# 12276 - Mapping a nearby galaxy filament

Cycle: 18, Proposal Category: GO

(Availability Mode: SUPPORTED)

**INVESTIGATORS**



| *Name* | *Institution* | *E-Mail* |
|---|---|---|
| **Dr. Bart P. Wakker (PI)** | **University of Wisconsin - Madison** | **wakker@astro.wisc.edu** |
| Dr. Anand Narayanan (CoI) | Indian Institute of Space Science and Technology | anandnarayanan@gmx.com |
| Dr. Blair D. Savage (CoI) | University of Wisconsin - Madison | savage@astro.wisc.edu |



**VISITS**

| *Visit* | *Targets used in Visit* | *Configurations used in Visit* | *Orbits Used* | *Last Orbit Planner Run* | *OP Current with Visit?* |
|---|---|---|---|---|---|
| 01 | (1) 4C63.22 | COS/FUV | 1 | 18-May-2011 21:03:58.0 | yes |
| 02 | (2) CSO712 | COS/FUV | 3 | 18-May-2011 21:04:04.0 | yes |
| 03 | (3) FBS1526+659 | COS/FUV | 1 | 18-May-2011 21:04:09.0 | yes |
| 04 | (4) KAZ49 | COS/FUV | 2 | 18-May-2011 21:04:13.0 | yes |
| 05 | (5) KAZ147 | COS/FUV | 1 | 18-May-2011 21:04:17.0 | yes |
| 06 | (6) MCG+10-22-028 | COS/FUV | 2 | 18-May-2011 21:04:21.0 | yes |
| 07 | (7) MRK486 | COS/FUV | 2 | 18-May-2011 21:04:27.0 | yes |
| 08 | (8) NPM1G+68.0125 | COS/FUV | 1 | 18-May-2011 21:04:31.0 | yes |
| 09 | (9) RXSJ15032+6809 | COS/FUV | 1 | 18-May-2011 21:04:35.0 | yes |
| 10 | (10) RXSJ16083+6018 | COS/FUV | 2 | 18-May-2011 21:04:39.0 | yes |
| 11 | (11) SBS1458+534 | COS/FUV | 2 | 18-May-2011 21:04:43.0 | yes |
| 12 | (12) SBS1518+593 | COS/FUV | 1 | 18-May-2011 21:04:47.0 | yes |

| *Visit* | *Targets used in Visit* | *Configurations used in Visit* | *Orbits Used* | *Last Orbit Planner Run* | *OP Current with Visit?* |
|---|---|---|---|---|---|
| 13 | (13) SBS1521+598 | COS/FUV | 2 | 18-May-2011 21:04:51.0 | yes |
| 14 | (14) SBS1527+564 | COS/FUV | 1 | 18-May-2011 21:04:55.0 | yes |
| 15 | (15) SBS1551+572 | COS/FUV | 3 | 18-May-2011 21:05:00.0 | yes |
| 16 | (16) SBS1624+575 | COS/FUV | 2 | 18-May-2011 21:05:05.0 | yes |
| 17 | (17) SDSSJ150455.56+564920.3 | COS/FUV | 2 | 18-May-2011 21:05:11.0 | yes |
| 18 | (18) SDSSJ170328.90+614109.0 | COS/FUV | 2 | 18-May-2011 21:05:15.0 | yes |
| 19 | (19) SDSSJ171737.95+655939.3 | COS/FUV | 2 | 18-May-2011 21:05:20.0 | yes |
| 20 | (20) SDSSJ172243.80+620958.0 | COS/FUV | 1 | 18-May-2011 21:05:24.0 | yes |
| 21 | (21) SDSSJ172823.40+573243.0 | COS/FUV | 1 | 18-May-2011 21:05:27.0 | yes |
| 22 | (22) UGC10855A | COS/FUV | 1 | 18-May-2011 21:05:30.0 | yes |

36 Total Orbits Used

**ABSTRACT**

Most of the baryons (90%) are in the intergalactic medium (IGM). Observationally, about 1/3rd of the IGM consists of photoionized hydrogen, which produces narrow Ly-alpha absorption lines. The remainder is predicted to be at temperatures >10^5 K, forming the WHIM; some of that gas produces broad Ly-alpha and OVI absorption. About half of the Ly-alpha lines originate within 400 kpc of galaxies (Wakker & Savage 2009). The relationship of the more isolated absorbers to galaxies and galaxy filaments is still unclear. We have identified a 10 Mpc long galaxy filament, toward which 4 QSOs have already been observed, showing evidence for broad Ly-alpha and OVI lines in the galaxy environments. We propose to observe an additional 23 AGNs projected on and next to this filament to study (1) the extent of the Ly-alpha producing gas, (2) whether broad lines (some of which trace the WHIM) are only seen inside the filament or also outside, and (3) the relative velocities of the intergalactic gas and the galaxies in the filament.

**OBSERVING DESCRIPTION**

All 22 targets are to be observed in the same manner: A G130M COS spectrum with central wavelength set to 1327 A. Each target has one visit, for 1, 2 or 3 orbits, dependent on the target flux. Acquisitions are done using a STEP-SIZE=3 ACQ/SEARCH, followed by an ACQ/PEAKXD and an ACQ/PEAKD. Exposure times for acquisition observations are set to values of 10-30 seconds, depending on the target brightness, using half the

nominal flux in the ETC. Aimed at S/N is 30-50. All targets are relatively faint, and for almost all the calculated buffer time is longer than the observation length in one orbit, so that the buffer time is set to the same value as the exposure time. Only for the four brightest targets (Ton1187, PG0044+030, ESO265-G23 and HE0429-5343) is the buffer time set to half the exposure time.

## Visit

**Proposal 12276, Visit 01, scheduling** Thu May 19 01:05:35 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

Special Requirements: (none)

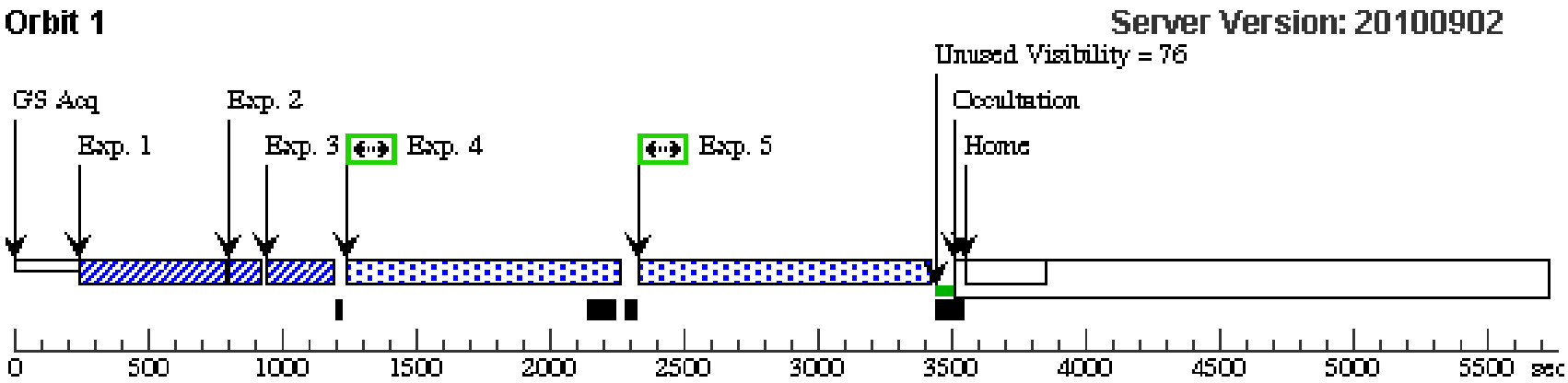
## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | 4C63.22 | RA: 15 23 45.9000 (230.9412500d)<br>Dec: +63 39 24.00 (63.65667d)<br>Equinox: J2000 | Redshift: 0.204 | V=16.80+/-0.1<br>FUV(1700)=0.41E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 4C63.22-ACQ/SEARCH | (1) 4C63.22 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 20 Secs<br>*[==>]* | *[1]* |
| *Comments: Acquisition exposure with G130M spectral element. Calculated for 0.5*F(1700)=2.2E-15 erg/cm2/s/A. COS ETC result for S/N=40 is 22 sec (id COS.A328294). Count rate 402/sec.* | | | | | | | | | |
| 2 | 4C63.22-ACQ/PEAKXD | (1) 4C63.22 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 20 Secs<br>*[==>]* | *[1]* |
| *Comments: See previous TA comment for ET calculation.* | | | | | | | | | |
| 3 | 4C63.22-ACQ/PEAKD | (1) 4C63.22 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5; STEP-SIZE=0.9 | | | 20 Secs<br>*[==>]* | *[1]* |
| 4 | 4C63.22-orbit1(1327-3) | (1) 4C63.22 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=870; FP-POS=3 | | | 970 Secs<br>*[==>]* | *[1]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 2491 sec* | | | | | | | | | |
| 5 | 4C63.22-orbit1(1291-3) | (1) 4C63.22 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=969; FP-POS=3 | | | 969 Secs<br>*[==>]* | *[1]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 2491 sec* | | | | | | | | | |

## Orbit Structure



## Visit

**Proposal 12276, Visit 02, completed** Thu May 19 01:05:35 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

Special Requirements: (none)

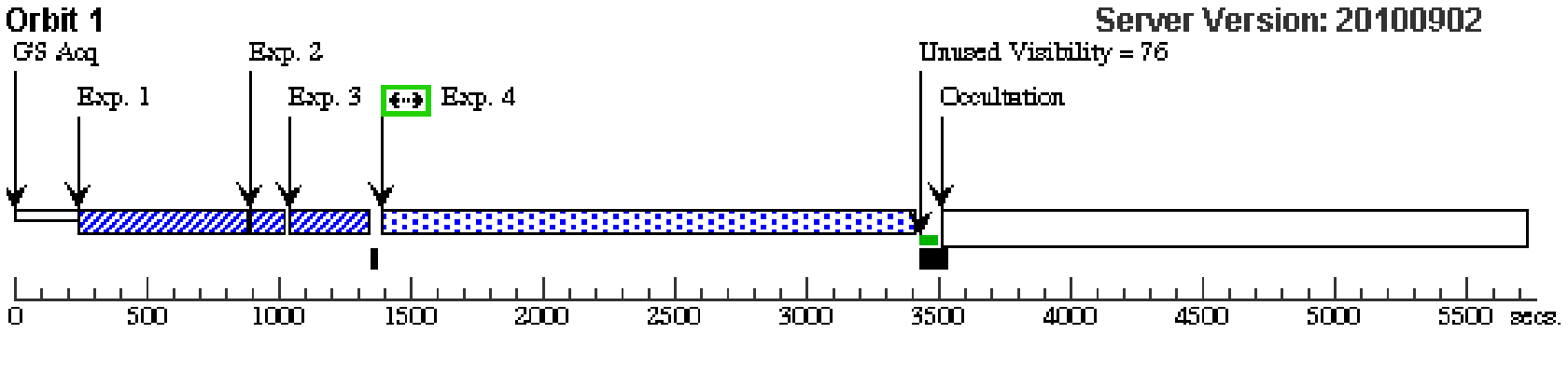
## Fixed Targets

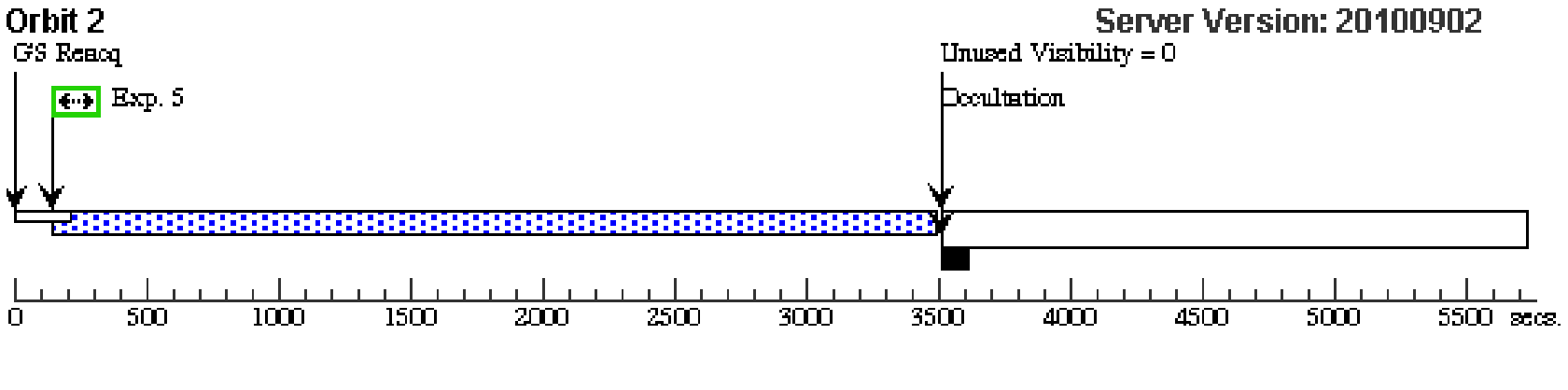
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (2) | CSO712 | RA: 15 00 30.6500 (225.1277083d)<br>Dec: +55 17 8.80 (55.28578d)<br>Equinox: J2000 | Redshift: 0.404 | V=17.88+/-0.1<br>FUV(1700)=0.19E-14 | Reference Frame: ICRS |

