# 14435 - COS FUV Spectroscopic Sensitivity Monitoring

Cycle: 23, Proposal Category: CAL/COS

(Calibration)

(Availability Mode: RESTRICTED)

**INVESTIGATORS**



| *Name* | *Institution* | *E-Mail* |
|---|---|---|
| **Dr. Gisella De Rosa (PI) (Contact)** | **Space Telescope Science Institute** | **gderosa@stsci.edu** |
| Dr. John Henry Debes (CoI) | Space Telescope Science Institute | debes@stsci.edu |
| Dr. Charles R. Proffitt (CoI) | Space Telescope Science Institute | proffitt@stsci.edu |



**VISITS**

| *Visit* | *Targets used in Visit* | *Configurations used in Visit* | *Orbits Used* | *Last Orbit Planner Run* | *OP Current with Visit?* |
|---|---|---|---|---|---|
| 13 | (6) GD71<br>DARK<br>WAVE | COS/FUV<br>COS/NUV<br>S/C | 1 | 09-Nov-2016 11:00:47.0 | yes |
| 14 | (6) GD71<br>DARK<br>WAVE | COS/FUV<br>COS/NUV<br>S/C | 1 | 09-Nov-2016 11:00:48.0 | yes |
| 15 | (6) GD71<br>DARK<br>WAVE | COS/FUV<br>COS/NUV<br>S/C | 1 | 09-Nov-2016 11:00:50.0 | yes |
| 16 | (6) GD71<br>DARK<br>WAVE | COS/FUV<br>COS/NUV<br>S/C | 1 | 09-Nov-2016 11:00:51.0 | yes |

| *Visit* | *Targets used in Visit* | *Configurations used in Visit* | *Orbits Used* | *Last Orbit Planner Run* | *OP Current with Visit?* |
|---|---|---|---|---|---|
| 17 | (6) GD71<br>DARK<br>WAVE | COS/FUV<br>COS/NUV<br>S/C | 1 | 09-Nov-2016 11:00:52.0 | yes |
| 02 | (1) WD0308-565<br>DARK | COS/FUV<br>COS/NUV<br>S/C | 2 | 09-Nov-2016 11:00:54.0 | yes |
| 04 | (1) WD0308-565<br>DARK | COS/FUV<br>COS/NUV<br>S/C | 2 | 09-Nov-2016 11:00:56.0 | yes |
| 06 | (1) WD0308-565<br>DARK | COS/FUV<br>COS/NUV<br>S/C | 2 | 09-Nov-2016 11:00:58.0 | yes |
| 08 | (1) WD0308-565<br>DARK | COS/FUV<br>COS/NUV<br>S/C | 2 | 09-Nov-2016 11:01:01.0 | yes |
| 10 | (1) WD0308-565<br>DARK | COS/FUV<br>COS/NUV<br>S/C | 2 | 09-Nov-2016 11:01:03.0 | yes |
| 12 | (1) WD0308-565<br>DARK | COS/FUV<br>COS/NUV<br>S/C | 2 | 09-Nov-2016 11:01:04.0 | yes |
| 01 | (1) WD0308-565 | COS/FUV<br>COS/NUV | 1 | 09-Nov-2016 11:01:06.0 | yes |
| 03 | (1) WD0308-565 | COS/FUV<br>COS/NUV | 1 | 09-Nov-2016 11:01:06.0 | yes |
| 05 | (1) WD0308-565 | COS/FUV<br>COS/NUV | 1 | 09-Nov-2016 11:01:07.0 | yes |
| 07 | (1) WD0308-565 | COS/FUV<br>COS/NUV | 1 | 09-Nov-2016 11:01:08.0 | yes |

| *Visit* | *Targets used in Visit* | *Configurations used in Visit* | *Orbits Used* | *Last Orbit Planner Run* | *OP Current with Visit?* |
|---|---|---|---|---|---|
| 09 | (1) WD0308-565 | COS/FUV<br>COS/NUV | 1 | 09-Nov-2016 11:01:09.0 | yes |
| 11 | (1) WD0308-565 | COS/FUV<br>COS/NUV | 1 | 09-Nov-2016 11:01:09.0 | yes |

23 Total Orbits Used

**ABSTRACT**

To track the time dependent sensitivity as a function of wavelength we will obtain exposures in all FUV gratings every month. There will be 2 types of monitoring sequences which will occur on alternating months. The complete monitoring sequence will use 3 orbits in 2 visits (except May - July when GD71 is unavailable). The 1 orbit visit will cover the G130M/1096/FUVB, G160M/1577/FUVA, and G160M/1623/FUVA modes. The 2 orbit visit will cover G130M/1222, G130M/1291, G130M/1327, G130M/1055/FUVA, G160M/1577/FUVB, G160M/1623/FUVB, G140L/1105, G140L/1230 modes. These comprise the reddest and bluest central wavelengths of each grating with additional coverage of the G130M blue modes. The reduced monitoring sequence in alternating months will use a 1 orbit visit to monitor the complete wavelength range of the standard modes using one central wavelength per grating. The modes covered are G130M/1291, G160M/1623, and G140L/1230. This reduced monitoring scheme, relative to C20, has been in place since C21. Should any drastic changes occur, the contingency orbits will be activated.

**OBSERVING DESCRIPTION**

There will be 2 types of monitoring sequences which will occur on alternating months. The complete monitoring sequence will use 3 orbits in 2 visits (except May - July when GD71 is unavailable). The 1 orbit visit will cover the G130M/1096/FUVB, G160M/1577/FUVA, and G160M/1623/FUVA modes. The 2 orbit visit will cover G130M/1222, G130M/1291, G130M/1327, G130M/1055/FUVA, G160M/1577/FUVB, G160M/1623/FUVB, G140L/1105, G140L/1230 modes. These comprise the reddest and bluest central wavelengths of each grating with additional coverage of the G130M blue modes. The reduced monitoring sequence in alternating months will use a 1 orbit visit to monitor the complete wavelength range of the standard modes using one central wavelength per grating. The modes covered are G130M/1291, G160M/1623, and G140L/1230. This reduced monitoring scheme, relative to C20, has been in place since C21. Should any drastic changes occur, the contingency orbits will be activated.

# Proposal 14435 - GD71 (13) - COS FUV Spectroscopic Sensitivity Monitoring

## Visit

**Proposal 14435, GD71 (13), completed** Wed Nov 09 16:01:11 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: S/C, COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 28-DEC-2015:00:00:00 AND 03-JAN-2016:00:00:00

*Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation*
*George Chapman added Exposure 3*
*Optimized the exposure time for the G130M/1096 setting to increase its SNR (exp time = 744 s) while remaining within the allocated time.*

## Diagnostics

(GD71 (13)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

## Fixed Targets

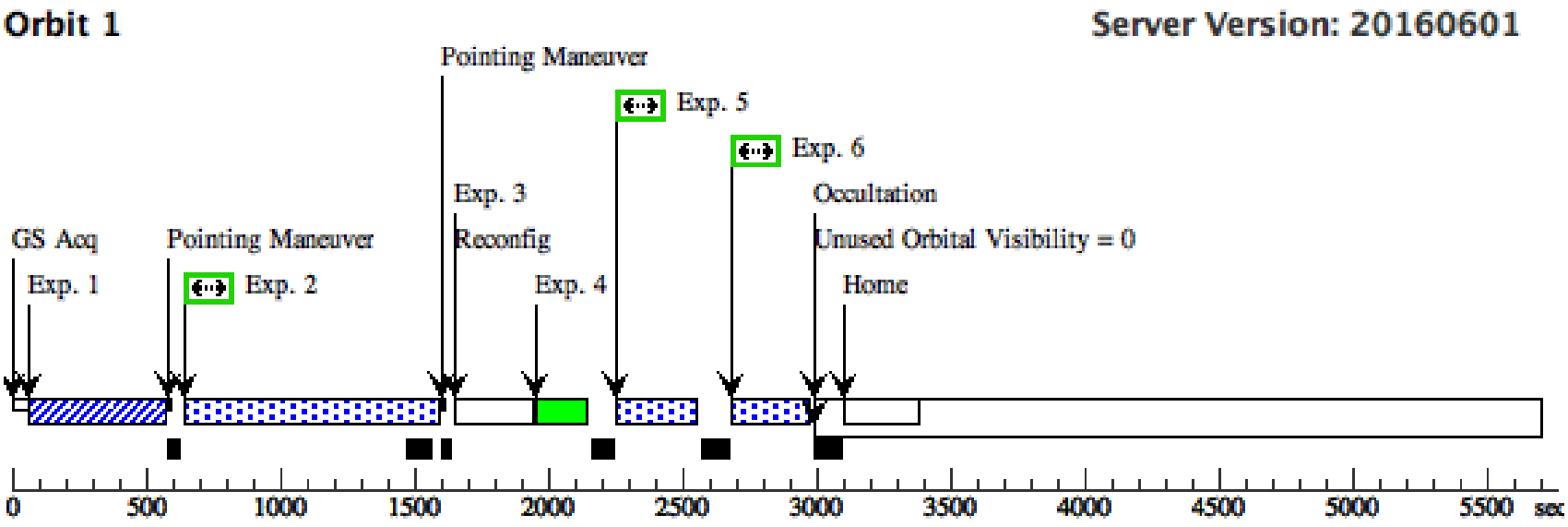
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (6) | GD71 | RA: 05 52 27.6100 (88.1150417d) | Proper Motion RA: 85 mas/yr | V=13.06+/-0.01 | Reference Frame: ICRS |
| | | Dec: +15 53 13.80 (15.88717d) | Proper Motion Dec: -174 mas/yr | | |
| | | Equinox: J2000 | Epoch of Position: 2000 | | |

*Comments: Use sma RA, DEC amd PM as in proposal 12392 by Bohlin et al.*
*Extended=NO*

**Exposures**

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ACQ/IM (404797) | (6) GD71 | COS/NUV, ACQ/IMAGE, BOA | MIRRORB | | | | 90 Secs (90 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: Exptime for S/N of 60 is 105.5 sec which leads to visibility overrun. COS.ta.404797*<br>*Using 90 sec leads to S/N of 55* | | | | | | | | |
| 2 | G130M/1096/FUVB (COS.sp.418698) | (6) GD71 | COS/FUV, TIME-TAG, PSA | G130M 1096 A | BUFFER-TIME=644;<br>FP-POS=3;<br>SEGMENT=B | | | 744 Secs (744 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: Set buffer-time = exptime - 100 sec = 644 to maximize time on target (see Cy 20 IHB section 5.4.1)* | | | | | | | | |
| 3 | | DARK | S/C, DATA, NONE | | | QASISTATES COS FUV HVLOW HVLOW | | 1 Secs (1 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.* | | | | | | | | |
| 4 | G130M/1096/FUVA WAVECAL | WAVE | COS/FUV, TIME-TAG, WCA | G130M 1096 A | FP-POS=3;<br>SEGMENT=A;<br>FLASH=NO | | | 140 Secs (140 Secs)<br>*[==>]* | ***[1]*** |
| 5 | G160M/1577/FUVA (COS.sp.413980) | (6) GD71 | COS/FUV, TIME-TAG, PSA | G160M 1577 A | BUFFER-TIME=102;<br>FP-POS=3;<br>SEGMENT=A | | | 102 Secs (102 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: Buffer-time for FUVA is 2.35e6/8770 = 268 sec, which is larger than exp time, so set buffer time to exptime.*<br>*2.35e6 is the number of events that each buffer can record*<br>*8770 cts/sec is the count rate in FUVA, per ETC calculation above* | | | | | | | | |
| 6 | G160M/1623/FUVA (COS.sp.413984) | (6) GD71 | COS/FUV, TIME-TAG, PSA | G160M 1623 A | BUFFER-TIME=154;<br>FP-POS=3;<br>SEGMENT=A | | | 154 Secs (154 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: Buffer time is 345 sec=2.35e6/7635*<br>*where 7635 is cts/sec in FUVA*<br>*Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime* | | | | | | | | |

Orbit Structure



# Proposal 14435 - GD71 (14) - COS FUV Spectroscopic Sensitivity Monitoring

## Visit

**Proposal 14435, GD71 (14), completed** Wed Nov 09 16:01:11 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: S/C, COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 22-FEB-2016:00:00:00 AND 28-FEB-2016:00:00:00

*Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation*
*George Chapman added Exposure 3*
*Optimized the exposure time for the G130M/1096 setting to increase its SNR (exp time = 744 s) while remaining within the allocated time.*

## Diagnostics

(GD71 (14)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

## Fixed Targets

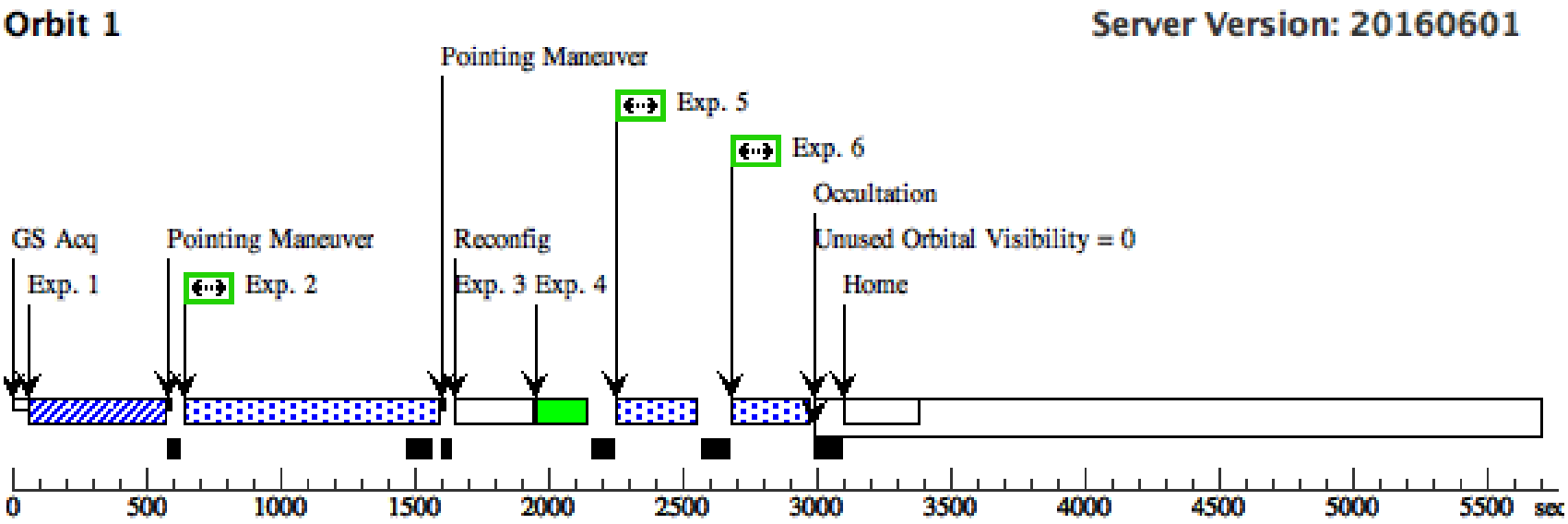
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (6) | GD71 | RA: 05 52 27.6100 (88.1150417d) | Proper Motion RA: 85 mas/yr | V=13.06+/-0.01 | Reference Frame: ICRS |
| | | Dec: +15 53 13.80 (15.88717d) | Proper Motion Dec: -174 mas/yr | | |
| | | Equinox: J2000 | Epoch of Position: 2000 | | |

