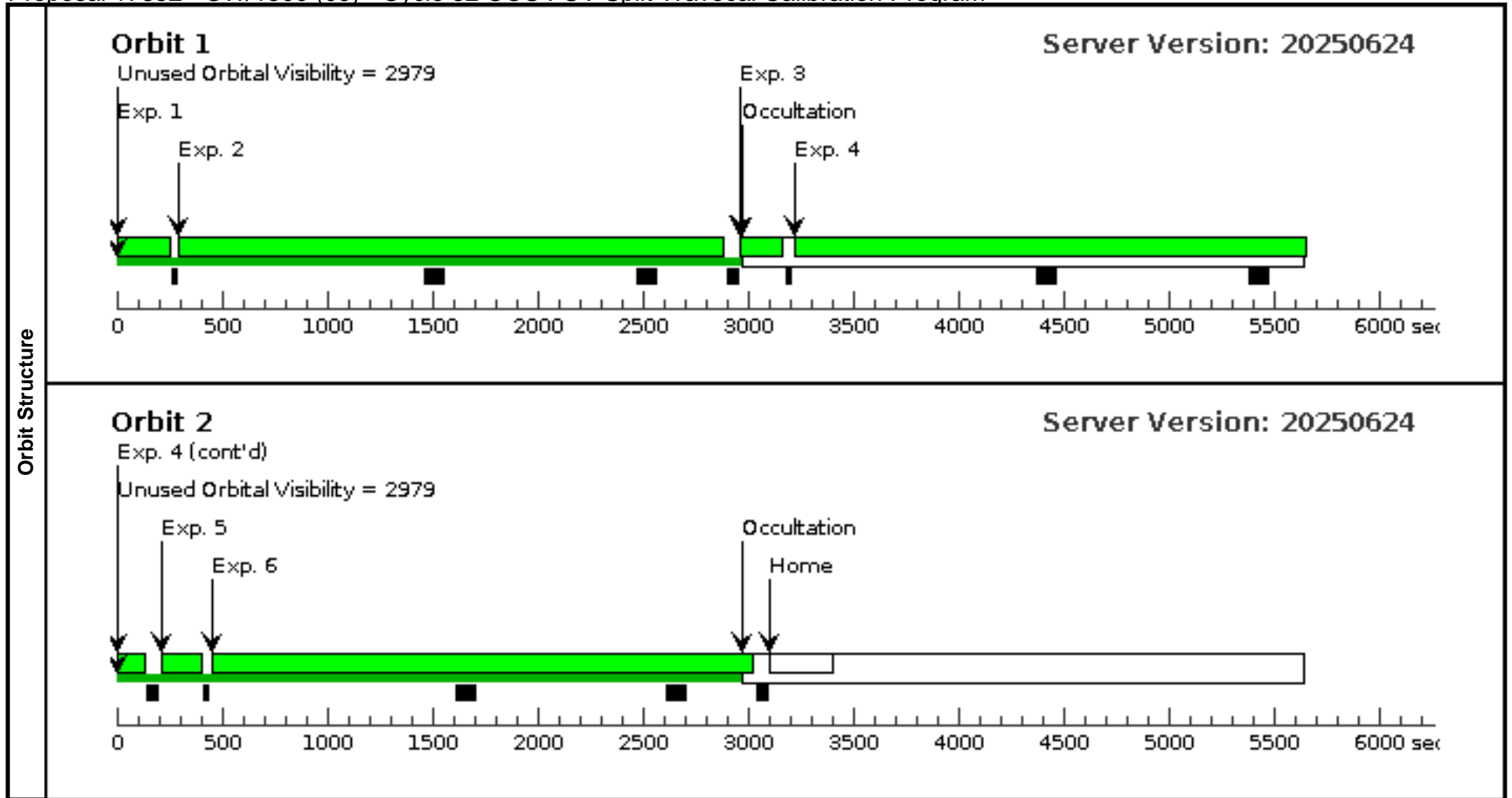
| Visit     | Proposal 17852, CW/1600 (08), completed<br><b>Diagnostic Status: Warning</b><br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 07 BY 13 D TO 15 D |  |       |                        |                      |  |              |                                      |                                |                                 |
|-----------|--|--|-------|------------------------|----------------------|--|--------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics  | (CW/1600 (08)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (08)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (08)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (08)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |  |              |                                      |                                |                                 |
| Exposures |  | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.  | Opt. Params. | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1  | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 1-2 Non-Int in CW/1600 (08) | [==>]                          | [1]                             |
|           | 2  | G160M/1600   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1600 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 1-2 Non-Int in CW/1600 (08) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3  | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 3-4 Non-Int in CW/1600 (08) | [==>]                          | [1]                             |
|           | 4  | G160M/1611   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1611 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 3-4 Non-Int in CW/1600 (08) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5  | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 5-6 Non-Int in CW/1600 (08) | [==>]                          | [2]                             |
|           | 6  | G160M/1623   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1623 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 5-6 Non-Int in CW/1600 (08) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1500 (09) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

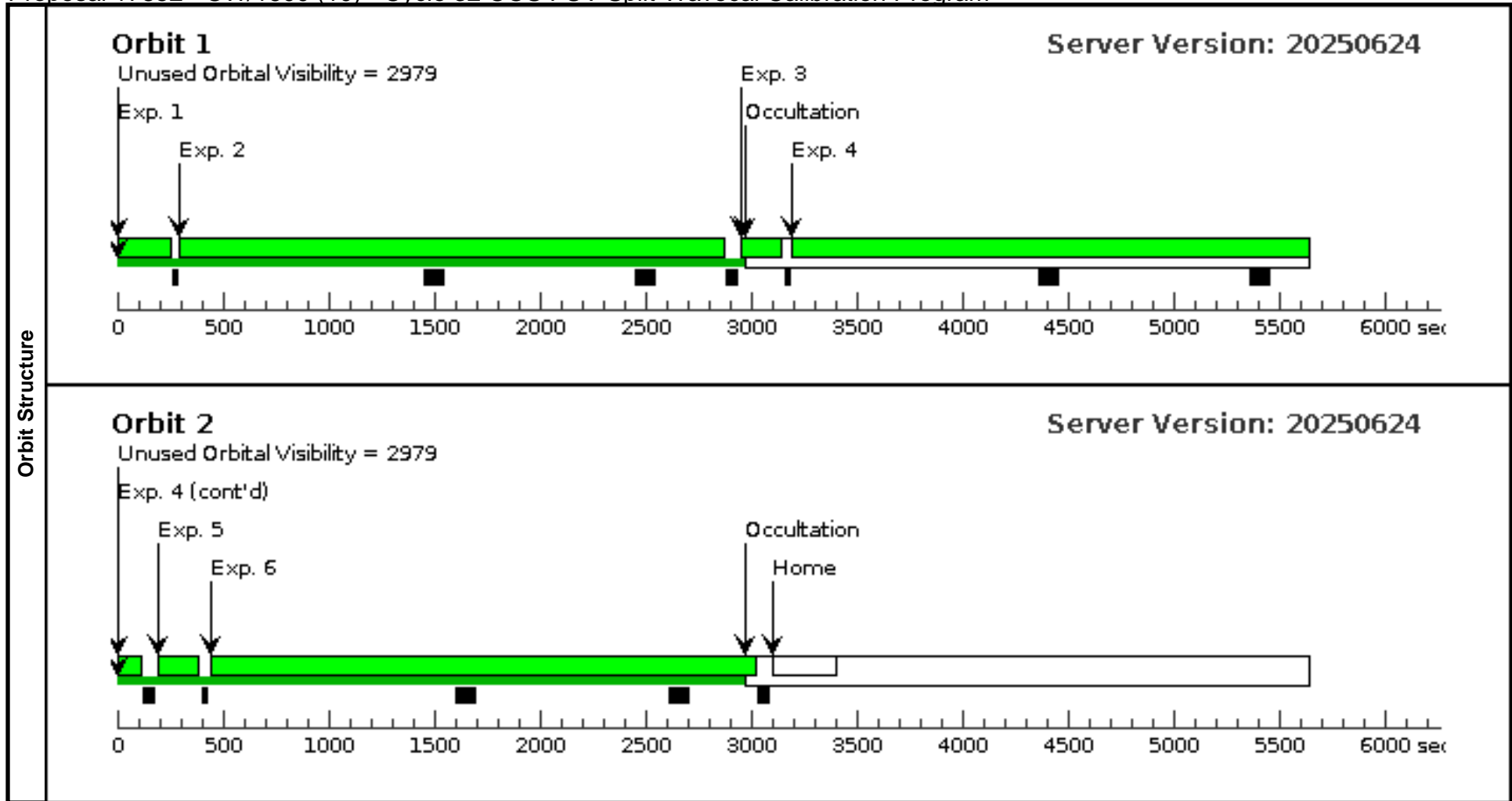
| Visit     | Proposal 17852, CW/1500 (09), completed<br>Diagnostic Status: Warning<br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 08 BY 13 D TO 15 D |  |       |                        |                      |  |              |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|--|--------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1500 (09)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (09)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (09)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (09)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |  |              |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.  | Opt. Params. | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 1-2 Non-Int in CW/1500 (09) | [==>]                          | [1]                             |
|           | 2   | G160M/153 3  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1533 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 1-2 Non-Int in CW/1500 (09) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 3-4 Non-Int in CW/1500 (09) | [==>]                          | [1]                             |
|           | 4   | G160M/157 7  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1577 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 3-4 Non-Int in CW/1500 (09) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 5-6 Non-Int in CW/1500 (09) | [==>]                          | [2]                             |
|           | 6   | G160M/158 9  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1589 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 5-6 Non-Int in CW/1500 (09) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1600 (10) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