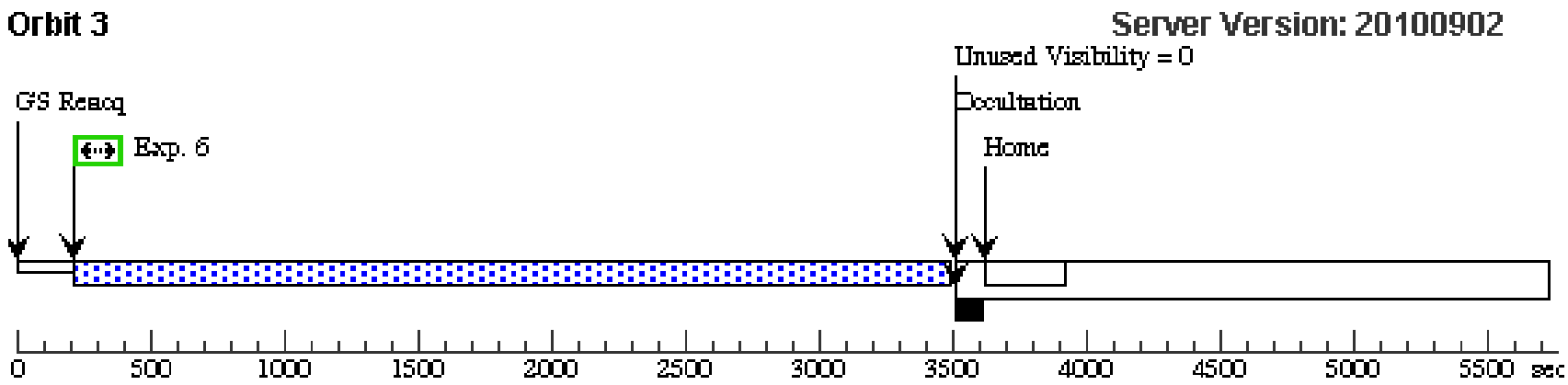
## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | CSO712-ACQ/SEARCH | (2) CSO712 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 30 Secs<br>*[==>]* | <br>***[1]*** |
| *Comments: Acquisition exposure with G130M spectral element. Calculated for 0.5*F(1700)=0.95E-15 erg/cm2/s/A. COS ETC result for S/N=30 is 30 sec (id COS.A328308). Count rate 356/sec.* | | | | | | | | | |
| 2 | CSO712-ACQ/PEAKXD | (2) CSO712 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 30 Secs<br>*[==>]* | <br>***[1]*** |
| *Comments: See the previous TA comment for ET calculation.* | | | | | | | | | |
| 3 | CSO712-ACQ/PEAKD | (2) CSO712 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5; STEP-SIZE=0.9 | | | 30 Secs<br>*[==>]* | <br>***[1]*** |
| 4 | CSO712-orbit1(1327-3) | (2) CSO712 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=1972; FP-POS=3 | | | 1972 Secs<br>*[==>]* | <br>***[1]*** |
| *Comments: 2/3rds of buffer time at twice nominal flux is 3395 sec* | | | | | | | | | |
| 5 | CSO712-orbit2(1291-3) | (2) CSO712 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=3225; FP-POS=3 | | | 3225 Secs<br>*[==>]* | <br>***[2]*** |
| *Comments: 2/3rds of buffer time at twice nominal flux is 3395 sec* | | | | | | | | | |
| 6 | CSO712-orbit3(1291-4) | (2) CSO712 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=3225; FP-POS=4 | | | 3225 Secs<br>*[==>]* | <br>***[3]*** |
| *Comments: 2/3rds of buffer time at twice nominal flux is 3395 sec* | | | | | | | | | |

Orbit Structure



## Visit

**Proposal 12276, Visit 03, completed** Thu May 19 01:05:36 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

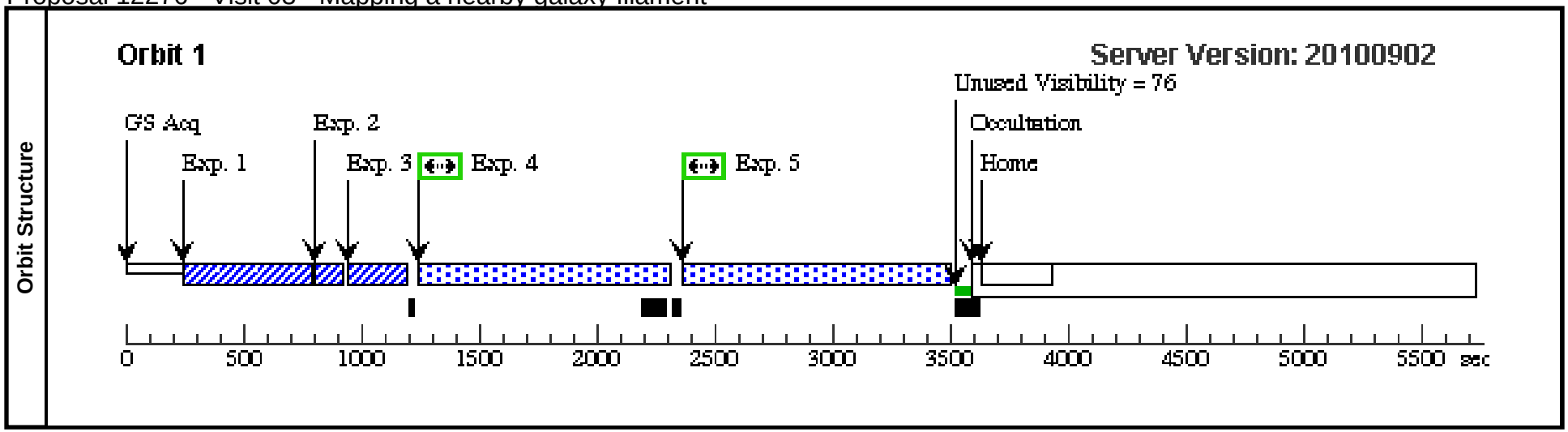
Special Requirements: (none)

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (3) | FBS1526+659 | RA: 15 27 28.6500 (231.8693750d)<br>Dec: +65 48 10.00 (65.80278d)<br>Equinox: J2000 | Redshift: 0.345 | V=16.90+/-0.1<br>FUV(1700)=0.49E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | FBS1526+659-ACQ/SEARCH | (3) FBS1526+659 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 20 Secs<br>*[==>]* | <br>***[1]*** |
| *Comments: Acquisition exposure with G130M spectral element.<br>Calculated for 0.5*F(1700)=2.5E-14 erg/cm2/s/A.<br>COS ETC result for S/N=40 is 20 sec (id COS.A328292).<br>Count rate 413/sec.* | | | | | | | | | |
| 2 | FBS1526+659-ACQ/PEAKXD | (3) FBS1526+659 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 20 Secs<br>*[==>]* | <br>***[1]*** |
| *Comments: See previous TA comment for ET calculation.* | | | | | | | | | |
| 3 | FBS1526+659-ACQ/PEAKD | (3) FBS1526+659 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5;<br>STEP-SIZE=0.9 | | | 20 Secs<br>*[==>]* | <br>***[1]*** |
| 4 | FBS1526+659-orbit1(1327-3) | (3) FBS1526+659 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=916;<br>FP-POS=3 | | | 1016 Secs<br>*[==>]* | <br>***[1]*** |
| *Comments: 2/3rds of buffer time at twice nominal flux is 2272 sec* | | | | | | | | | |
| 5 | FBS1526+659-orbit1(1291-3) | (3) FBS1526+659 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1016;<br>FP-POS=3 | | | 1016 Secs<br>*[==>]* | <br>***[1]*** |
| *Comments: 2/3rds of buffer time at twice nominal flux is 2272 sec* | | | | | | | | | |


Orbit Structure
Orbit 1
Server Version: 20100902
Unused Visibility = 76
GS Acq
Exp. 1
Exp. 2
Exp. 3
Exp. 4
Exp. 5
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

## Visit

**Proposal 12276, Visit 04, scheduling** Thu May 19 01:05:37 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

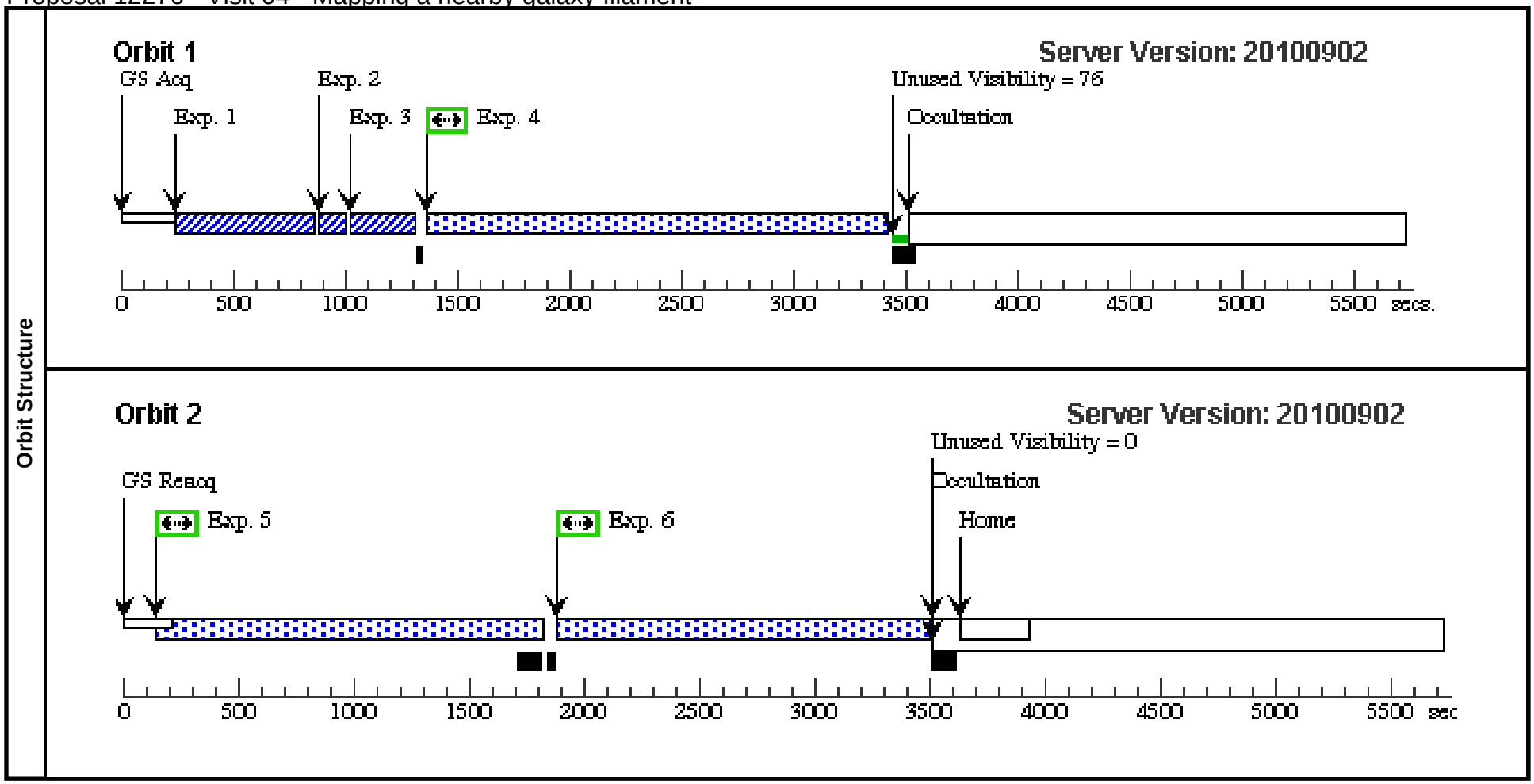
Special Requirements: (none)

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (4) | KAZ49 | RA: 15 57 3.3000 (239.2637500d)<br>Dec: +63 50 28.00 (63.84111d)<br>Equinox: J2000 | Redshift: 0.030 | V=15.30+/-0.1<br>FUV=0.27E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | KAZ49-ACQ/SEARCH | (4) KAZ49 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 28 Secs<br>*[==>]* | <br>***[1]*** |
| *Comments: Acquisition exposure with G130M spectral element. Calculated for 0.5*F(1700)=1.4E-15 erg/cm2/s/A. COS ETC result for S/N=35 is 28 sec (id COS.A328300). Count rate 371/sec.* | | | | | | | | | |
| 2 | KAZ49-ACQ/PEAKXD | (4) KAZ49 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 28 Secs<br>*[==>]* | <br>***[1]*** |
| *Comments: See the previous TA comment for ET calculation.* | | | | | | | | | |
| 3 | KAZ49-ACQ/PEAKD | (4) KAZ49 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5; STEP-SIZE=0.9 | | | 28 Secs<br>*[==>]* | <br>***[1]*** |
| 4 | KAZ49-orbit1(1327-3) | (4) KAZ49 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=2007; FP-POS=3 | | | 2007 Secs<br>*[==>]* | <br>***[1]*** |
| *Comments: 2/3rds of buffer time at twice nominal flux is 2999 sec* | | | | | | | | | |
| 5 | KAZ49-orbit2(1291-3) | (4) KAZ49 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1460; FP-POS=3 | | | 1560 Secs<br>*[==>]* | <br>***[2]*** |
| *Comments: 2/3rds of buffer time at twice nominal flux is 2999 sec* | | | | | | | | | |
| 6 | KAZ49-orbit2(1291-4) | (4) KAZ49 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1561; FP-POS=4 | | | 1561 Secs<br>*[==>]* | <br>***[2]*** |
| *Comments: 2/3rds of buffer time at twice nominal flux is 2999 sec* | | | | | | | | | |


Orbit Structure
Orbit 1
Server Version: 20100902
GS Acq
Exp. 1
Exp. 2
Exp. 3
Exp. 4
Unused Visibility = 76
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 2
Server Version: 20100902
Unused Visibility = 0
GS Reacq
Occultation
Exp. 5
Exp. 6
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

## Visit

**Proposal 12276, Visit 05, completed** Thu May 19 01:05:37 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

Special Requirements: (none)

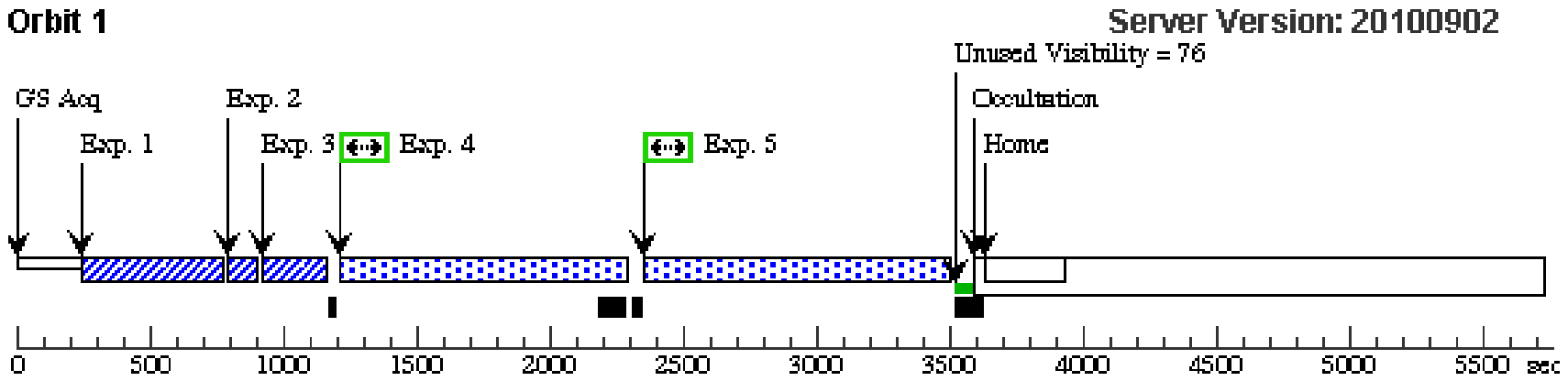
## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (5) | KAZ147 | RA: 17 34 31.5500 (263.6314583d)<br>Dec: +67 02 30.60 (67.04183d)<br>Equinox: J2000 | Redshift: 0.027 | V=16.00+/-0.1<br>FUV=0.83E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | KAZ147-ACQ/SEARCH | (5) KAZ147 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 18 Secs<br>*[==>]* | *[1]* |
| *Comments: Acquisition exposure with G130M spectral element. Calculated for 0.5*F(1700)=4.2E-15 erg/cm2/s/A. COS ETC result for S/N=50 is 18 sec (id COS.A328282). Count rate 478/sec.* | | | | | | | | | |
| 2 | KAZ147-ACQ/PEAKXD | (5) KAZ147 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 18 Secs<br>*[==>]* | *[1]* |
| 3 | KAZ147-ACQ/PEAKD | (5) KAZ147 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5; STEP-SIZE=0.9 | | | 18 Secs<br>*[==>]* | *[1]* |
| 4 | KAZ147-orbit1(1327-3) | (5) KAZ147 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=931; FP-POS=3 | | | 1031 Secs<br>*[==>]* | *[1]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 1651 sec* | | | | | | | | | |
| 5 | KAZ147-orbit1(1291-3) | (5) KAZ147 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1031; FP-POS=3 | | | 1031 Secs<br>*[==>]* | *[1]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 1651 sec* | | | | | | | | | |