*Comments: Use sma RA, DEC amd PM as in proposal 12392 by Bohlin et al.*
*Extended=NO*

**Exposures**

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ACQ/IM (404797) | (6) GD71 | COS/NUV, ACQ/IMAGE, BOA | MIRRORB | | | | 90 Secs (90 Secs)<br>*[==>]* | ***[1]*** |
| *Comments: Exptime for S/N of 60 is 105.5 sec which leads to visibility overrun. COS.ta.404797*<br>*Using 90 sec leads to S/N of 55* | | | | | | | | | |
| 2 | G130M/1096/FUVB (COS.sp.418698) | (6) GD71 | COS/FUV, TIME-TAG, PSA | G130M 1096 A | BUFFER-TIME=644;<br>FP-POS=3;<br>SEGMENT=B | | | 744 Secs (744 Secs)<br>*[==>]* | ***[1]*** |
| *Comments: Set buffer-time = exptime - 100 sec = 644 to maximize time on target (see Cy 20 IHB section 5.4.1)* | | | | | | | | | |
| 3 | | DARK | S/C, DATA, NONE | | | QASISTATES COS FUV HVLOW HVLOW | | 1 Secs (1 Secs)<br>*[==>]* | ***[1]*** |
| *Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.* | | | | | | | | | |
| 4 | G130M/1096/FUVA WAVECAL | WAVE | COS/FUV, TIME-TAG, WCA | G130M 1096 A | FP-POS=3;<br>SEGMENT=A;<br>FLASH=NO | | | 140 Secs (140 Secs)<br>*[==>]* | ***[1]*** |
| 5 | G160M/1577/FUVA (COS.sp.413980) | (6) GD71 | COS/FUV, TIME-TAG, PSA | G160M 1577 A | BUFFER-TIME=102;<br>FP-POS=3;<br>SEGMENT=A | | | 102 Secs (102 Secs)<br>*[==>]* | ***[1]*** |
| *Comments: Buffer-time for FUVA is 2.35e6/8770 = 268 sec, which is larger than exp time, so set buffer time to exptime.*<br>*2.35e6 is the number of events that each buffer can record*<br>*8770 cts/sec is the count rate in FUVA, per ETC calculation above* | | | | | | | | | |
| 6 | G160M/1623/FUVA (COS.sp.413984) | (6) GD71 | COS/FUV, TIME-TAG, PSA | G160M 1623 A | BUFFER-TIME=154;<br>FP-POS=3;<br>SEGMENT=A | | | 154 Secs (154 Secs)<br>*[==>]* | ***[1]*** |
| *Comments: Buffer time is 345 sec=2.35e6/7635*<br>*where 7635 is cts/sec in FUVA*<br>*Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime* | | | | | | | | | |

Orbit Structure



# Proposal 14435 - GD71 (15) - COS FUV Spectroscopic Sensitivity Monitoring

## Visit

**Proposal 14435, GD71 (15), completed** Wed Nov 09 16:01:11 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: S/C, COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 18-APR-2016:00:00:00 AND 24-APR-2016:00:00:00

*Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation*
*George Chapman added Exposure 3*
*Optimized the exposure time for the G130M/1096 setting to increase its SNR (exp time = 744 s) while remaining within the allocated time.*

## Diagnostics

(GD71 (15)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

## Fixed Targets

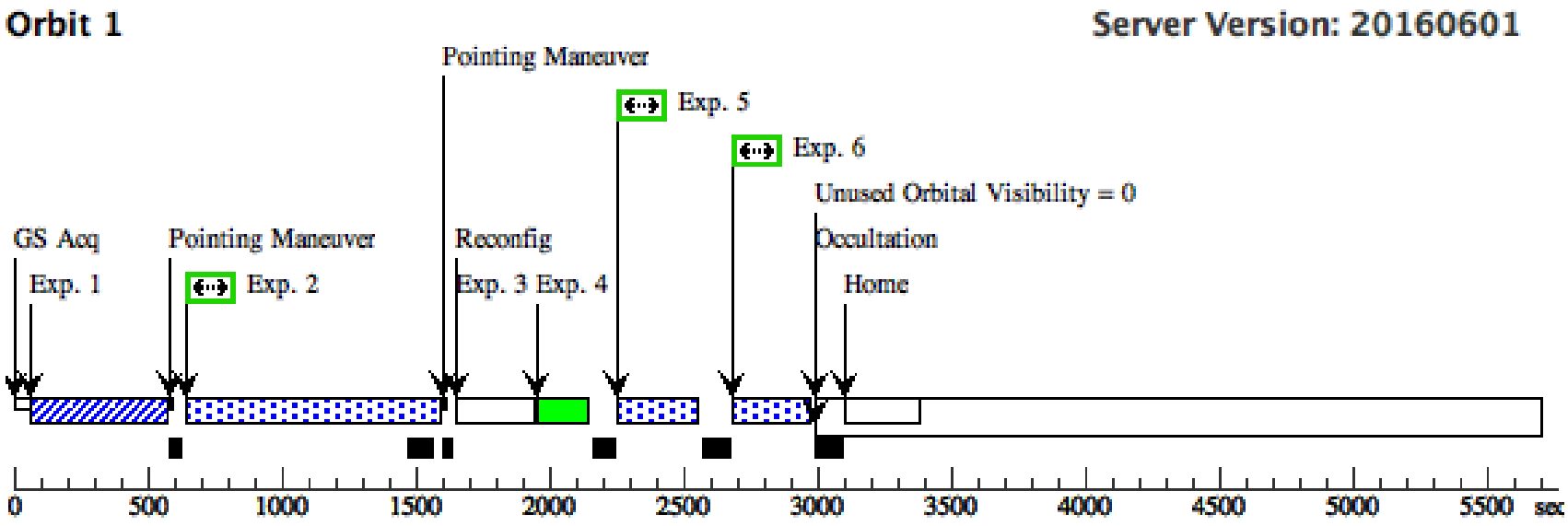
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (6) | GD71 | RA: 05 52 27.6100 (88.1150417d) | Proper Motion RA: 85 mas/yr | V=13.06+/-0.01 | Reference Frame: ICRS |
| | | Dec: +15 53 13.80 (15.88717d) | Proper Motion Dec: -174 mas/yr | | |
| | | Equinox: J2000 | Epoch of Position: 2000 | | |

*Comments: Use sma RA, DEC amd PM as in proposal 12392 by Bohlin et al.*
*Extended=NO*

**Exposures**

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ACQ/IM (404797) | (6) GD71 | COS/NUV, ACQ/IMAGE, BOA | MIRRORB | | | | 90 Secs (90 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: Exptime for S/N of 60 is 105.5 sec which leads to visibility overrun. COS.ta.404797*<br>*Using 90 sec leads to S/N of 55* | | | | | | | | |
| 2 | G130M/1096/FUVB (COS.sp.418698) | (6) GD71 | COS/FUV, TIME-TAG, PSA | G130M 1096 A | BUFFER-TIME=644;<br>FP-POS=3;<br>SEGMENT=B | | | 744 Secs (744 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: Set buffer-time = exptime - 100 sec = 644 to maximize time on target (see Cy 20 IHB section 5.4.1)* | | | | | | | | |
| 3 | | DARK | S/C, DATA, NONE | | | QASISTATES COS FUV HVLOW HVLOW | | 1 Secs (1 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.* | | | | | | | | |
| 4 | G130M/1096/FUVA WAVECAL | WAVE | COS/FUV, TIME-TAG, WCA | G130M 1096 A | FP-POS=3;<br>SEGMENT=A;<br>FLASH=NO | | | 140 Secs (140 Secs)<br>*[==>]* | ***[1]*** |
| 5 | G160M/1577/FUVA (COS.sp.413980) | (6) GD71 | COS/FUV, TIME-TAG, PSA | G160M 1577 A | BUFFER-TIME=102;<br>FP-POS=3;<br>SEGMENT=A | | | 102 Secs (102 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: Buffer-time for FUVA is 2.35e6/8770 = 268 sec, which is larger than exp time, so set buffer time to exptime.*<br>*2.35e6 is the number of events that each buffer can record*<br>*8770 cts/sec is the count rate in FUVA, per ETC calculation above* | | | | | | | | |
| 6 | G160M/1623/FUVA (COS.sp.413984) | (6) GD71 | COS/FUV, TIME-TAG, PSA | G160M 1623 A | BUFFER-TIME=154;<br>FP-POS=3;<br>SEGMENT=A | | | 154 Secs (154 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: Buffer time is 345 sec=2.35e6/7635*<br>*where 7635 is cts/sec in FUVA*<br>*Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime* | | | | | | | | |

Orbit Structure



# Proposal 14435 - GD71 (16) - COS FUV Spectroscopic Sensitivity Monitoring

## Visit

**Proposal 14435, GD71 (16), completed** Wed Nov 09 16:01:11 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: S/C, COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 22-AUG-2016:00:00:00 AND 28-AUG-2016:00:00:00

*Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation*
*George Chapman added Exposure 3*
*Optimized the exposure time for the G130M/1096 setting to increase its SNR (exp time = 744 s) while remaining within the allocated time.*

## Diagnostics

(GD71 (16)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

## Fixed Targets

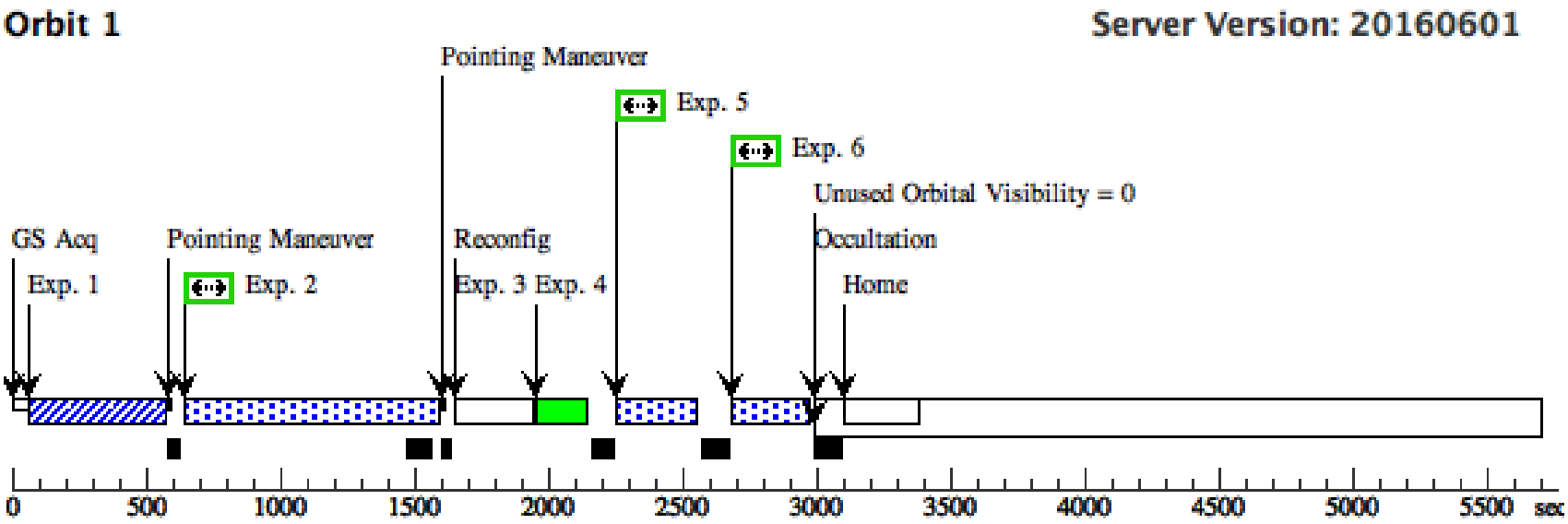
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (6) | GD71 | RA: 05 52 27.6100 (88.1150417d) | Proper Motion RA: 85 mas/yr | V=13.06+/-0.01 | Reference Frame: ICRS |
| | | Dec: +15 53 13.80 (15.88717d) | Proper Motion Dec: -174 mas/yr | | |
| | | Equinox: J2000 | Epoch of Position: 2000 | | |

*Comments: Use sma RA, DEC amd PM as in proposal 12392 by Bohlin et al.*
*Extended=NO*