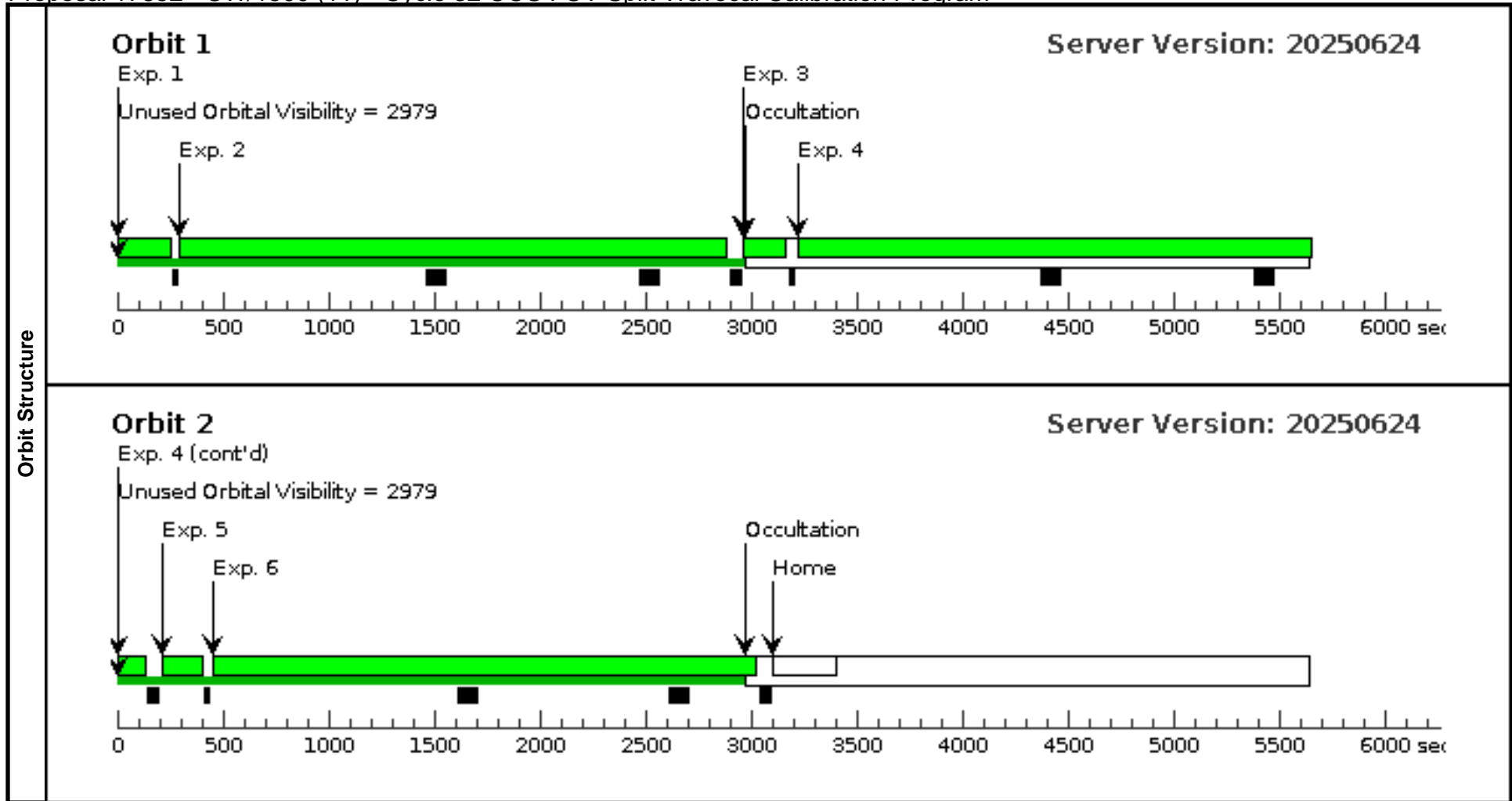
| Visit     | Proposal 17852, CW/1600 (10), completed<br>Diagnostic Status: Warning<br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 09 BY 13 D TO 15 D |  |       |                        |                      |  |              |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|--|--------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1600 (10)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (10)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (10)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (10)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |  |              |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.  | Opt. Params. | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 1-2 Non-Int in CW/1600 (10) | [==>]                          | [1]                             |
|           | 2   | G160M/1600   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1600 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 1-2 Non-Int in CW/1600 (10) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 3-4 Non-Int in CW/1600 (10) | [==>]                          | [1]                             |
|           | 4   | G160M/1611   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1611 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 3-4 Non-Int in CW/1600 (10) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 5-6 Non-Int in CW/1600 (10) | [==>]                          | [2]                             |
|           | 6   | G160M/1623   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1623 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 5-6 Non-Int in CW/1600 (10) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1500 (11) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

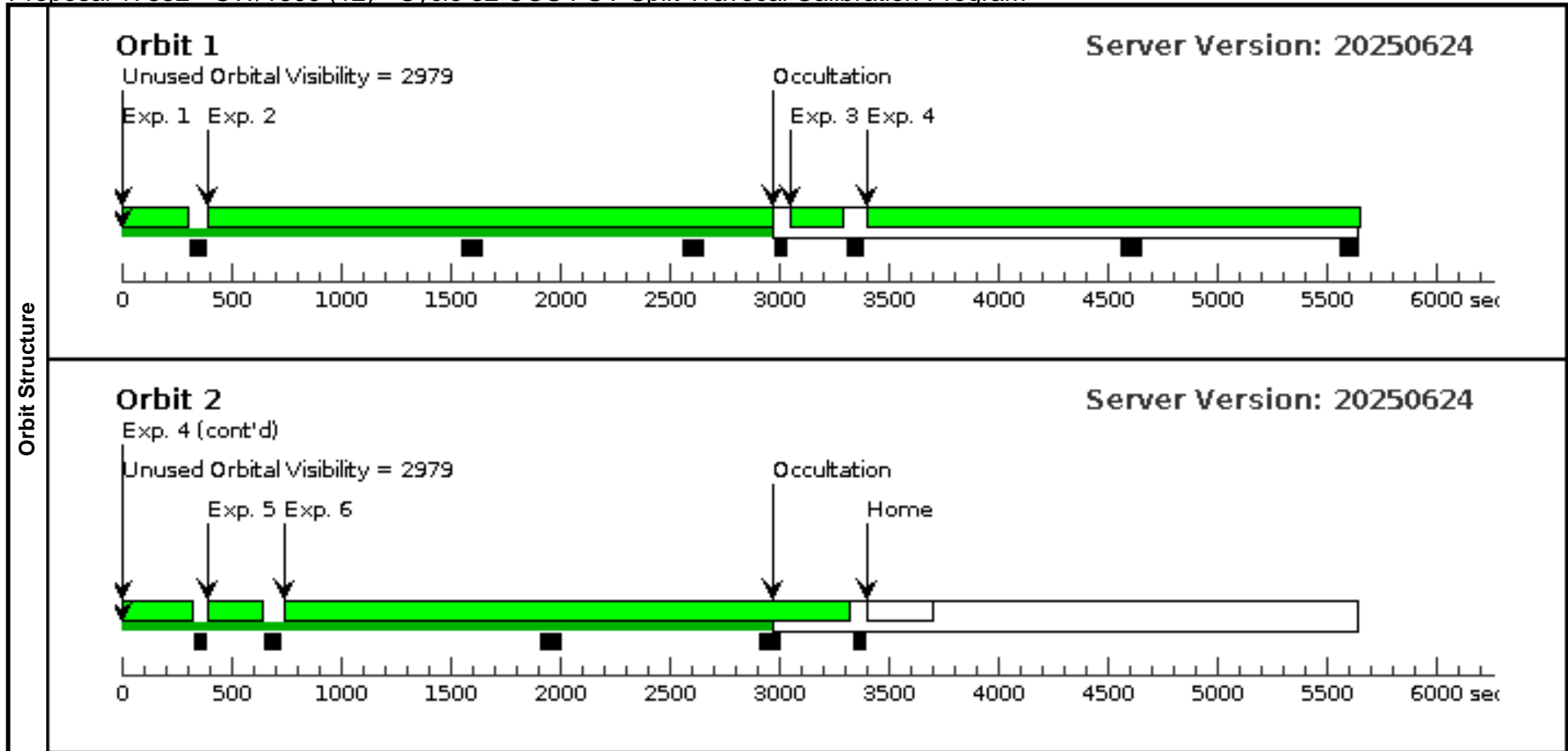
| Visit     | <b>Proposal 17852, CW/1500 (11), completed</b><br><b>Diagnostic Status: Warning</b><br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 10 BY 13 D TO 15 D |  |       |                        |                      |  |              |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|--|--------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1500 (11)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (11)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (11)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (11)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |  |              |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.  | Opt. Params. | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 1-2 Non-Int in CW/1500 (11) | [==>]                          | [1]                             |
|           | 2   | G160M/153 3  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1533 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 1-2 Non-Int in CW/1500 (11) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 3-4 Non-Int in CW/1500 (11) | [==>]                          | [1]                             |
|           | 4   | G160M/157 7  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1577 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 3-4 Non-Int in CW/1500 (11) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3   |              | Sequence 5-6 Non-Int in CW/1500 (11) | [==>]                          | [2]                             |
|           | 6   | G160M/158 9  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1589 A      | FP-POS=3;<br>LIFETIME-POS=L<br>P6;<br>FLASH=S0300D01<br>2;<br>BUFFER-TIME=10<br>00 |              | Sequence 5-6 Non-Int in CW/1500 (11) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1600 (12) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