## Orbit Structure



## Visit

**Proposal 12276, Visit 06, scheduling** Thu May 19 01:05:37 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

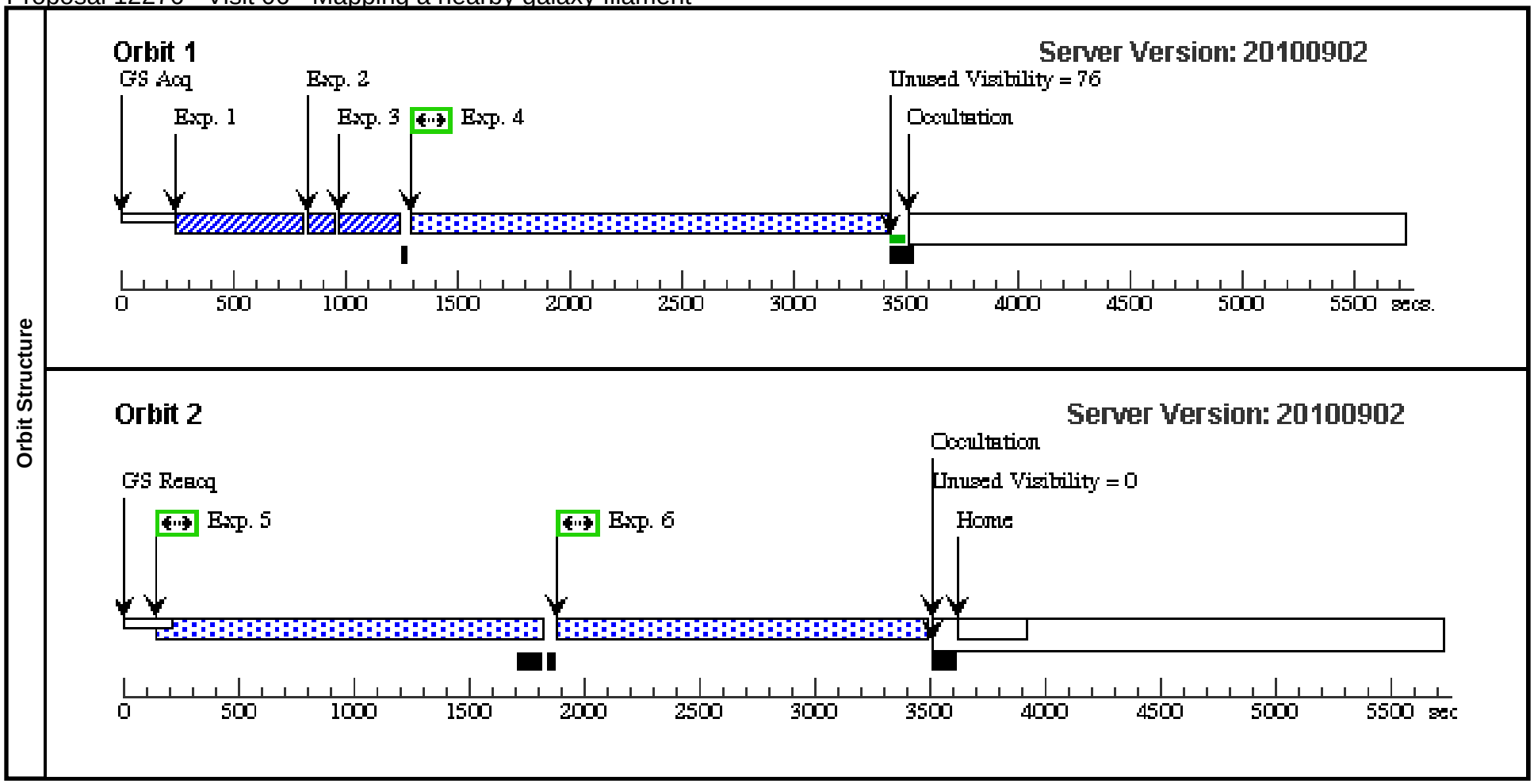
Special Requirements: (none)

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (6) | MCG+10-22-028 | RA: 15 38 10.0500 (234.5418750d)<br>Dec: +57 36 13.00 (57.60361d)<br>Equinox: J2000 | Redshift: 0.074 | V=17.77+/-0.1<br>FUV=0.30E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | MCG+10-22-28-ACQ/SEARCH | (6) MCG+10-22-028 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 23 Secs<br>*[==>]* | *[1]* |
| *Comments: Acquisition exposure with G130M spectral element. Calculated for 0.5*F(1700)=1.6E-15 erg/cm2/s/A. COS ETC result for S/N=35 is 24 sec (id COS.A328298). Count rate 379/sec.* | | | | | | | | | |
| 2 | MCG+10-22-28-ACQ/PEAKXD | (6) MCG+10-22-028 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 23 Secs<br>*[==>]* | *[1]* |
| *Comments: See the previous TA comment for ET calculation.* | | | | | | | | | |
| 3 | MCG+10-22-28-ACQ/PEAKD | (6) MCG+10-22-028 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5; STEP-SIZE=0.9 | | | 23 Secs<br>*[==>]* | *[1]* |
| 4 | MCG+10-22-28-orbit1(1327-3) | (6) MCG+10-22-028 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=2077; FP-POS=3 | | | 2077 Secs<br>*[==>]* | *[1]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 2833 sec* | | | | | | | | | |
| 5 | MCG+10-22-28-orbit2(1291-3) | (6) MCG+10-22-028 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1458; FP-POS=3 | | | 1558 Secs<br>*[==>]* | *[2]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 2833 sec* | | | | | | | | | |
| 6 | MCG+10-22-28-orbit2(1291-4) | (6) MCG+10-22-028 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1558; FP-POS=4 | | | 1558 Secs<br>*[==>]* | *[2]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 2833 sec* | | | | | | | | | |


Orbit Structure
Orbit 1
Server Version: 20100902
GS Acq
Exp. 1
Exp. 2
Exp. 3
Exp. 4
Unused Visibility = 76
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 2
Server Version: 20100902
Occultation
GS Reacq
Unused Visibility = 0
Exp. 5
Exp. 6
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500

## Visit

**Proposal 12276, Visit 07, scheduling** Thu May 19 01:05:38 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

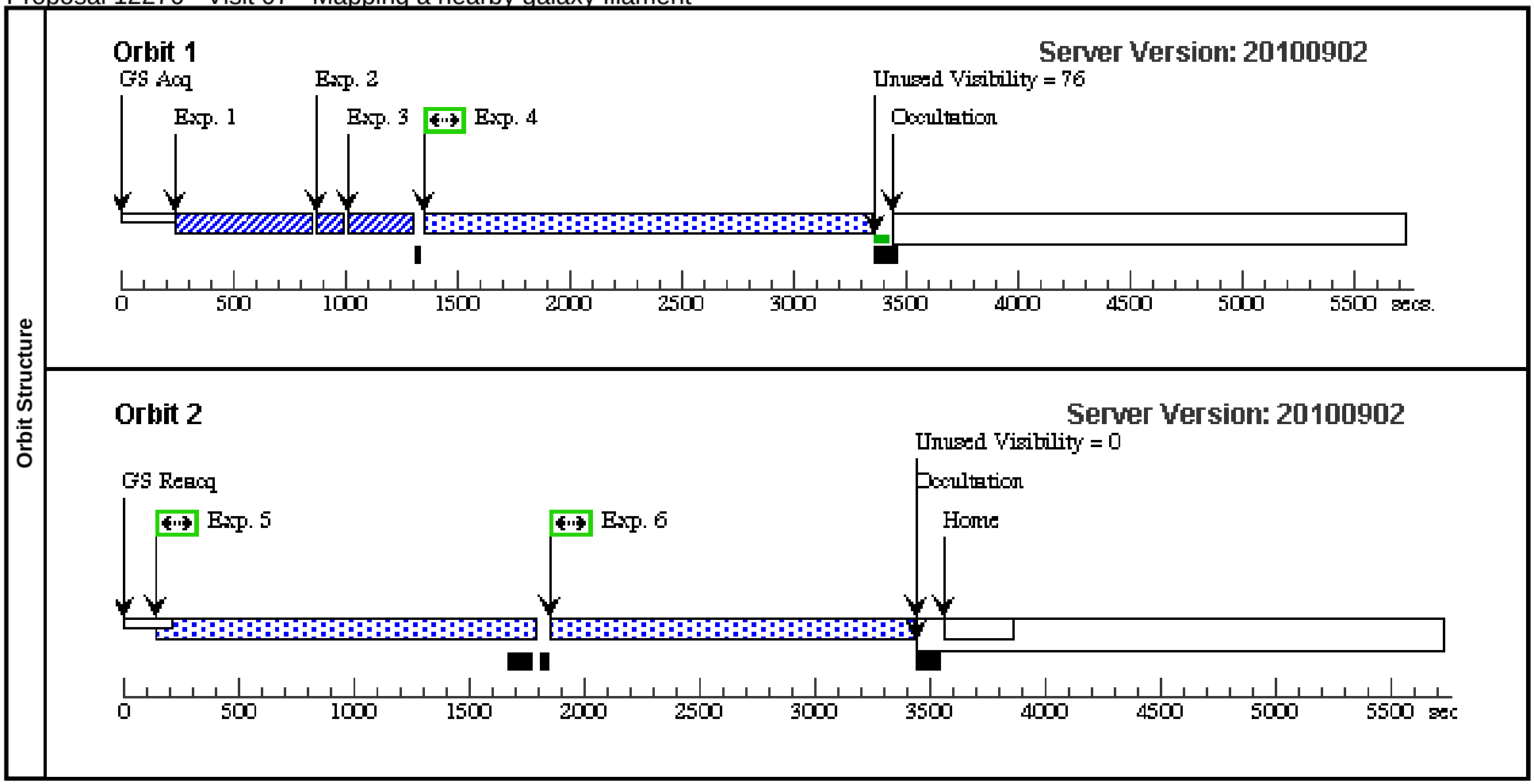
Special Requirements: (none)

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (7) | MRK486 | RA: 15 36 38.5000 (234.1604167d)<br>Dec: +54 33 32.00 (54.55889d)<br>Equinox: J2000 | Redshift: 0.038 | V=14.78+/-0.1<br>FUV=0.23E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | MRK486-ACQ/SEARCH | (7) MRK486 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 27 Secs<br>*[==>]* | *[1]* |
| *Comments: Acquisition exposure with G130M spectral element.<br>Calculated for 0.5*F(1700)=1.4E-15 erg/cm2/s/A.<br>COS ETC result for S/N=35 is 28 sec (id COS.A328300).<br>Count rate 371/sec.* | | | | | | | | | |
| 2 | MRK486-ACQ/PEAKXD | (7) MRK486 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 27 Secs<br>*[==>]* | *[1]* |
| *Comments: See previous TA comment for ET calculation.* | | | | | | | | | |
| 3 | MRK486-ACQ/PEAKD | (7) MRK486 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5;<br>STEP-SIZE=0.9 | | | 27 Secs<br>*[==>]* | *[1]* |
| 4 | MRK486-orbit1(1327-3) | (7) MRK486 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=1951;<br>FP-POS=3 | | | 1951 Secs<br>*[==>]* | *[1]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 2999 sec* | | | | | | | | | |
| 5 | MRK486-orbit1(1291-3) | (7) MRK486 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1425;<br>FP-POS=3 | | | 1525 Secs<br>*[==>]* | *[2]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 2999 sec* | | | | | | | | | |
| 6 | MRK486-orbit2(1291-4) | (7) MRK486 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1525;<br>FP-POS=4 | | | 1525 Secs<br>*[==>]* | *[2]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 2999 sec* | | | | | | | | | |


Orbit Structure
Orbit 1
Server Version: 20100902
GS Acq
Exp. 1
Exp. 2
Exp. 3
Exp. 4
Unused Visibility = 76
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 2
Server Version: 20100902
Unused Visibility = 0
GS Reacq
Exp. 5
Exp. 6
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

## Visit

**Proposal 12276, Visit 08, completed**

Thu May 19 01:05:38 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

Special Requirements: (none)

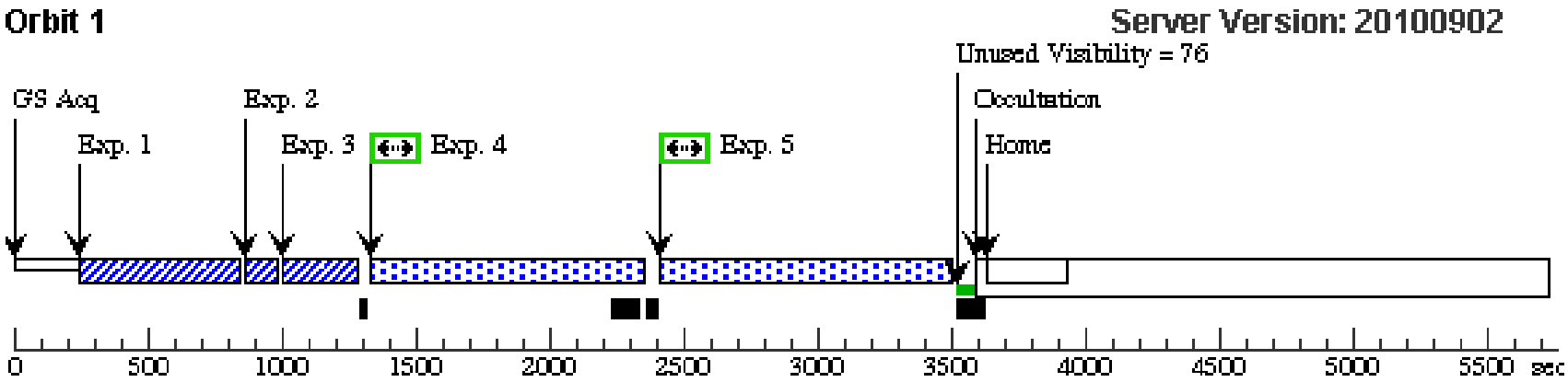
## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (8) | NPM1G+68.0125 | RA: 15 08 52.8000 (227.2200000d)<br>Dec: +68 14 7.00 (68.23528d)<br>Equinox: J2000 | Redshift: 0.058 | V=15.50+/-0.1<br>FUV=0.36E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | NPM1G+68 .0125-ACQ/ SEARCH | (8) NPM1G+68.012 5 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 26 Secs<br>*[==>]* | *[1]* |
| *Comments: Acquisition exposure with G130M spectral element. Calculated for 0.5*F(1700)=1.8E-15 erg/cm2/s/A. COS ETC result for S/N=40 is 28 sec (id COS.A328296). Count rate 387/sec.* | | | | | | | | | |
| 2 | NPM1G+68 .0125-ACQ/ PEAKXD | (8) NPM1G+68.012 5 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 26 Secs<br>*[==>]* | *[1]* |
| 3 | NPM1G+68 .0125-ACQ/ PEAKD | (8) NPM1G+68.012 5 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5; STEP-SIZE=0.9 | | | 26 Secs<br>*[==>]* | *[1]* |
| 4 | NPM1G+68 .0125-orbit1 (1327-3) | (8) NPM1G+68.012 5 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=866; FP-POS=3 | | | 966 Secs<br>*[==>]* | *[1]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 2651 sec* | | | | | | | | | |
| 5 | NPM1G+68 .0125-orbit1 (1291-3) | (8) NPM1G+68.012 5 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=966; FP-POS=3 | | | 966 Secs<br>*[==>]* | *[1]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 2651 sec* | | | | | | | | | |

