# 16245 - Mapping Lyman alpha and ionization in the leakiest galaxies

Cycle: 28, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

**INVESTIGATORS**

| *Name* | *Institution* |
|---|---|
| **Prof. Goeran Oestlin (PI) (ESA Member) (Contact)** | **Stockholm University** |
| Dr. Angela Adamo (CoI) (ESA Member) | Stockholm University |
| Dr. Arjan Bik (CoI) (ESA Member) | Stockholm University |
| Prof. John Chisholm (CoI) (AdminUSPI) | University of Texas at Austin |
| Prof. Matthew James Hayes (CoI) (ESA Member) | Stockholm University |
| Dr. Daniel Kunth (CoI) (ESA Member) | CNRS, Institut d'Astrophysique de Paris |
| Dr. Jens Melinder (CoI) (ESA Member) | Stockholm University |
| Armin Rasekh (CoI) (ESA Member) | Stockholm University |
| Dr. Axel Runnholm (CoI) (ESA Member) | Stockholm University |
| Prof. Daniel Schaerer (CoI) (ESA Member) | University of Geneva, Department of Astronomy |
| Prof. Anne Verhamme (CoI) (ESA Member) | University of Geneva, Department of Astronomy |

**VISITS**

| *Visit* | *Targets used in Visit* | *Configurations used in Visit* | *Orbits Used* | *Last Orbit Planner Run* | *OP Current with Visit?* |
|---|---|---|---|---|---|
| 10 | (1) SDSS-J124300.62+464650.5 | ACS/SBC | 2 | 07-Jun-2024 17:00:20.0 | yes |
| 11 | (1) SDSS-J124300.62+464650.5 | ACS/SBC | 2 | 07-Jun-2024 17:00:20.0 | yes |
| 12 | (1) SDSS-J124300.62+464650.5 | ACS/SBC | 2 | 07-Jun-2024 17:00:21.0 | yes |
| 13 | (1) SDSS-J124300.62+464650.5 | ACS/SBC | 2 | 07-Jun-2024 17:00:21.0 | yes |
| 14 | (1) SDSS-J124300.62+464650.5 | ACS/SBC | 2 | 07-Jun-2024 17:00:22.0 | yes |

| *Visit* | *Targets used in Visit* | *Configurations used in Visit* | *Orbits Used* | *Last Orbit Planner Run* | *OP Current with Visit?* |
|---|---|---|---|---|---|
| 15 | (1) SDSS-J124300.62+464650.5 | WFC3/UVIS | 2 | 07-Jun-2024 17:00:23.0 | yes |
| 16 | (1) SDSS-J124300.62+464650.5 | WFC3/IR<br>WFC3/UVIS | 2 | 07-Jun-2024 17:00:24.0 | yes |
| 17 | (1) SDSS-J124300.62+464650.5 | ACS/WFC | 2 | 07-Jun-2024 17:00:25.0 | yes |
| 18 | (1) SDSS-J124300.62+464650.5 | ACS/WFC | 2 | 07-Jun-2024 17:00:25.0 | yes |
| 22 | (3) SDSS-J115448.85+244333.0 | ACS/SBC | 2 | 07-Jun-2024 17:00:26.0 | yes |
| 23 | (3) SDSS-J115448.85+244333.0 | ACS/SBC | 1 | 07-Jun-2024 17:00:26.0 | yes |
| 24 | (2) SDSS-J125644.15+450917.1 | ACS/SBC | 2 | 07-Jun-2024 17:00:27.0 | yes |
| 25 | (2) SDSS-J125644.15+450917.1 | ACS/SBC | 1 | 07-Jun-2024 17:00:27.0 | yes |
| 26 | (3) SDSS-J115448.85+244333.0 | WFC3/IR<br>WFC3/UVIS | 3 | 07-Jun-2024 17:00:28.0 | yes |
| 30 | (2) SDSS-J125644.15+450917.1 | WFC3/IR<br>WFC3/UVIS | 3 | 07-Jun-2024 17:00:30.0 | yes |
| 29 | (3) SDSS-J115448.85+244333.0 | ACS/WFC | 2 | 07-Jun-2024 17:00:31.0 | yes |
| Z9 | (3) SDSS-J115448.85+244333.0 | ACS/WFC | 1 | 07-Jun-2024 17:00:31.0 | yes |
| 28 | (2) SDSS-J125644.15+450917.1 | ACS/WFC | 2 | 07-Jun-2024 17:00:32.0 | yes |
| Z8 | (1) SDSS-J124300.62+464650.5 | ACS/WFC | 1 | 07-Jun-2024 17:00:33.0 | yes |

36 Total Orbits Used

**ABSTRACT**

Understanding cosmic reionization, and how galaxies contributed to it, is a very active field in extragalactic research. Since directly detecting the ionizing Lyman continuum (LyC) from galaxies in the epoch of reionization (EoR) is impossible, much attention has been given to the study of the conditions for LyC escape in low redshift (z) analogs with properties akin to those expected for galaxies in the EoR. Recently many LyC leaking galaxies have been identified in the low-z universe with HST/COS, and the strategy of selecting emission line galaxies with high ionization, as revealed by their [OIII]/[OII] ratios, has been particularly successful. The Lyman alpha (Lya) emission line from hydrogen is another vital probe of the high-z universe and is extensively used to find galaxies and determine their redshifts. Being a resonant line, the observability of Lya is very sensitive to the amount of neutral hydrogen in the interstellar medium (ISM) and it has been found that Lya emission is often dominated by large

halos, likely formed by resonant scattering.

Here we propose an imaging study of the Lya and ionized gas emission in three low-z galaxies with the highest (38-72%) known LyC escape fractions. We will investigate the existence of Lya halos, and map the ionization structure of the ISM, to investigate conditions for LyC escape and how isotropic it is.

In addition, for the source with highest escape fraction, its slightly higher redshift makes direct imaging of the LyC feasible. This rare opportunity means that the spatial distribution of the ionizing radiation and its escape fraction can be mapped and related to the local ionization level and dust content.

**OBSERVING DESCRIPTION**

ACS/SBC observations: In order to ensure a low detector temperature (and hence accepatble dark current level) throughout each visit, each visit is limited to no more than 2 orbits duration. For the same reasone we ask the schedulers to make sure that the SBC was not used 5 hours prior to each of our SBC visits. For one target (j1243+46) we take observations in F125LP, F140LP, F150LP and F165LP, and for the other two targets we will observe in F140LP and F165LP only. The F165LP observations, which are most sensitive to dark current, are always confined to the first orbit in a visit. The F125LP observations, which are affected by geocoronal emission, are obtained in the parts of orbits when HST is in earth shadow.

WFC3/UVIS: All exposures use post-flash to reach a minimum of 19 e/pix, and are, since the targets are small, to be obtained in the UVIS2-C1K1C aperture in order to limit CTI losses. All exposures are dithered with offsets large enough to mitigate droplets and allow subpixel PSF sampling.

WFC3/IR: these observations are contained in the same visits as UVIS, and employ 4 dithered expoures to sample the PSF, and to mitigate defects and self persistence.

ACS/WFC Ramp observations target the redshifted emission lines [OII]3727, H-beta, [OIII]5007 and H-alpha. Dithers are designed to sample the PSF and mitigate artefacts but kept small due to the limited field of view of the ramp apertures.

## Visit

**Proposal 16245, j1243+46-SBC-v1 (10), completed** Fri Jun 07 21:00:33 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: ACS/SBC

Special Requirements: (none)

*Comments: Message to the schedulers: Please make sure that ACS/SBC was not used (and that the high voltage was turned off) during the past 5 hours prior to this visit. This reason for this request is to ensure that the SBC detector is cool at the start of the visit, and to maintain the temperature at <25 C for the duration of the visit, so that the dark current does not ramp up to unacceptable levels.*

## Diagnostics

(j1243+46-SBC-v1 (10)) Warning (Orbit Planner): GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE

(j1243+46-SBC-v1 (10)) Warning (Orbit Planner): GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE

(j1243+46-SBC-v1 (10)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1243+46-SBC-v1 (10)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Exposure 1 (j1243+46-SBC-v1 (10)) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.

(Exposure 3 (j1243+46-SBC-v1 (10)) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.

## Fixed Targets

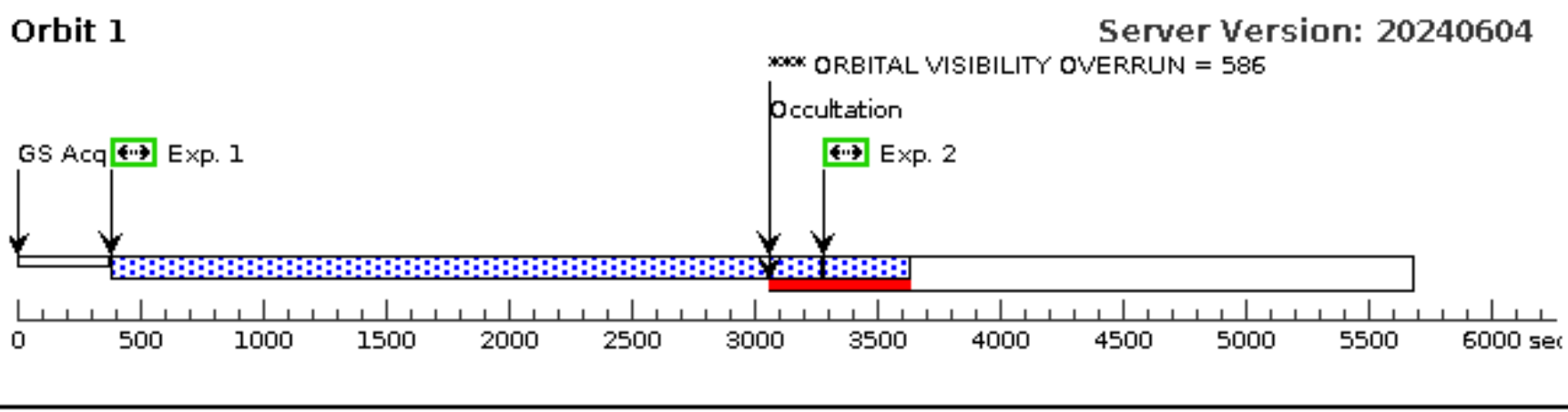
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | SDSS-J124300.62+464650.5 | RA: 12 43 0.6360 (190.7526500d)<br>Dec: +46 46 50.59 (46.78072d)<br>Equinox: J2000 | | V=21.48+/-0.04<br>GALEX FUV = 21.31 mag (AB) | Reference Frame: NED |

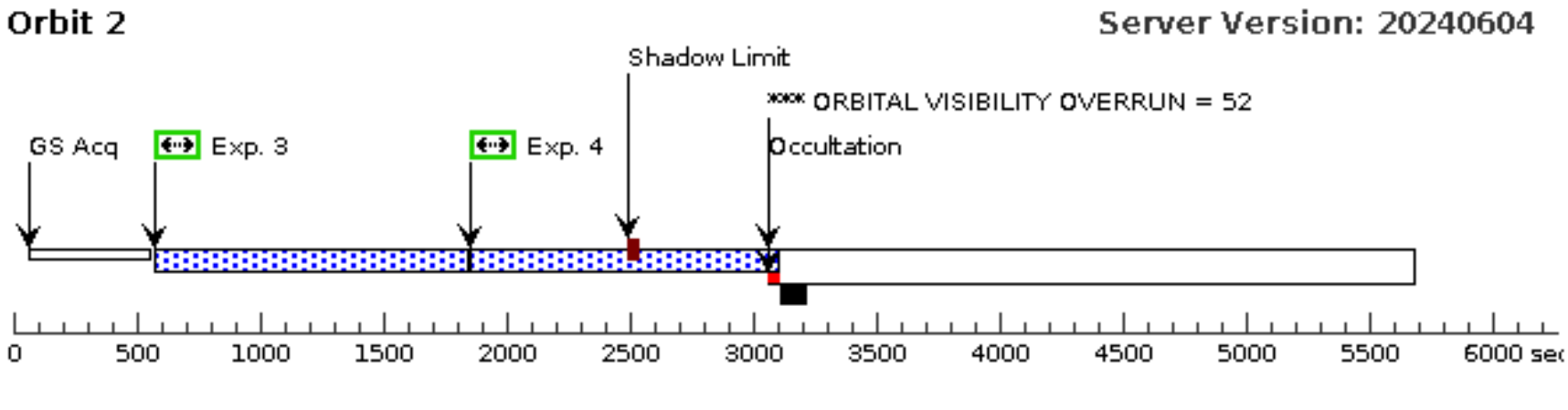
*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*z=0.43*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (1452034) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F165LP | | GS ACQ SCENARIO BASE1B3 | | 2821 Secs (2821 Secs)<br>*[==>]* | *[1]* |
| 2 | (1452017) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F150LP | | | | 300 Secs (300 Secs)<br>*[==>]* | *[1]* |
| 3 | (1452015) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F125LP | | SHADOW;<br>NEW OBSET FULL ACQ;<br>GS ACQ SCENARIO BASE1B3 | | 1200 Secs (1200 Secs)<br>*[==>]* | *[2]* |
| 4 | (1452035) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F140LP | | | | 1200 Secs (1200 Secs)<br>*[==>]* | *[2]* |

Orbit Structure



## Visit

**Proposal 16245, j1243+46-SBC-v2 (11), completed** Fri Jun 07 21:00:33 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: ACS/SBC

Special Requirements: SAME ORIENT AS 10; AFTER 10 BY 6 H TO 100 D

*Comments: Message to the schedulers: Please make sure that ACS/SBC was not used (and that the high voltage was turned off) during the past 5 hours prior to this visit. This reason for this request is to ensure that the SBC detector is cool at the start of the visit, and to maintain the temperature at <25 C for the duration of the visit, so that the dark current does not ramp up to unacceptable levels.*

## Diagnostics

(j1243+46-SBC-v2 (11)) Warning (Orbit Planner): GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE

(j1243+46-SBC-v2 (11)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1243+46-SBC-v2 (11)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Exposure 1 (j1243+46-SBC-v2 (11)) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.