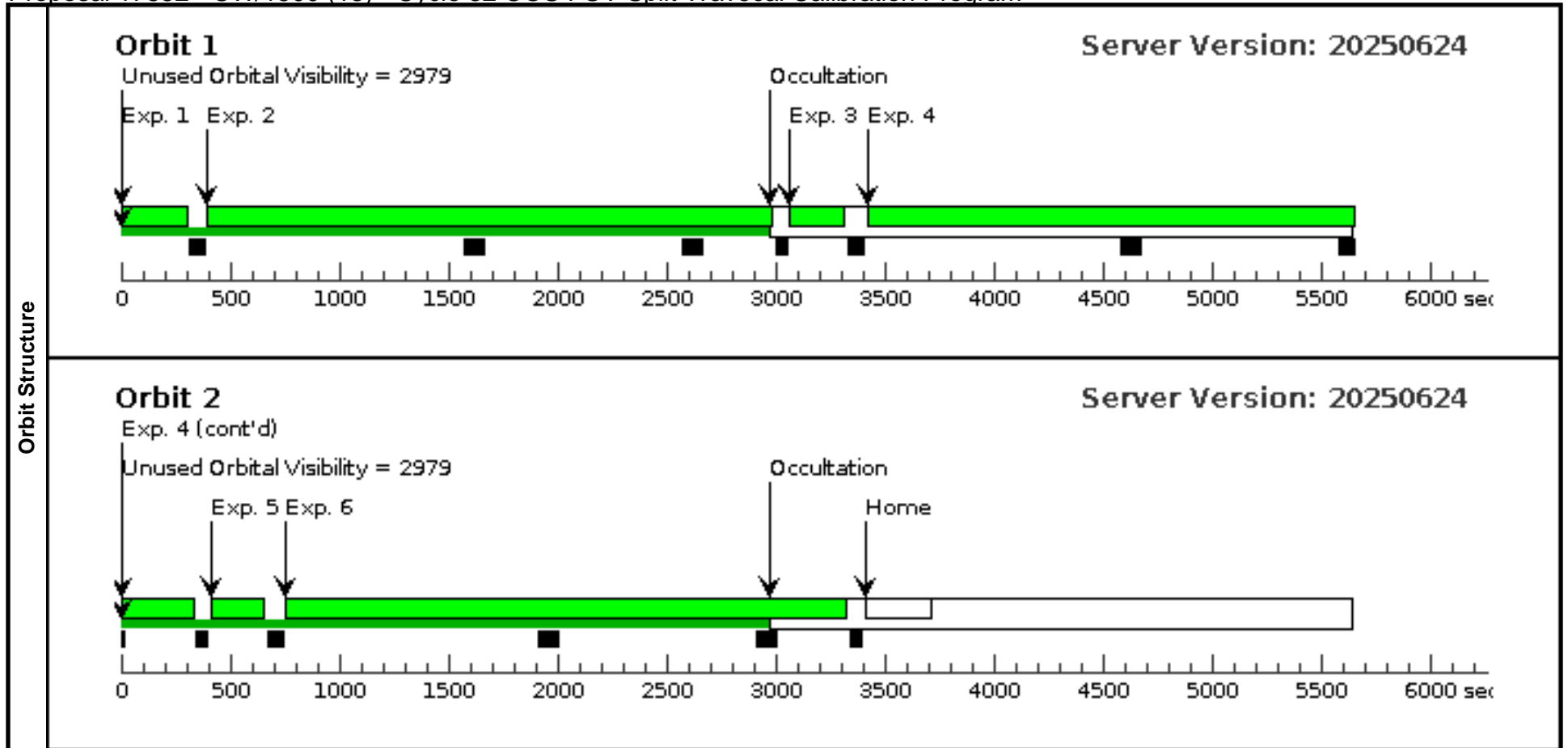
| Visit     | <b>Proposal 17852, CW/1600 (12), completed</b><br><b>Diagnostic Status: Warning</b><br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 11 BY 13 D TO 15 D |  |       |                        |                      |   |                         |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|---|-------------------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1600 (12)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (12)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (12)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (12)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |   |                         |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.   | Opt. Params.            | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 1-2 Non-Int in CW/1600 (12) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 2   | G160M/1600   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1600 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 1-2 Non-Int in CW/1600 (12) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 3-4 Non-Int in CW/1600 (12) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 4   | G160M/1611   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1611 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 3-4 Non-Int in CW/1600 (12) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 5-6 Non-Int in CW/1600 (12) | 60 Secs (60 Secs)<br>[==>]     | [2]                             |
|           | 6   | G160M/1623   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1623 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 5-6 Non-Int in CW/1600 (12) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1500 (13) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

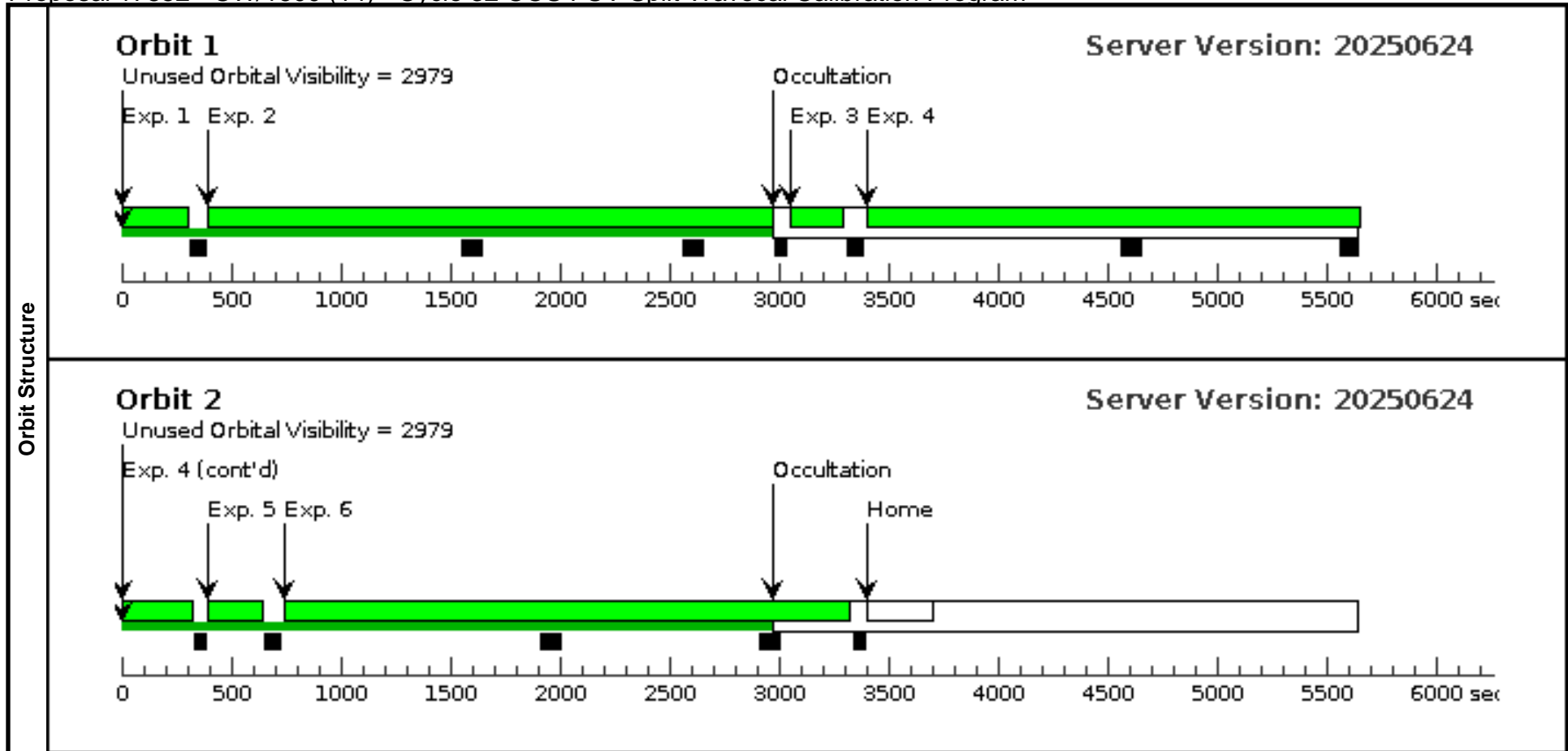
| Visit     | Proposal 17852, CW/1500 (13), completed<br>Diagnostic Status: Warning<br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 12 BY 13 D TO 15 D |  |       |                        |                      |   |                         |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|---|-------------------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1500 (13)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (13)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (13)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (13)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |   |                         |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.   | Opt. Params.            | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 1-2 Non-Int in CW/1500 (13) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 2   | G160M/153 3  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1533 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 1-2 Non-Int in CW/1500 (13) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 3-4 Non-Int in CW/1500 (13) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 4   | G160M/157 7  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1577 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 3-4 Non-Int in CW/1500 (13) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 5-6 Non-Int in CW/1500 (13) | 60 Secs (60 Secs)<br>[==>]     | [2]                             |
|           | 6   | G160M/158 9  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1589 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 5-6 Non-Int in CW/1500 (13) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1600 (14) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

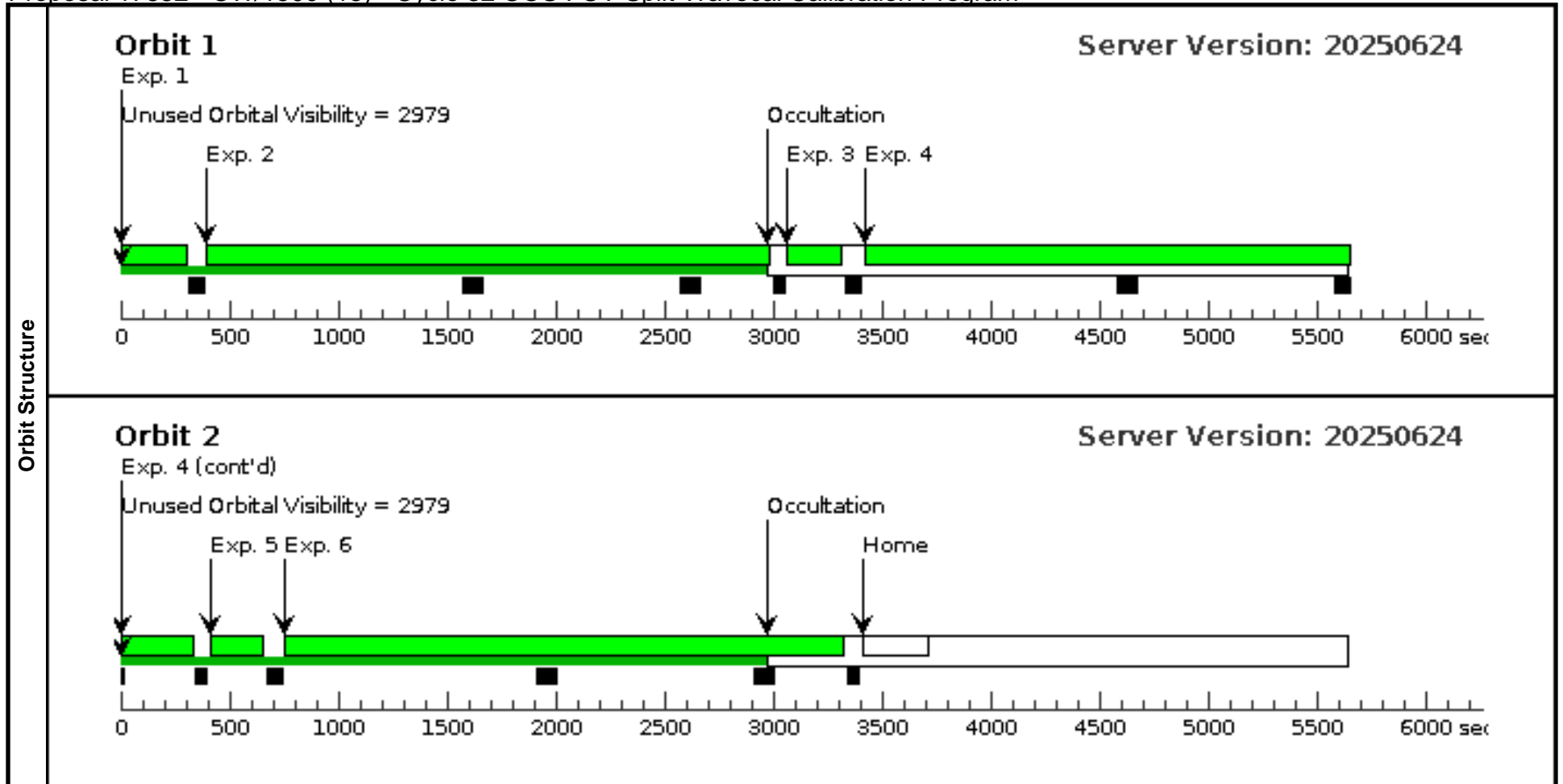
| Visit     | <b>Proposal 17852, CW/1600 (14), completed</b><br><b>Diagnostic Status: Warning</b><br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 13 BY 13 D TO 15 D |  |       |                        |                      |   |                         |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|---|-------------------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1600 (14)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (14)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (14)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (14)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |   |                         |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.   | Opt. Params.            | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 1-2 Non-Int in CW/1600 (14) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 2   | G160M/1600   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1600 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 1-2 Non-Int in CW/1600 (14) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 3-4 Non-Int in CW/1600 (14) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 4   | G160M/1611   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1611 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 3-4 Non-Int in CW/1600 (14) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 5-6 Non-Int in CW/1600 (14) | 60 Secs (60 Secs)<br>[==>]     | [2]                             |
|           | 6   | G160M/1623   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1623 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 5-6 Non-Int in CW/1600 (14) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1500 (15) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