## Orbit Structure



## Visit

**Proposal 12276, Visit 09, completed** Thu May 19 01:05:38 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

Special Requirements: (none)

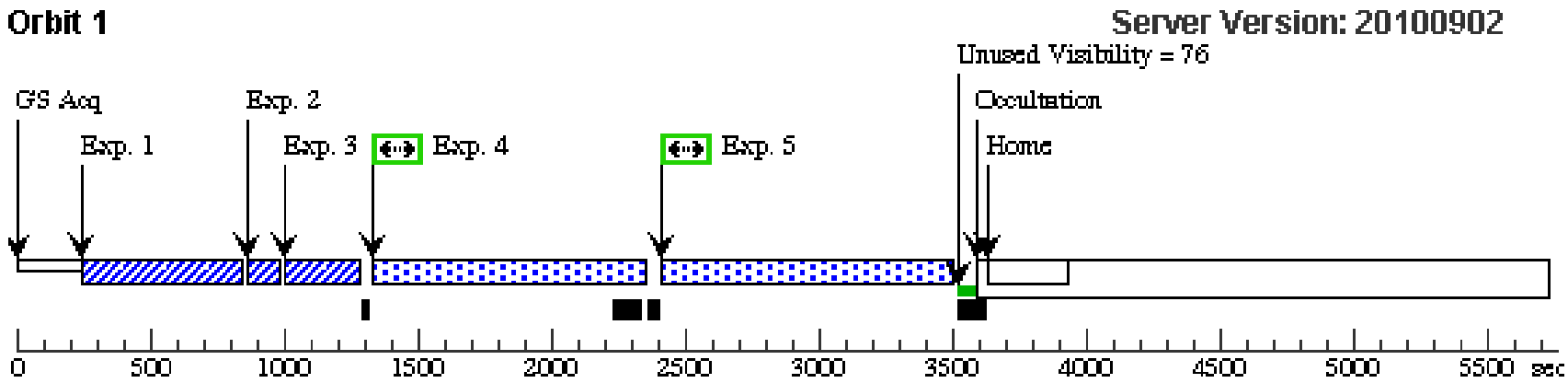
## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (9) | RXSJ15032+6809 | RA: 15 03 16.4000 (225.8183333d)<br>Dec: +68 10 6.00 (68.16833d)<br>Equinox: J2000 | Redshift: 0.178 | V=17.40+/-0.1<br>FUV=0.36E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | RXSJ15032+6809-ACQ/SEARCH | (9) RXSJ15032+6809 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 26 Secs<br>[==>] | [1] |
| | *Comments: Acquisition exposure with G130M spectral element. Calculated for 0.5*F(1700)=1.8E-15 erg/cm2/s/A. COS ETC result for S/N=40 is 28 sec (id COS.A328296). Count rate 387/sec.* | | | | | | | | |
| 2 | RXSJ15032+6809-ACQ/PEAKXD | (9) RXSJ15032+6809 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 26 Secs<br>[==>] | [1] |
| 3 | RXSJ15032+6809-ACQ/PEAKD | (9) RXSJ15032+6809 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5; STEP-SIZE=0.9 | | | 26 Secs<br>[==>] | [1] |
| 4 | RXSJ15032+6809-orbit 1(1327-3) | (9) RXSJ15032+6809 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=866; FP-POS=3 | | | 966 Secs<br>[==>] | [1] |
| | *Comments: 2/3rds of buffer time at twice nominal flux is 2651 sec* | | | | | | | | |
| 5 | RXSJ15032+6809-orbit 1(1291-3) | (9) RXSJ15032+6809 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=966; FP-POS=3 | | | 966 Secs<br>[==>] | [1] |
| | *Comments: 2/3rds of buffer time at twice nominal flux is 2651 sec* | | | | | | | | |

## Orbit Structure



## Visit

**Proposal 12276, Visit 10, completed** Thu May 19 01:05:39 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

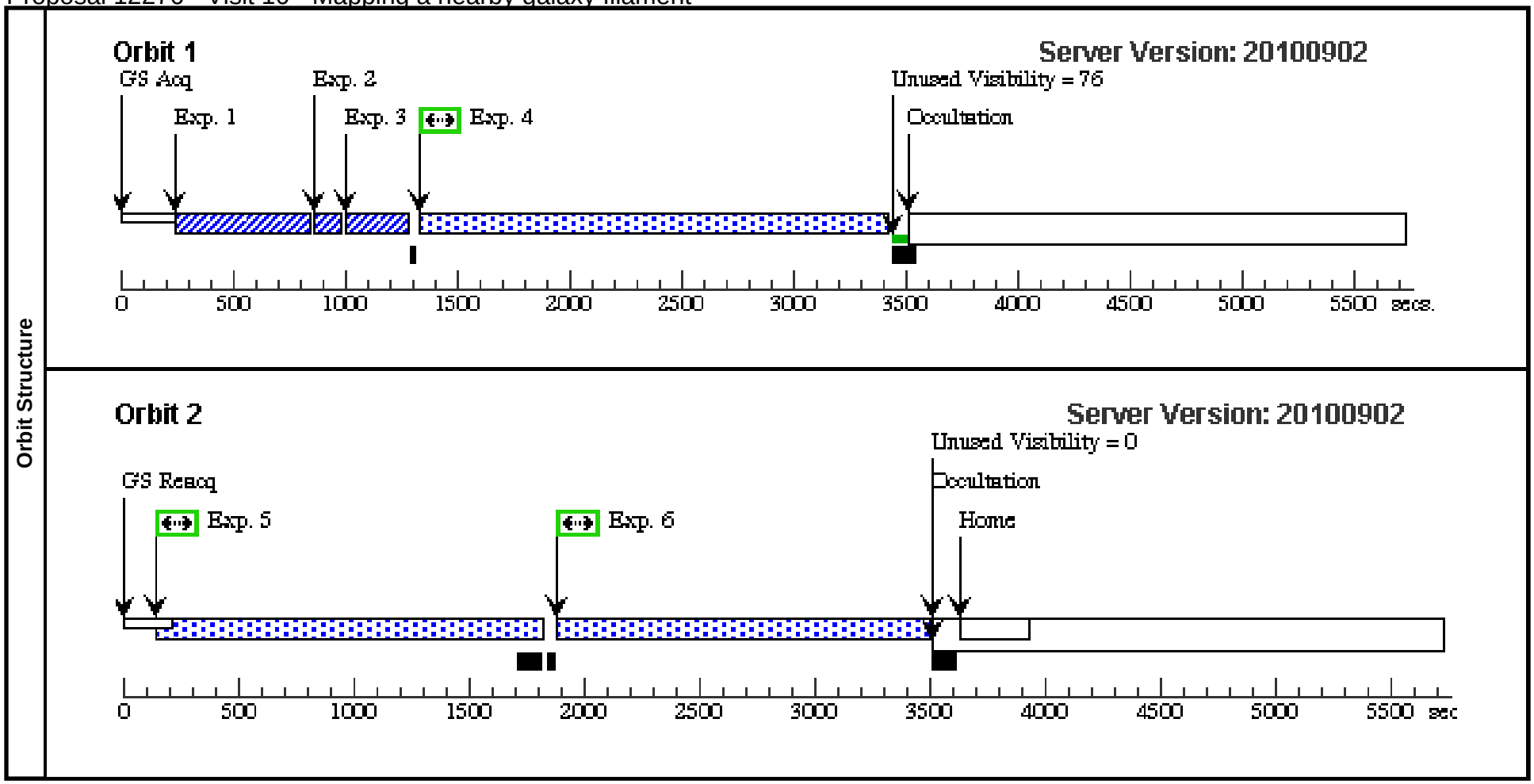
Special Requirements: (none)

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (10) | RXSJ16083+6018 | RA: 16 08 20.5200 (242.0855000d)<br>Dec: +60 18 27.70 (60.30769d)<br>Equinox: J2000 | Redshift: 0.114 | V=16.00+/-0.1<br>FUV=0.22E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | RXSJ16083+6018-ACQ/SEARCH | (10) RXSJ16083+6018 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 26 Secs<br>*[==>]* | *[1]* |
| *Comments: Acquisition exposure with G130M spectral element.<br>Calculated for 0.5*F(1700)=1.1E-15 erg/cm2/s/A.<br>COS ETC result for S/N=30 is 27 sec (id COS.A328305).<br>Count rate 360/sec.* | | | | | | | | | |
| 2 | RXSJ16083+6018-ACQ/PEAKXD | (10) RXSJ16083+6018 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 26 Secs<br>*[==>]* | *[1]* |
| 3 | RXSJ16083+6018-ACQ/PEAKD | (10) RXSJ16083+6018 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5;<br>STEP-SIZE=0.9 | | | 26 Secs<br>*[==>]* | *[1]* |
| 4 | RXSJ16083+6018-orbit 1(1327-3) | (10) RXSJ16083+6018 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=2037;<br>FP-POS=3 | | | 2037 Secs<br>*[==>]* | *[1]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 3235 sec* | | | | | | | | | |
| 5 | RXSJ16083+6018-orbit 2(1291-3) | (10) RXSJ16083+6018 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1460;<br>FP-POS=3 | | | 1560 Secs<br>*[==>]* | *[2]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 3235 sec* | | | | | | | | | |
| 6 | RXSJ16083+6018-orbit 2(1291-4) | (10) RXSJ16083+6018 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1561;<br>FP-POS=4 | | | 1561 Secs<br>*[==>]* | *[2]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 3235 sec* | | | | | | | | | |


Orbit Structure
Orbit 1
Server Version: 20100902
GS Acq
Exp. 1
Exp. 2
Exp. 3
Exp. 4
Unused Visibility = 76
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 2
Server Version: 20100902
Unused Visibility = 0
GS Reacq
Exp. 5
Exp. 6
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

## Visit

**Proposal 12276, Visit 11, scheduling** Thu May 19 01:05:39 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

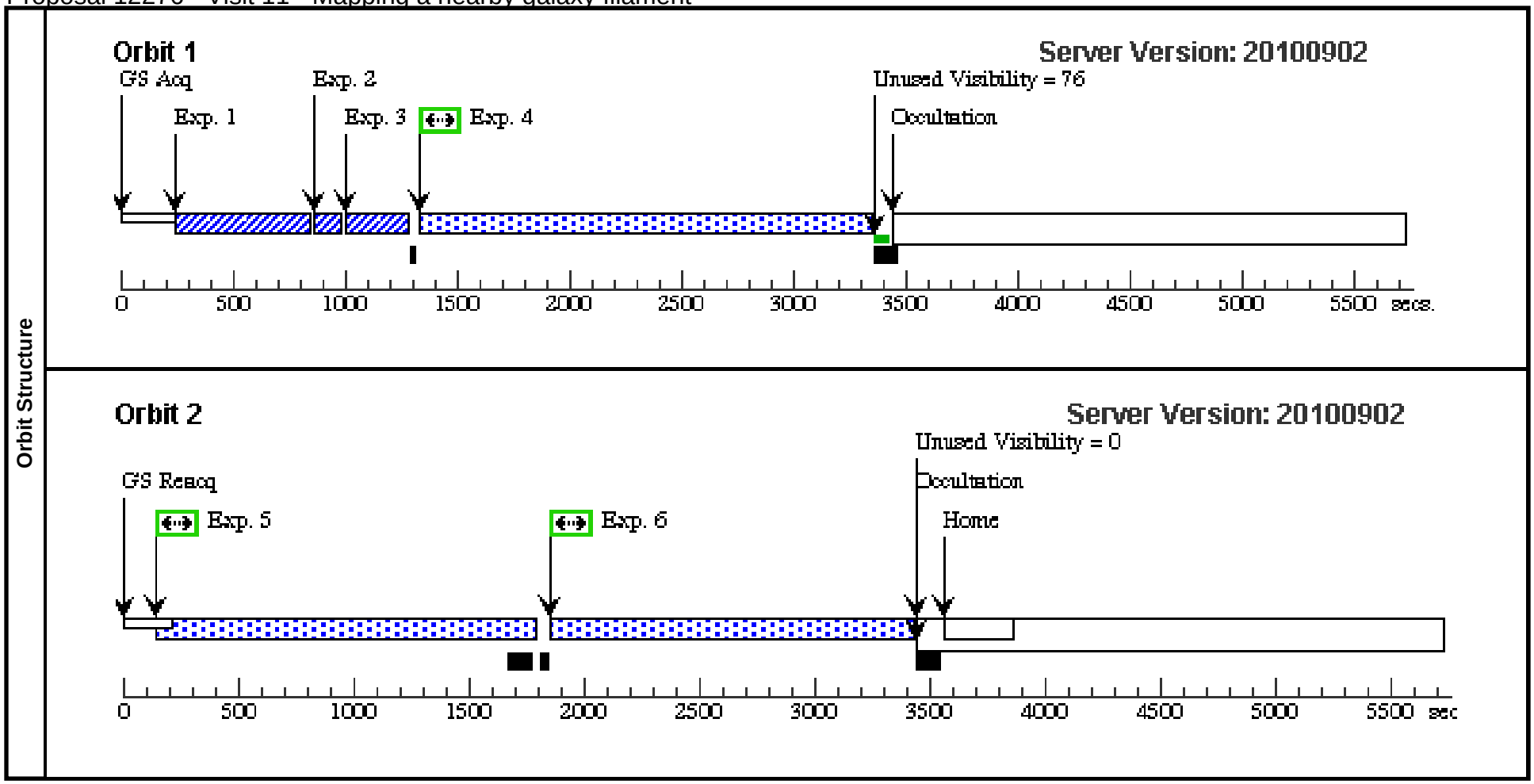
Special Requirements: (none)