**Exposures**

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ACQ/IM (404797) | (6) GD71 | COS/NUV, ACQ/IMAGE, BOA | MIRRORB | | | | 90 Secs (90 Secs)<br>*[==>]* | *[1]* |
| | *Comments: Exptime for S/N of 60 is 105.5 sec which leads to visibility overrun. COS.ta.404797*<br>*Using 90 sec leads to S/N of 55* | | | | | | | | |
| 2 | G130M/1096/FUVB (COS.sp.418698) | (6) GD71 | COS/FUV, TIME-TAG, PSA | G130M 1096 A | BUFFER-TIME=644;<br>FP-POS=3;<br>SEGMENT=B | | | 744 Secs (744 Secs)<br>*[==>]* | *[1]* |
| | *Comments: Set buffer-time = exptime - 100 sec = 644 to maximize time on target (see Cy 20 IHB section 5.4.1)* | | | | | | | | |
| 3 | | DARK | S/C, DATA, NONE | | | QASISTATES COS FUV HVLOW HVLOW | | 1 Secs (1 Secs)<br>*[==>]* | *[1]* |
| | *Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.* | | | | | | | | |
| 4 | G130M/1096/FUVA WAVECAL | WAVE | COS/FUV, TIME-TAG, WCA | G130M 1096 A | FP-POS=3;<br>SEGMENT=A;<br>FLASH=NO | | | 140 Secs (140 Secs)<br>*[==>]* | *[1]* |
| 5 | G160M/1577/FUVA (COS.sp.413980) | (6) GD71 | COS/FUV, TIME-TAG, PSA | G160M 1577 A | BUFFER-TIME=102;<br>FP-POS=3;<br>SEGMENT=A | | | 102 Secs (102 Secs)<br>*[==>]* | *[1]* |
| | *Comments: Buffer-time for FUVA is 2.35e6/8770 = 268 sec, which is larger than exp time, so set buffer time to exptime.*<br>*2.35e6 is the number of events that each buffer can record*<br>*8770 cts/sec is the count rate in FUVA, per ETC calculation above* | | | | | | | | |
| 6 | G160M/1623/FUVA (COS.sp.413984) | (6) GD71 | COS/FUV, TIME-TAG, PSA | G160M 1623 A | BUFFER-TIME=154;<br>FP-POS=3;<br>SEGMENT=A | | | 154 Secs (154 Secs)<br>*[==>]* | *[1]* |
| | *Comments: Buffer time is 345 sec=2.35e6/7635*<br>*where 7635 is cts/sec in FUVA*<br>*Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime* | | | | | | | | |

Orbit Structure



## Visit

**Proposal 14435, GD71 (17), implementation** Wed Nov 09 16:01:11 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: S/C, COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 17-OCT-2016:00:00:00 AND 23-OCT-2016:00:00:00

*Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation*
*George Chapman added Exposure 3*
*Optimized the exposure time for the G130M/1096 setting to increase its SNR (exp time = 744 s) while remaining within the allocated time.*

## Diagnostics

(GD71 (17)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

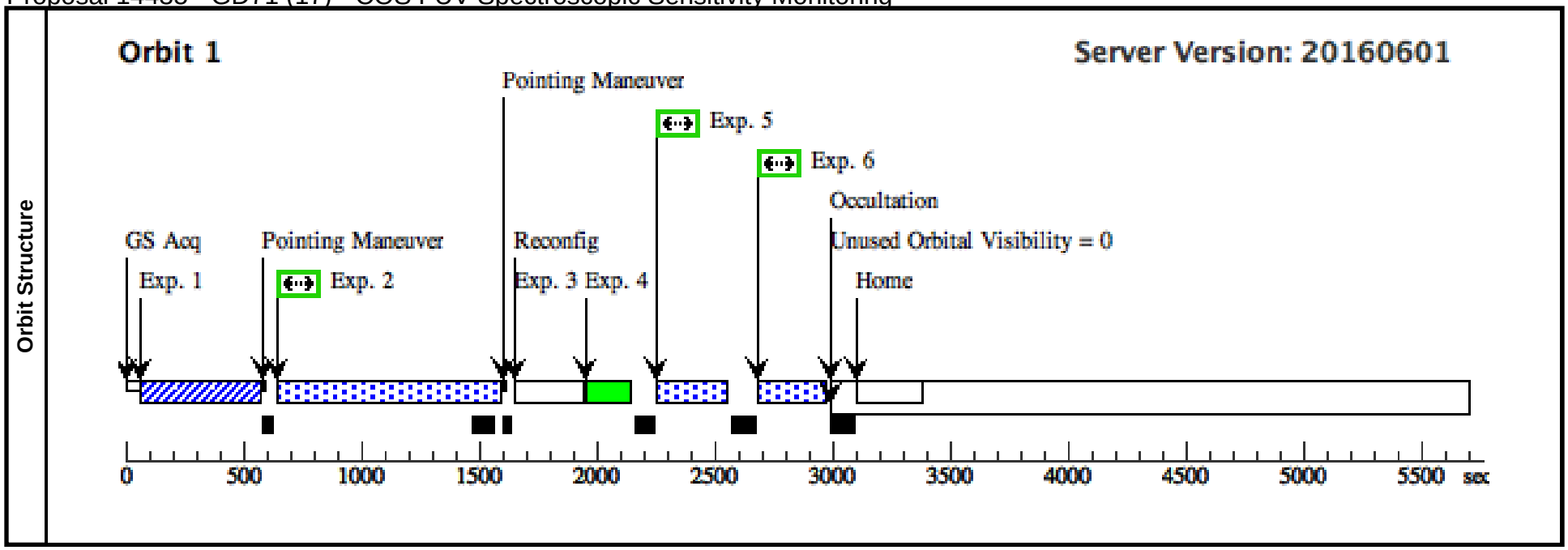
## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (6) | GD71 | RA: 05 52 27.6100 (88.1150417d) | Proper Motion RA: 85 mas/yr | V=13.06+/-0.01 | Reference Frame: ICRS |
| | | Dec: +15 53 13.80 (15.88717d) | Proper Motion Dec: -174 mas/yr | | |
| | | Equinox: J2000 | Epoch of Position: 2000 | | |

*Comments: Use sma RA, DEC amd PM as in proposal 12392 by Bohlin et al.*
*Extended=NO*

**Exposures**

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ACQ/IM (404797) | (6) GD71 | COS/NUV, ACQ/IMAGE, BOA | MIRRORB | | | | 90 Secs (90 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: Exptime for S/N of 60 is 105.5 sec which leads to visibility overrun. COS.ta.404797*<br>*Using 90 sec leads to S/N of 55* | | | | | | | | |
| 2 | G130M/1096/FUVB (COS.sp.418698) | (6) GD71 | COS/FUV, TIME-TAG, PSA | G130M 1096 A | BUFFER-TIME=644;<br>FP-POS=3;<br>SEGMENT=B | | | 744 Secs (744 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: Set buffer-time = exptime - 100 sec = 644 to maximize time on target (see Cy 20 IHB section 5.4.1)* | | | | | | | | |
| 3 | | DARK | S/C, DATA, NONE | | | QASISTATES COS FUV HVLOW HVLOW | | 1 Secs (1 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.* | | | | | | | | |
| 4 | G130M/1096/FUVA WAVECAL | WAVE | COS/FUV, TIME-TAG, WCA | G130M 1096 A | FP-POS=3;<br>SEGMENT=A;<br>FLASH=NO | | | 140 Secs (140 Secs)<br>*[==>]* | ***[1]*** |
| 5 | G160M/1577/FUVA (COS.sp.413980) | (6) GD71 | COS/FUV, TIME-TAG, PSA | G160M 1577 A | BUFFER-TIME=102;<br>FP-POS=3;<br>SEGMENT=A | | | 102 Secs (102 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: Buffer-time for FUVA is 2.35e6/8770 = 268 sec, which is larger than exp time, so set buffer time to exptime.*<br>*2.35e6 is the number of events that each buffer can record*<br>*8770 cts/sec is the count rate in FUVA, per ETC calculation above* | | | | | | | | |
| 6 | G160M/1623/FUVA (COS.sp.413984) | (6) GD71 | COS/FUV, TIME-TAG, PSA | G160M 1623 A | BUFFER-TIME=154;<br>FP-POS=3;<br>SEGMENT=A | | | 154 Secs (154 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: Buffer time is 345 sec=2.35e6/7635*<br>*where 7635 is cts/sec in FUVA*<br>*Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime* | | | | | | | | |


Orbit Structure
Orbit 1
Server Version: 20160601
Pointing Maneuver
Exp. 5
Exp. 6
Occultation
GS Acq
Exp. 1
Pointing Maneuver
Exp. 2
Reconfig
Exp. 3 Exp. 4
Unused Orbital Visibility = 0
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

## Visit

**Proposal 14435, WD0308 - complete (02), completed** Wed Nov 09 16:01:11 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: S/C, COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 28-DEC-2015:00:00:00 AND 03-JAN-2016:00:00:00

*Comments: George Chapman added Exposure 9*

## Diagnostics

(WD0308 - complete (02)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | WD0308-565 | RA: 03 09 47.9200 (47.4496667d)<br>Dec: -56 23 49.41 (-56.39706d)<br>Equinox: J2000 | Proper Motion RA: 0.018141 sec of time/yr<br>Proper Motion Dec: 0.0643 arcsec/yr<br>Epoch of Position: 2000 | V=14.07+/-0.02 | Reference Frame: ICRS |

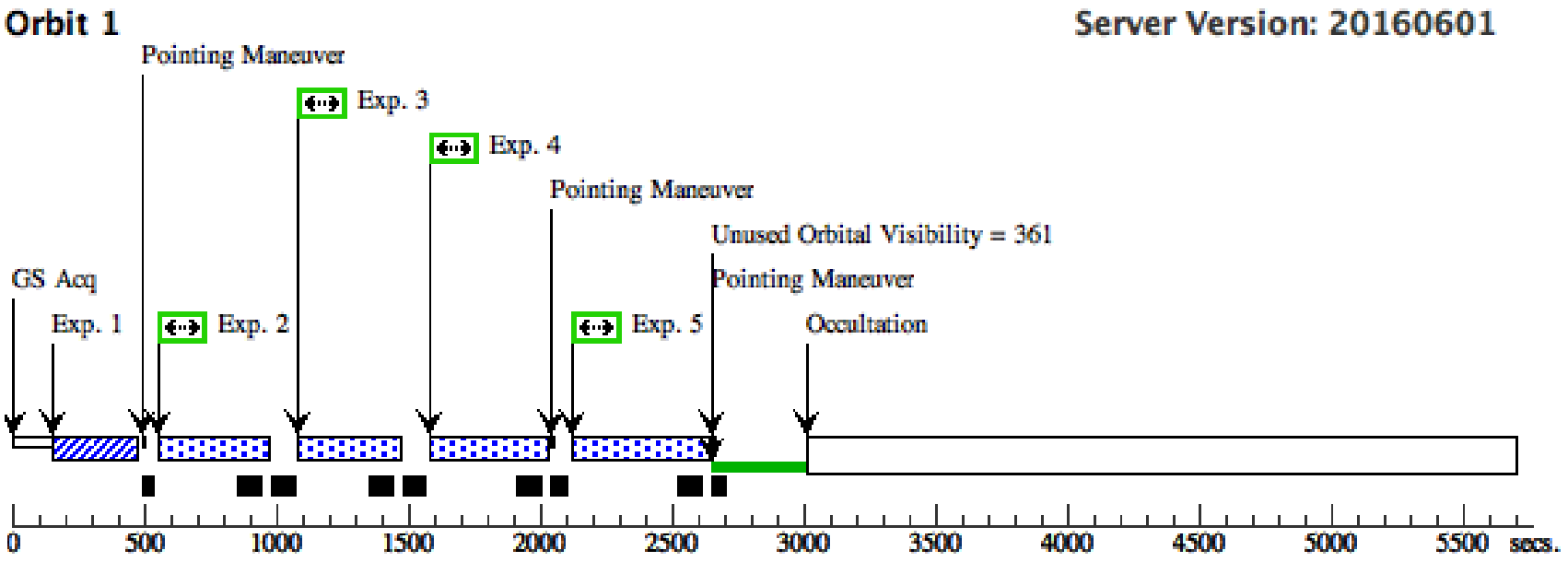
*Comments: Coordinates from Charle's proposal*
*Extended=NO*