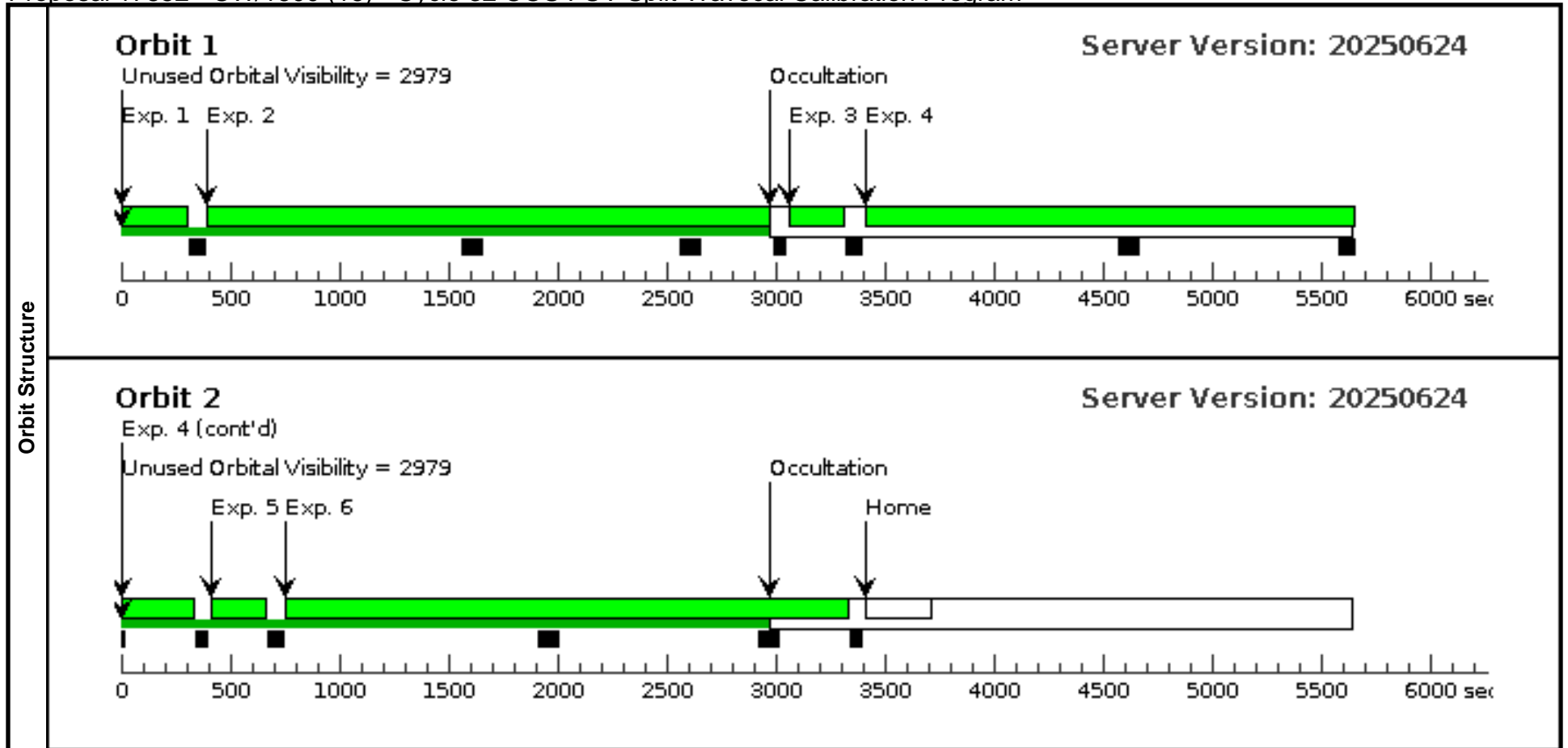
| Visit     | Proposal 17852, CW/1500 (15), completed<br>Diagnostic Status: Warning<br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 14 BY 13 D TO 15 D |  |       |                        |                      |   |                         |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|---|-------------------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1500 (15)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (15)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (15)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (15)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |   |                         |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.   | Opt. Params.            | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 1-2 Non-Int in CW/1500 (15) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 2   | G160M/153 3  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1533 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 1-2 Non-Int in CW/1500 (15) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 3-4 Non-Int in CW/1500 (15) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 4   | G160M/157 7  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1577 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 3-4 Non-Int in CW/1500 (15) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 5-6 Non-Int in CW/1500 (15) | 60 Secs (60 Secs)<br>[==>]     | [2]                             |
|           | 6   | G160M/158 9  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1589 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 5-6 Non-Int in CW/1500 (15) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1600 (16) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

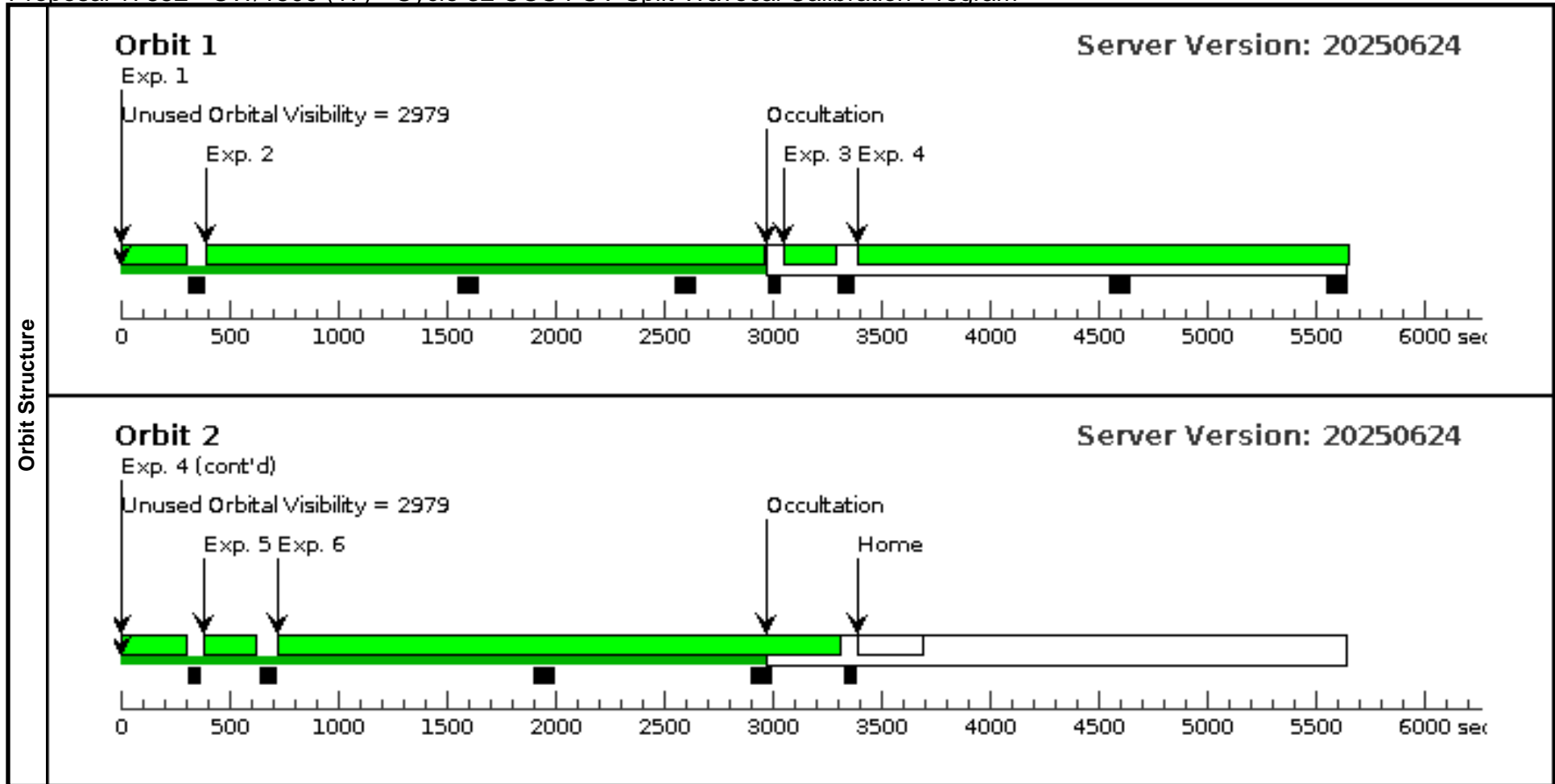
| Visit     | <b>Proposal 17852, CW/1600 (16), completed</b><br><b>Diagnostic Status: Warning</b><br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 15 BY 13 D TO 15 D |  |       |                        |                      |   |                         |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|---|-------------------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1600 (16)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (16)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (16)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (16)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |   |                         |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.   | Opt. Params.            | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 1-2 Non-Int in CW/1600 (16) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 2   | G160M/1623   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1623 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 1-2 Non-Int in CW/1600 (16) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 3-4 Non-Int in CW/1600 (16) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 4   | G160M/1611   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1611 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 3-4 Non-Int in CW/1600 (16) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 5-6 Non-Int in CW/1600 (16) | 60 Secs (60 Secs)<br>[==>]     | [2]                             |
|           | 6   | G160M/1600   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1600 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 5-6 Non-Int in CW/1600 (16) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1500 (17) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