(j1243+46-SBC-v2 (11)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

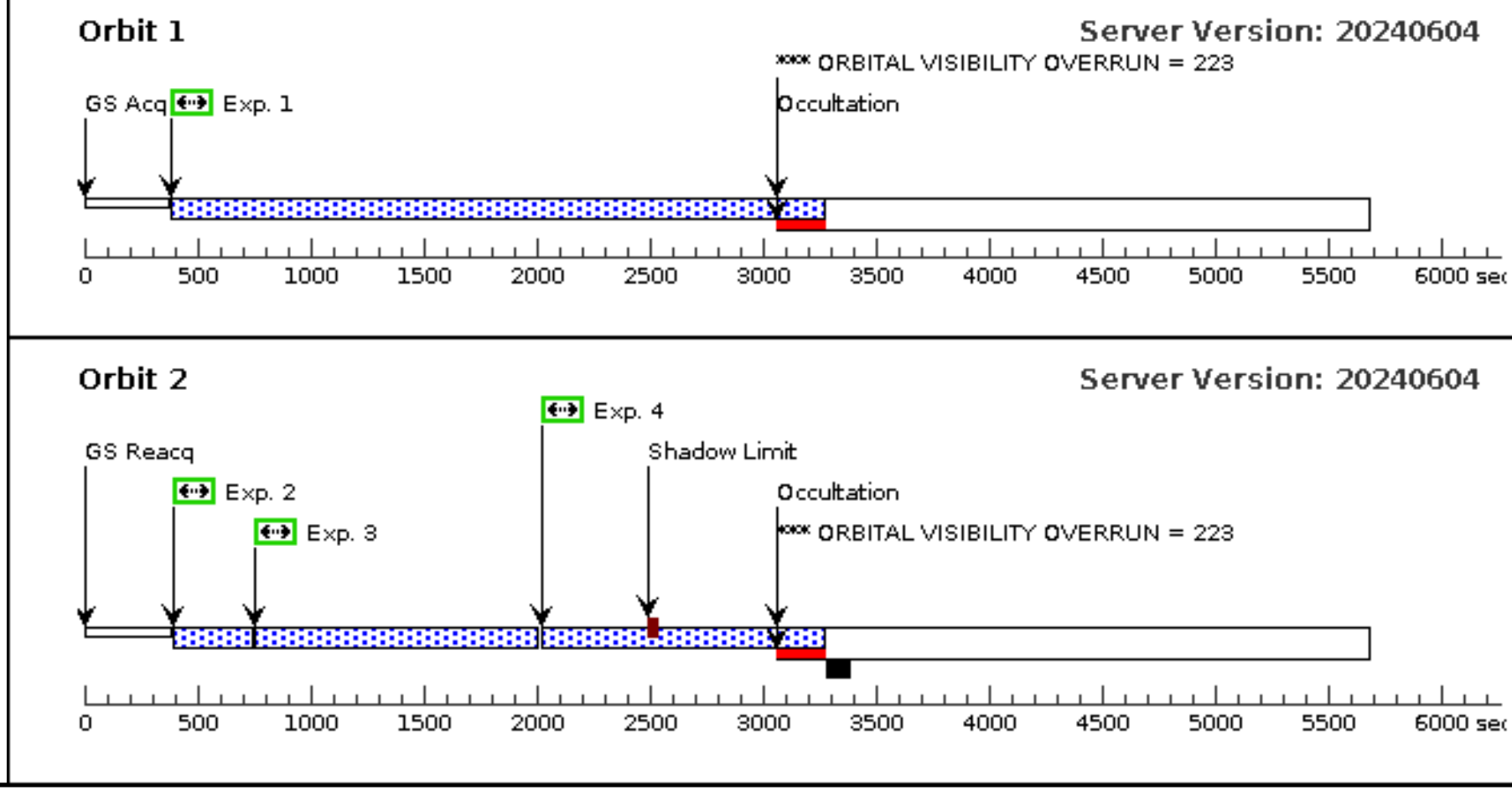
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | SDSS-J124300.62+464650.5 | RA: 12 43 0.6360 (190.7526500d)<br>Dec: +46 46 50.59 (46.78072d)<br>Equinox: J2000 | | V=21.48+/-0.04<br>GALEX FUV = 21.31 mag (AB) | Reference Frame: NED |

*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*z=0.43*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (1452034) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F165LP | | POS TARG 0.1848,0.4912;<br>GS ACQ SCENARIO BASE1B3 | | 2821 Secs (2821 Secs)<br>*[==>]* | ***[1]*** |
| 2 | (1452017) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F150LP | | SAME POS AS 1 | | 300 Secs (300 Secs)<br>*[==>]* | ***[2]*** |
| 3 | (1452015) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F125LP | | SAME POS AS 1;<br>SHADOW | | 1200 Secs (1200 Secs)<br>*[==>]* | ***[2]*** |
| 4 | (1452035) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F140LP | | SAME POS AS 1 | | 1200 Secs (1200 Secs)<br>*[==>]* | ***[2]*** |

Orbit Structure



## Visit

**Proposal 16245, j1243+46-SBC-v3 (12), completed** Fri Jun 07 21:00:33 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: ACS/SBC

Special Requirements: SAME ORIENT AS 10; AFTER 11 BY 6 H TO 100 D

*Comments: Message to the schedulers: Please make sure that ACS/SBC was not used (and that the high voltage was turned off) during the past 5 hours prior to this visit. This reason for this request is to ensure that the SBC detector is cool at the start of the visit, and to maintain the temperature at <25 C for the duration of the visit, so that the dark current does not ramp up to unacceptable levels.*

## Diagnostics

(j1243+46-SBC-v3 (12)) Warning (Orbit Planner): GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE

(j1243+46-SBC-v3 (12)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1243+46-SBC-v3 (12)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Exposure 1 (j1243+46-SBC-v3 (12)) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.

(j1243+46-SBC-v3 (12)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

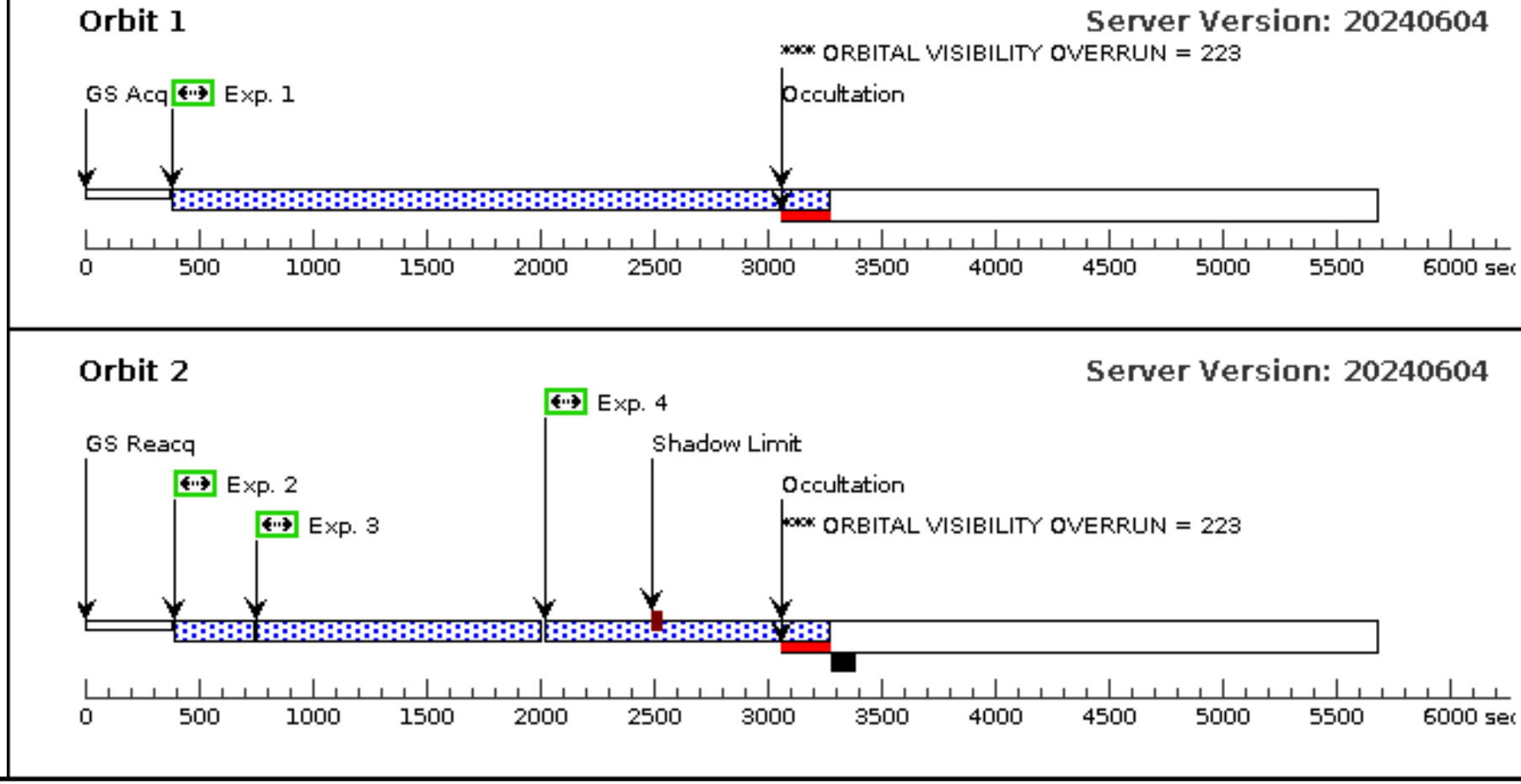
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | SDSS-J124300.62+464650.5 | RA: 12 43 0.6360 (190.7526500d)<br>Dec: +46 46 50.59 (46.78072d)<br>Equinox: J2000 | | V=21.48+/-0.04<br>GALEX FUV = 21.31 mag (AB) | Reference Frame: NED |

*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*z=0.43*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (1452034) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F165LP | | POS TARG -0.1680, -0.4829;<br>GS ACQ SCENARIO BASE1B3 | | 2821 Secs (2821 Secs)<br>*[==>]* | ***[1]*** |
| 2 | (1452017) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F150LP | | SAME POS AS 1 | | 300 Secs (300 Secs)<br>*[==>]* | ***[2]*** |
| 3 | (1452015) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F125LP | | SAME POS AS 1;<br>SHADOW | | 1200 Secs (1200 Secs)<br>*[==>]* | ***[2]*** |
| 4 | (1452035) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F140LP | | SAME POS AS 1 | | 1200 Secs (1200 Secs)<br>*[==>]* | ***[2]*** |

Orbit Structure



## Visit

**Proposal 16245, j1243+46-SBC-v4 (13), completed** Fri Jun 07 21:00:33 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: ACS/SBC

Special Requirements: SAME ORIENT AS 10; AFTER 12 BY 6 H TO 100 D

*Comments: Message to the schedulers: Please make sure that ACS/SBC was not used (and that the high voltage was turned off) during the past 5 hours prior to this visit. This reason for this request is to ensure that the SBC detector is cool at the start of the visit, and to maintain the temperature at <25 C for the duration of the visit, so that the dark current does not ramp up to unacceptable levels.*

## Diagnostics

(j1243+46-SBC-v4 (13)) Warning (Orbit Planner): GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE

(j1243+46-SBC-v4 (13)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1243+46-SBC-v4 (13)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Exposure 1 (j1243+46-SBC-v4 (13)) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.

(j1243+46-SBC-v4 (13)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

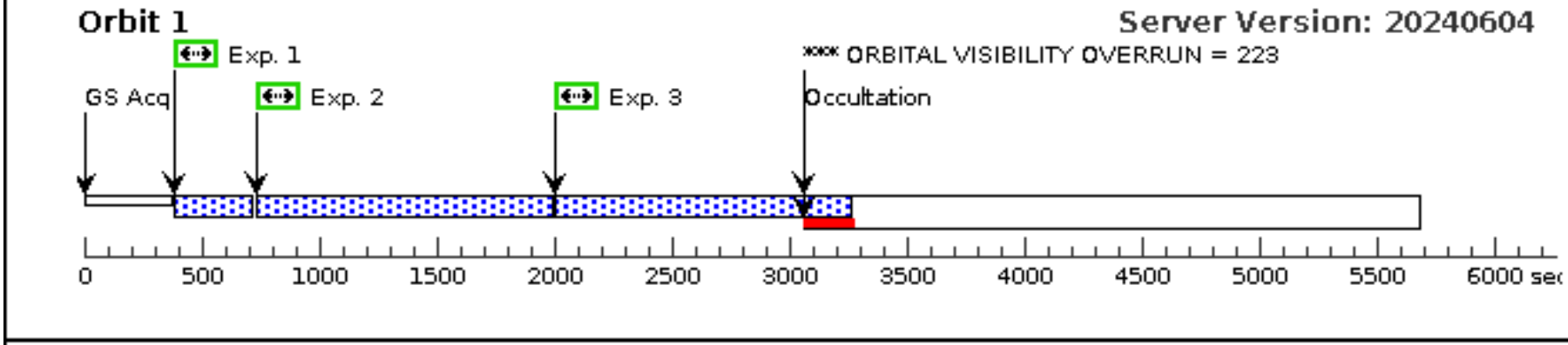
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | SDSS-J124300.62+464650.5 | RA: 12 43 0.6360 (190.7526500d)<br>Dec: +46 46 50.59 (46.78072d)<br>Equinox: J2000 | | V=21.48+/-0.04<br>GALEX FUV = 21.31 mag (AB) | Reference Frame: NED |