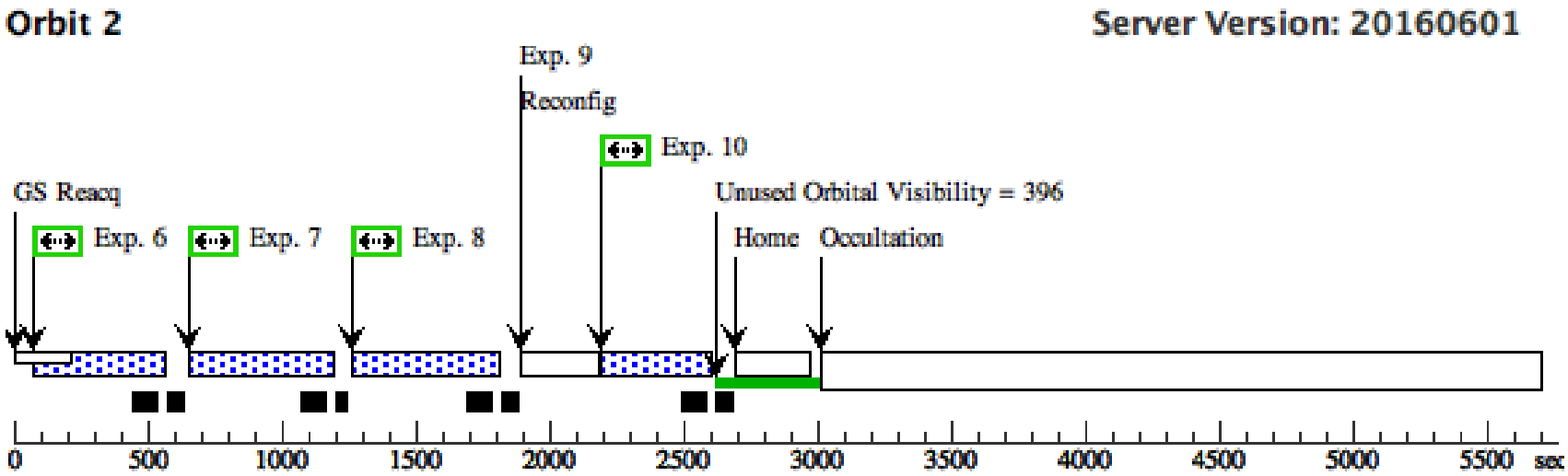
**Exposures**

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ACQ/IM (396029) | (1) WD0308-565 | COS/NUV, ACQ/IMAGE, BOA | MIRRORA | | GS ACQ SCENARIO BASE1B3 | | 45 Secs (45 Secs)<br>*[==>]* | *[1]* |
| 2 | G130M/1222 (COS.sp.395840) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1222 A | BUFFER-TIME=126; FP-POS=3 | | | 226 Secs (226 Secs)<br>*[==>]* | *[1]* |
| | *Comments: Buffer time calculated as 2/3 * ETC buffer time is 2/3*455 which is larger than exptime. Set buffer-time = exptime - 100 sec to maximize time on target = 126*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 3 | G130M/1291 (COS.sp.395841) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=144; FP-POS=3 | | | 244 Secs (244 Secs)<br>*[==>]* | *[1]* |
| | *Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 4 | G130M/1327 (COS.sp.395843) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=212; FP-POS=3 | | | 312 Secs (312 Secs)<br>*[==>]* | *[1]* |
| | *Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 212*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 5 | G130M/1055/FUVA (OS.sp.524117) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1055 A | BUFFER-TIME=234; FP-POS=3; SEGMENT=BOTH | | | 334 Secs (334 Secs)<br>*[==>]* | *[1]* |
| | *Comments: ETC buffer time is larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 224*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 6 | G160M/1577 (395846) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G160M 1577 A | FP-POS=3; BUFFER-TIME=190 | | | 290 Secs (290 Secs)<br>*[==>]* | *[2]* |
| | *Comments: ETC buffer time is 632, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 190* | | | | | | | | |
| 7 | G160M/1623 (395848) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G160M 1623 A | FP-POS=3; BUFFER-TIME=300 | | | 400 Secs (400 Secs)<br>*[==>]* | *[2]* |
| | *Comments: ETC buffer time is 794, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 300* | | | | | | | | |
| 8 | G140L/1230 (COS.sp.395854) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G140L 1280 A | BUFFER-TIME=180; FP-POS=3 | | | 280 Secs (280 Secs)<br>*[==>]* | *[2]* |
| | *Comments: ETC buffer time is 479, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 180*<br>*Continue use of 1 FP-POS* | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 9 | | DARK | S/C, DATA, NONE | | | QASISTATES COS FUV HVLOW HVLOW | 1 Secs (1 Secs)<br>*[==>]* | <br>***[2]*** |
| | *Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.* | | | | | | | | |
| | 10 | G140L/1105 /FUVA (OS.sp.395853) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G140L<br>1105 A | BUFFER-TIME=180;<br>FP-POS=3;<br>SEGMENT=A | | 280 Secs (280 Secs)<br>*[==>]* | <br>***[2]*** |
| | *Comments: ETC buffer time is 398 , larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 180*<br>*Continue use of 1 FP-POS* | | | | | | | | |

Orbit Structure



## Visit

**Proposal 14435, WD0308 - complete (04), completed** Wed Nov 09 16:01:11 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: S/C, COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 22-FEB-2016:00:00:00 AND 28-FEB-2016:00:00:00

*Comments: George Chapman added Exposure 9*

## Diagnostics

(WD0308 - complete (04)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | WD0308-565 | RA: 03 09 47.9200 (47.4496667d)<br>Dec: -56 23 49.41 (-56.39706d)<br>Equinox: J2000 | Proper Motion RA: 0.018141 sec of time/yr<br>Proper Motion Dec: 0.0643 arcsec/yr<br>Epoch of Position: 2000 | V=14.07+/-0.02 | Reference Frame: ICRS |

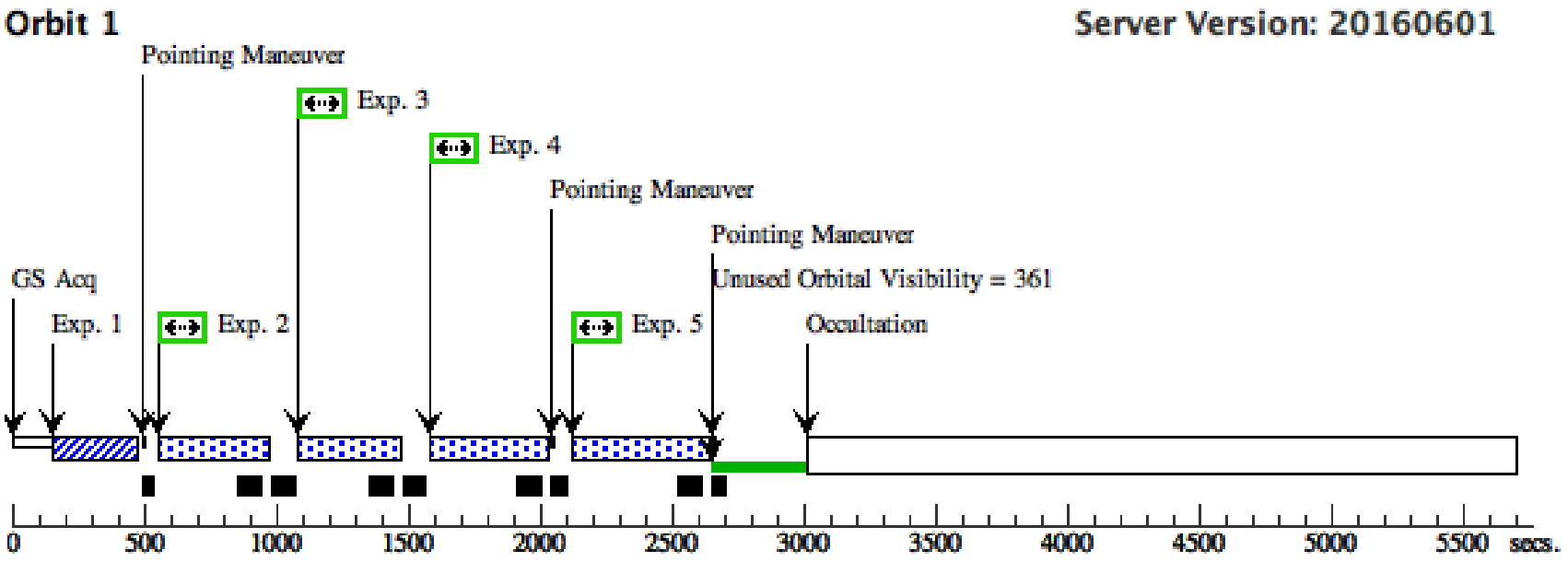
*Comments: Coordinates from Charle's proposal*
*Extended=NO*

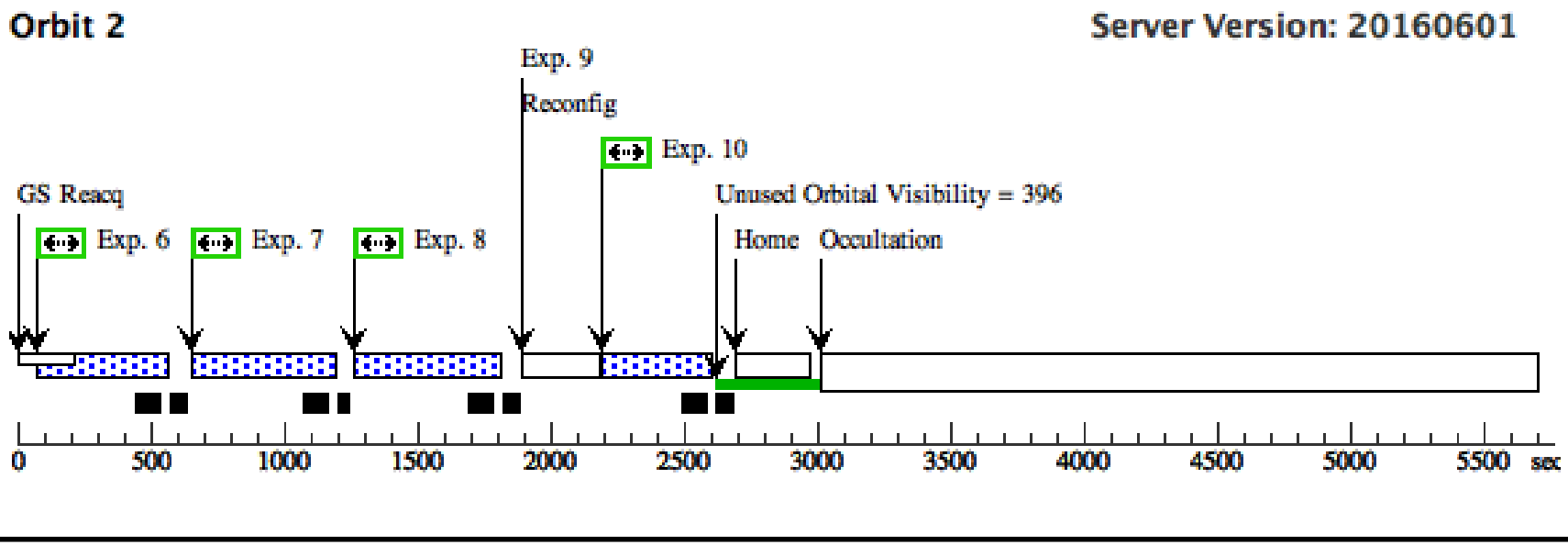
**Exposures**

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ACQ/IM (396029) | (1) WD0308-565 | COS/NUV, ACQ/IMAGE, BOA | MIRRORA | | GS ACQ SCENARIO BASE1B3 | | 45 Secs (45 Secs)<br>*[==>]* | *[1]* |
| 2 | G130M/1222 (COS.sp.395840) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1222 A | BUFFER-TIME=126; FP-POS=3 | | | 226 Secs (226 Secs)<br>*[==>]* | *[1]* |
| | *Comments: Buffer time calculated as 2/3 * ETC buffer time is 2/3*455 which is larger than exptime. Set buffer-time = exptime - 100 sec to maximize time on target = 126*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 3 | G130M/1291 (COS.sp.395841) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=144; FP-POS=3 | | | 244 Secs (244 Secs)<br>*[==>]* | *[1]* |
| | *Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin.*<br>*Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 4 | G130M/1327 (COS.sp.395843) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=212; FP-POS=3 | | | 312 Secs (312 Secs)<br>*[==>]* | *[1]* |
| | *Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin.*<br>*Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 212*<br><br>*Continue use of 1 FP-POS* | | | | | | | | |
| 5 | G130M/1055/FUVA (OS.sp.524117) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1055 A | BUFFER-TIME=234; FP-POS=3; SEGMENT=BOTH | | | 334 Secs (334 Secs)<br>*[==>]* | *[1]* |
| | *Comments: ETC buffer time is larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 224*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 6 | G160M/1577 (395846) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G160M 1577 A | FP-POS=3; BUFFER-TIME=190 | | | 290 Secs (290 Secs)<br>*[==>]* | *[2]* |
| | *Comments: ETC buffer time is 632, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 190* | | | | | | | | |
| 7 | G160M/1623 (395848) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G160M 1623 A | FP-POS=3; BUFFER-TIME=300 | | | 400 Secs (400 Secs)<br>*[==>]* | *[2]* |
| | *Comments: ETC buffer time is 794, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 300* | | | | | | | | |
| 8 | G140L/1230 (COS.sp.395854) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G140L 1280 A | BUFFER-TIME=180; FP-POS=3 | | | 280 Secs (280 Secs)<br>*[==>]* | *[2]* |
| | *Comments: ETC buffer time is 479, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 180*<br>*Continue use of 1 FP-POS* | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 9 | | DARK | S/C, DATA, NONE | | | QASISTATES COS FUV HVLOW HVLOW | 1 Secs (1 Secs)<br>*[==>]* | <br>***[2]*** |
| | *Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.* | | | | | | | | |
| | 10 | G140L/1105 /FUVA (OS.sp.395853) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G140L<br>1105 A | BUFFER-TIME=180;<br>FP-POS=3;<br>SEGMENT=A | | 280 Secs (280 Secs)<br>*[==>]* | <br>***[2]*** |
| | *Comments: ETC buffer time is 398 , larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 180*<br>*Continue use of 1 FP-POS* | | | | | | | | |

Orbit Structure



## Visit

**Proposal 14435, WD0308 - complete (06), completed** Wed Nov 09 16:01:11 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: S/C, COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 18-APR-2016:00:00:00 AND 24-APR-2016:00:00:00

*Comments: George Chapman added Exposure 9*

## Diagnostics

(WD0308 - complete (06)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | WD0308-565 | RA: 03 09 47.9200 (47.4496667d)<br>Dec: -56 23 49.41 (-56.39706d)<br>Equinox: J2000 | Proper Motion RA: 0.018141 sec of time/yr<br>Proper Motion Dec: 0.0643 arcsec/yr<br>Epoch of Position: 2000 | V=14.07+/-0.02 | Reference Frame: ICRS |