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (11) | SBS1458+534 | RA: 14 59 49.6000 (224.9566667d)<br>Dec: +53 19 9.00 (53.31917d)<br>Equinox: J2000 | Redshift: 0.338 | V=16.95+/-0.1<br>FUV=0.22E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | SBS1458+534-ACQ/SEARCH | (11) SBS1458+534 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 26 Secs<br>*[==>]* | *[1]* |
| *Comments: Acquisition exposure with G130M spectral element.<br>Calculated for 0.5*F(1700)=1.1E-15 erg/cm2/s/A.<br>COS ETC result for S/N=30 is 27 sec (id COS.A328305).<br>Count rate 360/sec.* | | | | | | | | | |
| 2 | SBS1458+534-ACQ/PEAKXD | (11) SBS1458+534 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 26 Secs<br>*[==>]* | *[1]* |
| 3 | SBS1458+534-ACQ/PEAKD | (11) SBS1458+534 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5;<br>STEP-SIZE=0.9 | | | 26 Secs<br>*[==>]* | *[1]* |
| 4 | SBS1458+534-orbit1(1327-3) | (11) SBS1458+534 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=1966;<br>FP-POS=3 | | | 1966 Secs<br>*[==>]* | *[1]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 3235 sec* | | | | | | | | | |
| 5 | SBS1458+534-orbit2(1291-3) | (11) SBS1458+534 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1425;<br>FP-POS=3 | | | 1525 Secs<br>*[==>]* | *[2]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 3235 sec* | | | | | | | | | |
| 6 | SBS1458+534-orbit2(1291-4) | (11) SBS1458+534 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1525;<br>FP-POS=4 | | | 1525 Secs<br>*[==>]* | *[2]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 3235 sec* | | | | | | | | | |


Orbit Structure
Orbit 1
Server Version: 20100902
GS Acq
Exp. 1
Exp. 2
Exp. 3
Exp. 4
Unused Visibility = 76
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 2
Server Version: 20100902
Unused Visibility = 0
GS Reacq
Exp. 5
Exp. 6
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

## Visit

**Proposal 12276, Visit 12, scheduling** Thu May 19 01:05:39 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

Special Requirements: (none)

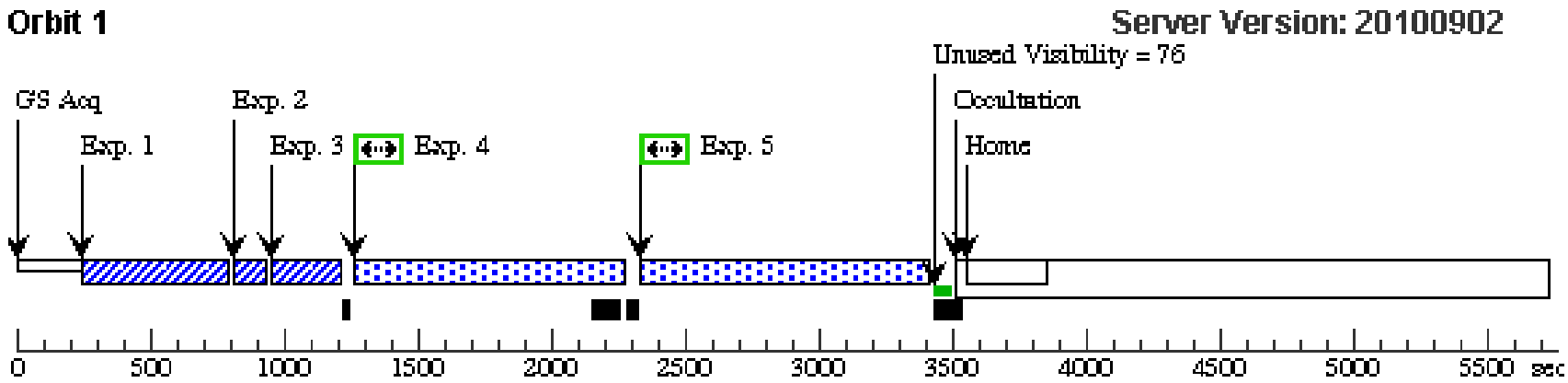
## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (12) | SBS1518+593 | RA: 15 19 21.6500 (229.8402083d)<br>Dec: +59 08 23.70 (59.13992d)<br>Equinox: J2000 | Redshift: 0.078 | V=15.97+/-0.1<br>FUV=0.63E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | SBS1518+593-ACQ/SEARCH | (12) SBS1518+593 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 21 Secs<br>*[==>]* | *[1]* |
| *Comments: Acquisition exposure with G130M spectral element. Calculated for 0.5*F(1700)=3.2E-15 erg/cm2/s/A. COS ETC result for S/N=50 is 23 sec (id COS.A328289). Count rate 440/sec.* | | | | | | | | | |
| 2 | SBS1518+593-ACQ/PEAKXD | (12) SBS1518+593 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 21 Secs<br>*[==>]* | *[1]* |
| 3 | SBS1518+593-ACQ/PEAKD | (12) SBS1518+593 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5; STEP-SIZE=0.9 | | | 21 Secs<br>*[==>]* | *[1]* |
| 4 | SBS1518+593-orbit1(1327-3) | (12) SBS1518+593 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=859; FP-POS=3 | | | 959 Secs<br>*[==>]* | *[1]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 1967 sec* | | | | | | | | | |
| 5 | SBS1518+593-orbit1(1291-3) | (12) SBS1518+593 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=960; FP-POS=3 | | | 960 Secs<br>*[==>]* | *[1]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 1967 sec* | | | | | | | | | |

## Orbit Structure



## Visit

**Proposal 12276, Visit 13, scheduling** Thu May 19 01:05:39 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

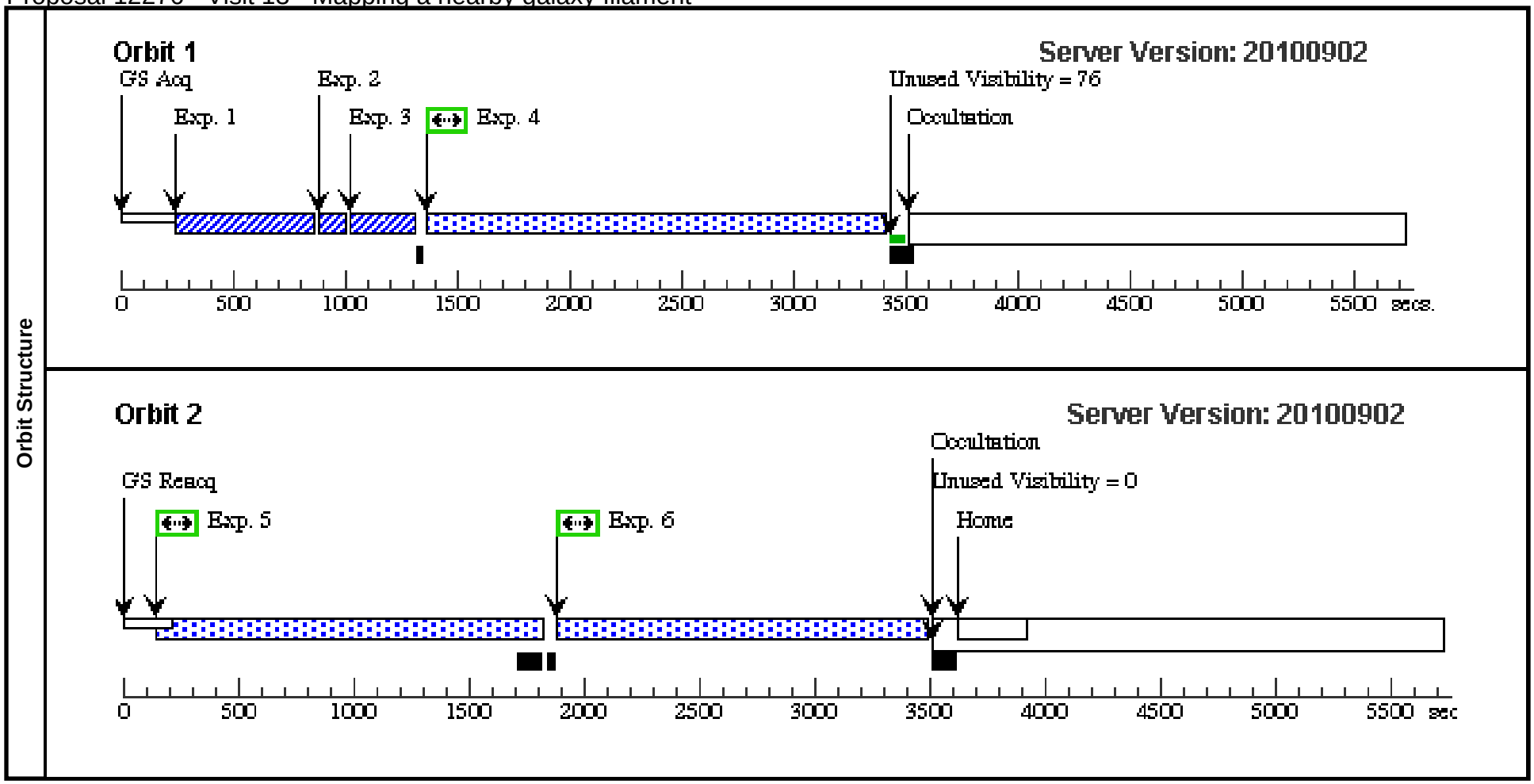
Special Requirements: (none)

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (13) | SBS1521+598 | RA: 15 21 53.8000 (230.4741667d)<br>Dec: +59 40 20.00 (59.67222d)<br>Equinox: J2000 | Redshift: 0.286 | V=17.69+/-0.1<br>FUV=0.20E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | SBS1521+598-ACQ/SEARCH | (13) SBS1521+598 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 28 Secs<br>*[==>]* | *[1]* |
| *Comments: Acquisition exposure with G130M spectral element.<br>Calculated for 0.5*F(1700)=1.0E-15 erg/cm2/s/A.<br>COS ETC result for S/N=30 is 30 sec (id COS.A328308).<br>Count rate 356/sec.* | | | | | | | | | |
| 2 | SBS1521+598-ACQ/PEAKXD | (13) SBS1521+598 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 28 Secs<br>*[==>]* | *[1]* |
| 3 | SBS1521+598-ACQ/PEAKD | (13) SBS1521+598 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5;<br>STEP-SIZE=0.9 | | | 28 Secs<br>*[==>]* | *[1]* |
| 4 | SBS1521+598-orbit1(1327-3) | (13) SBS1521+598 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=2002;<br>FP-POS=3 | | | 2002 Secs<br>*[==>]* | *[1]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 3339 sec* | | | | | | | | | |
| 5 | SBS1521+598-orbit2(1291-3) | (13) SBS1521+598 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1458;<br>FP-POS=3 | | | 1558 Secs<br>*[==>]* | *[2]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 3339 sec* | | | | | | | | | |
| 6 | SBS1521+598-orbit2(1291-4) | (13) SBS1521+598 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1558;<br>FP-POS=4 | | | 1558 Secs<br>*[==>]* | *[2]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 3339 sec* | | | | | | | | | |


Orbit Structure
Orbit 1
Server Version: 20100902
GS Acq
Exp. 1
Exp. 2
Exp. 3
Exp. 4
Unused Visibility = 76
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 2
Server Version: 20100902
Occultation
GS Reacq
Unused Visibility = 0
Exp. 5
Exp. 6
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

## Visit

**Proposal 12276, Visit 14, completed**

Thu May 19 01:05:40 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

Special Requirements: (none)

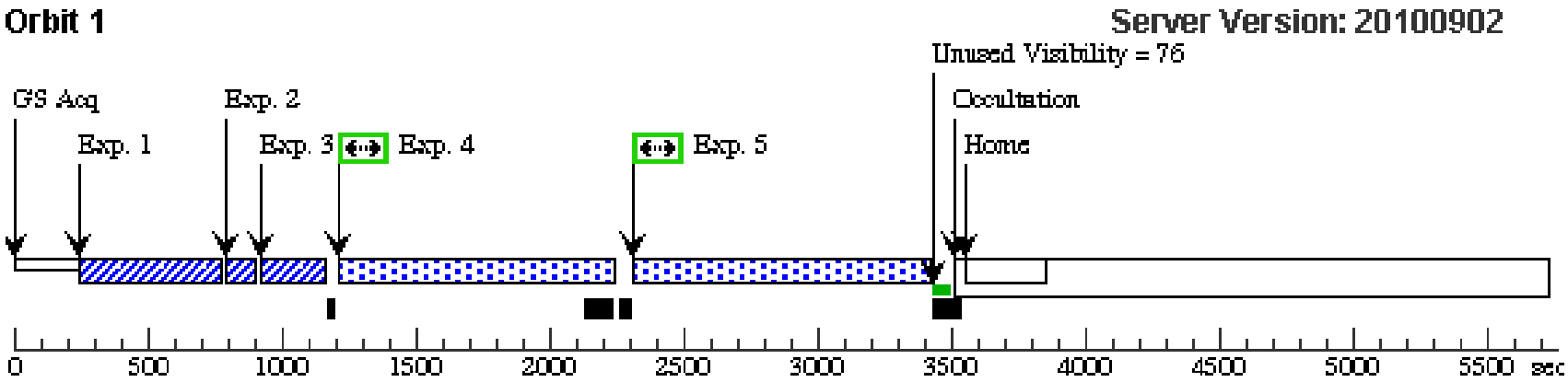
## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (14) | SBS1527+564 | RA: 15 29 7.5500 (232.2814583d)<br>Dec: +56 16 5.50 (56.26819d)<br>Equinox: J2000 | Redshift: 0.099 | V=16.77+/-0.1<br>FUV=0.73E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | SBS1527+564-ACQ/SEARCH | (14) SBS1527+564 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 18 Secs<br>*[==>]* | *[1]* |
| *Comments: Acquisition exposure with G130M spectral element. Calculated for 0.5*F(1700)=3.7E-15 erg/cm2/s/A. COS ETC result for S/N=50 is 20 sec (id COS.A328287). Count rate 459/sec.* | | | | | | | | | |
| 2 | SBS1527+564-ACQ/PEAKXD | (14) SBS1527+564 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 18 Secs<br>*[==>]* | *[1]* |
| 3 | SBS1527+564-ACQ/PEAKD | (14) SBS1527+564 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5; STEP-SIZE=0.9 | | | 18 Secs<br>*[==>]* | *[1]* |
| 4 | SBS1527+564-orbit1(1327-3) | (14) SBS1527+564 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=882; FP-POS=3 | | | 982 Secs<br>*[==>]* | *[1]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 1795 sec* | | | | | | | | | |
| 5 | SBS1527+564-orbit1(1291-3) | (14) SBS1527+564 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=982; FP-POS=3 | | | 982 Secs<br>*[==>]* | *[1]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 1795 sec* | | | | | | | | | |