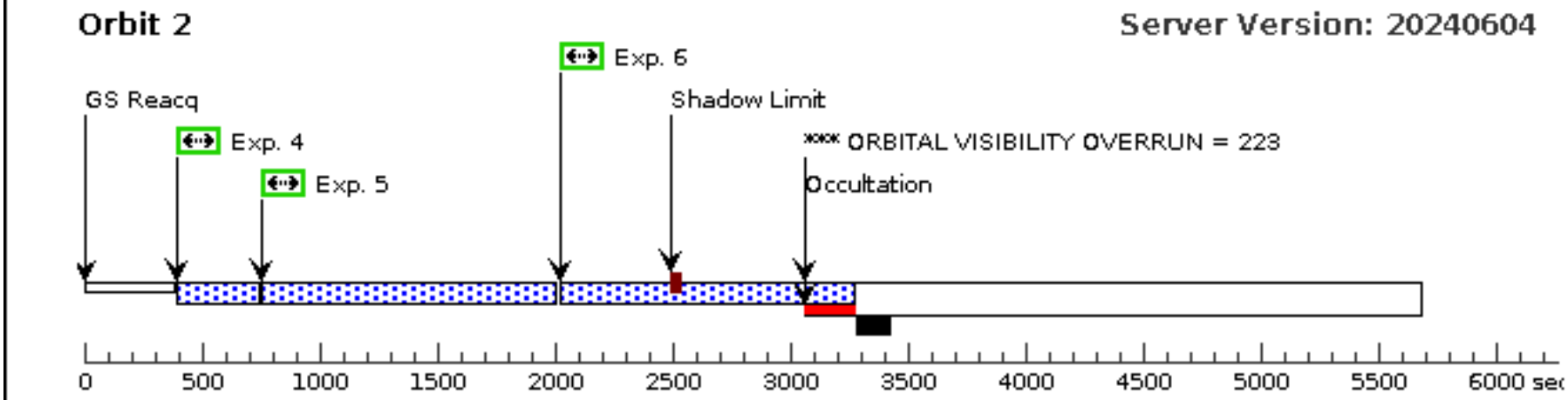
*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*z=0.43*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (1452034) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F165LP | | POS TARG 0.3276,1.0157;<br>GS ACQ SCENARIO BASE1B3 | | 268 Secs (268 Secs)<br>*[==>]* | <br>***[1]*** |
| 2 | (1452017) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F125LP | | SAME POS AS 1 | | 1200 Secs (1200 Secs)<br>*[==>]* | <br>***[1]*** |
| 3 | (1452017) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F165LP | | SAME POS AS 1 | | 1200 Secs (1200 Secs)<br>*[==>]* | <br>***[1]*** |
| 4 | (1452015) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F150LP | | SAME POS AS 1 | | 300 Secs (300 Secs)<br>*[==>]* | <br>***[2]*** |
| 5 | (1452035) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F125LP | | SAME POS AS 1;<br>SHADOW | | 1200 Secs (1200 Secs)<br>*[==>]* | <br>***[2]*** |
| 6 | (1452035) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F140LP | | SAME POS AS 1 | | 1200 Secs (1200 Secs)<br>*[==>]* | <br>***[2]*** |

Orbit Structure



## Visit

**Proposal 16245, j1243+46-SBC-v5 (14), completed** Fri Jun 07 21:00:33 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: ACS/SBC

Special Requirements: SAME ORIENT AS 10; AFTER 13 BY 6 H TO 100 D

*Comments: Message to the schedulers: Please make sure that ACS/SBC was not used (and that the high voltage was turned off) during the past 5 hours prior to this visit. This reason for this request is to ensure that the SBC detector is cool at the start of the visit, and to maintain the temperature at <25 C for the duration of the visit, so that the dark current does not ramp up to unacceptable levels.*

## Diagnostics

(j1243+46-SBC-v5 (14)) Warning (Orbit Planner): GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE

(j1243+46-SBC-v5 (14)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1243+46-SBC-v5 (14)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Exposure 1 (j1243+46-SBC-v5 (14)) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.

(j1243+46-SBC-v5 (14)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

## Fixed Targets

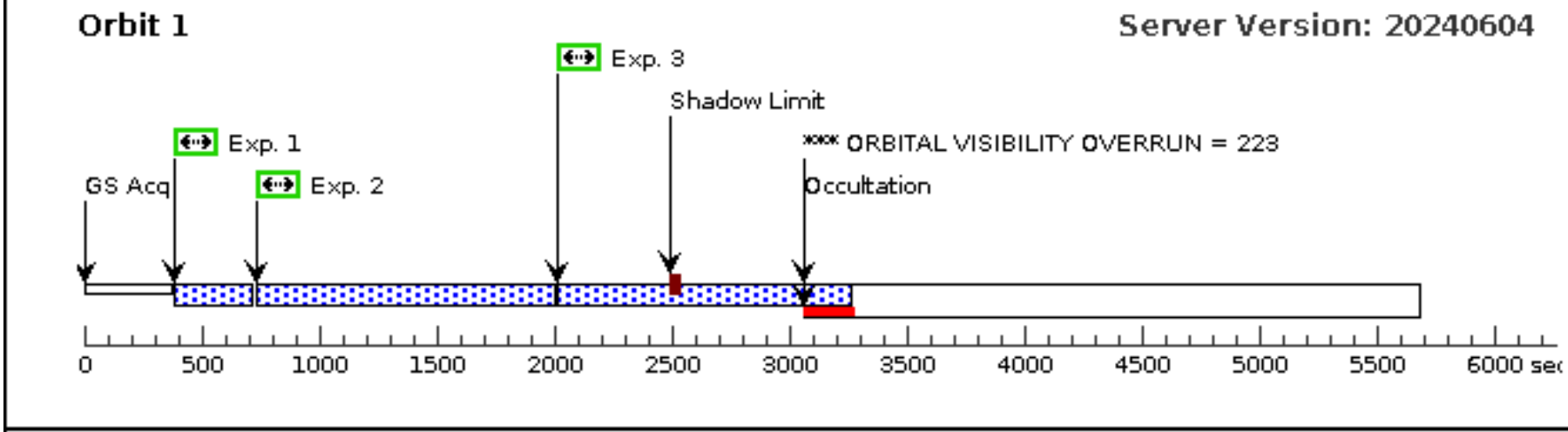
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | SDSS-J124300.62+464650.5 | RA: 12 43 0.6360 (190.7526500d)<br>Dec: +46 46 50.59 (46.78072d)<br>Equinox: J2000 | | V=21.48+/-0.04<br>GALEX FUV = 21.31 mag (AB) | Reference Frame: NED |

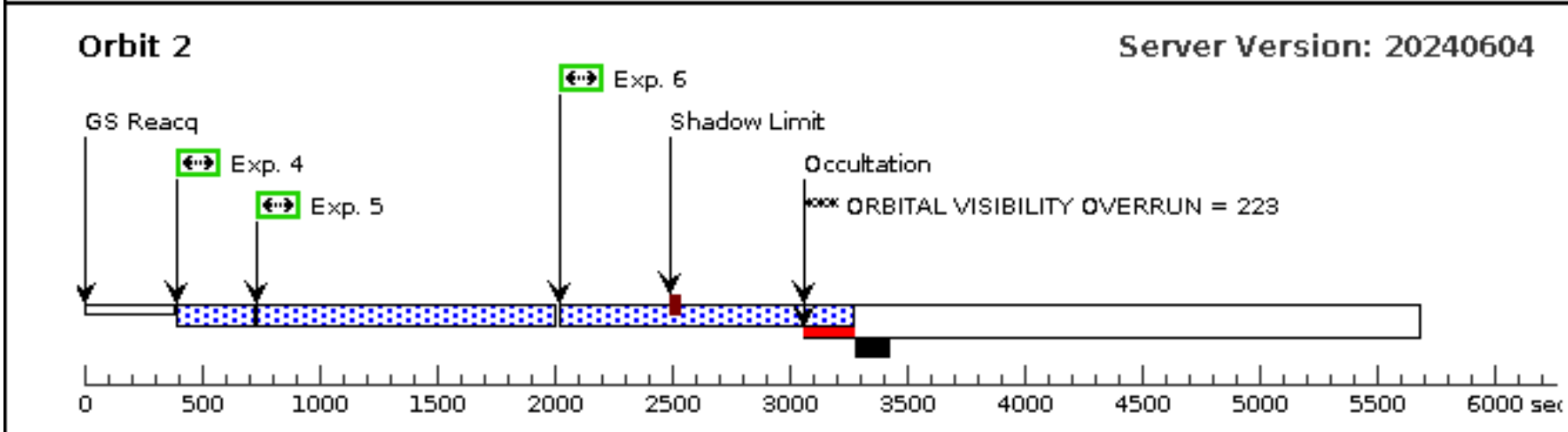
*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*z=0.43*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (1452017) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F150LP | | POS TARG -0.3276, -0.9907;<br>GS ACQ SCENARIO BASE1B3 | | 266 Secs (266 Secs)<br>*[==>]* | <br>***[1]*** |
| 2 | (1452015) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F125LP | | SAME POS AS 1;<br>SHADOW | | 1220 Secs (1220 Secs)<br>*[==>]* | <br>***[1]*** |
| 3 | (1452017) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F150LP | | SAME POS AS 1 | | 1200 Secs (1200 Secs)<br>*[==>]* | <br>***[1]*** |
| 4 | (1452035) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F150LP | | SAME POS AS 1 | | 303 Secs (303 Secs)<br>*[==>]* | <br>***[2]*** |
| 5 | (1452015) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F125LP | | SAME POS AS 1;<br>SHADOW | | 1220 Secs (1220 Secs)<br>*[==>]* | <br>***[2]*** |
| 6 | (1452015) | (1) SDSS-J124300.62+464650.5 | ACS/SBC, ACCUM, SBC | F140LP | | SAME POS AS 1 | | 1200 Secs (1200 Secs)<br>*[==>]* | <br>***[2]*** |

Orbit Structure



## Visit

**Proposal 16245, j1243+46 wfc3-v1 (15), completed** Fri Jun 07 21:00:33 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

*Comments: UVIS/F225W and F845M*
*flash levels set to obtain a background of 19-20 e/pix*

## Diagnostics

(j1243+46 wfc3-v1 (15)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1243+46 wfc3-v1 (15)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1243+46 wfc3-v1 (15)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

(j1243+46 wfc3-v1 (15)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

(Exposure 4 (j1243+46 wfc3-v1 (15))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser

(Exposure 5 (j1243+46 wfc3-v1 (15))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser

(Exposure 6 (j1243+46 wfc3-v1 (15))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser

## Fixed Targets

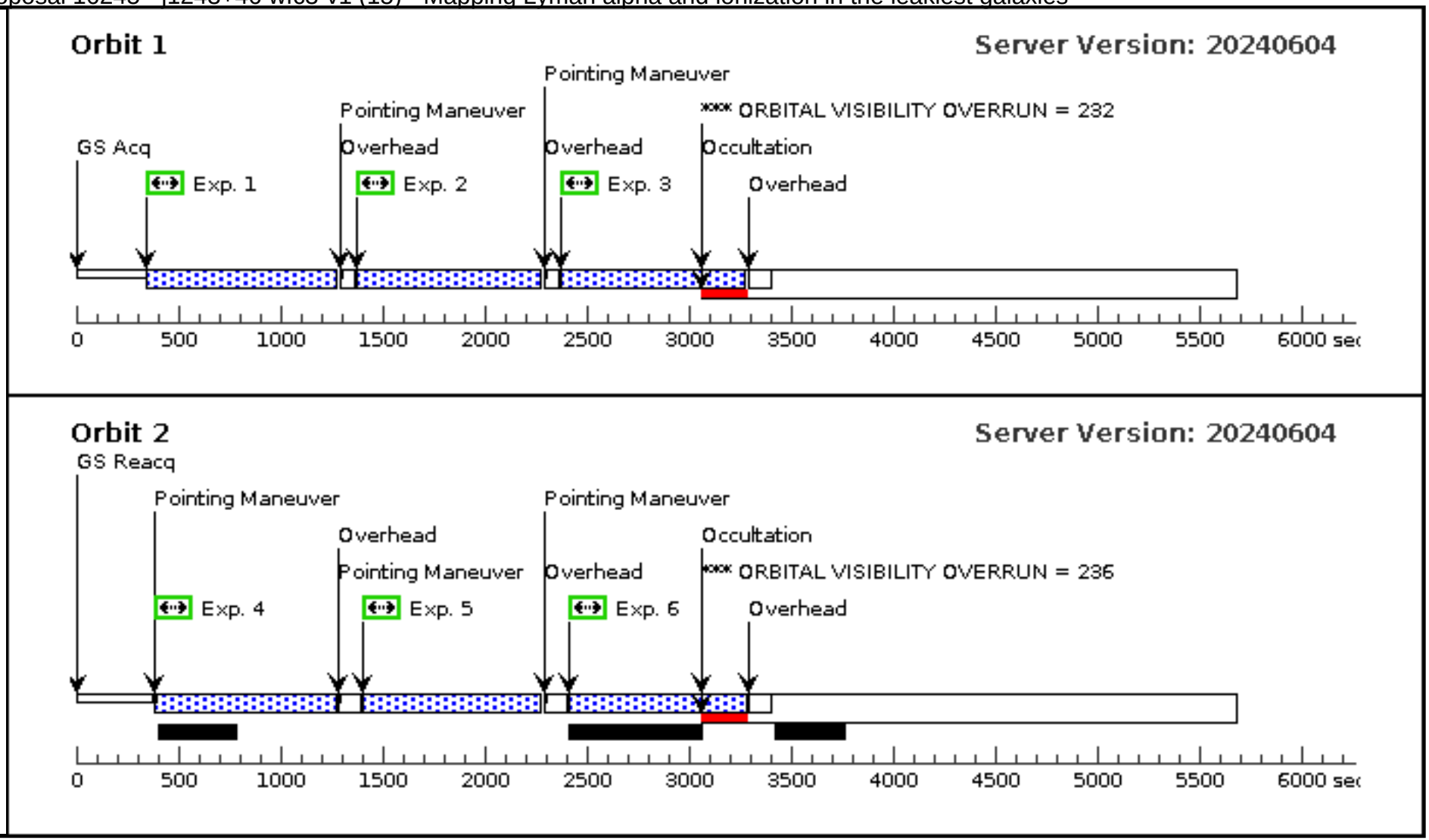
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | SDSS-J124300.62+464650.5 | RA: 12 43 0.6360 (190.7526500d)<br>Dec: +46 46 50.59 (46.78072d)<br>Equinox: J2000 | | V=21.48+/-0.04<br>GALEX FUV = 21.31 mag (AB) | Reference Frame: NED |