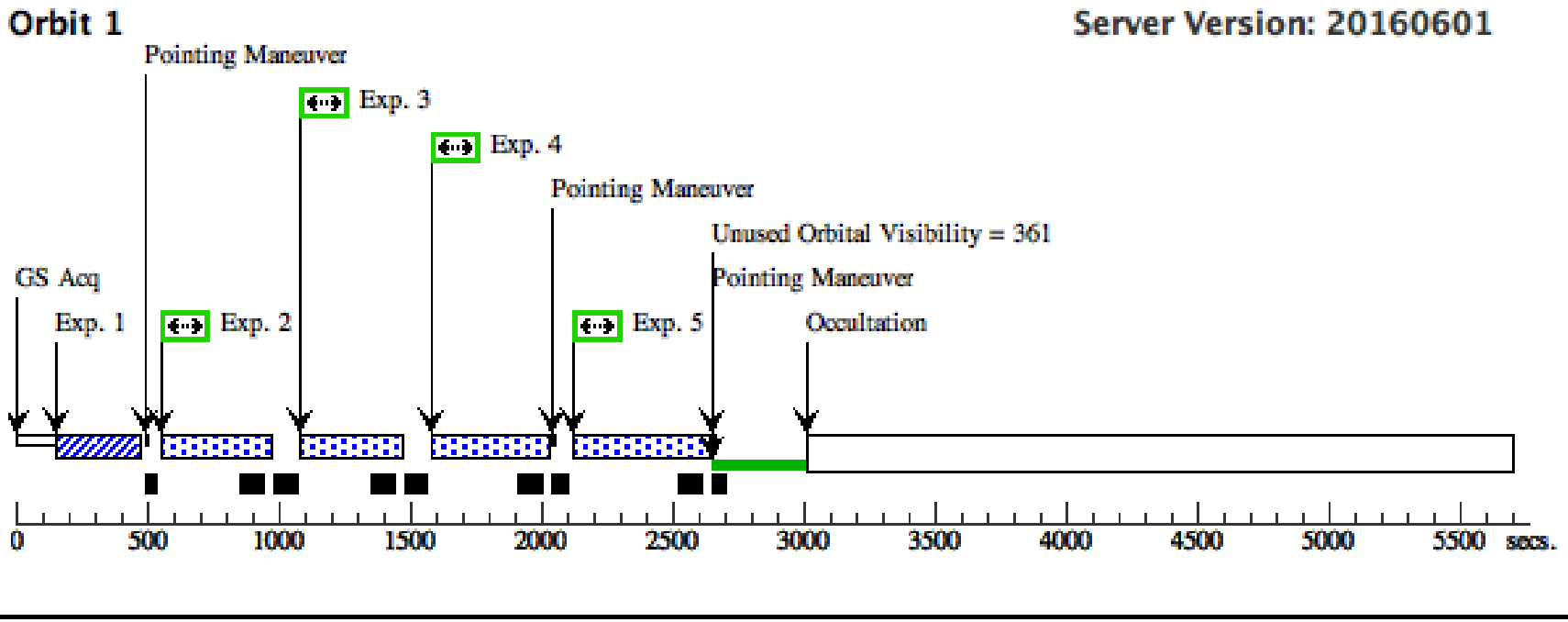
*Comments: Coordinates from Charle's proposal*
*Extended=NO*

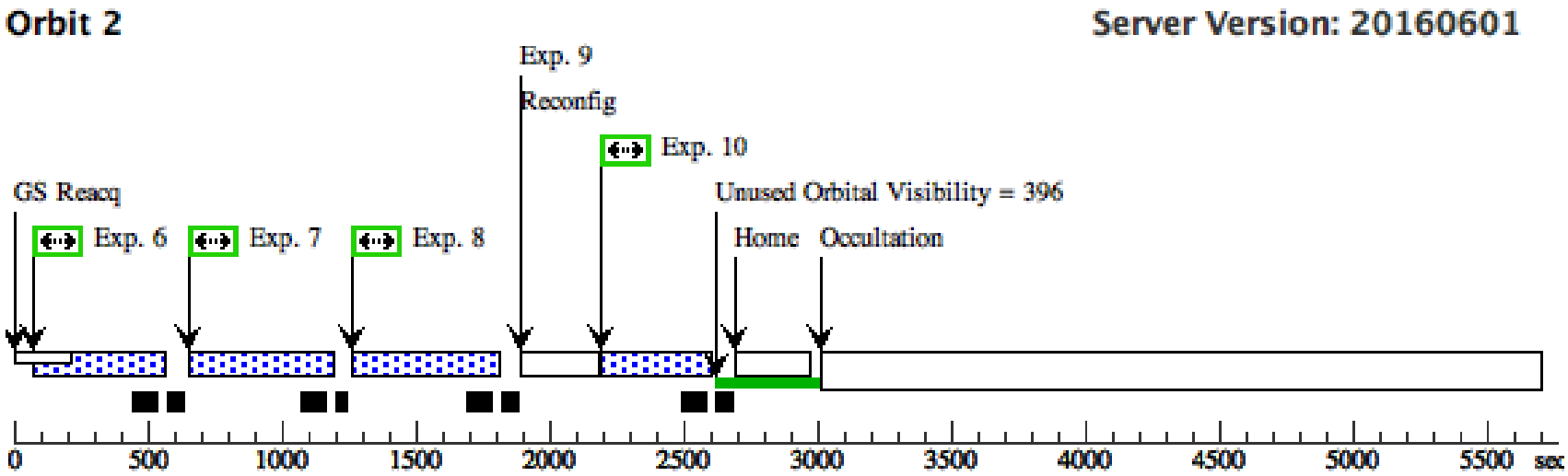
**Exposures**

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ACQ/IM (396029) | (1) WD0308-565 | COS/NUV, ACQ/IMAGE, BOA | MIRRORA | | | | 45 Secs (45 Secs)<br>*[==>]* | *[1]* |
| 2 | G130M/1222 (COS.sp.395840) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1222 A | BUFFER-TIME=126; FP-POS=3 | | | 226 Secs (226 Secs)<br>*[==>]* | *[1]* |
| | *Comments: Buffer time calculated as 2/3 * ETC buffer time is 2/3*455 which is larger than exptime. Set buffer-time = exptime - 100 sec to maximize time on target = 126*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 3 | G130M/1291 (COS.sp.395841) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=144; FP-POS=3 | | | 244 Secs (244 Secs)<br>*[==>]* | *[1]* |
| | *Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 4 | G130M/1327 (COS.sp.395843) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=212; FP-POS=3 | | | 312 Secs (312 Secs)<br>*[==>]* | *[1]* |
| | *Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 212*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 5 | G130M/1055/FUVA (OS.sp.524117) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1055 A | BUFFER-TIME=234; FP-POS=3; SEGMENT=BOTH | | | 334 Secs (334 Secs)<br>*[==>]* | *[1]* |
| | *Comments: ETC buffer time is larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 224*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 6 | G160M/1577 (395846) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G160M 1577 A | FP-POS=3; BUFFER-TIME=190 | | | 290 Secs (290 Secs)<br>*[==>]* | *[2]* |
| | *Comments: ETC buffer time is 632, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 190* | | | | | | | | |
| 7 | G160M/1623 (395848) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G160M 1623 A | FP-POS=3; BUFFER-TIME=300 | | | 400 Secs (400 Secs)<br>*[==>]* | *[2]* |
| | *Comments: ETC buffer time is 794, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 300* | | | | | | | | |
| 8 | G140L/1230 (COS.sp.395854) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G140L 1280 A | BUFFER-TIME=180; FP-POS=3 | | | 280 Secs (280 Secs)<br>*[==>]* | *[2]* |
| | *Comments: ETC buffer time is 479, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 180*<br>*Continue use of 1 FP-POS* | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 9 | | DARK | S/C, DATA, NONE | | | QASISTATES COS FUV HVLOW HVLOW | 1 Secs (1 Secs)<br>*[==>]* | <br>***[2]*** |
| | *Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.* | | | | | | | | |
| | 10 | G140L/1105 /FUVA (OS.sp.395853) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G140L<br>1105 A | BUFFER-TIME=180;<br>FP-POS=3;<br>SEGMENT=A | | 280 Secs (280 Secs)<br>*[==>]* | <br>***[2]*** |
| | *Comments: ETC buffer time is 398 , larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 180*<br>*Continue use of 1 FP-POS* | | | | | | | | |

Orbit Structure



## Visit

**Proposal 14435, WD0308 - complete (08), completed** Wed Nov 09 16:01:11 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: S/C, COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 20-JUN-2016:00:00:00 AND 26-JUN-2016:00:00:00

*Comments: George Chapman added Exposure 9*

## Diagnostics

(WD0308 - complete (08)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | WD0308-565 | RA: 03 09 47.9200 (47.4496667d)<br>Dec: -56 23 49.41 (-56.39706d)<br>Equinox: J2000 | Proper Motion RA: 0.018141 sec of time/yr<br>Proper Motion Dec: 0.0643 arcsec/yr<br>Epoch of Position: 2000 | V=14.07+/-0.02 | Reference Frame: ICRS |

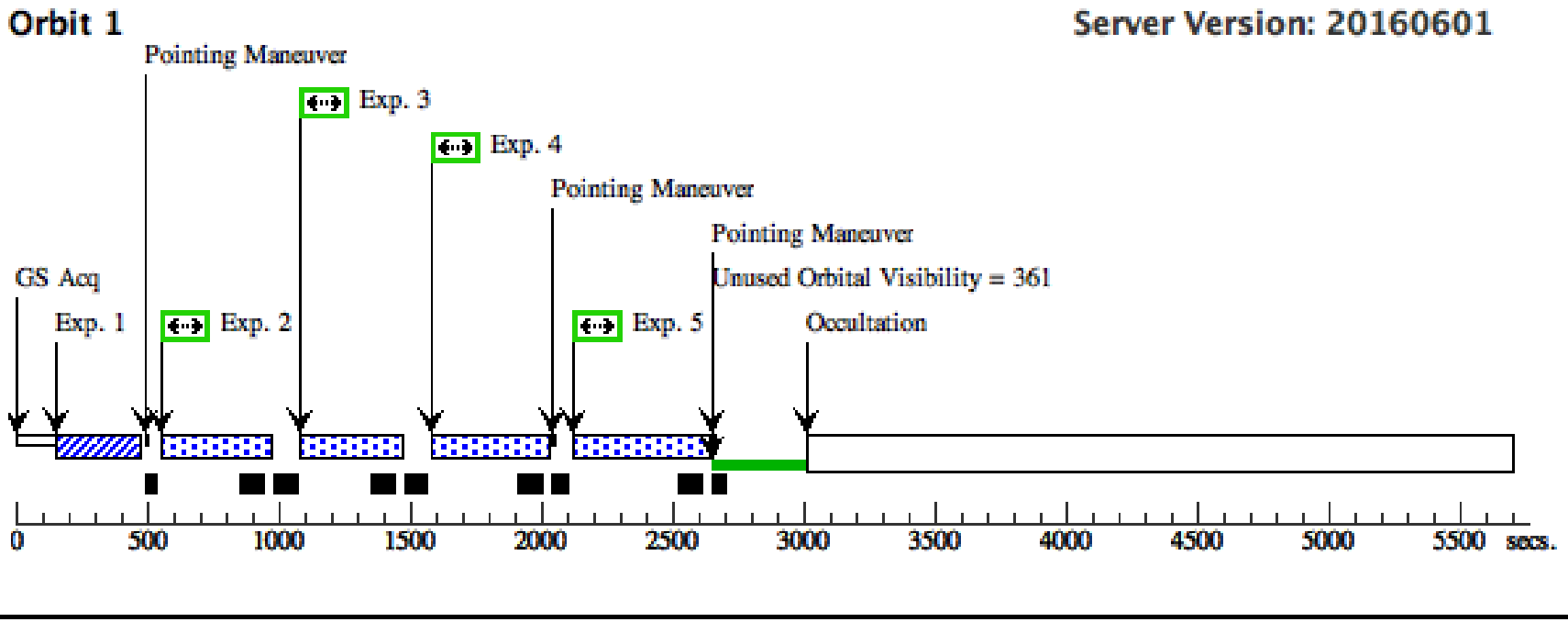
*Comments: Coordinates from Charle's proposal*
*Extended=NO*