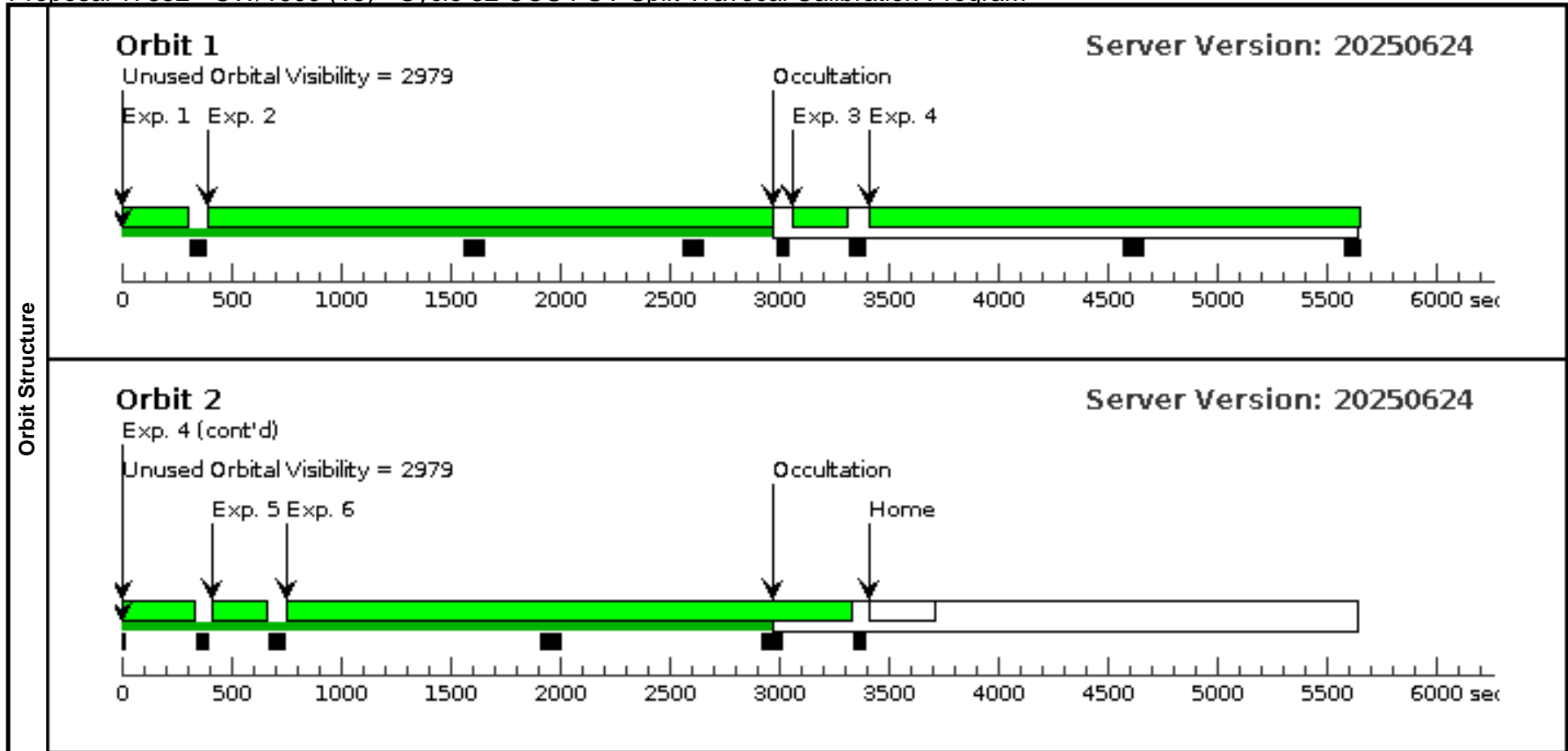
| Visit     | Proposal 17852, CW/1500 (17), completed<br>Diagnostic Status: Warning<br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 16 BY 13 D TO 15 D |  |       |                        |                      |   |                         |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|---|-------------------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1500 (17)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (17)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (17)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (17)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |   |                         |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.   | Opt. Params.            | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 1-2 Non-Int in CW/1500 (17) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 2   | G160M/158 9  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1589 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 1-2 Non-Int in CW/1500 (17) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 3-4 Non-Int in CW/1500 (17) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 4   | G160M/157 7  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1577 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 3-4 Non-Int in CW/1500 (17) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 5-6 Non-Int in CW/1500 (17) | 60 Secs (60 Secs)<br>[==>]     | [2]                             |
|           | 6   | G160M/153 3  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1533 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 5-6 Non-Int in CW/1500 (17) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1600 (18) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

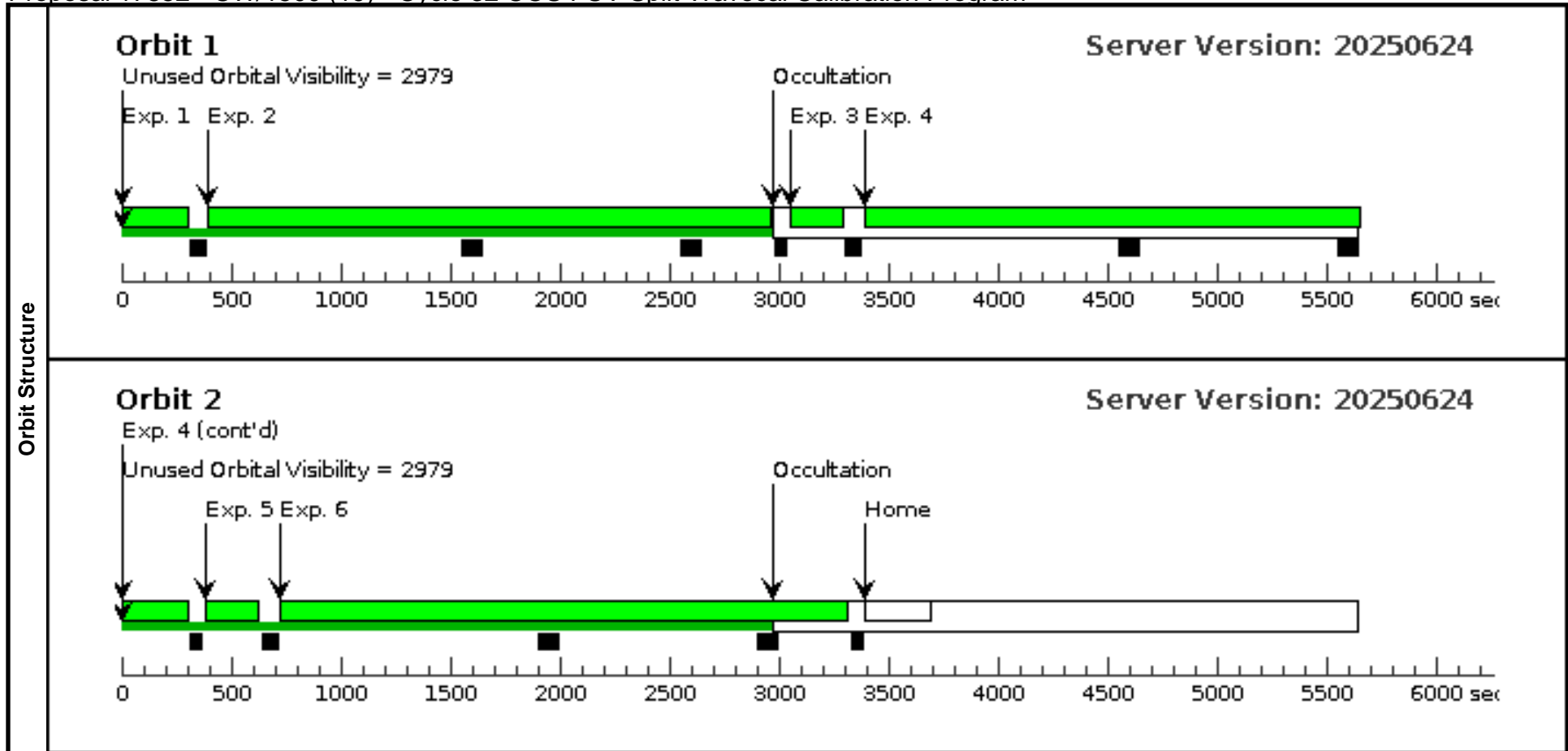
| Visit     | <b>Proposal 17852, CW/1600 (18), completed</b><br><b>Diagnostic Status: Warning</b><br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 17 BY 13 D TO 15 D |  |       |                        |                      |   |                         |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|---|-------------------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1600 (18)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (18)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (18)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (18)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |   |                         |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.   | Opt. Params.            | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 1-2 Non-Int in CW/1600 (18) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 2   | G160M/1623   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1623 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 1-2 Non-Int in CW/1600 (18) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 3-4 Non-Int in CW/1600 (18) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 4   | G160M/1611   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1611 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 3-4 Non-Int in CW/1600 (18) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 5-6 Non-Int in CW/1600 (18) | 60 Secs (60 Secs)<br>[==>]     | [2]                             |
|           | 6   | G160M/1600   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1600 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 5-6 Non-Int in CW/1600 (18) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1500 (19) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