*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*z=0.43*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | (1) SDSS-J124300.62+464650.5 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F225W | FLASH=15 | | | 905 Secs (905 Secs)<br>*[==>]* | <br>***[1]*** |
| 2 | | (1) SDSS-J124300.62+464650.5 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F225W | FLASH=15 | POS TARG 2.799,2.785 | | 905 Secs (905 Secs)<br>*[==>]* | <br>***[1]*** |
| 3 | | (1) SDSS-J124300.62+464650.5 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-CTE | F225W | FLASH=15 | POS TARG -2.799,-2.785 | | 906 Secs (906 Secs)<br>*[==>]* | <br>***[1]*** |
| 4 | | (1) SDSS-J124300.62+464650.5 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-CTE | F845M | FLASH=9 | SAME POS AS 1 | | 872 Secs (872 Secs)<br>*[==>]* | <br>***[2]*** |
| 5 | | (1) SDSS-J124300.62+464650.5 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-CTE | F845M | FLASH=9 | SAME POS AS 2 | | 872 Secs (872 Secs)<br>*[==>]* | <br>***[2]*** |
| 6 | | (1) SDSS-J124300.62+464650.5 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-CTE | F845M | FLASH=9 | SAME POS AS 3 | | 873 Secs (873 Secs)<br>*[==>]* | <br>***[2]*** |

Orbit Structure



## Visit

**Proposal 16245, j1243+46 wfc3-v2 (16), completed** Fri Jun 07 21:00:33 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: (none)

*Comments: UVIS/F438W, UVIS/F621M and IR/F140W flash levels set to obtain a background of 19-20 e/pix*

## Diagnostics

(j1243+46 wfc3-v2 (16)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1243+46 wfc3-v2 (16)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1243+46 wfc3-v2 (16)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

(Exposure 4 (j1243+46 wfc3-v2 (16))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser

(Exposure 5 (j1243+46 wfc3-v2 (16))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser

(Exposure 6 (j1243+46 wfc3-v2 (16))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser

## Fixed Targets

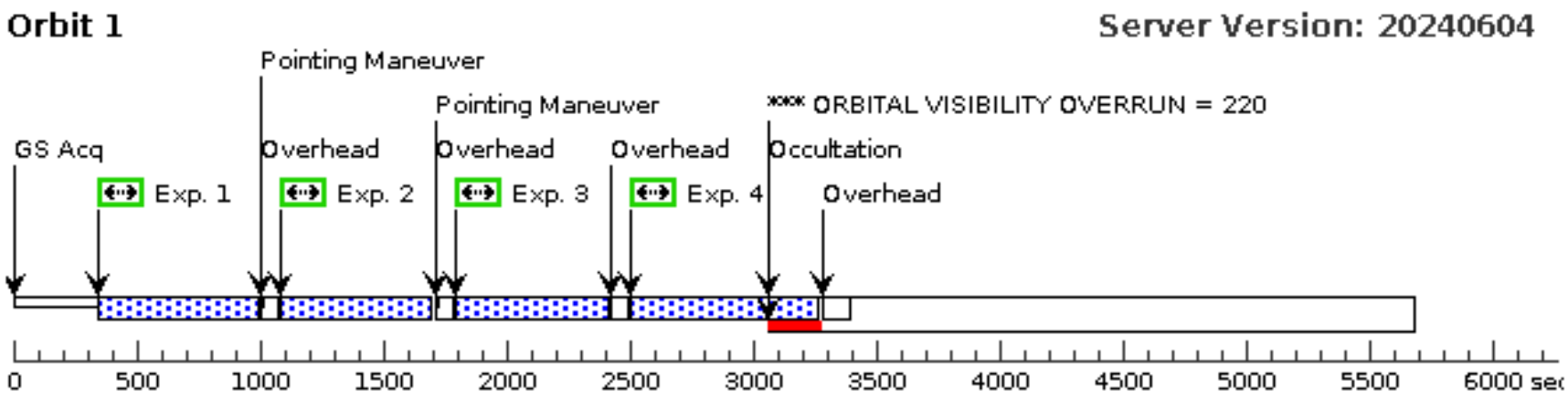
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | SDSS-J124300.62+464650.5 | RA: 12 43 0.6360 (190.7526500d)<br>Dec: +46 46 50.59 (46.78072d)<br>Equinox: J2000 | | V=21.48+/-0.04<br>GALEX FUV = 21.31 mag (AB) | Reference Frame: NED |

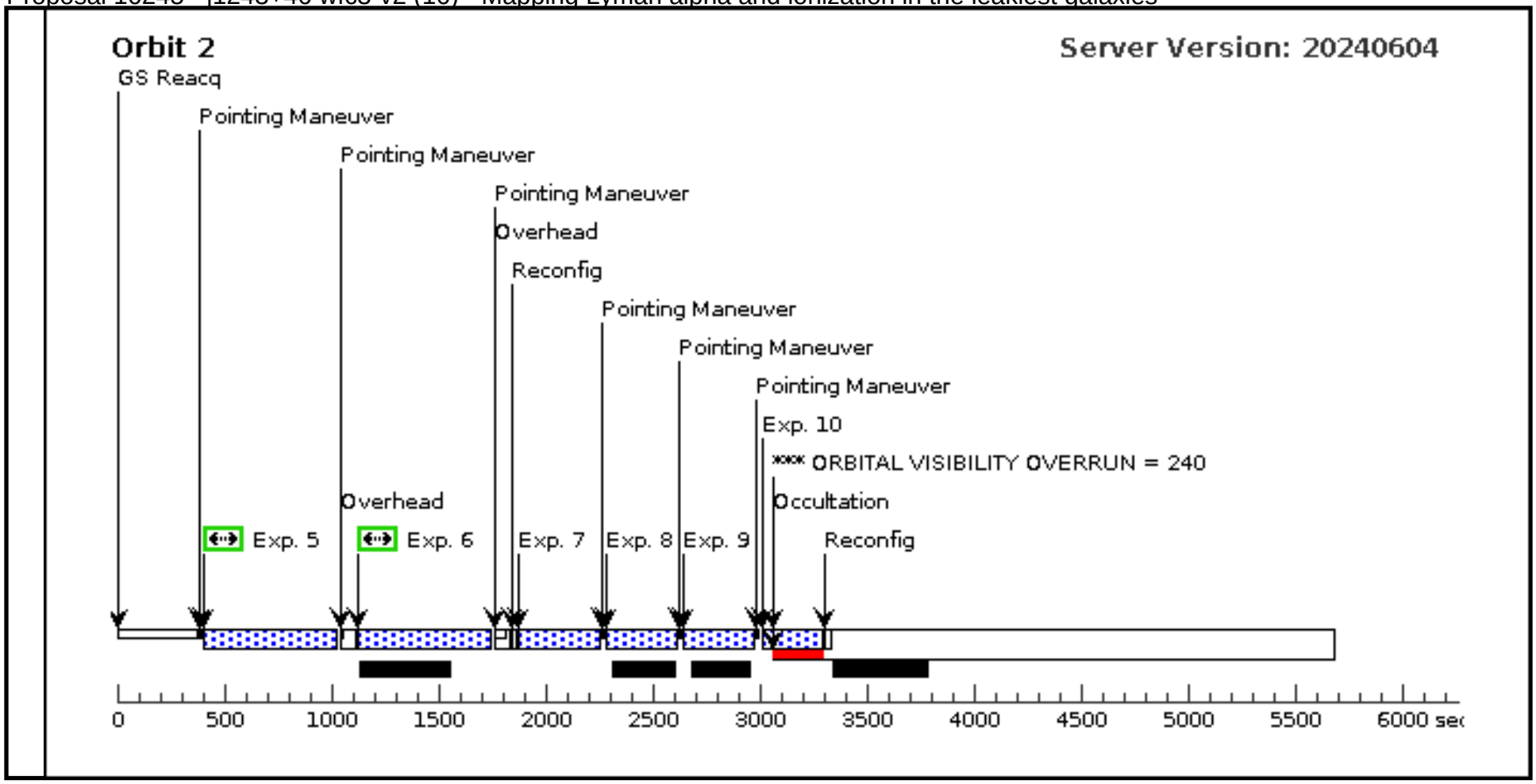
*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*z=0.43*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | (1) SDSS-J124300.62+464650.5 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F438W | FLASH=12 | | | 616 Secs (616 Secs)<br>*[==>]* | <br>***[1]*** |
| 2 | | (1) SDSS-J124300.62+464650.5 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F438W | FLASH=12 | POS TARG 2.799,2.785 | | 616 Secs (616 Secs)<br>*[==>]* | <br>***[1]*** |
| 3 | | (1) SDSS-J124300.62+464650.5 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F438W | FLASH=12 | POS TARG -2.799,-2.785 | | 620 Secs (620 Secs)<br>*[==>]* | <br>***[1]*** |
| 4 | | (1) SDSS-J124300.62+464650.5 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-CTE | F621M | FLASH=6 | SAME POS AS 3 | | 746 Secs (746 Secs)<br>*[==>]* | <br>***[1]*** |
| 5 | | (1) SDSS-J124300.62+464650.5 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F621M | FLASH=8 | SAME POS AS 2 | | 627 Secs (627 Secs)<br>*[==>]* | <br>***[2]*** |
| 6 | | (1) SDSS-J124300.62+464650.5 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F621M | FLASH=8 | SAME POS AS 1 | | 627 Secs (627 Secs)<br>*[==>]* | <br>***[2]*** |
| 7 | | (1) SDSS-J124300.62+464650.5 | WFC3/IR, MULTIACCUM, IR | F140W | SAMP-SEQ=STEP50;<br>NSAMP=12 | | | 349.232932 Secs (349.233 Secs)<br>*[==>]* | <br>***[2]*** |
| 8 | | (1) SDSS-J124300.62+464650.5 | WFC3/IR, MULTIACCUM, IR | F140W | SAMP-SEQ=STEP50;<br>NSAMP=11 | POS TARG 0.9788,1.1495 | | 299.232481 Secs (299.232 Secs)<br>*[==>]* | <br>***[2]*** |
| 9 | | (1) SDSS-J124300.62+464650.5 | WFC3/IR, MULTIACCUM, IR | F140W | SAMP-SEQ=STEP50;<br>NSAMP=11 | POS TARG 1.5525,0.3328 | | 299.232481 Secs (299.232 Secs)<br>*[==>]* | <br>***[2]*** |
| 10 | | (1) SDSS-J124300.62+464650.5 | WFC3/IR, MULTIACCUM, IR | F140W | SAMP-SEQ=STEP50;<br>NSAMP=10 | POS TARG -0.9113,0.8773 | | 249.23203 Secs (249.232 Secs)<br>*[==>]* | <br>***[2]*** |

**Orbit Structure**




Orbit 2
Server Version: 20240604
GS Reacq
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Overhead
Reconfig
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Exp. 10
**** ORBITAL VISIBILITY OVERRUN = 240
Occultation
Overhead
Exp. 5
Exp. 6
Exp. 7
Exp. 8
Exp. 9
Reconfig
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

## Visit

**Proposal 16245, j1243+46 Ha & Hb ramps (17), completed** Fri Jun 07 21:00:33 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: ACS/WFC

Special Requirements: (none)

*Comments: Ramp filter observations of H-alpha and H-beta*

## Diagnostics

(j1243+46 Ha & Hb ramps (17)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1243+46 Ha & Hb ramps (17)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(H-alpha (17.002)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(H-alpha (17.003)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(H-beta (17.005)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(H-beta (17.006)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

## Fixed Targets

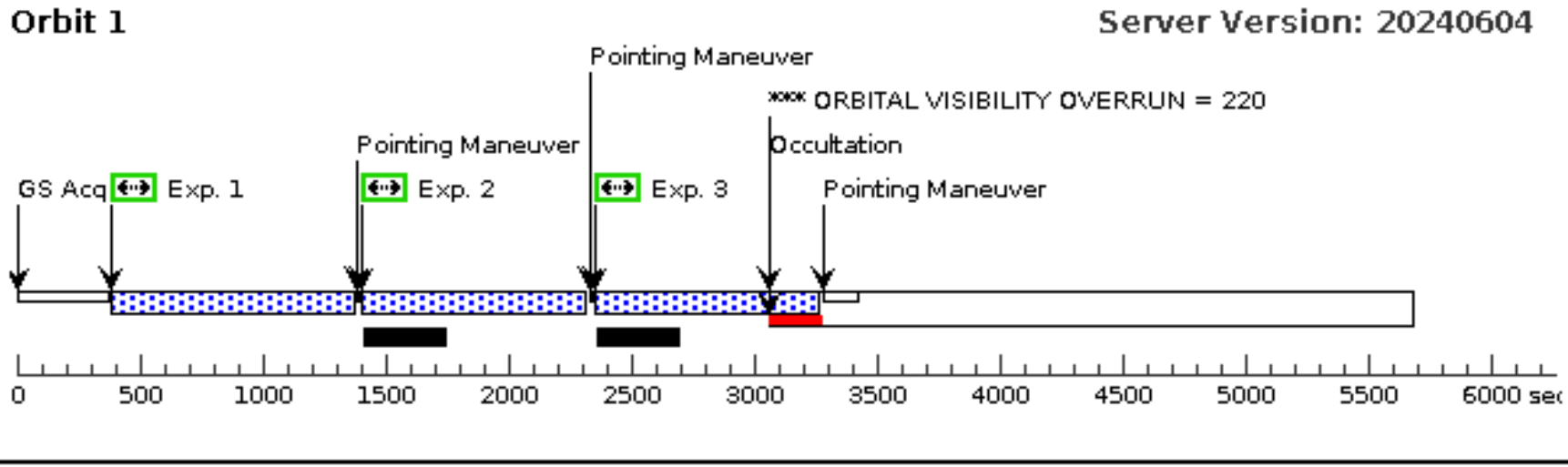
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | SDSS-J124300.62+464650.5 | RA: 12 43 0.6360 (190.7526500d)<br>Dec: +46 46 50.59 (46.78072d)<br>Equinox: J2000 | | V=21.48+/-0.04<br>GALEX FUV = 21.31 mag (AB) | Reference Frame: NED |