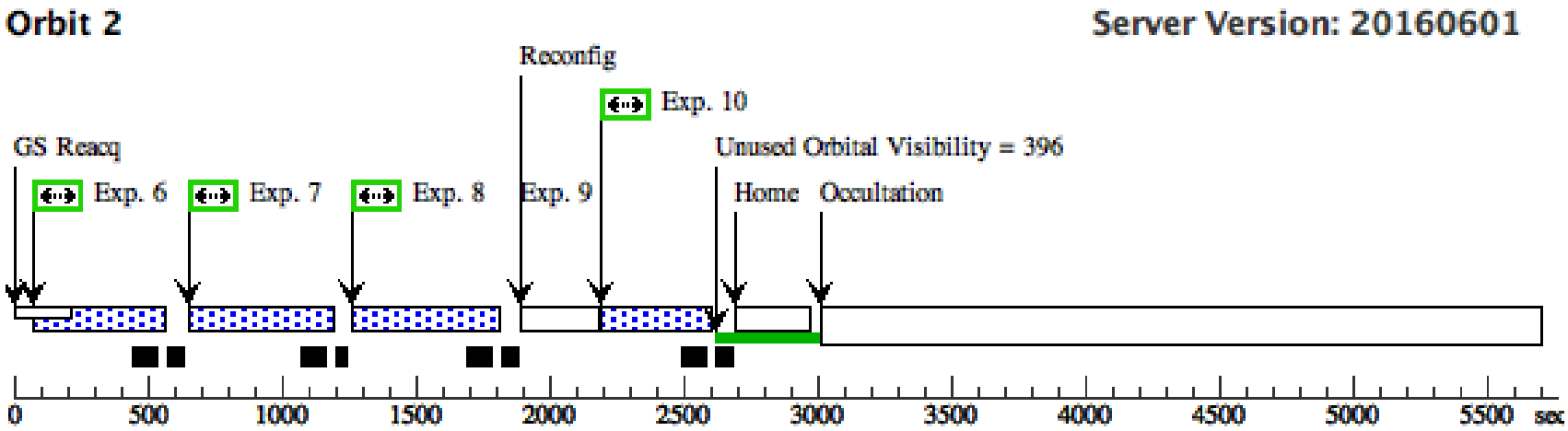
**Exposures**

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ACQ/IM (396029) | (1) WD0308-565 | COS/NUV, ACQ/IMAGE, BOA | MIRRORA | | | | 45 Secs (45 Secs)<br>*[==>]* | <br>***[1]*** |
| 2 | G130M/1222 (COS.sp.395840) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1222 A | BUFFER-TIME=126; FP-POS=3 | | | 226 Secs (226 Secs)<br>*[==>]* | <br>***[1]*** |
| | *Comments: Buffer time calculated as 2/3 * ETC buffer time is 2/3*455 which is larger than exptime. Set buffer-time = exptime - 100 sec to maximize time on target = 126*<br><br>*Continue use of 1 FP-POS* | | | | | | | | |
| 3 | G130M/1291 (COS.sp.395841) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=144; FP-POS=3 | | | 244 Secs (244 Secs)<br>*[==>]* | <br>***[1]*** |
| | *Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 4 | G130M/1327 (COS.sp.395843) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=212; FP-POS=3 | | | 312 Secs (312 Secs)<br>*[==>]* | <br>***[1]*** |
| | *Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 212*<br><br>*Continue use of 1 FP-POS* | | | | | | | | |
| 5 | G130M/1055/FUVA (OS.sp.524117) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1055 A | BUFFER-TIME=234; FP-POS=3; SEGMENT=BOTH | | | 334 Secs (334 Secs)<br>*[==>]* | <br>***[1]*** |
| | *Comments: ETC buffer time is larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 224*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 6 | G160M/1577 (395846) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G160M 1577 A | FP-POS=3; BUFFER-TIME=190 | | | 290 Secs (290 Secs)<br>*[==>]* | <br>***[2]*** |
| | *Comments: ETC buffer time is 632, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 190* | | | | | | | | |
| 7 | G160M/1623 (395848) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G160M 1623 A | FP-POS=3; BUFFER-TIME=300 | | | 400 Secs (400 Secs)<br>*[==>]* | <br>***[2]*** |
| | *Comments: ETC buffer time is 794, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 300* | | | | | | | | |
| 8 | G140L/1230 (COS.sp.395854) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G140L 1280 A | BUFFER-TIME=180; FP-POS=3 | | | 280 Secs (280 Secs)<br>*[==>]* | <br>***[2]*** |
| | *Comments: ETC buffer time is 479, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 180*<br>*Continue use of 1 FP-POS* | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 9 | | DARK | S/C, DATA, NONE | | | QASISTATES COS FUV HVLOW HVLOW | 1 Secs (1 Secs)<br>*[==>]* | <br>***[2]*** |
| | *Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.* | | | | | | | | |
| | 10 | G140L/1105 /FUVA (OS.sp.395853) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G140L<br>1105 A | BUFFER-TIME=180;<br>FP-POS=3;<br>SEGMENT=A | | 280 Secs (280 Secs)<br>*[==>]* | <br>***[2]*** |
| | *Comments: ETC buffer time is 398 , larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 180*<br>*Continue use of 1 FP-POS* | | | | | | | | |

Orbit Structure



## Visit

**Proposal 14435, WD0308 - complete (10), completed** Wed Nov 09 16:01:11 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: S/C, COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 22-AUG-2016:00:00:00 AND 28-AUG-2016:00:00:00

*Comments: George Chapman added Exposure 9*

## Diagnostics

(WD0308 - complete (10)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | WD0308-565 | RA: 03 09 47.9200 (47.4496667d)<br>Dec: -56 23 49.41 (-56.39706d)<br>Equinox: J2000 | Proper Motion RA: 0.018141 sec of time/yr<br>Proper Motion Dec: 0.0643 arcsec/yr<br>Epoch of Position: 2000 | V=14.07+/-0.02 | Reference Frame: ICRS |

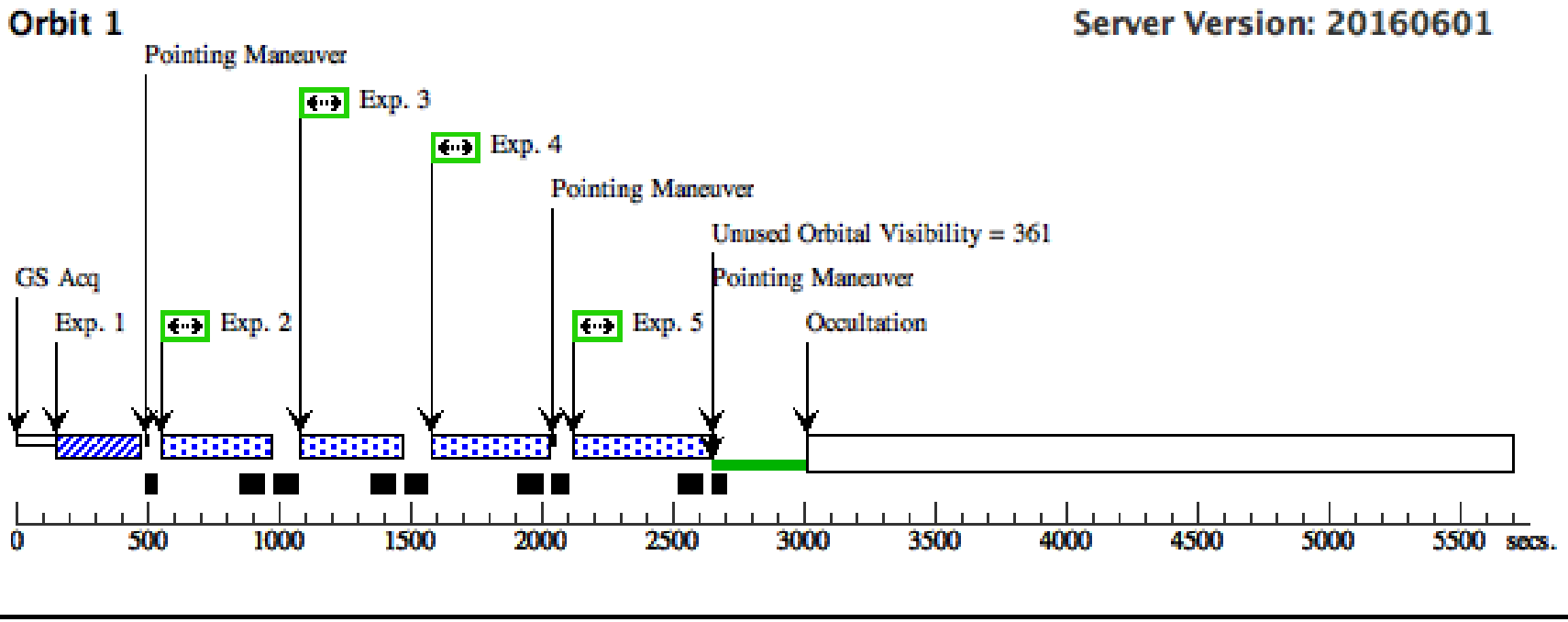
*Comments: Coordinates from Charle's proposal*
*Extended=NO*

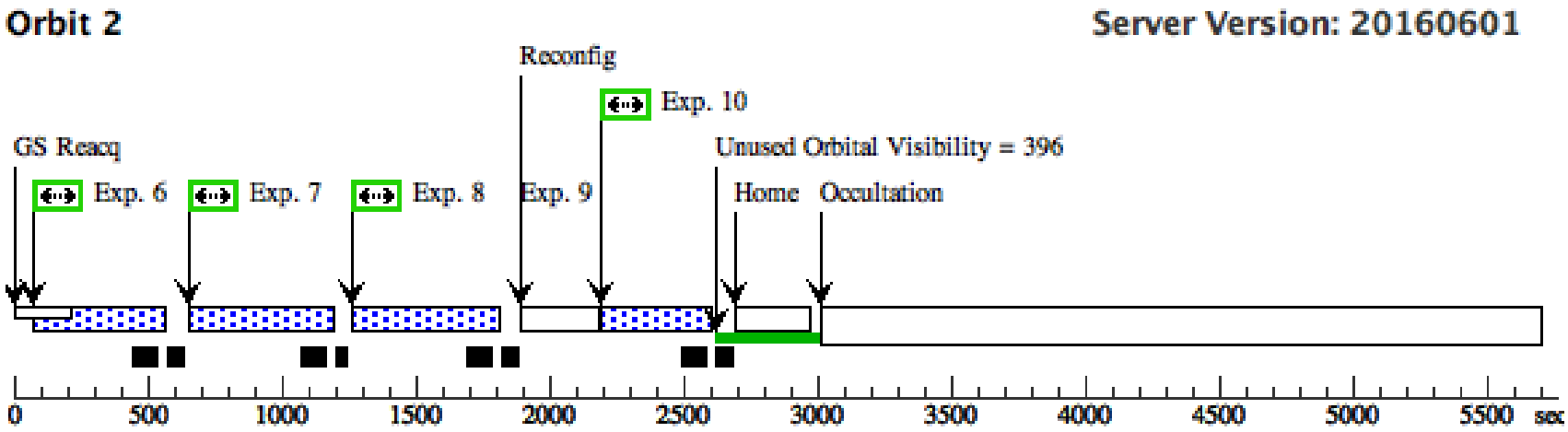
**Exposures**

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ACQ/IM (396029) | (1) WD0308-565 | COS/NUV, ACQ/IMAGE, BOA | MIRRORA | | | | 45 Secs (45 Secs)<br>*[==>]* | <br>***[1]*** |
| 2 | G130M/1222 (COS.sp.395840) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1222 A | BUFFER-TIME=126; FP-POS=3 | | | 226 Secs (226 Secs)<br>*[==>]* | <br>***[1]*** |
| | *Comments: Buffer time calculated as 2/3 * ETC buffer time is 2/3*455 which is larger than exptime. Set buffer-time = exptime - 100 sec to maximize time on target = 126*<br><br>*Continue use of 1 FP-POS* | | | | | | | | |
| 3 | G130M/1291 (COS.sp.395841) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=144; FP-POS=3 | | | 244 Secs (244 Secs)<br>*[==>]* | <br>***[1]*** |
| | *Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin.*<br>*Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 4 | G130M/1327 (COS.sp.395843) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=212; FP-POS=3 | | | 312 Secs (312 Secs)<br>*[==>]* | <br>***[1]*** |
| | *Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin.*<br>*Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 212*<br><br>*Continue use of 1 FP-POS* | | | | | | | | |
| 5 | G130M/1055/FUVA (OS.sp.524117) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1055 A | BUFFER-TIME=234; FP-POS=3; SEGMENT=BOTH | | | 334 Secs (334 Secs)<br>*[==>]* | <br>***[1]*** |
| | *Comments: ETC buffer time is larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 224*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 6 | G160M/1577 (395846) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G160M 1577 A | FP-POS=3; BUFFER-TIME=190 | | | 290 Secs (290 Secs)<br>*[==>]* | <br>***[2]*** |
| | *Comments: ETC buffer time is 632, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 190* | | | | | | | | |
| 7 | G160M/1623 (395848) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G160M 1623 A | FP-POS=3; BUFFER-TIME=300 | | | 400 Secs (400 Secs)<br>*[==>]* | <br>***[2]*** |
| | *Comments: ETC buffer time is 794, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 300* | | | | | | | | |
| 8 | G140L/1230 (COS.sp.395854) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G140L 1280 A | BUFFER-TIME=180; FP-POS=3 | | | 280 Secs (280 Secs)<br>*[==>]* | <br>***[2]*** |
| | *Comments: ETC buffer time is 479, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 180*<br>*Continue use of 1 FP-POS* | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 9 | | DARK | S/C, DATA, NONE | | | QASISTATES COS FUV HVLOW HVLOW | 1 Secs (1 Secs)<br>*[==>]* | <br>***[2]*** |
| | *Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.* | | | | | | | | |
| | 10 | G140L/1105 /FUVA (OS.sp.395853) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G140L<br>1105 A | BUFFER-TIME=180;<br>FP-POS=3;<br>SEGMENT=A | | 280 Secs (280 Secs)<br>*[==>]* | <br>***[2]*** |
| | *Comments: ETC buffer time is 398 , larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 180*<br>*Continue use of 1 FP-POS* | | | | | | | | |

Orbit Structure



## Visit

**Proposal 14435, WD0308 - complete (12), implementation** Wed Nov 09 16:01:11 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: S/C, COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 17-OCT-2016:00:00:00 AND 23-OCT-2016:00:00:00

*Comments: George Chapman added Exposure 9*

## Diagnostics

(WD0308 - complete (12)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | WD0308-565 | RA: 03 09 47.9200 (47.4496667d)<br>Dec: -56 23 49.41 (-56.39706d)<br>Equinox: J2000 | Proper Motion RA: 0.018141 sec of time/yr<br>Proper Motion Dec: 0.0643 arcsec/yr<br>Epoch of Position: 2000 | V=14.07+/-0.02 | Reference Frame: ICRS |

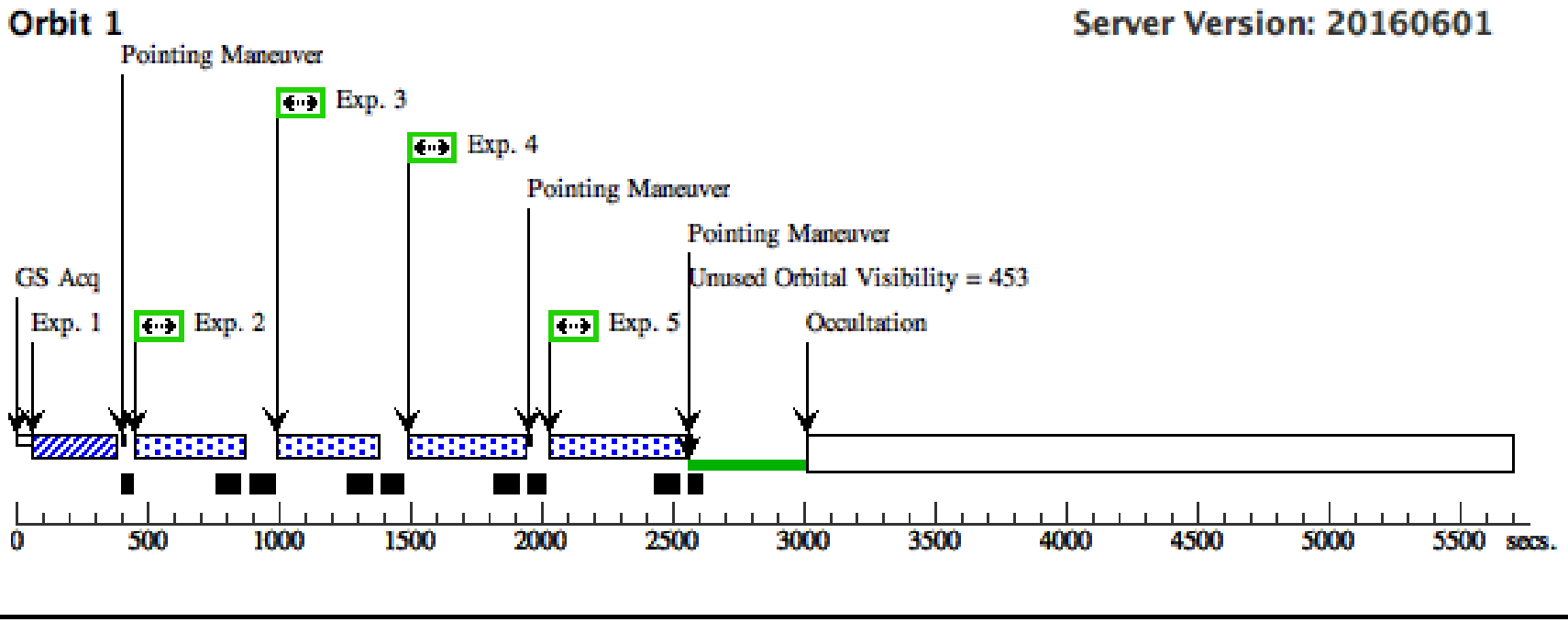
*Comments: Coordinates from Charle's proposal*
*Extended=NO*