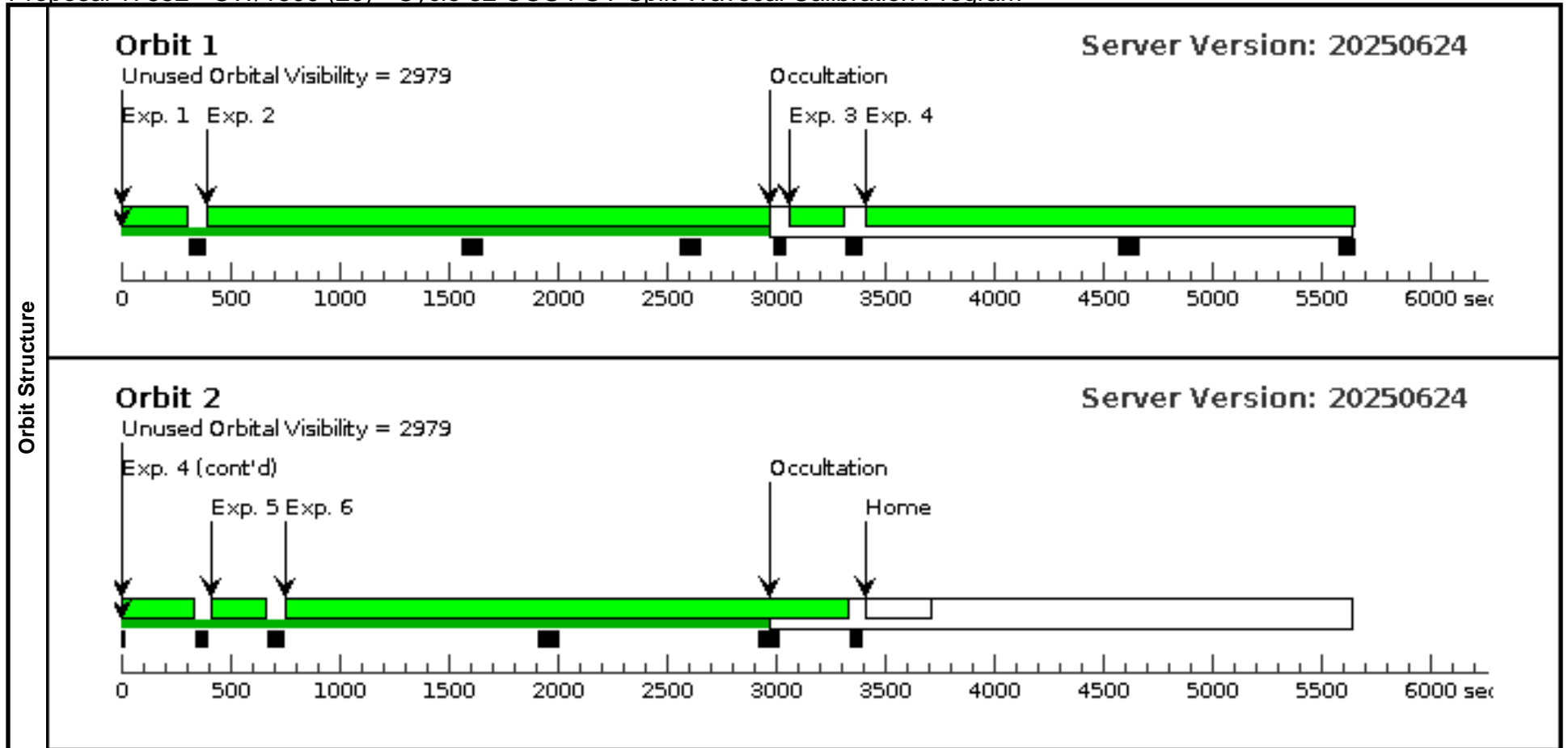
| Visit     | Proposal 17852, CW/1500 (19), completed<br>Diagnostic Status: Warning<br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 18 BY 13 D TO 15 D |  |       |                        |                      |   |                         |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|---|-------------------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1500 (19)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (19)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (19)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (19)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |   |                         |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.   | Opt. Params.            | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 1-2 Non-Int in CW/1500 (19) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 2   | G160M/158 9  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1589 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 1-2 Non-Int in CW/1500 (19) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 3-4 Non-Int in CW/1500 (19) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 4   | G160M/157 7  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1577 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 3-4 Non-Int in CW/1500 (19) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 5-6 Non-Int in CW/1500 (19) | 60 Secs (60 Secs)<br>[==>]     | [2]                             |
|           | 6   | G160M/153 3  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1533 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 5-6 Non-Int in CW/1500 (19) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1600 (20) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:34 GMT 2025

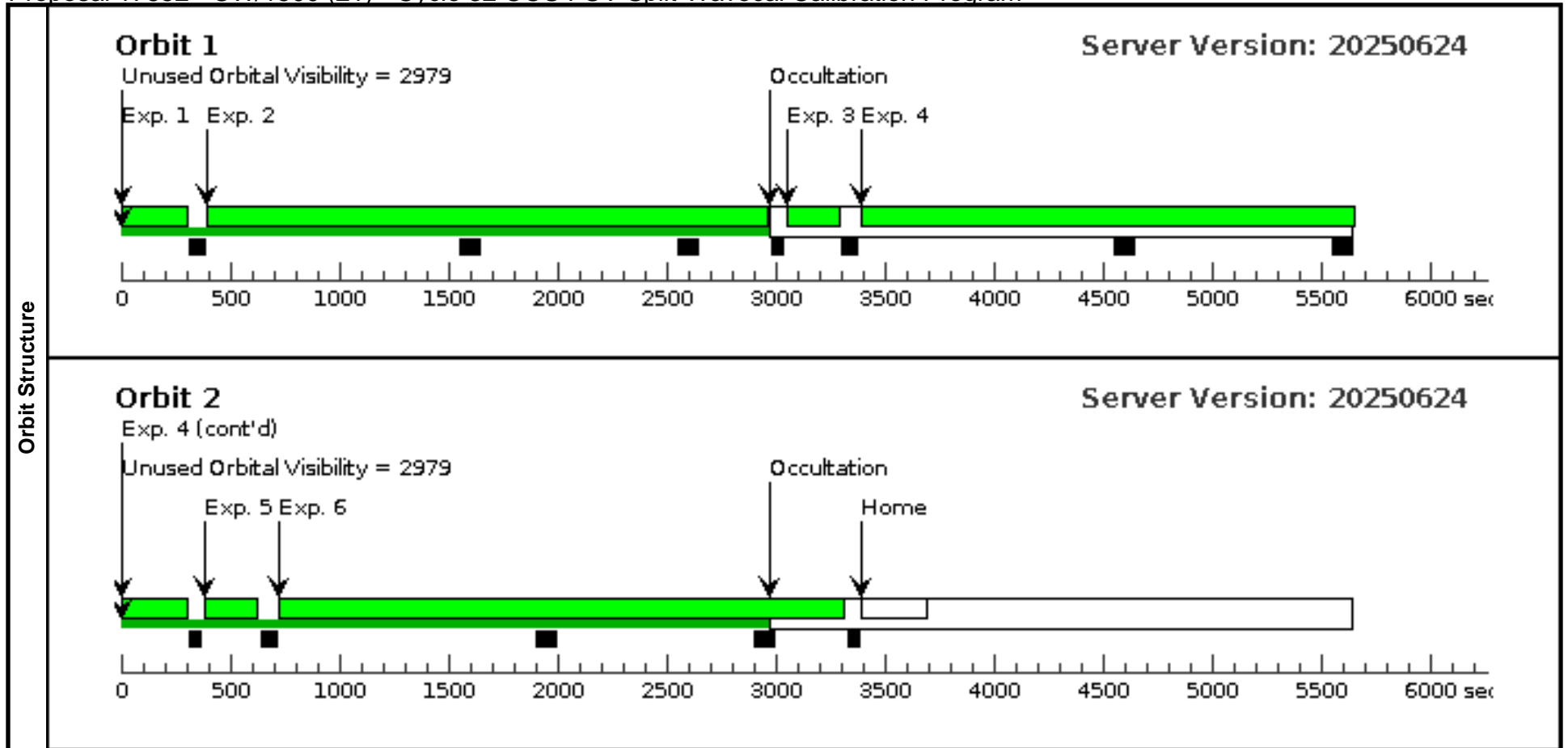
| Visit     | <b>Proposal 17852, CW/1600 (20), completed</b><br><b>Diagnostic Status: Warning</b><br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 19 BY 13 D TO 15 D |  |       |                        |                      |   |                         |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|---|-------------------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1600 (20)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (20)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (20)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (20)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |   |                         |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.   | Opt. Params.            | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 1-2 Non-Int in CW/1600 (20) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 2   | G160M/1623   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1623 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 1-2 Non-Int in CW/1600 (20) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 3-4 Non-Int in CW/1600 (20) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 4   | G160M/1611   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1611 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 3-4 Non-Int in CW/1600 (20) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 5-6 Non-Int in CW/1600 (20) | 60 Secs (60 Secs)<br>[==>]     | [2]                             |
|           | 6   | G160M/1600   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1600 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 5-6 Non-Int in CW/1600 (20) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1500 (21) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:35 GMT 2025