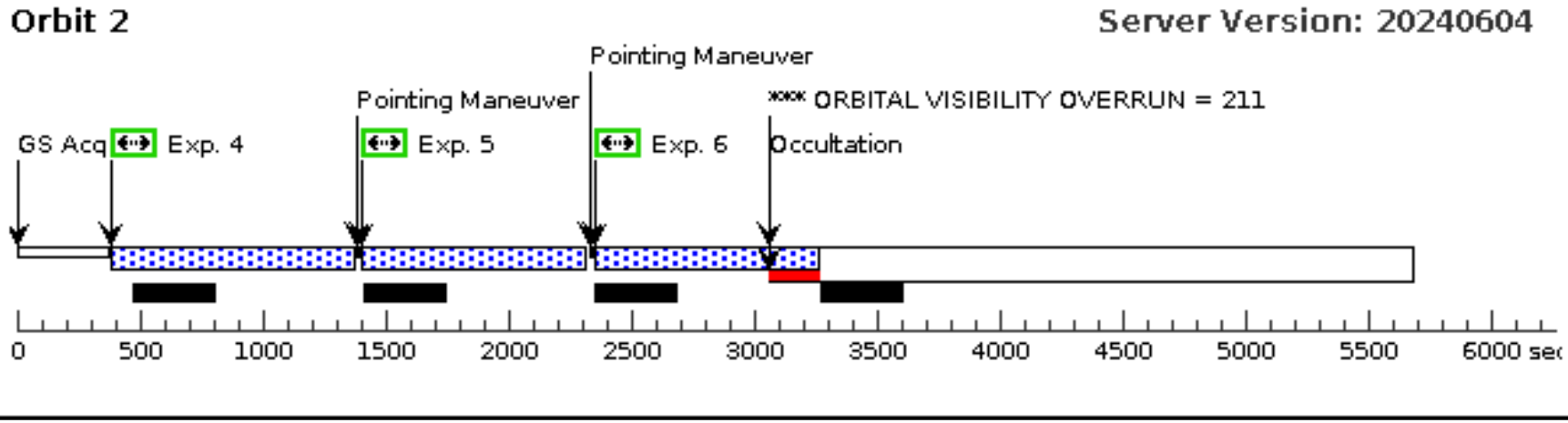
*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*z=0.43*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | H-alpha | (1) SDSS-J124300.62+464650.5 | ACS/WFC, ACCUM, WFC2-ORAMP | FR931N 9399 A | | | | 789 Secs (789 Secs)<br>*[==>]* | <br>***[1]*** |
| 2 | H-alpha | (1) SDSS-J124300.62+464650.5 | ACS/WFC, ACCUM, WFC2-ORAMP | FR931N 9399 A | | POS TARG 0.2162,0.2181 | | 789 Secs (789 Secs)<br>*[==>]* | <br>***[1]*** |
| 3 | H-alpha | (1) SDSS-J124300.62+464650.5 | ACS/WFC, ACCUM, WFC2-ORAMP | FR931N 9399 A | | POS TARG -0.2162,-0.2181 | | 788 Secs (788 Secs)<br>*[==>]* | <br>***[1]*** |
| 4 | H-beta | (1) SDSS-J124300.62+464650.5 | ACS/WFC, ACCUM, WFC1-IRAMP | FR716N 6962 A | | | | 786 Secs (786 Secs)<br>*[==>]* | <br>***[2]*** |
| 5 | H-beta | (1) SDSS-J124300.62+464650.5 | ACS/WFC, ACCUM, WFC1-IRAMP | FR716N 6962 A | | POS TARG 0.2162,0.2181 | | 786 Secs (786 Secs)<br>*[==>]* | <br>***[2]*** |
| 6 | H-beta | (1) SDSS-J124300.62+464650.5 | ACS/WFC, ACCUM, WFC1-IRAMP | FR716N 6962 A | | POS TARG -0.2162,-0.2181 | | 785 Secs (785 Secs)<br>*[==>]* | <br>***[2]*** |

Orbit Structure



## Visit

**Proposal 16245, j1243+46 OII & OII ramps (18), failed** Fri Jun 07 21:00:33 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: ACS/WFC

Special Requirements: (none)

*Comments: ramp filter observations of [OII] and [OIII]*

## Diagnostics

(j1243+46 OII & OII ramps (18)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1243+46 OII & OII ramps (18)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

([OII] (18.002)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

([OII] (18.003)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

([OIII] (18.005)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

## Fixed Targets

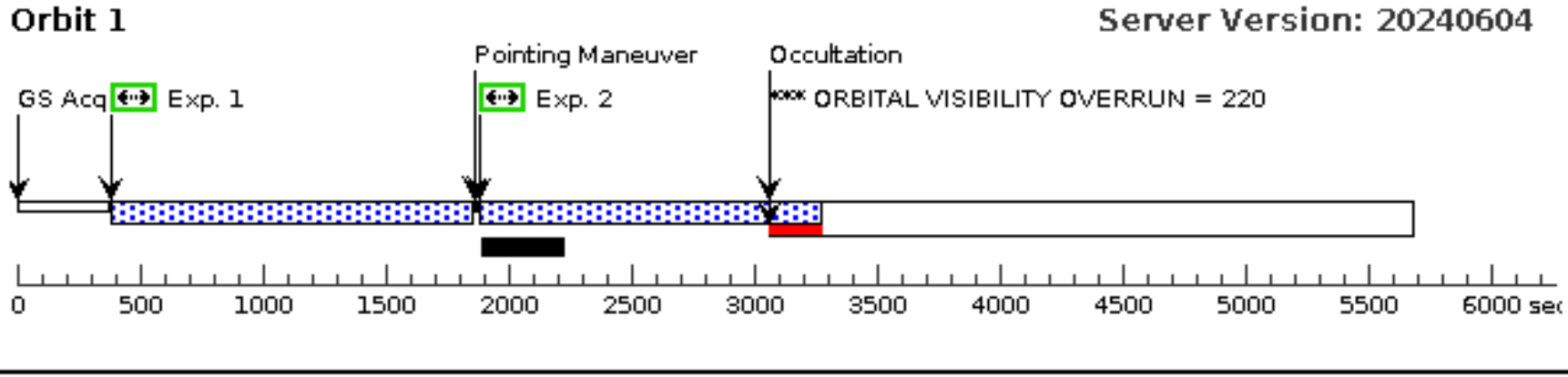
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | SDSS-J124300.62+464650.5 | RA: 12 43 0.6360 (190.7526500d)<br>Dec: +46 46 50.59 (46.78072d)<br>Equinox: J2000 | | V=21.48+/-0.04<br>GALEX FUV = 21.31 mag (AB) | Reference Frame: NED |

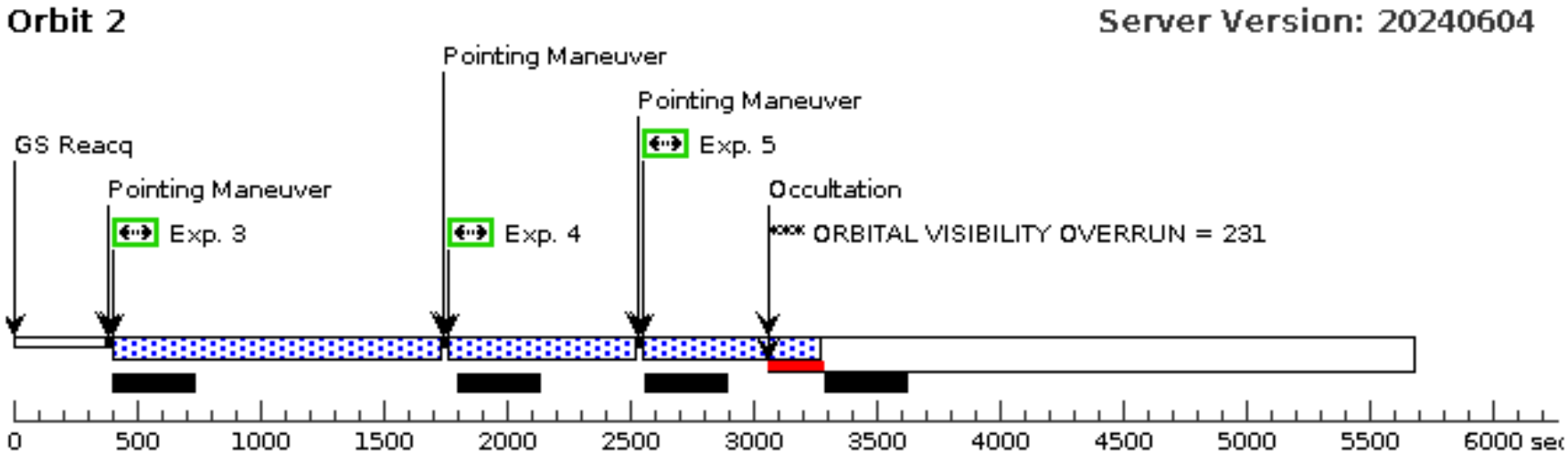
*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*z=0.43*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | [OII] | (1) SDSS-J124300.62+464650.5 | ACS/WFC, ACCUM, WFC1-IRAMP | FR551N 5338 A | | | | 1262 Secs (1262 Secs)<br>*[==>]* | <br>***[1]*** |
| 2 | [OII] | (1) SDSS-J124300.62+464650.5 | ACS/WFC, ACCUM, WFC1-IRAMP | FR551N 5338 A | | POS TARG 0.2137,0.2108 | | 1262 Secs (1262 Secs)<br>*[==>]* | <br>***[1]*** |
| 3 | [OII] | (1) SDSS-J124300.62+464650.5 | ACS/WFC, ACCUM, WFC1-IRAMP | FR551N 5338 A | | POS TARG -0.2137, -0.2108 | | 1202 Secs (1202 Secs)<br>*[==>]* | <br>***[2]*** |
| 4 | [OIII] | (1) SDSS-J124300.62+464650.5 | ACS/WFC, ACCUM, WFC1-IRAMP | FR716N 7170 A | | | | 600 Secs (600 Secs)<br>*[==>]* | <br>***[2]*** |
| 5 | [OIII] | (1) SDSS-J124300.62+464650.5 | ACS/WFC, ACCUM, WFC1-IRAMP | FR716N 7170 A | | POS TARG 0.2219,0.2189 | | 600 Secs (600 Secs)<br>*[==>]* | <br>***[2]*** |

Orbit Structure



## Visit

**Proposal 16245, j1154+24 SBC-v1 (22), completed** Fri Jun 07 21:00:34 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: ACS/SBC

Special Requirements: (none)

*Comments: Message to the schedulers: Please make sure that ACS/SBC was not used (and that the high voltage was turned off) during the past 5 hours prior to this visit. This reason for this request is to ensure that the SBC detector is cool at the start of the visit, and to maintain the temperature at <25 C for the duration of the visit, so that the dark current does not ramp up to unacceptable levels.*

## Diagnostics

(j1154+24 SBC-v1 (22)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1154+24 SBC-v1 (22)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

## Fixed Targets

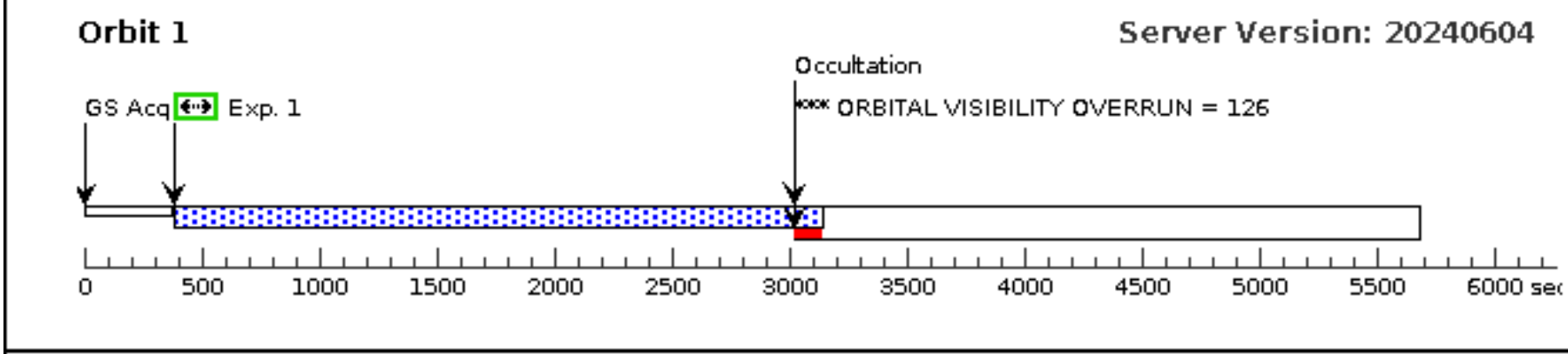
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (3) | SDSS-J115448.85+244333.0 | RA: 11 54 48.8520 (178.7035500d)<br>Dec: +24 43 33.13 (24.72587d)<br>Equinox: J2000 | | V=21.77+/-0.05<br>GALEX FUV = 21.1 mag (AB) | Reference Frame: NED |