## Orbit Structure



# Proposal 12276 - Visit 15 - Mapping a nearby galaxy filament

## Visit

**Proposal 12276, Visit 15, completed** Thu May 19 01:05:40 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

Special Requirements: (none)

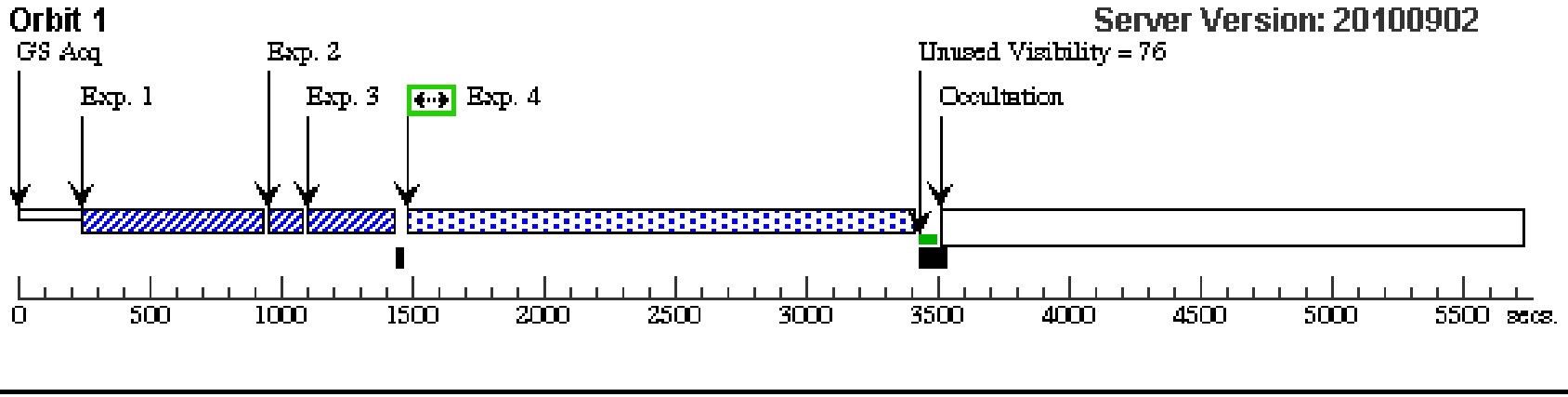
## Fixed Targets

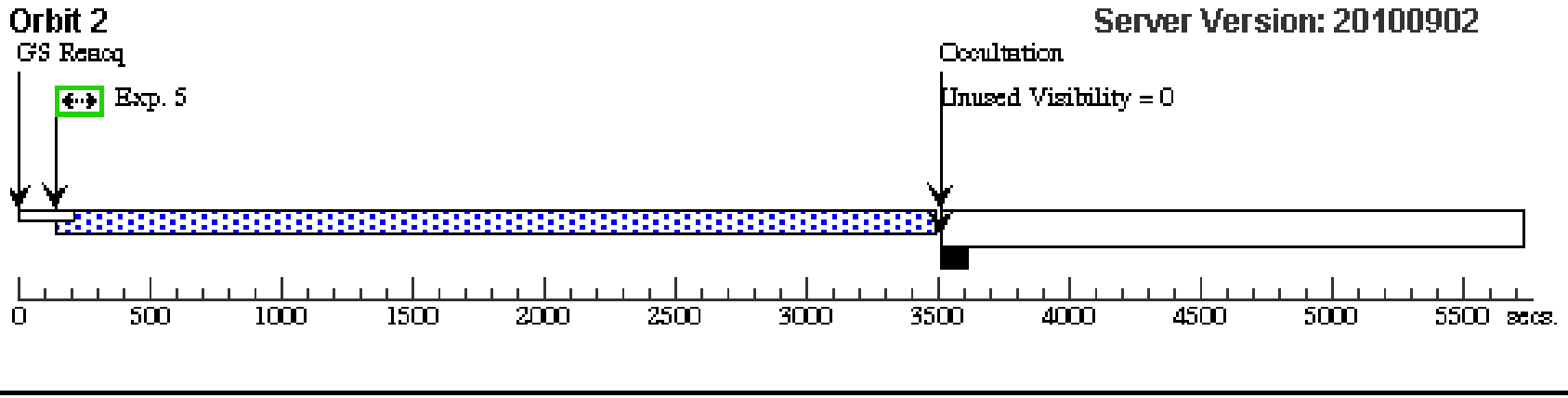
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (15) | SBS1551+572 | RA: 15 52 32.5500 (238.1356250d)<br>Dec: +57 05 16.50 (57.08792d)<br>Equinox: J2000 | Redshift: 0.366 | V=17.36+/-0.1<br>FUV=0.15E-14 | Reference Frame: ICRS |

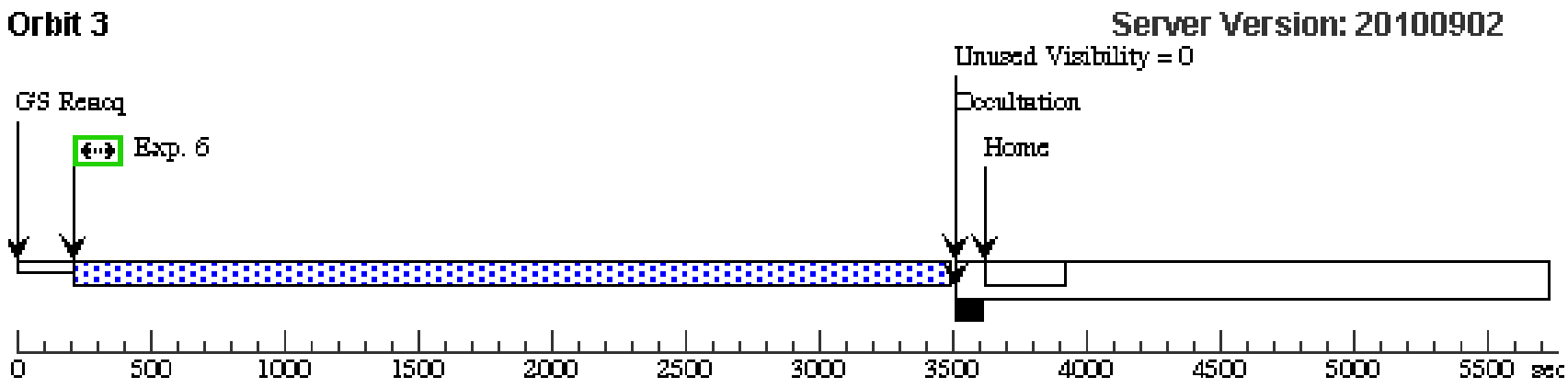
## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | SBS1551+572-ACQ/SEARCH | (15) SBS1551+572 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 36 Secs<br>*[==>]* | ***[1]*** |
| *Comments: Acquisition exposure with G130M spectral element.<br>Calculated for 0.5*F(1700)=0.8E-15 erg/cm2/s/A.<br>COS ETC result for S/N=30 is 39 sec (id COS.A328312).<br>Count rate 349/sec.* | | | | | | | | | |
| 2 | SBS1551+572-ACQ/PEAKXD | (15) SBS1551+572 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 36 Secs<br>*[==>]* | ***[1]*** |
| *Comments: See the previous TA comment for ET calculation.* | | | | | | | | | |
| 3 | SBS1551+572-ACQ/PEAKD | (15) SBS1551+572 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5;<br>STEP-SIZE=0.9 | | | 36 Secs<br>*[==>]* | ***[1]*** |
| 4 | SBS1551+572-orbit1(1327-3) | (15) SBS1551+572 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=1882;<br>FP-POS=3 | | | 1882 Secs<br>*[==>]* | ***[1]*** |
| *Comments: 2/3rds of buffer time at twice nominal flux is 3635 sec* | | | | | | | | | |
| 5 | SBS1551+572-orbit2(1291-3) | (15) SBS1551+572 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=3225;<br>FP-POS=3 | | | 3225 Secs<br>*[==>]* | ***[2]*** |
| *Comments: 2/3rds of buffer time at twice nominal flux is 3635 sec* | | | | | | | | | |
| 6 | SBS1551+572-orbit3(1291-4) | (15) SBS1551+572 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=3225;<br>FP-POS=4 | | | 3225 Secs<br>*[==>]* | ***[3]*** |
| *Comments: 2/3rds of buffer time at twice nominal flux is 3635 sec* | | | | | | | | | |

Orbit Structure



## Visit

**Proposal 12276, Visit 16, scheduling** Thu May 19 01:05:40 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

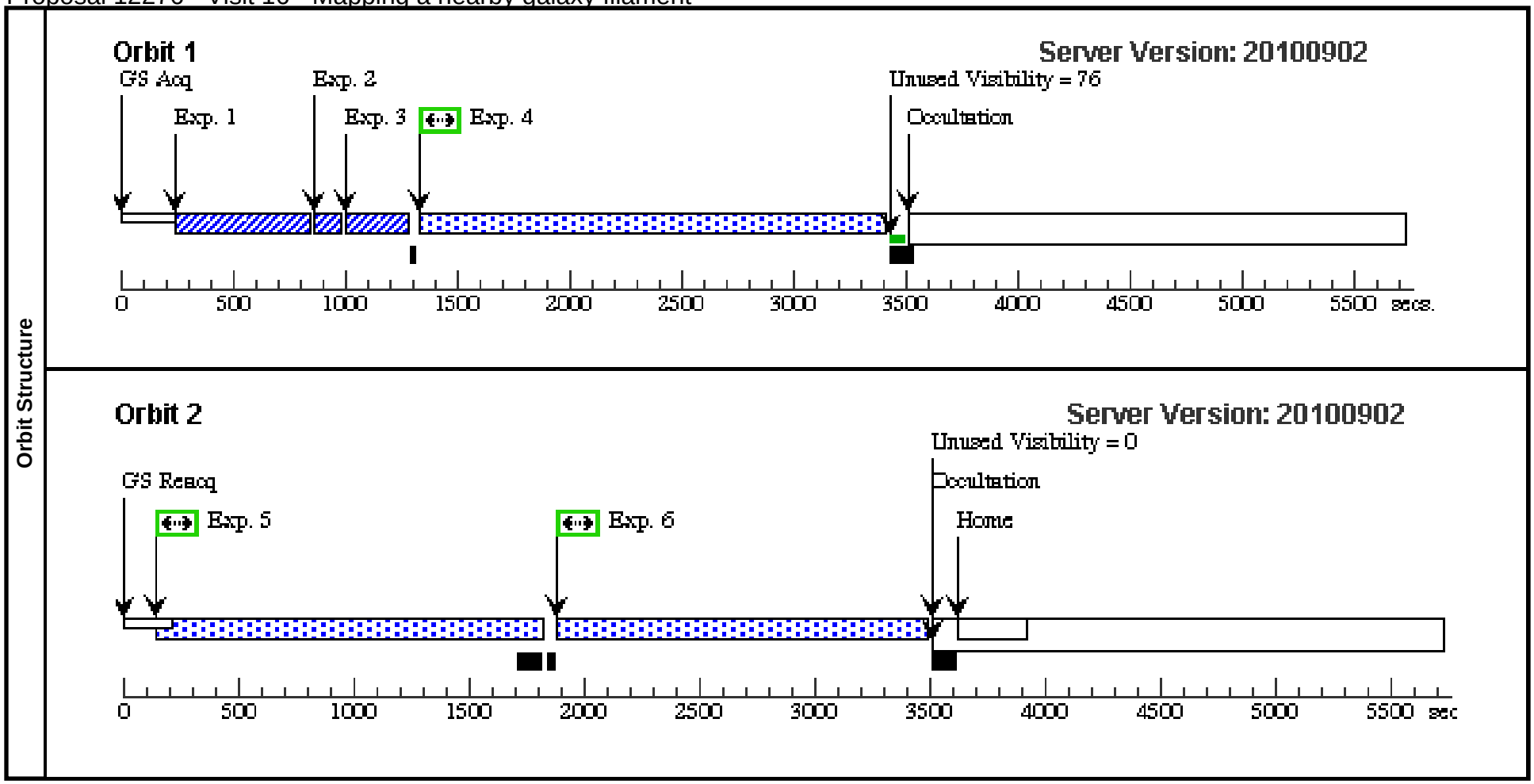
Special Requirements: (none)

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (16) | SBS1624+575 | RA: 16 25 26.5000 (246.3604167d)<br>Dec: +57 27 27.00 (57.45750d)<br>Equinox: J2000 | Redshift: 0.067 | V=15.47+/-0.1<br>FUV=0.27E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | SBS1624+575-ACQ/SEARCH | (16) SBS1624+575 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 26 Secs<br>*[==>]* | <br>***[1]*** |
| *Comments: Acquisition exposure with G130M spectral element.<br>Calculated for 0.5*F(1700)=1.4E-15 erg/cm2/s/A.<br>COS ETC result for S/N=35 is 28 sec (id COS.A328300).<br>Count rate 371/sec.* | | | | | | | | | |
| 2 | SBS1624+575-ACQ/PEAKXD | (16) SBS1624+575 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 26 Secs<br>*[==>]* | <br>***[1]*** |
| 3 | SBS1624+575-ACQ/PEAKD | (16) SBS1624+575 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5;<br>STEP-SIZE=0.9 | | | 26 Secs<br>*[==>]* | <br>***[1]*** |
| 4 | SBS1624+575-orbit1(1327-3) | (16) SBS1624+575 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=2032;<br>FP-POS=3 | | | 2032 Secs<br>*[==>]* | <br>***[1]*** |
| *Comments: 2/3rds of buffer time at twice nominal flux is 2999 sec* | | | | | | | | | |
| 5 | SBS1624+575-orbit2(1291-3) | (16) SBS1624+575 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1458;<br>FP-POS=3 | | | 1558 Secs<br>*[==>]* | <br>***[2]*** |
| *Comments: 2/3rds of buffer time at twice nominal flux is 2999 sec* | | | | | | | | | |
| 6 | SBS1624+575-orbit2(1291-4) | (16) SBS1624+575 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1558;<br>FP-POS=4 | | | 1558 Secs<br>*[==>]* | <br>***[2]*** |
| *Comments: 2/3rds of buffer time at twice nominal flux is 2999 sec* | | | | | | | | | |


Orbit Structure
Orbit 1
Server Version: 20100902
GS Acq
Exp. 1
Exp. 2
Exp. 3
Exp. 4
Unused Visibility = 76
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 2
Server Version: 20100902
Unused Visibility = 0
GS Reacq
Exp. 5
Exp. 6
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500