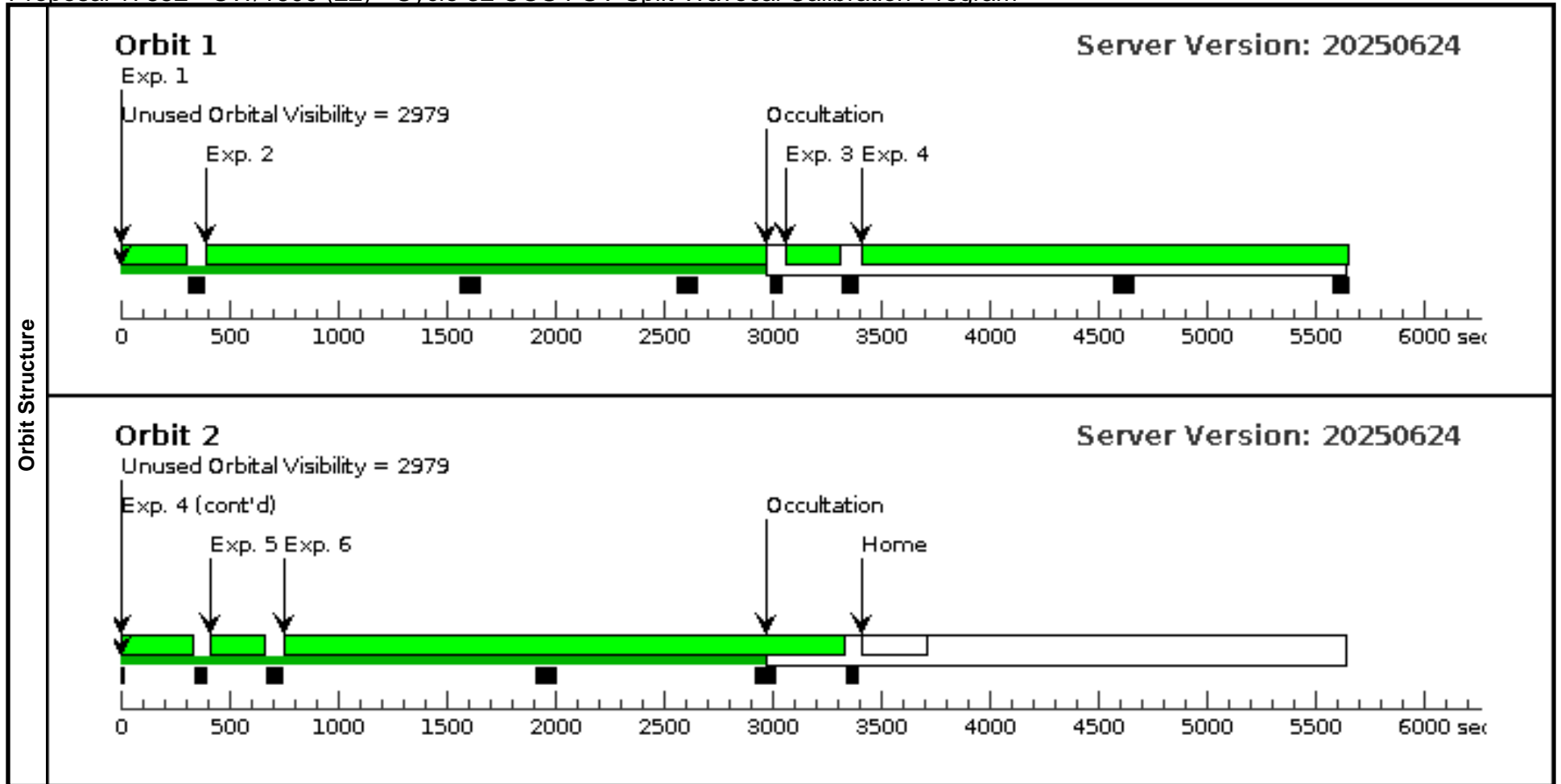
| Visit     | Proposal 17852, CW/1500 (21), completed<br>Diagnostic Status: Warning<br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 20 BY 13 D TO 15 D |  |       |                        |                      |   |                         |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|---|-------------------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1500 (21)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (21)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (21)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (21)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |   |                         |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.   | Opt. Params.            | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 1-2 Non-Int in CW/1500 (21) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 2   | G160M/158 9  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1589 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 1-2 Non-Int in CW/1500 (21) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 3-4 Non-Int in CW/1500 (21) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 4   | G160M/157 7  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1577 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 3-4 Non-Int in CW/1500 (21) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 5-6 Non-Int in CW/1500 (21) | 60 Secs (60 Secs)<br>[==>]     | [2]                             |
|           | 6   | G160M/153 3  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1533 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 5-6 Non-Int in CW/1500 (21) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1600 (22) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:35 GMT 2025

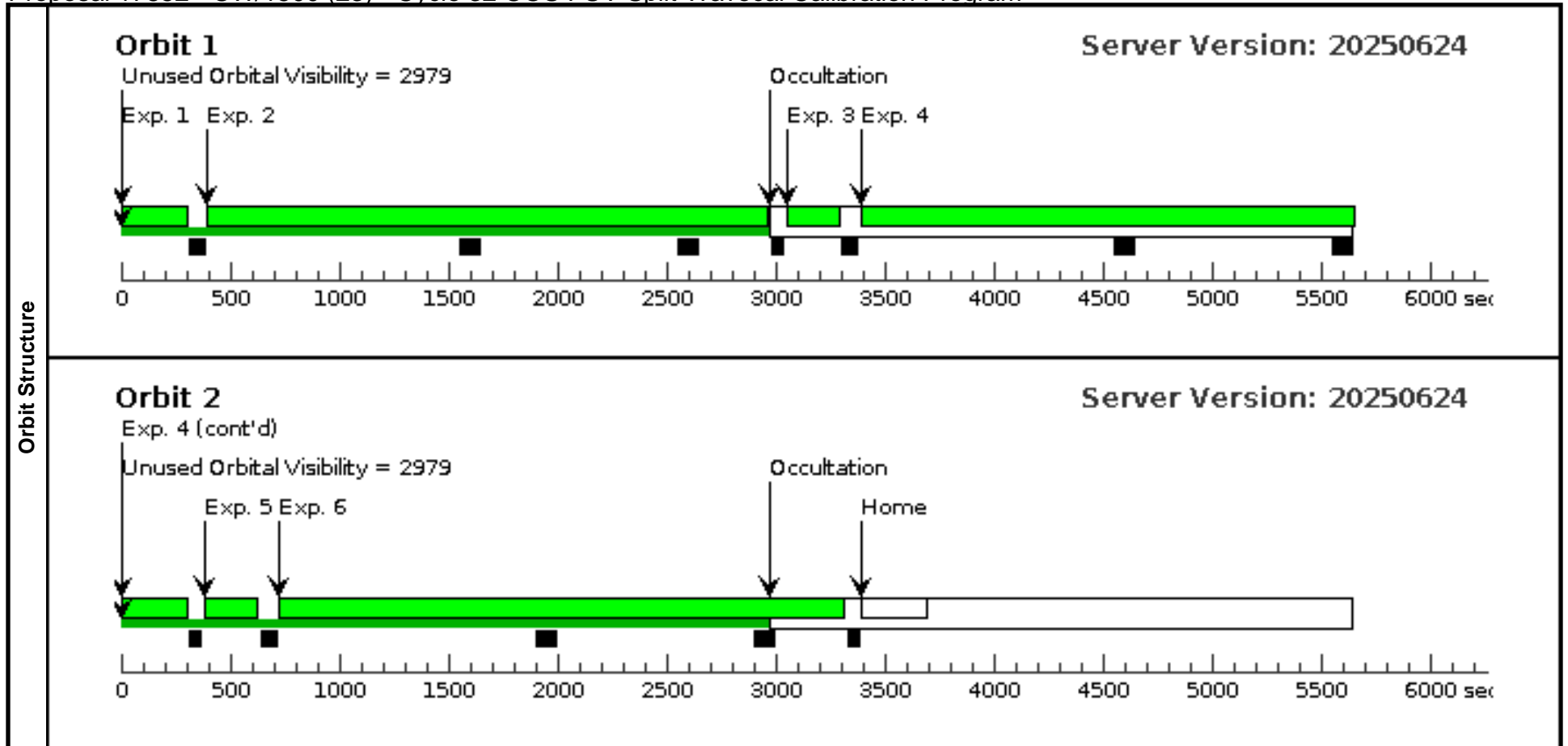
| Visit     | Proposal 17852, CW/1600 (22), completed<br>Diagnostic Status: Warning<br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 21 BY 13 D TO 15 D |  |       |                        |                      |   |                         |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|---|-------------------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1600 (22)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (22)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (22)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (22)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |   |                         |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.   | Opt. Params.            | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 1-2 Non-Int in CW/1600 (22) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 2   | G160M/1623   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1623 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 1-2 Non-Int in CW/1600 (22) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 3-4 Non-Int in CW/1600 (22) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 4   | G160M/1611   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1611 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 3-4 Non-Int in CW/1600 (22) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 5-6 Non-Int in CW/1600 (22) | 60 Secs (60 Secs)<br>[==>]     | [2]                             |
|           | 6   | G160M/1600   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1600 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 5-6 Non-Int in CW/1600 (22) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1500 (23) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:35 GMT 2025

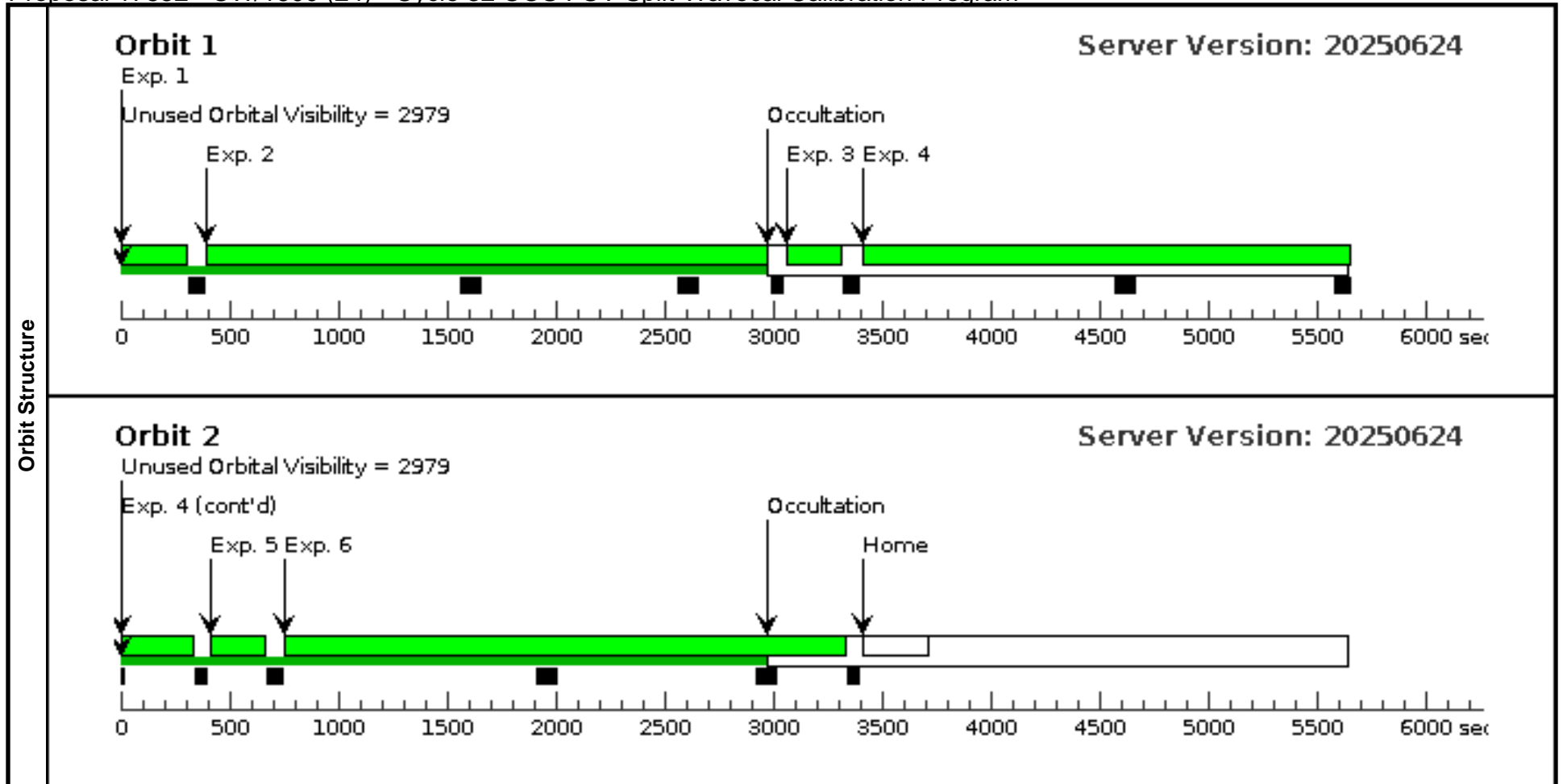
| Visit     | Proposal 17852, CW/1500 (23), completed<br>Diagnostic Status: Warning<br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 22 BY 13 D TO 15 D |  |       |                        |                      |   |                         |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|---|-------------------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1500 (23)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (23)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (23)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (23)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |   |                         |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.   | Opt. Params.            | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 1-2 Non-Int in CW/1500 (23) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 2   | G160M/158 9  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1589 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 1-2 Non-Int in CW/1500 (23) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 3-4 Non-Int in CW/1500 (23) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 4   | G160M/157 7  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1577 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 3-4 Non-Int in CW/1500 (23) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 5-6 Non-Int in CW/1500 (23) | 60 Secs (60 Secs)<br>[==>]     | [2]                             |
|           | 6   | G160M/153 3  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1533 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 5-6 Non-Int in CW/1500 (23) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1600 (24) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:35 GMT 2025