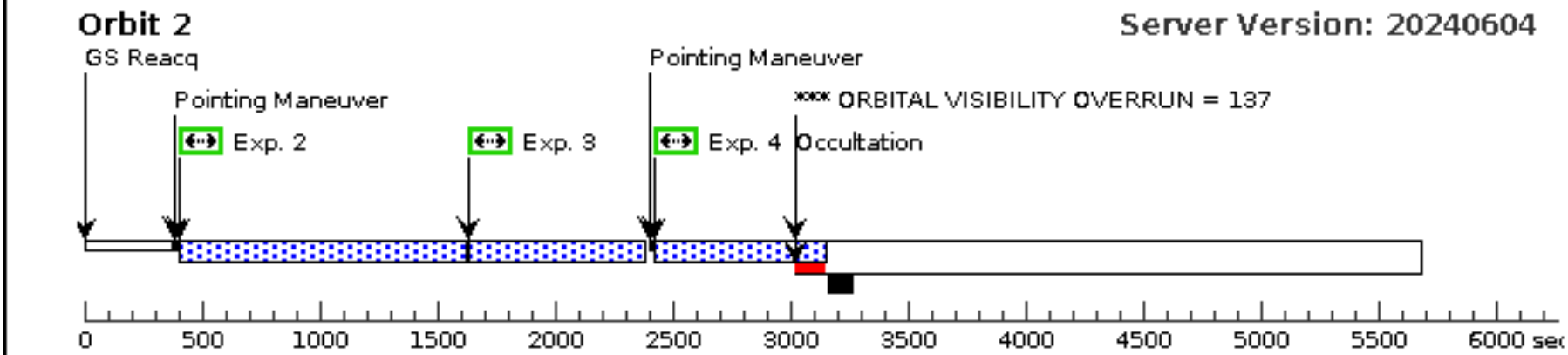
*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (1452026) | (3) SDSS-J115448.85+244333.0 | ACS/SBC, ACCUM, SBC | F165LP | | | | 2693 Secs (2693 Secs)<br>*[==>]* | <br>***[1]*** |
| 2 | (1452026) | (3) SDSS-J115448.85+244333.0 | ACS/SBC, ACCUM, SBC | F165LP | | POS TARG -0.2873, -0.2860 | | 1197 Secs (1197 Secs)<br>*[==>]* | <br>***[2]*** |
| 3 | (1452024) | (3) SDSS-J115448.85+244333.0 | ACS/SBC, ACCUM, SBC | F140LP | | SAME POS AS 2 | | 700 Secs (700 Secs)<br>*[==>]* | <br>***[2]*** |
| 4 | (1452024) | (3) SDSS-J115448.85+244333.0 | ACS/SBC, ACCUM, SBC | F140LP | | SAME POS AS 1 | | 700 Secs (700 Secs)<br>*[==>]* | <br>***[2]*** |

Orbit Structure



## Visit

**Proposal 16245, j1154+24 SBC-v2 (23), completed** Fri Jun 07 21:00:34 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: ACS/SBC

Special Requirements: (none)

*Comments: Message to the schedulers: Please make sure that ACS/SBC was not used (and that the high voltage was turned off) during the past 5 hours prior to this visit. This reason for this request is to ensure that the SBC detector is cool at the start of the visit, and to maintain the temperature at <25 C for the duration of the visit, so that the dark current does not ramp up to unacceptable levels.*

## Diagnostics

(j1154+24 SBC-v2 (23)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

## Fixed Targets

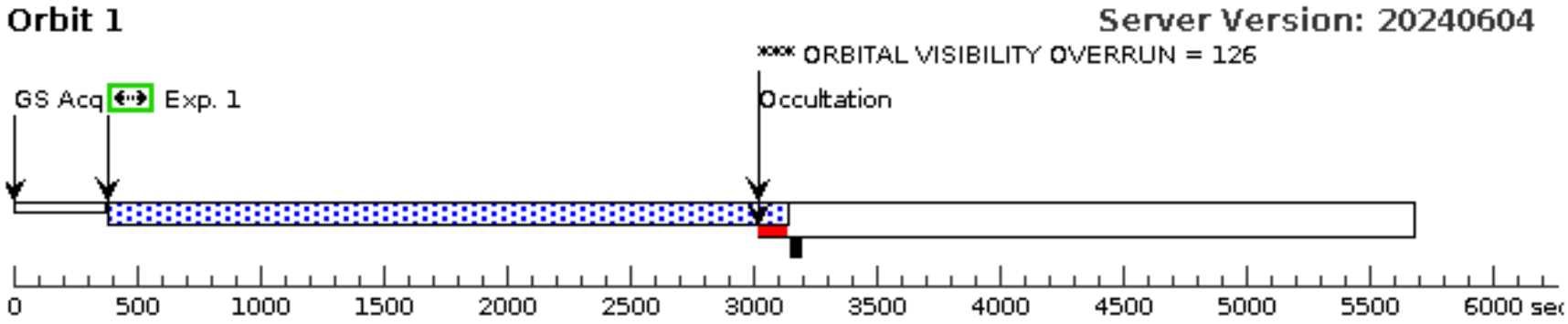
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (3) | SDSS-J115448.85+244333.0 | RA: 11 54 48.8520 (178.7035500d)<br>Dec: +24 43 33.13 (24.72587d)<br>Equinox: J2000 | | V=21.77+/-0.05<br>GALEX FUV = 21.1 mag (AB) | Reference Frame: NED |

*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (1452026) | (3) SDSS-J115448.85+244333.0 | ACS/SBC, ACCUM, SBC | F165LP | | POS TARG -0.5662, -0.5945 | | 2693 Secs (2693 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 16245, j1256+45 SBC-v1 (24), completed** Fri Jun 07 21:00:34 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: ACS/SBC

Special Requirements: (none)

*Comments: Message to the schedulers: Please make sure that ACS/SBC was not used (and that the high voltage was turned off) during the past 5 hours prior to this visit. This reason for this request is to ensure that the SBC detector is cool at the start of the visit, and to maintain the temperature at <25 C for the duration of the visit, so that the dark current does not ramp up to unacceptable levels.*

## Diagnostics

(j1256+45 SBC-v1 (24)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1256+45 SBC-v1 (24)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

## Fixed Targets

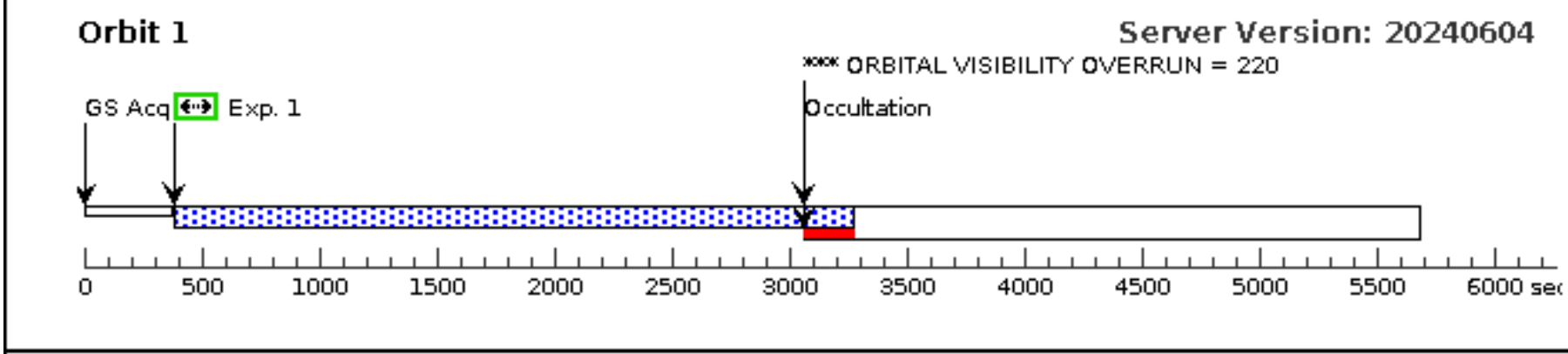
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (2) | SDSS-J125644.15+450917.1 | RA: 12 56 44.1528 (194.1839700d)<br>Dec: +45 09 17.21 (45.15478d)<br>Equinox: J2000 | | V=21.22+/-0.05<br>GALEX FUV = 21.66 mag (AB) | Reference Frame: NED |

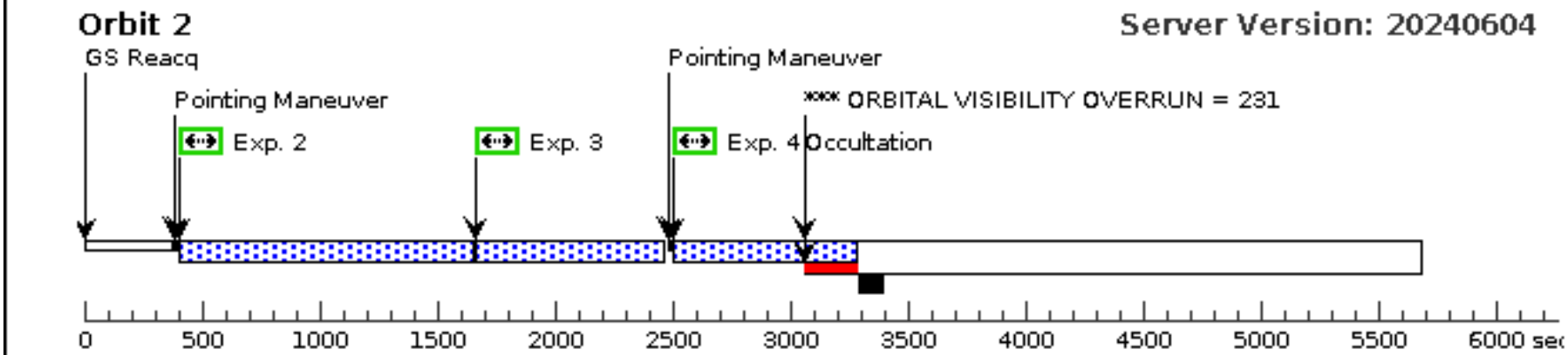
*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (1452021) | (2) SDSS-J125644.15+450917.1 | ACS/SBC, ACCUM, SBC | F165LP | | | | 2821 Secs (2821 Secs) | |
| | | | | | | | | *[==>]* | ***[1]*** |
| 2 | (1452021) | (2) SDSS-J125644.15+450917.1 | ACS/SBC, ACCUM, SBC | F165LP | | POS TARG -0.2873, -0.2860 | | 1225 Secs (1225 Secs) | |
| | | | | | | | | *[==>]* | ***[2]*** |
| 3 | (1452023) | (2) SDSS-J125644.15+450917.1 | ACS/SBC, ACCUM, SBC | F140LP | | SAME POS AS 2 | | 750 Secs (750 Secs) | |
| | | | | | | | | *[==>]* | ***[2]*** |
| 4 | (1452023) | (2) SDSS-J125644.15+450917.1 | ACS/SBC, ACCUM, SBC | F140LP | | SAME POS AS 1 | | 750 Secs (750 Secs) | |
| | | | | | | | | *[==>]* | ***[2]*** |

Orbit Structure



## Visit

**Proposal 16245, j1256+45 SBC-v2 (25), completed** Fri Jun 07 21:00:34 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: ACS/SBC

Special Requirements: (none)

*Comments: Message to the schedulers: Please make sure that ACS/SBC was not used (and that the high voltage was turned off) during the past 5 hours prior to this visit. This reason for this request is to ensure that the SBC detector is cool at the start of the visit, and to maintain the temperature at <25 C for the duration of the visit, so that the dark current does not ramp up to unacceptable levels.*

## Diagnostics

(j1256+45 SBC-v2 (25)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

## Fixed Targets

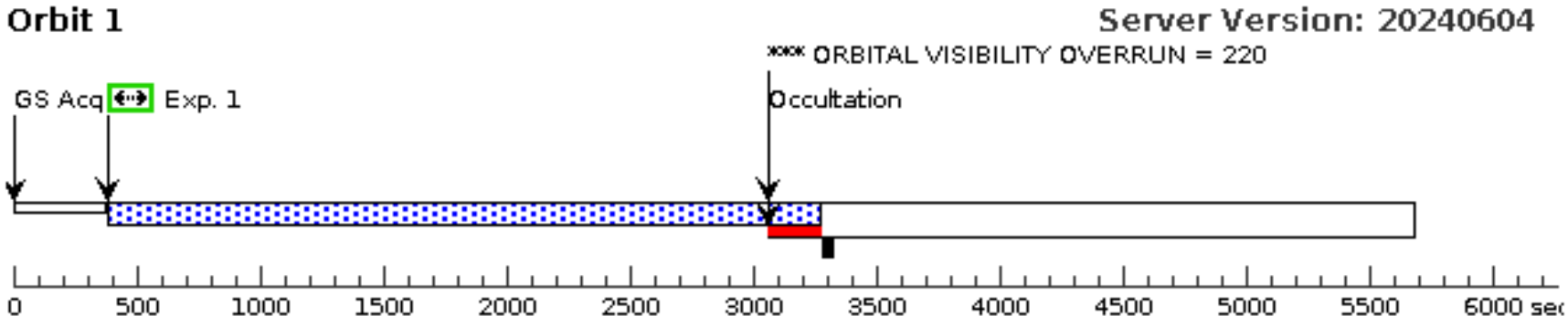
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (2) | SDSS-J125644.15+450917.1 | RA: 12 56 44.1528 (194.1839700d)<br>Dec: +45 09 17.21 (45.15478d)<br>Equinox: J2000 | | V=21.22+/-0.05<br>GALEX FUV = 21.66 mag (AB) | Reference Frame: NED |

*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

## Exposures

| # | Label (ETC Run) | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | (1452021) | (2) SDSS-J125644.15+450917.1 | ACS/SBC, ACCUM, SBC | F165LP | | POS TARG -0.5662, -0.5945 | | 2821 Secs (2821 Secs)<br>*[==>]* | *[1]* |

## Orbit Structure



## Visit

**Proposal 16245, j1154+24 wfc3 (with OIII) (26), completed** Fri Jun 07 21:00:34 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: (none)

*Comments: broad band continuum + OIII + IR*
*flash levels set to obtain a background of 19-20 e/pix*

## Diagnostics

(j1154+24 wfc3 (with OIII) (26)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1154+24 wfc3 (with OIII) (26)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1154+24 wfc3 (with OIII) (26)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1154+24 wfc3 (with OIII) (26)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

(j1154+24 wfc3 (with OIII) (26)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

(Exposure 8 (j1154+24 wfc3 (with OIII) (26))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser