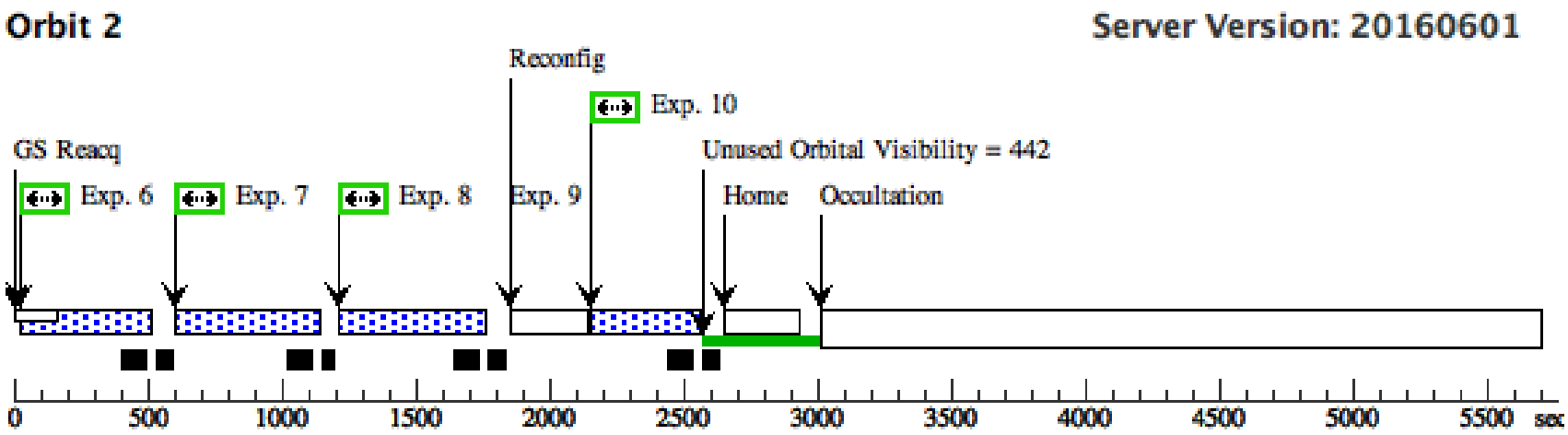
**Exposures**

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ACQ/IM (396029) | (1) WD0308-565 | COS/NUV, ACQ/IMAGE, BOA | MIRRORA | | GS ACQ SCENARIO SINGLE | | 45 Secs (45 Secs)<br>*[==>]* | ***[1]*** |
| 2 | G130M/1222 (COS.sp.395840) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1222 A | BUFFER-TIME=126; FP-POS=3 | | | 226 Secs (226 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: Buffer time calculated as 2/3 * ETC buffer time is 2/3*455 which is larger than exptime. Set buffer-time = exptime - 100 sec to maximize time on target = 126*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 3 | G130M/1291 (COS.sp.395841) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=144; FP-POS=3 | | | 244 Secs (244 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 4 | G130M/1327 (COS.sp.395843) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=212; FP-POS=3 | | | 312 Secs (312 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 212*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 5 | G130M/1055/FUVA (OS.sp.524117) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1055 A | BUFFER-TIME=234; FP-POS=3; SEGMENT=BOTH | | | 334 Secs (334 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: ETC buffer time is larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 224*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 6 | G160M/1577 (395846) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G160M 1577 A | FP-POS=3; BUFFER-TIME=190 | | | 290 Secs (290 Secs)<br>*[==>]* | ***[2]*** |
| | *Comments: ETC buffer time is 632, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 190* | | | | | | | | |
| 7 | G160M/1623 (395848) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G160M 1623 A | FP-POS=3; BUFFER-TIME=300 | | | 400 Secs (400 Secs)<br>*[==>]* | ***[2]*** |
| | *Comments: ETC buffer time is 794, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 300* | | | | | | | | |
| 8 | G140L/1230 (COS.sp.395854) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G140L 1280 A | BUFFER-TIME=180; FP-POS=3 | | | 280 Secs (280 Secs)<br>*[==>]* | ***[2]*** |
| | *Comments: ETC buffer time is 479, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 180*<br>*Continue use of 1 FP-POS* | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 9 | | DARK | S/C, DATA, NONE | | | QASISTATES COS FUV HVLOW HVLOW | 1 Secs (1 Secs)<br>*[==>]* | <br>***[2]*** |
| | *Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.* | | | | | | | | |
| | 10 | G140L/1105 /FUVA (OS.sp.395853) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G140L<br>1105 A | BUFFER-TIME=180;<br>FP-POS=3;<br>SEGMENT=A | | 280 Secs (280 Secs)<br>*[==>]* | <br>***[2]*** |
| | *Comments: ETC buffer time is 398 , larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 180*<br>*Continue use of 1 FP-POS* | | | | | | | | |

Orbit Structure



## Visit

**Proposal 14435, WD0308 - reduced (01), completed** Wed Nov 09 16:01:11 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 23-NOV-2015:00:00:00 AND 29-NOV-2015:00:00:00

## Diagnostics

(WD0308 - reduced (01)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

## Fixed Targets

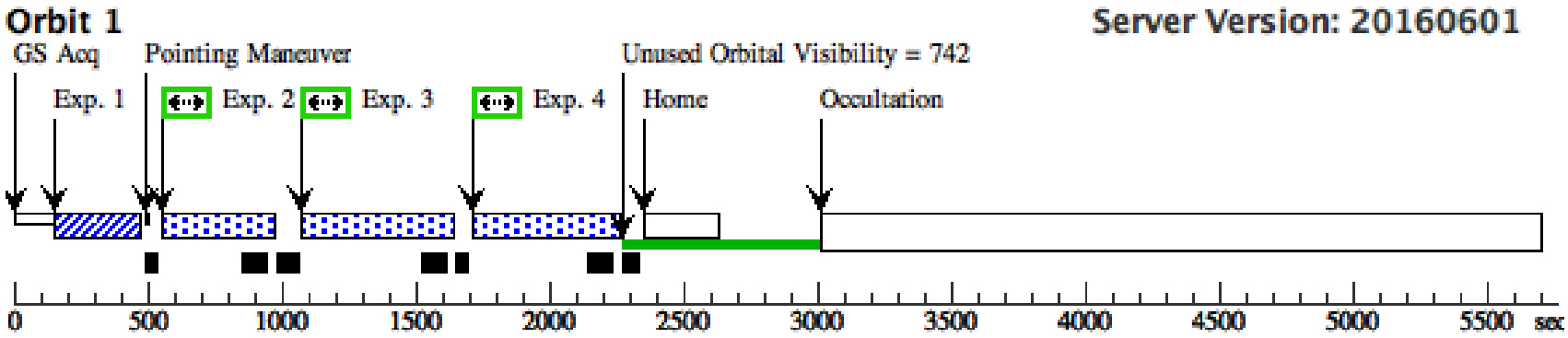
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | WD0308-565 | RA: 03 09 47.9200 (47.4496667d)<br>Dec: -56 23 49.41 (-56.39706d)<br>Equinox: J2000 | Proper Motion RA: 0.018141 sec of time/yr<br>Proper Motion Dec: 0.0643 arcsec/yr<br>Epoch of Position: 2000 | V=14.07+/-0.02 | Reference Frame: ICRS |

*Comments: Coordinates from Charle's proposal*
*Extended=NO*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ACQ/IM (396029) | (1) WD0308-565 | COS/NUV, ACQ/IMAGE, BOA | MIRRORA | | | | 45 Secs (45 Secs)<br>*[==>]* | ***[1]*** |
| 2 | G130M/1291 (COS.sp.395841) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=144; FP-POS=3 | | | 244 Secs (244 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin.*<br>*Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 3 | G160M/1623 (395848) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G160M 1623 A | FP-POS=3; BUFFER-TIME=300 | | | 400 Secs (400 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: ETC buffer time is 794, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 300* | | | | | | | | |
| 4 | G140L/1230 (COS.sp.395854) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G140L 1280 A | BUFFER-TIME=180; FP-POS=3 | | | 280 Secs (280 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: ETC buffer time is 479, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 180*<br>*Continue use of 1 FP-POS* | | | | | | | | |

Orbit Structure



## Visit

**Proposal 14435, WD0308 - reduced (03), completed** Wed Nov 09 16:01:11 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 18-JAN-2016:00:00:00 AND 24-JAN-2016:00:00:00

## Diagnostics

(WD0308 - reduced (03)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

## Fixed Targets

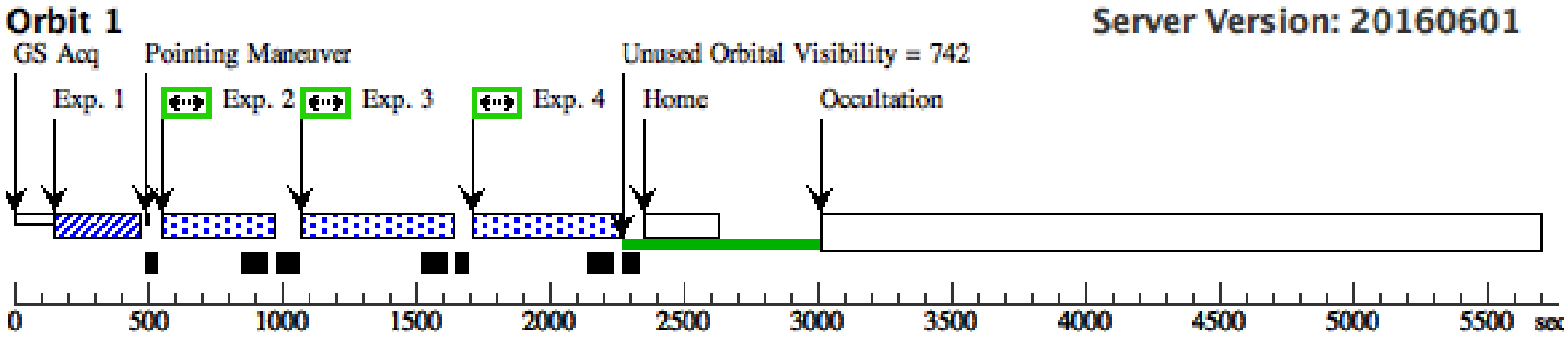
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | WD0308-565 | RA: 03 09 47.9200 (47.4496667d)<br>Dec: -56 23 49.41 (-56.39706d)<br>Equinox: J2000 | Proper Motion RA: 0.018141 sec of time/yr<br>Proper Motion Dec: 0.0643 arcsec/yr<br>Epoch of Position: 2000 | V=14.07+/-0.02 | Reference Frame: ICRS |

*Comments: Coordinates from Charle's proposal*
*Extended=NO*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ACQ/IM (396029) | (1) WD0308-565 | COS/NUV, ACQ/IMAGE, BOA | MIRRORA | | | | 45 Secs (45 Secs)<br>*[==>]* | *[1]* |
| 2 | G130M/1291 (COS.sp.395841) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=144; FP-POS=3 | | | 244 Secs (244 Secs)<br>*[==>]* | *[1]* |
| | *Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin.*<br>*Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 3 | G160M/1623 (395848) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G160M 1623 A | FP-POS=3; BUFFER-TIME=300 | | | 400 Secs (400 Secs)<br>*[==>]* | *[1]* |
| | *Comments: ETC buffer time is 794, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 300* | | | | | | | | |
| 4 | G140L/1230 (COS.sp.395854) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G140L 1280 A | BUFFER-TIME=180; FP-POS=3 | | | 280 Secs (280 Secs)<br>*[==>]* | *[1]* |
| | *Comments: ETC buffer time is 479, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 180*<br>*Continue use of 1 FP-POS* | | | | | | | | |

Orbit Structure



## Visit

**Proposal 14435, WD0308 - reduced (05), completed** Wed Nov 09 16:01:12 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 21-MAR-2016:00:00:00 AND 27-MAR-2016:00:00:00