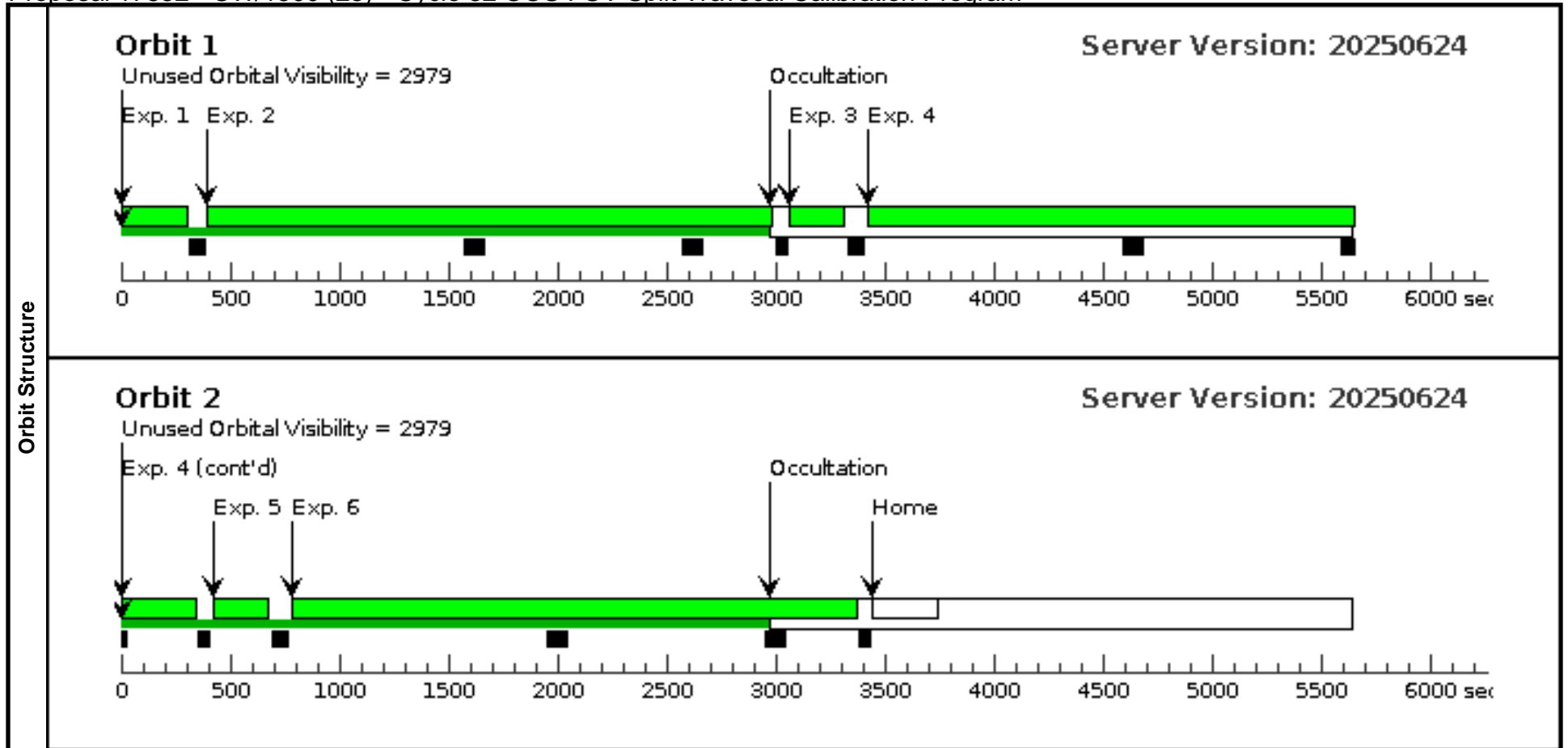
| Visit     | <b>Proposal 17852, CW/1600 (24), scheduled</b><br><b>Diagnostic Status: Warning</b><br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 23 BY 13 D TO 15 D |  |       |                        |                      |   |                         |                                      |                                |                                 |
|-----------|---|--|-------|------------------------|----------------------|---|-------------------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics   | (CW/1600 (24)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (24)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (24)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1600 (24)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |   |                         |                                      |                                |                                 |
| Exposures |   | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.   | Opt. Params.            | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 1-2 Non-Int in CW/1600 (24) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 2   | G160M/1623   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1623 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 1-2 Non-Int in CW/1600 (24) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 3-4 Non-Int in CW/1600 (24) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 4   | G160M/1611   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1611 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 3-4 Non-Int in CW/1600 (24) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5   | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 5-6 Non-Int in CW/1600 (24) | 60 Secs (60 Secs)<br>[==>]     | [2]                             |
|           | 6   | G160M/1600   | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1600 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 5-6 Non-Int in CW/1600 (24) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1500 (25) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:35 GMT 2025

| Visit     | <b>Proposal 17852, CW/1500 (25), implementation</b><br><b>Diagnostic Status: Warning</b><br>Scientific Instruments: COS/FUV, COS/NUV<br>Special Requirements: AFTER 24 BY 13 D TO 15 D |  |       |                        |                      |   |                         |                                      |                                |                                 |
|-----------|--|--|-------|------------------------|----------------------|---|-------------------------|--------------------------------------|--------------------------------|---------------------------------|
|           | Diagnostics  | (CW/1500 (25)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (25)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (25)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS<br>(CW/1500 (25)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT |       |                        |                      |   |                         |                                      |                                |                                 |
| Exposures |  | #  | Label | Target                 | Config,Mode,Aperture | Spectral Els.   | Opt. Params.            | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] |
|           | 1  | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 1-2 Non-Int in CW/1500 (25) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 2  | G160M/153 3  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1533 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 1-2 Non-Int in CW/1500 (25) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 3  | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 3-4 Non-Int in CW/1500 (25) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |
|           | 4  | G160M/153 3  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1533 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 3-4 Non-Int in CW/1500 (25) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |
|           | 5  | NUV G230 L/2635  | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 5-6 Non-Int in CW/1500 (25) | 60 Secs (60 Secs)<br>[==>]     | [2]                             |
|           | 6  | G160M/153 3  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1533 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D01 2;<br>BUFFER-TIME=10 00 |                         | Sequence 5-6 Non-Int in CW/1500 (25) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |



Proposal 17852 - CW/1600 (26) - Cycle 32 COS FUV Split-Wavecal Calibration Program

Wed Sep 10 16:00:35 GMT 2025

| Visit       | <p>Proposal 17852, CW/1600 (26), scheduling</p> <p><b>Diagnostic Status: Warning</b></p> <p>Scientific Instruments: COS/FUV, COS/NUV</p> <p>Special Requirements: AFTER 25 BY 13 D TO 15 D</p>  |       |                        |                      |   |                         |                                      |                                |                                 |       |
|-------------|---|-------|------------------------|----------------------|---|-------------------------|--------------------------------------|--------------------------------|---------------------------------|-------|
| Diagnostics | <p>(CW/1600 (26)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS</p> <p>(CW/1600 (26)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS</p> <p>(CW/1600 (26)) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS</p> <p>(CW/1600 (26)) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB VISIT</p> |       |                        |                      |   |                         |                                      |                                |                                 |       |
| Exposures   | #   | Label | Target                 | Config,Mode,Aperture | Spectral Els.   | Opt. Params.            | Special Reqs.                        | Groups                         | Exp. Time (Total)/[Actual Dur.] | Orbit |
| 1           | NUV G230 L/2635   | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 1-2 Non-Int in CW/1600 (26) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |       |
| 2           | G160M/1623  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1623 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 1-2 Non-Int in CW/1600 (26) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |       |
| 3           | NUV G230 L/2635   | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 3-4 Non-Int in CW/1600 (26) | 60 Secs (60 Secs)<br>[==>]     | [1]                             |       |
| 4           | G160M/1611  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1611 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 3-4 Non-Int in CW/1600 (26) | 2400 Secs (2400 Secs)<br>[==>] | [1]                             |       |
| 5           | NUV G230 L/2635   | WAVE  | COS/NUV, TIME-TAG, WCA | G230L<br>2635 A      | FP-POS=3  | QESIPARM USELAMP NOLAMP | Sequence 5-6 Non-Int in CW/1600 (26) | 60 Secs (60 Secs)<br>[==>]     | [2]                             |       |
| 6           | G160M/1600  | WAVE  | COS/FUV, TIME-TAG, WCA | G160M<br>1600 A      | FP-POS=3;<br>LIFETIME-POS=L P6;<br>FLASH=S0300D012;<br>BUFFER-TIME=1000 |                         | Sequence 5-6 Non-Int in CW/1600 (26) | 2400 Secs (2400 Secs)<br>[==>] | [2]                             |       |