## Fixed Targets

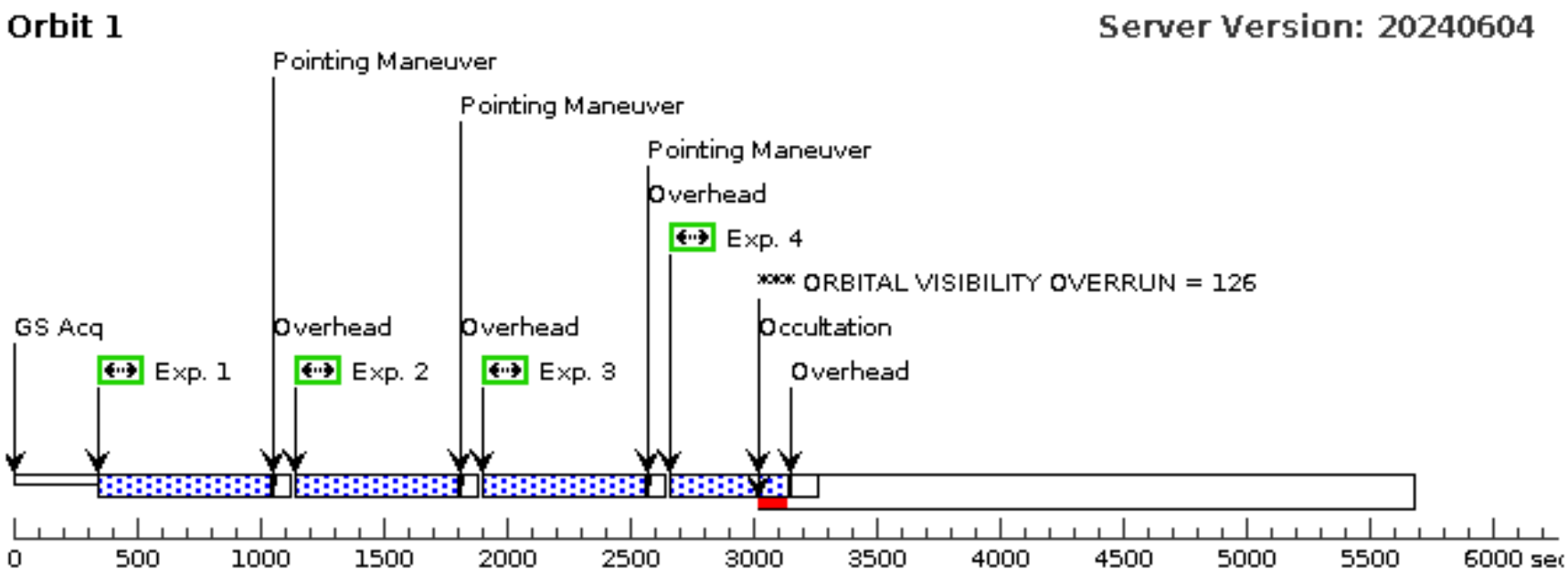
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (3) | SDSS-J115448.85+244333.0 | RA: 11 54 48.8520 (178.7035500d)<br>Dec: +24 43 33.13 (24.72587d)<br>Equinox: J2000 | | V=21.77+/-0.05<br>GALEX FUV = 21.1 mag (AB) | Reference Frame: NED |

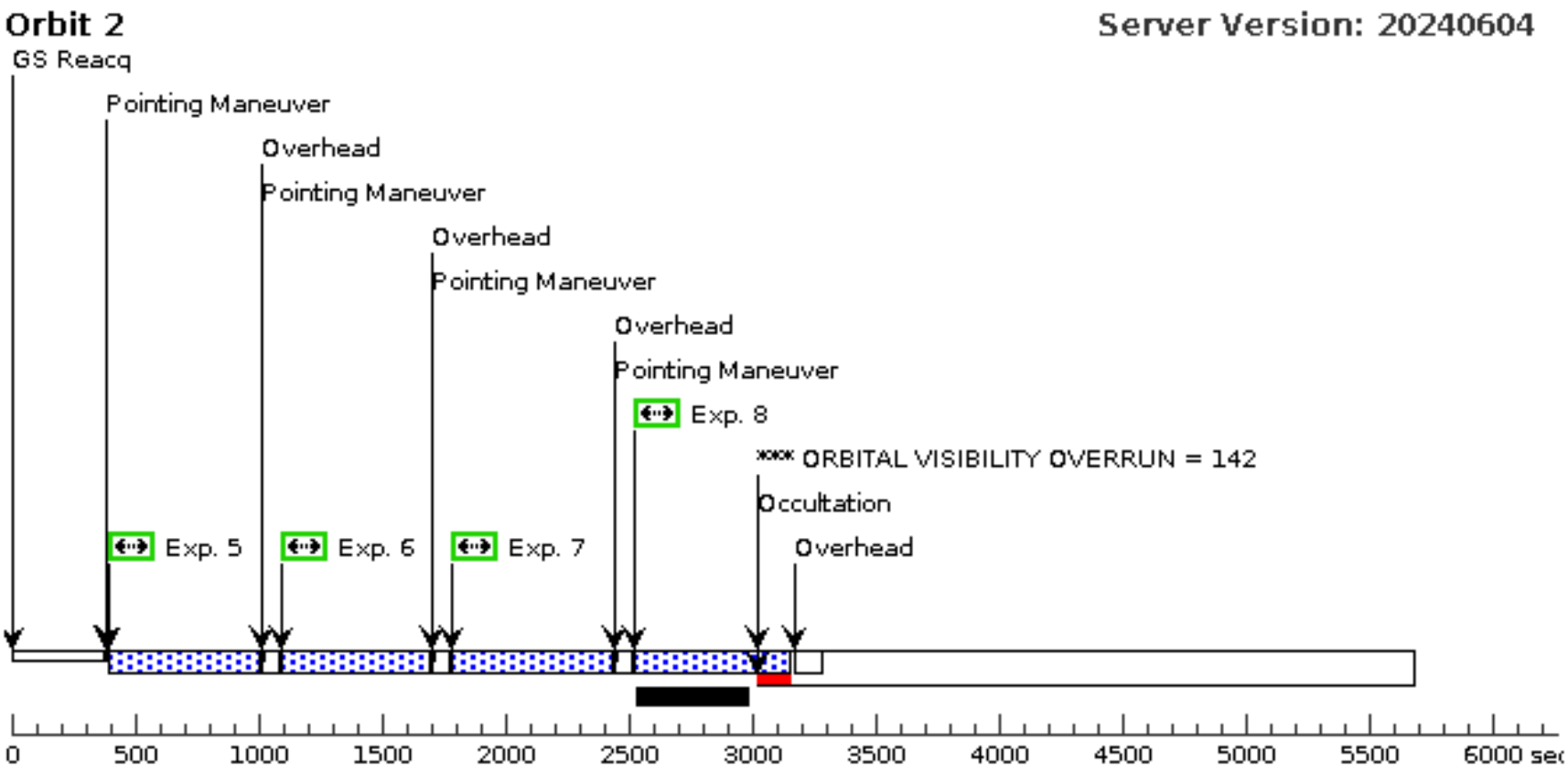
*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

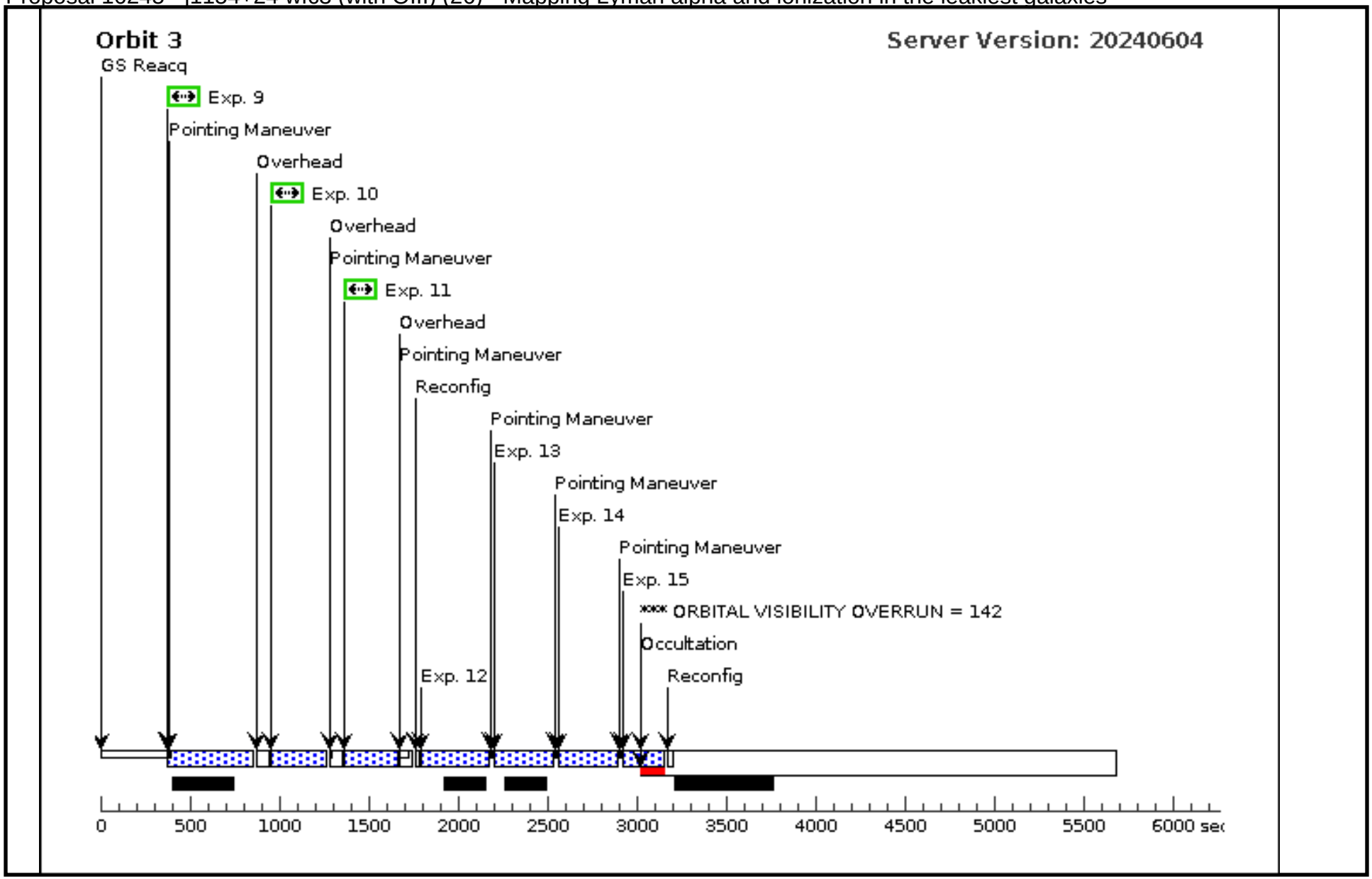
**Exposures**

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | (3) SDSS-J115448.85+244333.0 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F225W | FLASH=16 | | | 670 Secs (670 Secs) | |
| | | | | | | | | *[==>]* | ***[1]*** |
| 2 | | (3) SDSS-J115448.85+244333.0 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F225W | FLASH=16 | POS TARG -2.799,-2.785 | | 665 Secs (665 Secs) | |
| | | | | | | | | *[==>]* | ***[1]*** |
| 3 | | (3) SDSS-J115448.85+244333.0 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F225W | FLASH=16 | POS TARG 2.799,2.785 | | 665 Secs (665 Secs) | |
| | | | | | | | | *[==>]* | ***[1]*** |
| 4 | | (3) SDSS-J115448.85+244333.0 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-CTE | F775W | FLASH=8 | POS TARG 2.806,2.792 | | 458 Secs (458 Secs) | |
| | | | | | | | | *[==>]* | ***[1]*** |
| 5 | | (3) SDSS-J115448.85+244333.0 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F438W | FLASH=12 | SAME POS AS 1 | | 600 Secs (600 Secs) | |
| | | | | | | | | *[==>]* | ***[2]*** |
| 6 | | (3) SDSS-J115448.85+244333.0 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F438W | FLASH=12 | SAME POS AS 4 | | 600 Secs (600 Secs) | |
| | | | | | | | | *[==>]* | ***[2]*** |
| 7 | | (3) SDSS-J115448.85+244333.0 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F621M | FLASH=8 | SAME POS AS 1 | | 632 Secs (632 Secs) | |
| | | | | | | | | *[==>]* | ***[2]*** |
| 8 | | (3) SDSS-J115448.85+244333.0 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-CTE | F621M | FLASH=8 | SAME POS AS 4 | | 630 Secs (630 Secs) | |
| | | | | | | | | *[==>]* | ***[2]*** |
| 9 | | (3) SDSS-J115448.85+244333.0 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F775W | FLASH=8 | SAME POS AS 1 | | 461 Secs (461 Secs) | |
| | | | | | | | | *[==>]* | ***[3]*** |
| 10 | | (3) SDSS-J115448.85+244333.0 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F680N | FLASH=16 | SAME POS AS 1 | | 300 Secs (300 Secs) | |
| | | | | | | | | *[==>]* | ***[3]*** |
| 11 | | (3) SDSS-J115448.85+244333.0 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F680N | FLASH=16 | SAME POS AS 4 | | 300 Secs (300 Secs) | |
| | | | | | | | | *[==>]* | ***[3]*** |
| 12 | | (3) SDSS-J115448.85+244333.0 | WFC3/IR, MULTIACCUM, IR | F140W | SAMP-SEQ=STEP50; NSAMP=12 | | | 349.232932 Secs (349.233 Secs) | |
| | | | | | | | | *[==>]* | ***[3]*** |
| 13 | | (3) SDSS-J115448.85+244333.0 | WFC3/IR, MULTIACCUM, IR | F140W | SAMP-SEQ=STEP50; NSAMP=11 | POS TARG 0.9788,1.1495 | | 299.232481 Secs (299.232 Secs) | |
| | | | | | | | | *[==>]* | ***[3]*** |
| 14 | | (3) SDSS-J115448.85+244333.0 | WFC3/IR, MULTIACCUM, IR | F140W | SAMP-SEQ=STEP50; NSAMP=11 | POS TARG 1.5525,0.3328 | | 299.232481 Secs (299.232 Secs) | |
| | | | | | | | | *[==>]* | ***[3]*** |
| 15 | | (3) SDSS-J115448.85+244333.0 | WFC3/IR, MULTIACCUM, IR | F140W | SAMP-SEQ=STEP50; NSAMP=9 | POS TARG -0.9113,0.8773 | | 199.231579 Secs (199.232 Secs) | |
| | | | | | | | | *[==>]* | ***[3]*** |