## Diagnostics

(WD0308 - reduced (05)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

## Fixed Targets

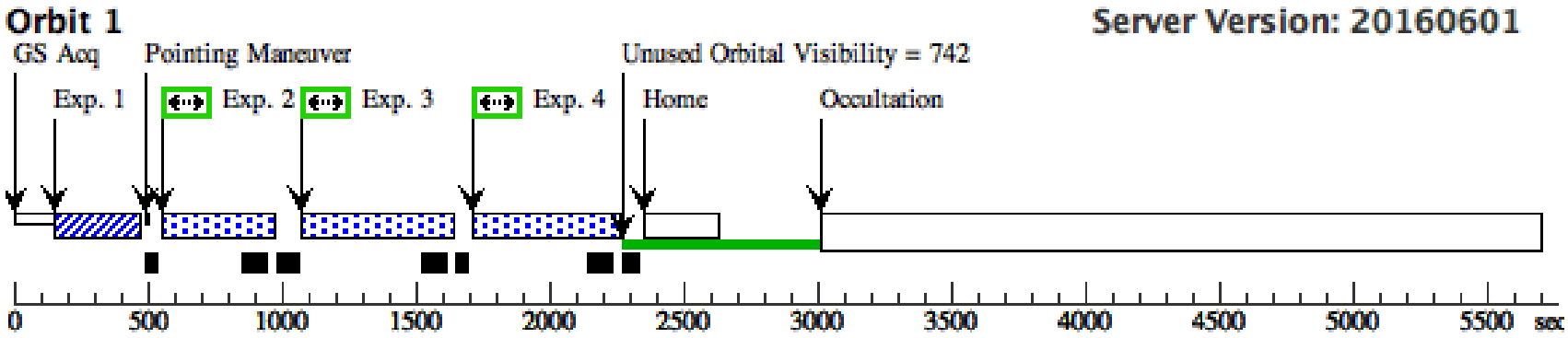
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | WD0308-565 | RA: 03 09 47.9200 (47.4496667d)<br>Dec: -56 23 49.41 (-56.39706d)<br>Equinox: J2000 | Proper Motion RA: 0.018141 sec of time/yr<br>Proper Motion Dec: 0.0643 arcsec/yr<br>Epoch of Position: 2000 | V=14.07+/-0.02 | Reference Frame: ICRS |

*Comments: Coordinates from Charle's proposal*
*Extended=NO*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ACQ/IM (396029) | (1) WD0308-565 | COS/NUV, ACQ/IMAGE, BOA | MIRRORA | | | | 45 Secs (45 Secs)<br>*[==>]* | ***[1]*** |
| 2 | G130M/1291 (COS.sp.395841) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=144; FP-POS=3 | | | 244 Secs (244 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin.*<br>*Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144*<br>*Continue use of 1 FP-POS* | | | | | | | | |
| 3 | G160M/1623 (395848) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G160M 1623 A | FP-POS=3; BUFFER-TIME=300 | | | 400 Secs (400 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: ETC buffer time is 794, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 300* | | | | | | | | |
| 4 | G140L/1230 (COS.sp.395854) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G140L 1280 A | BUFFER-TIME=180; FP-POS=3 | | | 280 Secs (280 Secs)<br>*[==>]* | ***[1]*** |
| | *Comments: ETC buffer time is 479, larger than exptime*<br>*Target has been observed before no need to 2/3 factor*<br>*Set buffer time = exptime - 100 = 180*<br>*Continue use of 1 FP-POS* | | | | | | | | |

Orbit Structure



## Visit

**Proposal 14435, WD0308 - reduced (07), completed** Wed Nov 09 16:01:12 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 23-MAY-2016:00:00:00 AND 29-MAY-2016:00:00:00

## Diagnostics

(WD0308 - reduced (07)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | WD0308-565 | RA: 03 09 47.9200 (47.4496667d)<br>Dec: -56 23 49.41 (-56.39706d)<br>Equinox: J2000 | Proper Motion RA: 0.018141 sec of time/yr<br>Proper Motion Dec: 0.0643 arcsec/yr<br>Epoch of Position: 2000 | V=14.07+/-0.02 | Reference Frame: ICRS |

*Comments: Coordinates from Charle's proposal*
*Extended=NO*

## Exposures

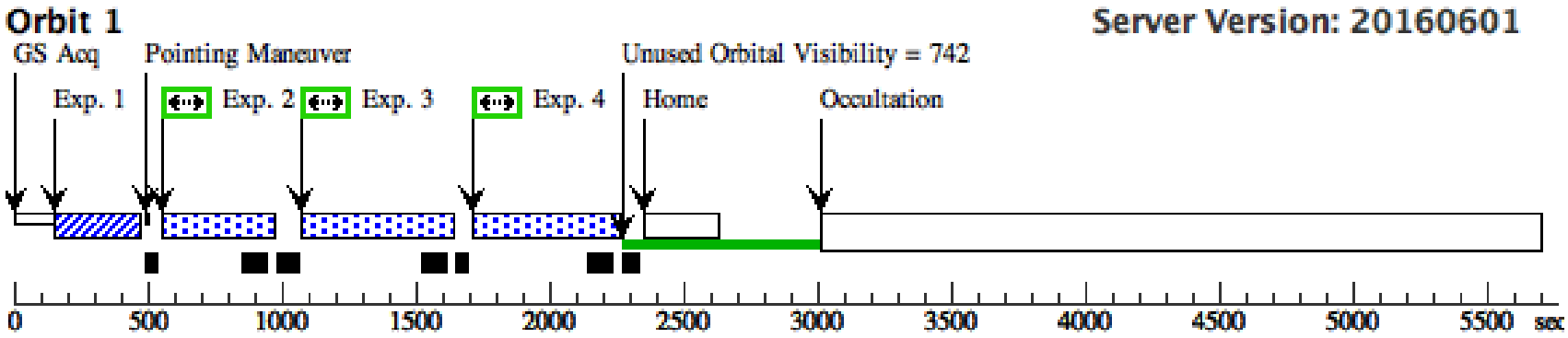
| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ACQ/IM (396029) | (1) WD0308-565 | COS/NUV, ACQ/IMAGE, BOA | MIRRORA | | | | 45 Secs (45 Secs)<br>*[==>]* | ***[1]*** |
| 2 | G130M/1291 (COS.sp.395841) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=144; FP-POS=3 | | | 244 Secs (244 Secs)<br>*[==>]* | ***[1]*** |
| 3 | G160M/1623 (395848) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G160M 1623 A | FP-POS=3; BUFFER-TIME=300 | | | 400 Secs (400 Secs)<br>*[==>]* | ***[1]*** |
| 4 | G140L/1230 (COS.sp.395854) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G140L 1280 A | BUFFER-TIME=180; FP-POS=3 | | | 280 Secs (280 Secs)<br>*[==>]* | ***[1]*** |

*Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin.*
*Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144*
*Continue use of 1 FP-POS*

*Comments: ETC buffer time is 794, larger than exptime*
*Target has been observed before no need to 2/3 factor*
*Set buffer time = exptime - 100 = 300*

*Comments: ETC buffer time is 479, larger than exptime*
*Target has been observed before no need to 2/3 factor*
*Set buffer time = exptime - 100 = 180*
*Continue use of 1 FP-POS*

Orbit Structure



## Visit

**Proposal 14435, WD0308 - reduced (09), completed** Wed Nov 09 16:01:12 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 25-JUL-2016:00:00:00 AND 31-JUL-2016:00:00:00

## Diagnostics

(WD0308 - reduced (09)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | WD0308-565 | RA: 03 09 47.9200 (47.4496667d)<br>Dec: -56 23 49.41 (-56.39706d)<br>Equinox: J2000 | Proper Motion RA: 0.018141 sec of time/yr<br>Proper Motion Dec: 0.0643 arcsec/yr<br>Epoch of Position: 2000 | V=14.07+/-0.02 | Reference Frame: ICRS |

*Comments: Coordinates from Charle's proposal*
*Extended=NO*

## Exposures

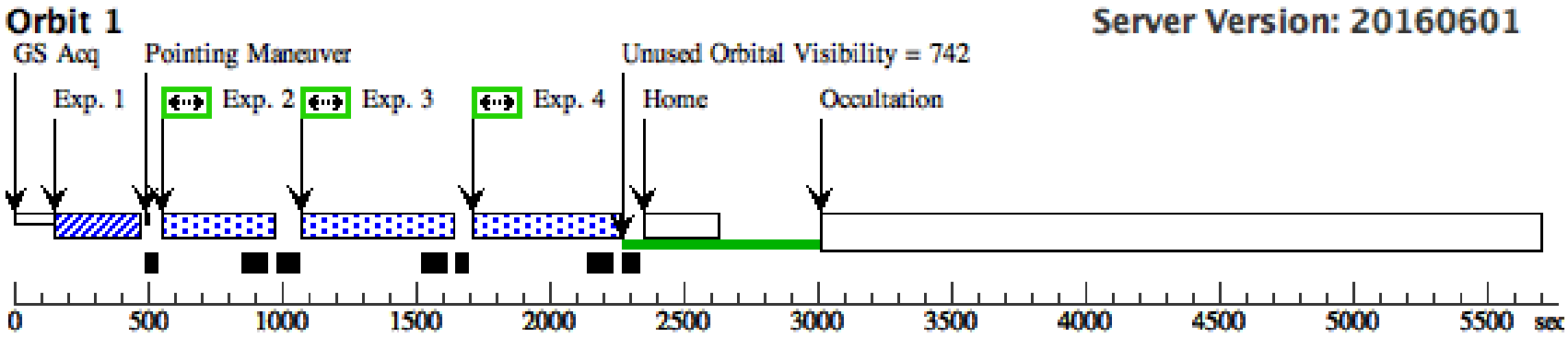
| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ACQ/IM (396029) | (1) WD0308-565 | COS/NUV, ACQ/IMAGE, BOA | MIRRORA | | | | 45 Secs (45 Secs)<br>*[==>]* | ***[1]*** |
| 2 | G130M/1291 (COS.sp.395841) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=144; FP-POS=3 | | | 244 Secs (244 Secs)<br>*[==>]* | ***[1]*** |
| 3 | G160M/1623 (395848) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G160M 1623 A | FP-POS=3; BUFFER-TIME=300 | | | 400 Secs (400 Secs)<br>*[==>]* | ***[1]*** |
| 4 | G140L/1230 (COS.sp.395854) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G140L 1280 A | BUFFER-TIME=180; FP-POS=3 | | | 280 Secs (280 Secs)<br>*[==>]* | ***[1]*** |

*Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin.*
*Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144*
*Continue use of 1 FP-POS*

*Comments: ETC buffer time is 794, larger than exptime*
*Target has been observed before no need to 2/3 factor*
*Set buffer time = exptime - 100 = 300*

*Comments: ETC buffer time is 479, larger than exptime*
*Target has been observed before no need to 2/3 factor*
*Set buffer time = exptime - 100 = 180*
*Continue use of 1 FP-POS*

Orbit Structure



## Visit

**Proposal 14435, WD0308 - reduced (11), scheduled** Wed Nov 09 16:01:12 GMT 2016

**Diagnostic Status: Warning**

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 19-SEP-2016:00:00:00 AND 25-SEP-2016:00:00:00

## Diagnostics

(WD0308 - reduced (11)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | WD0308-565 | RA: 03 09 47.9200 (47.4496667d)<br>Dec: -56 23 49.41 (-56.39706d)<br>Equinox: J2000 | Proper Motion RA: 0.018141 sec of time/yr<br>Proper Motion Dec: 0.0643 arcsec/yr<br>Epoch of Position: 2000 | V=14.07+/-0.02 | Reference Frame: ICRS |

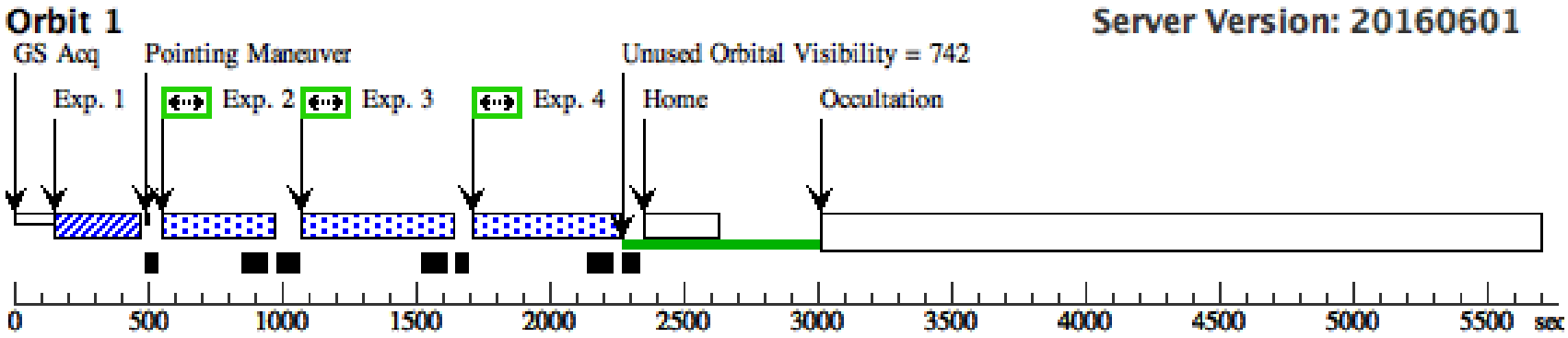
*Comments: Coordinates from Charle's proposal*
*Extended=NO*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ACQ/IM (396029) | (1) WD0308-565 | COS/NUV, ACQ/IMAGE, BOA | MIRRORA | | | | 45 Secs (45 Secs)<br>*[==>]* | *[1]* |
| 2 | G130M/1291 (COS.sp.395841) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=144; FP-POS=3 | | | 244 Secs (244 Secs)<br>*[==>]* | *[1]* |
| 3 | G160M/1623 (395848) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G160M 1623 A | FP-POS=3; BUFFER-TIME=300 | | | 400 Secs (400 Secs)<br>*[==>]* | *[1]* |
| 4 | G140L/1230 (COS.sp.395854) | (1) WD0308-565 | COS/FUV, TIME-TAG, PSA | G140L 1280 A | BUFFER-TIME=180; FP-POS=3 | | | 280 Secs (280 Secs)<br>*[==>]* | *[1]* |

*Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin.*
*Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144*
*Continue use of 1 FP-POS*

*Comments: ETC buffer time is 794, larger than exptime*
*Target has been observed before no need to 2/3 factor*
*Set buffer time = exptime - 100 = 300*

*Comments: ETC buffer time is 479, larger than exptime*
*Target has been observed before no need to 2/3 factor*
*Set buffer time = exptime - 100 = 180*
*Continue use of 1 FP-POS*

Orbit Structure