## Visit

**Proposal 12276, Visit 17, scheduling** Thu May 19 01:05:41 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

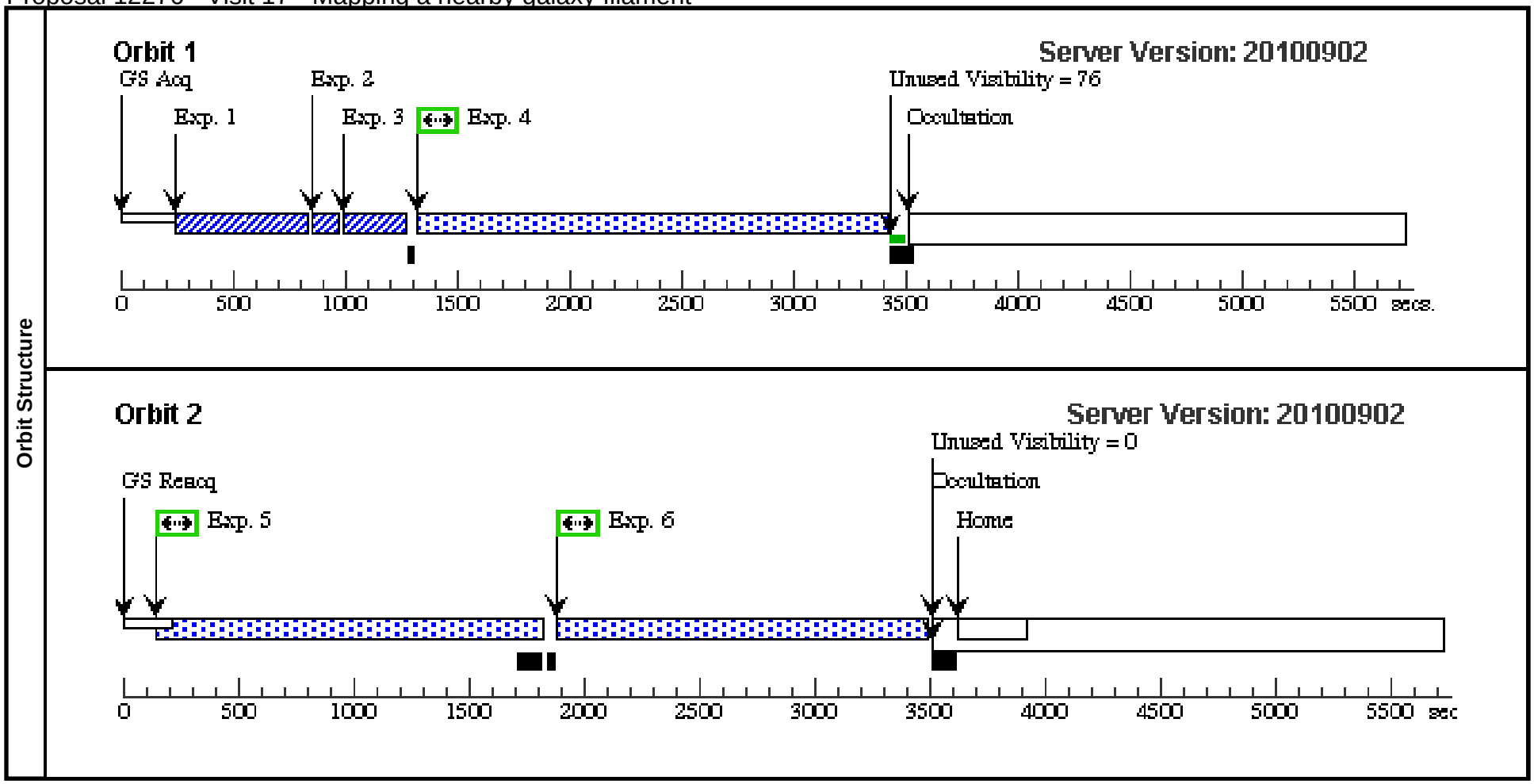
Special Requirements: (none)

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (17) | SDSSJ150455.56+564920.3 | RA: 15 04 55.5200 (226.2313333d)<br>Dec: +56 49 19.70 (56.82214d)<br>Equinox: J2000 | Redshift: 0.360 | V=17.08+/-0.1<br>FUV=0.22E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | SDSSJ150455.56+564920.3-ACQ/SEARCH | (17) SDSSJ150455.56+564920.3 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 25 Secs<br>*[==>]* | *[1]* |
| | *Comments: Acquisition exposure with G130M spectral element.*<br>*Calculated for 0.5*F(1700)=1.1E-15 erg/cm2/s/A.*<br>*COS ETC result for S/N=30 is 27 sec (id COS.A328305).*<br>*Count rate 360/sec.* | | | | | | | | |
| 2 | SDSSJ150455.56+564920.3-ACQ/PEAKXD | (17) SDSSJ150455.56+564920.3 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 25 Secs<br>*[==>]* | *[1]* |
| 3 | SDSSJ150455.56+564920.3-ACQ/PEAKD | (17) SDSSJ150455.56+564920.3 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5;<br>STEP-SIZE=0.9 | | | 25 Secs<br>*[==>]* | *[1]* |
| 4 | SDSSJ150455.56+564920.3-orbit1(1327-3) | (17) SDSSJ150455.56+564920.3 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=2047;<br>FP-POS=3 | | | 2047 Secs<br>*[==>]* | *[1]* |
| | *Comments: 2/3rds of buffer time at twice nominal flux is 3235 sec* | | | | | | | | |
| 5 | SDSSJ150455.56+564920.3-orbit2(1291-3) | (17) SDSSJ150455.56+564920.3 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1458;<br>FP-POS=3 | | | 1558 Secs<br>*[==>]* | *[2]* |
| | *Comments: 2/3rds of buffer time at twice nominal flux is 3235 sec* | | | | | | | | |
| 6 | SDSSJ150455.56+564920.3-orbit2(1291-4) | (17) SDSSJ150455.56+564920.3 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1558;<br>FP-POS=4 | | | 1558 Secs<br>*[==>]* | *[2]* |
| | *Comments: 2/3rds of buffer time at twice nominal flux is 3235 sec* | | | | | | | | |


Orbit Structure
Orbit 1
Server Version: 20100902
GS Acq
Exp. 1
Exp. 2
Exp. 3
Exp. 4
Unused Visibility = 76
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 2
Server Version: 20100902
Unused Visibility = 0
GS Reacq
Occultation
Exp. 5
Exp. 6
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500

## Visit

**Proposal 12276, Visit 18, scheduling** Thu May 19 01:05:41 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

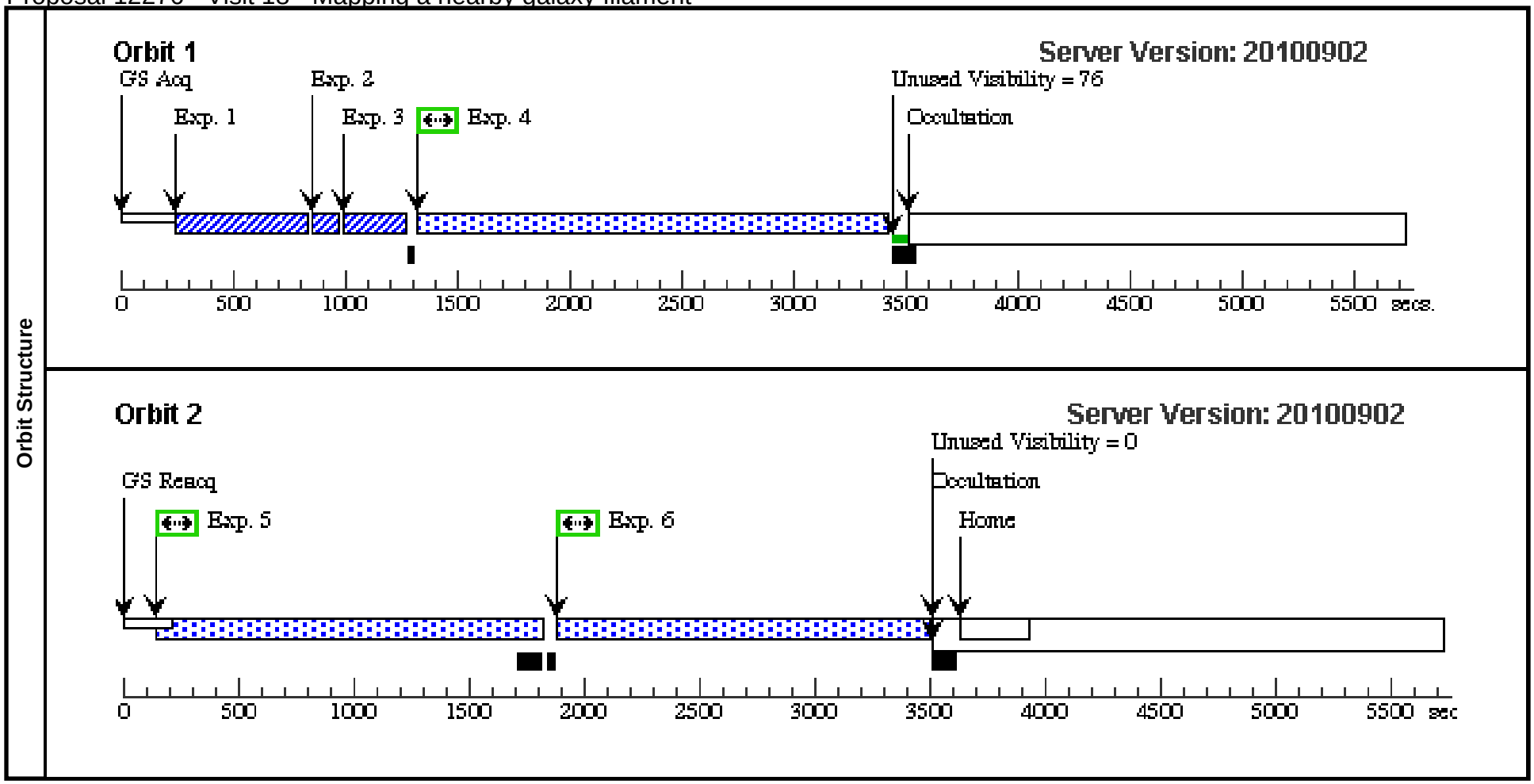
Special Requirements: (none)

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (18) | SDSSJ170328.90+614109.0 | RA: 17 03 29.0000 (255.8708333d)<br>Dec: +61 41 9.60 (61.68600d)<br>Equinox: J2000 | Redshift: 0.077 | V=16.86+/-0.1<br>FUV=0.21E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | SDSSJ170328.90+614109.0-ACQ/SEARCH | (18) SDSSJ170328.90+614109.0 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 25 Secs<br>*[==>]* | *[1]* |
| | *Comments: Acquisition exposure with G130M spectral element.*<br>*Calculated for 0.5*F(1700)=1.1E-15 erg/cm2/s/A.*<br>*COS ETC result for S/N=30 is 27 sec (id COS.A328305).*<br>*Count rate 360/sec.* | | | | | | | | |
| 2 | SDSSJ170328.90+614109.0-ACQ/PEAKXD | (18) SDSSJ170328.90+614109.0 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 25 Secs<br>*[==>]* | *[1]* |
| 3 | SDSSJ170328.90+614109.0-ACQ/PEAKD | (18) SDSSJ170328.90+614109.0 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5;<br>STEP-SIZE=0.9 | | | 25 Secs<br>*[==>]* | *[1]* |
| 4 | SDSSJ170328.90+614109.0-orbit1(1327-3) | (18) SDSSJ170328.90+614109.0 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=2052;<br>FP-POS=3 | | | 2052 Secs<br>*[==>]* | *[1]* |
| | *Comments: 2/3rds of buffer time at twice nominal flux is 3286 sec* | | | | | | | | |
| 5 | SDSSJ170328.90+614109.0-orbit2(1291-3) | (18) SDSSJ170328.90+614109.0 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1460;<br>FP-POS=3 | | | 1560 Secs<br>*[==>]* | *[2]* |
| | *Comments: 2/3rds of buffer time at twice nominal flux is 3286 sec* | | | | | | | | |
| 6 | SDSSJ170328.90+614109.0-orbit2(1291-4) | (18) SDSSJ170328.90+614109.0 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1561;<br>FP-POS=4 | | | 1561 Secs<br>*[==>]* | *[2]* |
| | *Comments: 2/3rds of buffer time at twice nominal flux is 3286 sec* | | | | | | | | |


Orbit Structure
Orbit 1
Server Version: 20100902
GS Acq
Exp. 1
Exp. 2
Exp. 3
Exp. 4
Unused Visibility = 76
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 2
Server Version: 20100902
Unused Visibility = 0
GS Reacq
Occultation
Exp. 5
Exp. 6
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

## Visit

**Proposal 12276, Visit 19, scheduling** Thu May 19 01:05:41 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

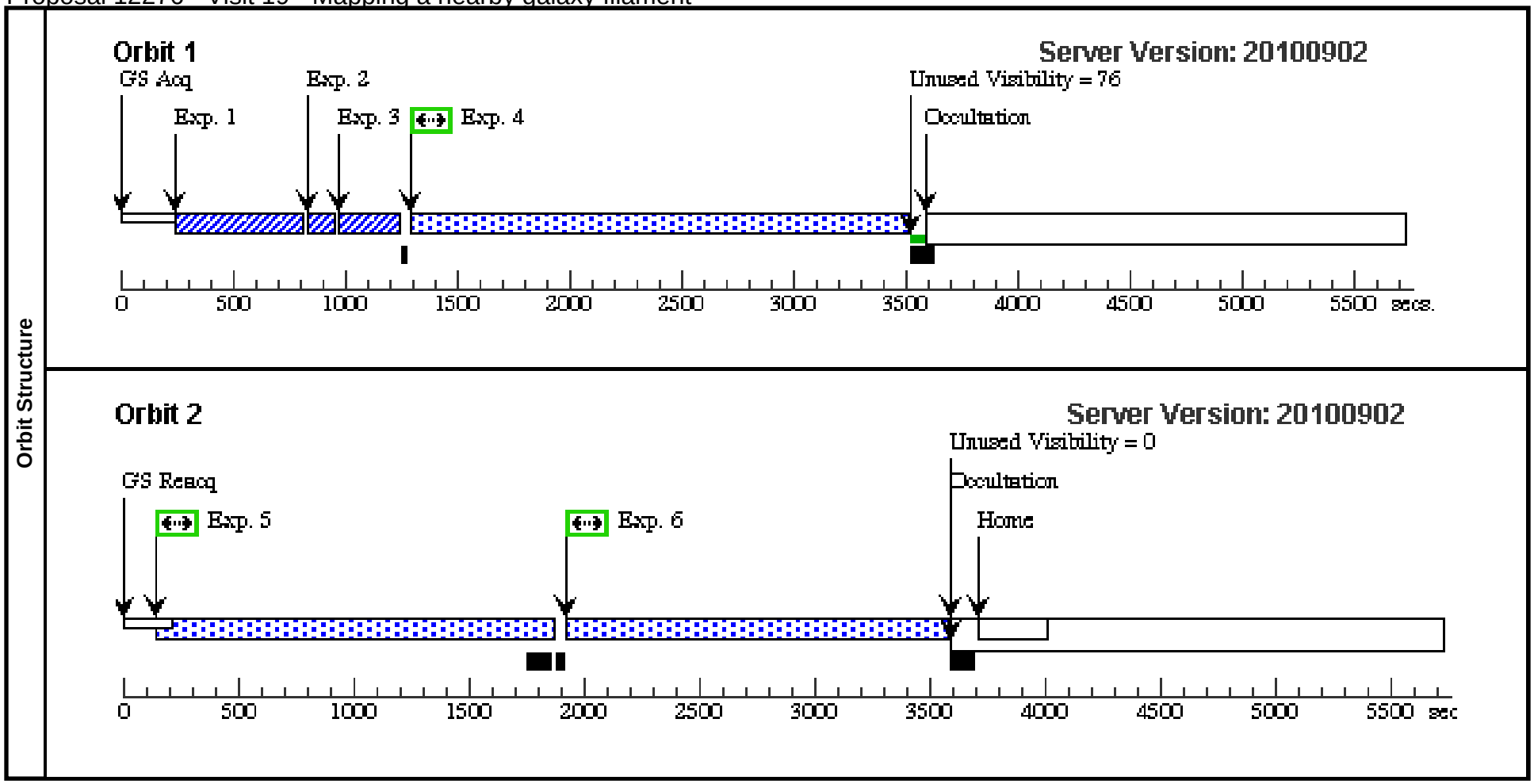
Special Requirements: (none)

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (19) | SDSSJ171737.95+655939.3 | RA: 17 17 38.0000 (259.4083333d)<br>Dec: +65 59 39.00 (65.99417d)<br>Equinox: J2000 | Redshift: 0.293 | V=17.38+/-0.1<br>FUV=0.31E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | SDSSJ171737.95+655939.3-ACQ/SEARCH | (19) SDSSJ171737.95+655939.3 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 23 Secs<br>*[==>]* | *[1]* |
| | *Comments: Acquisition exposure with G130M spectral element.*<br>*Calculated for 0.5*F(1700)=1.6E-15 erg/cm2/s/A.*<br>*COS ETC result for S/N=35 is 24 sec (id COS.A328298).*<br>*Count rate 379/sec.* | | | | | | | | |
| 2 | SDSSJ171737.95+655939.3-ACQ/PEAKXD | (19) SDSSJ171737.95+655939.3 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 23 Secs<br>*[==>]* | *[1]* |
| 3 | SDSSJ171737.95+655939.3-ACQ/PEAKD | (19) SDSSJ171737.95+655939.3 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5;<br>STEP-SIZE=0.9 | | | 23 Secs<br>*[==>]* | *[1]* |
| 4 | SDSSJ171737.95+655939.3-orbit1(1327-3) | (19) SDSSJ171737.95+655939.3 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=2165;<br>FP-POS=3 | | | 2165 Secs<br>*[==>]* | *[1]* |
| | *Comments: 2/3rds of buffer time at twice nominal flux is 2833 sec* | | | | | | | | |
| 5 | SDSSJ171737.95+655939.3-orbit2(1291-3) | (19) SDSSJ171737.95+655939.3 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1502;<br>FP-POS=3 | | | 1602 Secs<br>*[==>]* | *[2]* |
| | *Comments: 2/3rds of buffer time at twice nominal flux is 2833 sec* | | | | | | | | |
| 6 | SDSSJ171737.95+655939.3-orbit2(1291-4) | (19) SDSSJ171737.95+655939.3 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1602;<br>FP-POS=4 | | | 1602 Secs<br>*[==>]* | *[2]* |
| | *Comments: 2/3rds of buffer time at twice nominal flux is 2833 sec* | | | | | | | | |


Orbit Structure
Orbit 1
Server Version: 20100902
GS Acq
Exp. 1
Exp. 2
Exp. 3
Exp. 4
Unused Visibility = 76
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 2
Server Version: 20100902
Unused Visibility = 0
GS Reacq
Exp. 5
Exp. 6
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500

## Visit

**Proposal 12276, Visit 20, scheduling** Thu May 19 01:05:42 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

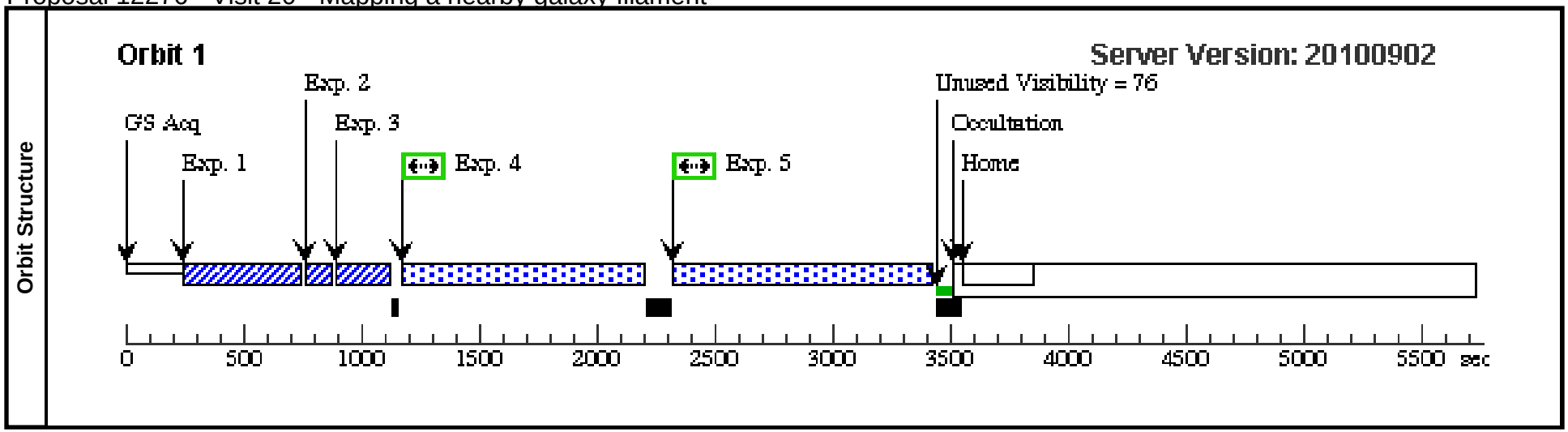
Special Requirements: (none)

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (20) | SDSSJ172243.80+620958.0 | RA: 17 22 43.8000 (260.6825000d)<br>Dec: +62 09 58.00 (62.16611d)<br>Equinox: J2000 | Redshift: 0.028 | V=18.00+/-0.1<br>FUV=1.20E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | SDSSJ172243.80+620958.0-ACQ/SEARCH | (20) SDSSJ172243.80+620958.0 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 15 Secs<br>*[==>]* | *[1]* |
| | *Comments: Acquisition exposure with G130M spectral element.*<br>*Calculated for 0.5*F(1700)=6.0E-15 erg/cm2/s/A.*<br>*COS ETC result for S/N=60 is 18 sec (id COS.A328276).*<br>*Count rate 547/sec.* | | | | | | | | |
| 2 | SDSSJ172243.80+620958.0-ACQ/PEAKXD | (20) SDSSJ172243.80+620958.0 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 15 Secs<br>*[==>]* | *[1]* |
| 3 | SDSSJ172243.80+620958.0-ACQ/PEAKD | (20) SDSSJ172243.80+620958.0 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5;<br>STEP-SIZE=0.9 | | | 15 Secs<br>*[==>]* | *[1]* |
| 4 | SDSSJ172243.80+620958.0-orbit1(1327-3) | (20) SDSSJ172243.80+620958.0 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=974;<br>FP-POS=3 | | | 974 Secs<br>*[==>]* | *[1]* |
| | *Comments: 2/3rds of buffer time at twice nominal flux is 1272 sec* | | | | | | | | |
| 5 | SDSSJ172243.80+620958.0-orbit1(1291-3) | (20) SDSSJ172243.80+620958.0 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=974;<br>FP-POS=3 | | | 974 Secs<br>*[==>]* | *[1]* |
| | *Comments: 2/3rds of buffer time at twice nominal flux is 1272 sec* | | | | | | | | |


Orbit Structure
Orbit 1
Server Version: 20100902
GS Acq
Exp. 1
Exp. 2
Exp. 3
Exp. 4
Exp. 5
Unused Visibility = 76
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

# Proposal 12276 - Visit 21 - Mapping a nearby galaxy filament

## Visit

**Proposal 12276, Visit 21, completed** Thu May 19 01:05:42 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

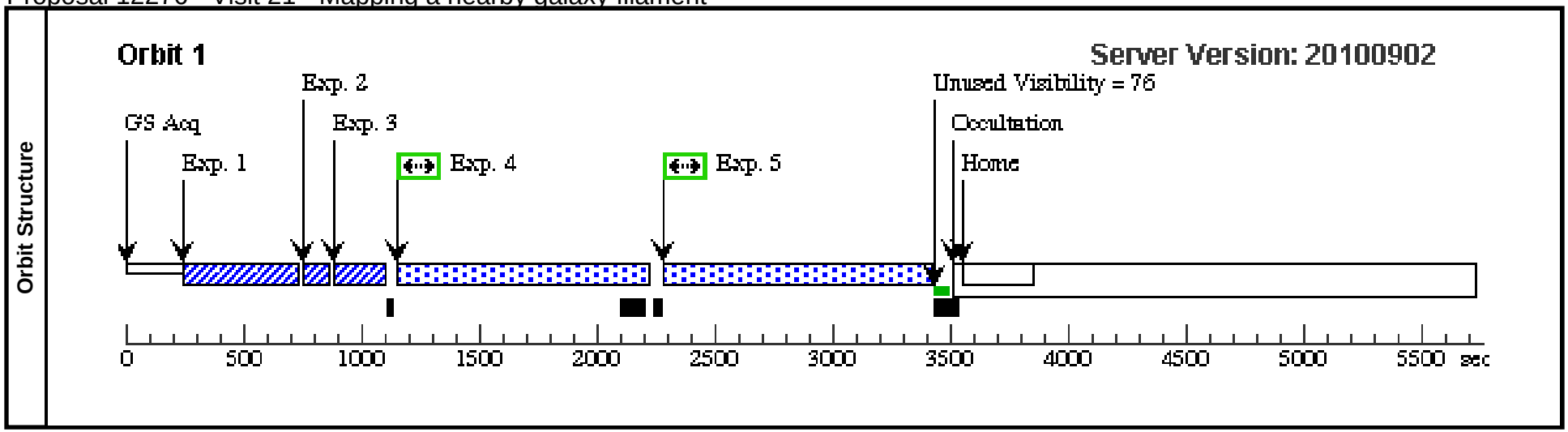
Special Requirements: (none)

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (21) | SDSSJ172823.40+573243.0 | RA: 17 28 23.8000 (262.0991667d)<br>Dec: +57 32 44.00 (57.54556d)<br>Equinox: J2000 | Redshift: 0.028 | V=18.16+/-0.1<br>FUV=0.94E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | SDSSJ172823.40+573243.0-ACQ/SEARCH | (21) SDSSJ172823.40+573243.0 | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 14 Secs<br>*[==>]* | *[1]* |
| | *Comments: Acquisition exposure with G130M spectral element.*<br>*Calculated for 0.5*F(1700)=4.7E-15 erg/cm2/s/A.*<br>*COS ETC result for S/N=50 is 16 sec (id COS.A328278).*<br>*Count rate 497/sec.* | | | | | | | | |
| 2 | SDSSJ172823.40+573243.0-ACQ/PEAKXD | (21) SDSSJ172823.40+573243.0 | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 14 Secs<br>*[==>]* | *[1]* |
| 3 | SDSSJ172823.40+573243.0-ACQ/PEAKD | (21) SDSSJ172823.40+573243.0 | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5;<br>STEP-SIZE=0.9 | | | 14 Secs<br>*[==>]* | *[1]* |
| 4 | SDSSJ172823.40+573243.0-orbit1(1327-3) | (21) SDSSJ172823.40+573243.0 | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=917;<br>FP-POS=3 | | | 1017 Secs<br>*[==>]* | *[1]* |
| | *Comments: 2/3rds of buffer time at twice nominal flux is 1517 sec* | | | | | | | | |
| 5 | SDSSJ172823.40+573243.0-orbit1(1291-3) | (21) SDSSJ172823.40+573243.0 | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=1017;<br>FP-POS=3 | | | 1017 Secs<br>*[==>]* | *[1]* |
| | *Comments: 2/3rds of buffer time at twice nominal flux is 1571 sec* | | | | | | | | |


Orbit Structure
Orbit 1
Server Version: 20100902
GS Acq
Exp. 1
Exp. 2
Exp. 3
Exp. 4
Exp. 5
Unused Visibility = 76
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

## Visit

**Proposal 12276, Visit 22, completed** Thu May 19 01:05:42 GMT 2011

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV

Special Requirements: (none)

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (22) | UGC10855A | RA: 17 25 19.2000 (261.3300000d)<br>Dec: +58 49 0.00 (58.81667d)<br>Equinox: J2000 | Redshift: 0.029 | V=18.97+/-0.1<br>FUV=0.75E-14 | Reference Frame: ICRS |

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | UGC10855A-ACQ/SEARCH | (22) UGC10855A | COS/FUV, ACQ/SEARCH, PSA | G130M 1327 A | SCAN-SIZE=3 | | | 18 Secs<br>*[==>]* | *[1]* |
| *Comments: Acquisition exposure with G130M spectral element.<br>Calculated for 0.5*F(1700)=3.8E-15 erg/cm2/s/A.<br>COS ETC result for S/N=50 is 30 sec (id COS.A328284).<br>Count rate 463/sec* | | | | | | | | | |
| 2 | UGC10855A-ACQ/PEAKXD | (22) UGC10855A | COS/FUV, ACQ/PEAKXD, PSA | G130M 1327 A | | | | 18 Secs<br>*[==>]* | *[1]* |
| 3 | UGC10855A-ACQ/PEAKD | (22) UGC10855A | COS/FUV, ACQ/PEAKD, PSA | G130M 1327 A | NUM-POS=5;<br>STEP-SIZE=0.9 | | | 18 Secs<br>*[==>]* | *[1]* |
| 4 | UGC10855A-orbit1(1327-3) | (22) UGC10855A | COS/FUV, TIME-TAG, PSA | G130M 1327 A | BUFFER-TIME=882;<br>FP-POS=3 | | | 982 Secs<br>*[==>]* | *[1]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 1764 sec* | | | | | | | | | |
| 5 | UGC10855A-orbit1(1291-3) | (22) UGC10855A | COS/FUV, TIME-TAG, PSA | G130M 1291 A | BUFFER-TIME=982;<br>FP-POS=3 | | | 982 Secs<br>*[==>]* | *[1]* |
| *Comments: 2/3rds of buffer time at twice nominal flux is 1764 sec* | | | | | | | | | |

## Orbit Structure