Orbit Structure




Orbit 2
Server Version: 20240604
GS Reacq
Pointing Maneuver
Overhead
Pointing Maneuver
Overhead
Pointing Maneuver
Overhead
Pointing Maneuver
Exp. 8
**** ORBITAL VISIBILITY OVERRUN = 142
Occultation
Overhead
Exp. 5
Exp. 6
Exp. 7
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec


Orbit 3
Server Version: 20240604
GS Reacq
Exp. 9
Pointing Maneuver
Overhead
Exp. 10
Overhead
Pointing Maneuver
Exp. 11
Overhead
Pointing Maneuver
Reconfig
Pointing Maneuver
Exp. 13
Pointing Maneuver
Exp. 14
Pointing Maneuver
Exp. 15
*** ORBITAL VISIBILITY OVERRUN = 142
Occultation
Exp. 12
Reconfig
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

## Visit

**Proposal 16245, j1256+45 wfc3 (with OIII) (30), completed** Fri Jun 07 21:00:34 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: (none)

*Comments: broad band continuum + OIII + IR*
*flash levels set to obtain a background of 19-20 e/pix*

## Diagnostics

(j1256+45 wfc3 (with OIII) (30)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1256+45 wfc3 (with OIII) (30)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1256+45 wfc3 (with OIII) (30)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1256+45 wfc3 (with OIII) (30)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

(j1256+45 wfc3 (with OIII) (30)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

(j1256+45 wfc3 (with OIII) (30)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

(j1256+45 wfc3 (with OIII) (30)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

(Exposure 4 (j1256+45 wfc3 (with OIII) (30))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser

## Fixed Targets

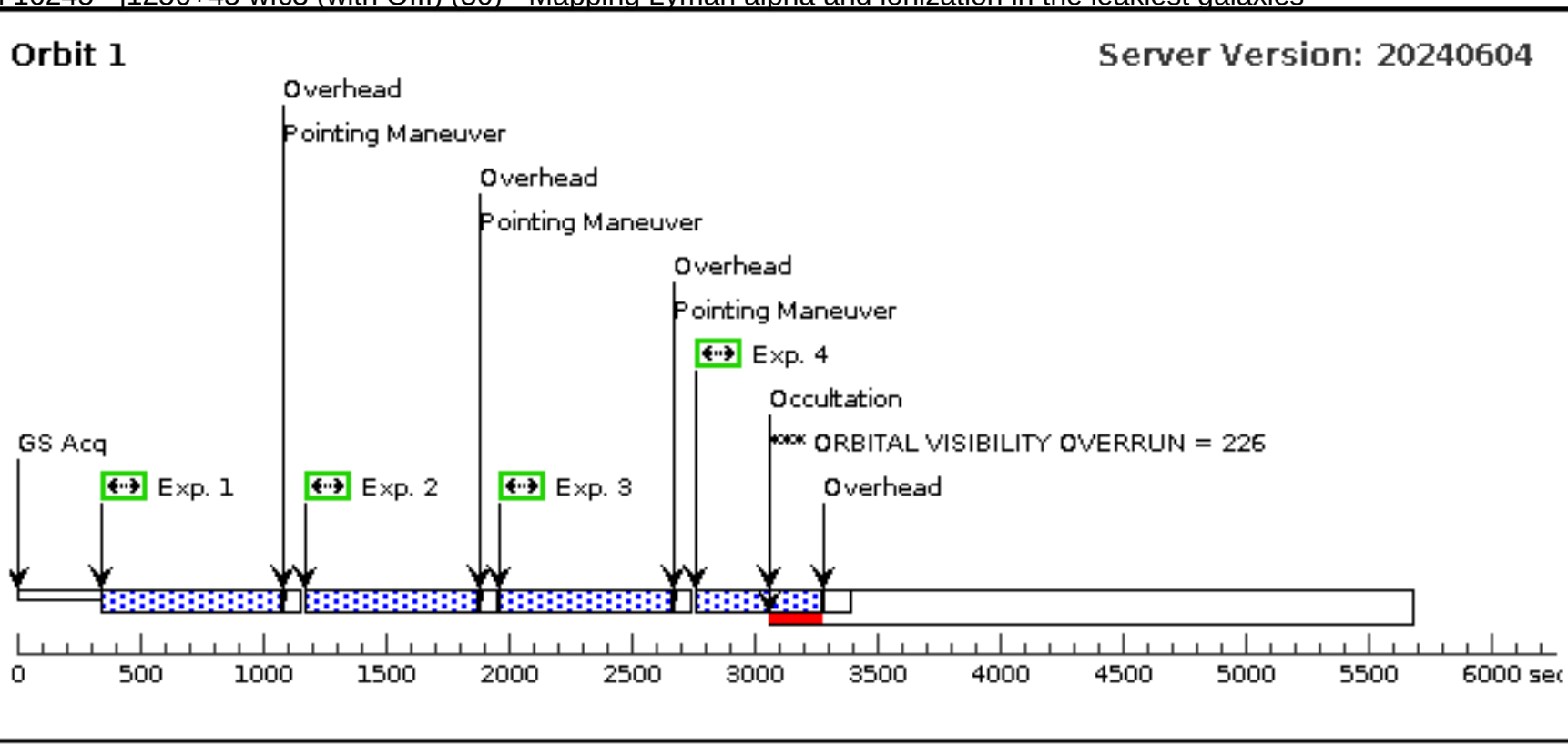
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (2) | SDSS-J125644.15+450917.1 | RA: 12 56 44.1528 (194.1839700d)<br>Dec: +45 09 17.21 (45.15478d)<br>Equinox: J2000 | | V=21.22+/-0.05<br>GALEX FUV = 21.66 mag (AB) | Reference Frame: NED |

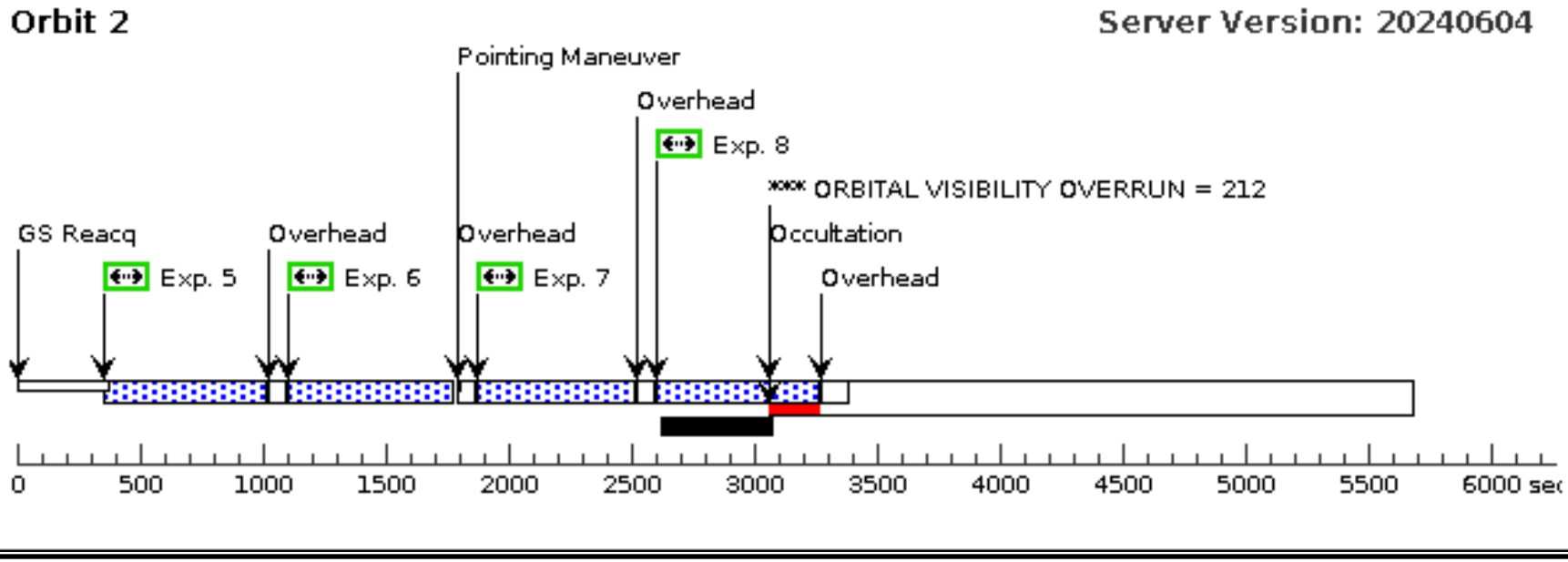
*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

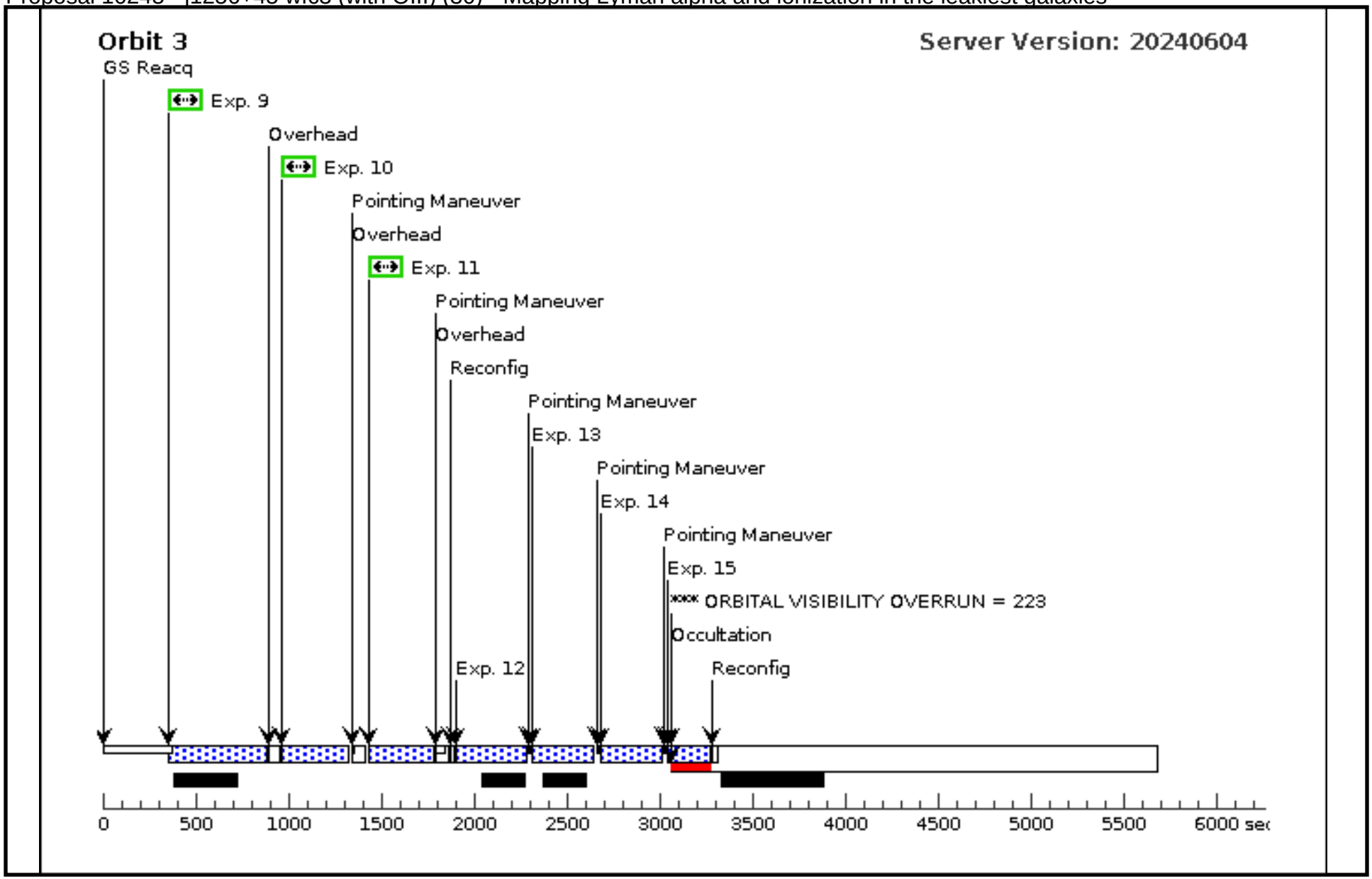
**Exposures**

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | (2) SDSS-J125644.15+450917.1 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F225W | FLASH=16 | | | 700 Secs (700 Secs) | |
| | | | | | | | | *[==>]* | ***[1]*** |
| 2 | | (2) SDSS-J125644.15+450917.1 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F225W | FLASH=16 | POS TARG -2.799,-2.785 | | 700 Secs (700 Secs) | |
| | | | | | | | | *[==>]* | ***[1]*** |
| 3 | | (2) SDSS-J125644.15+450917.1 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F225W | FLASH=16 | POS TARG 2.799,2.785 | | 700 Secs (700 Secs) | |
| | | | | | | | | *[==>]* | ***[1]*** |
| 4 | | (2) SDSS-J125644.15+450917.1 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-CTE | F775W | FLASH=7 | POS TARG 2.806,2.792 | | 492 Secs (492 Secs) | |
| | | | | | | | | *[==>]* | ***[1]*** |
| 5 | | (2) SDSS-J125644.15+450917.1 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F621M | FLASH=8 | SAME POS AS 4 | | 641 Secs (641 Secs) | |
| | | | | | | | | *[==>]* | ***[2]*** |
| 6 | | (2) SDSS-J125644.15+450917.1 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F438W | FLASH=12 | SAME POS AS 4 | | 640 Secs (640 Secs) | |
| | | | | | | | | *[==>]* | ***[2]*** |
| 7 | | (2) SDSS-J125644.15+450917.1 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F438W | FLASH=12 | SAME POS AS 1 | | 640 Secs (640 Secs) | |
| | | | | | | | | *[==>]* | ***[2]*** |
| 8 | | (2) SDSS-J125644.15+450917.1 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-CTE | F621M | FLASH=8 | SAME POS AS 1 | | 641 Secs (641 Secs) | |
| | | | | | | | | *[==>]* | ***[2]*** |
| 9 | | (2) SDSS-J125644.15+450917.1 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F775W | FLASH=7 | SAME POS AS 1 | | 502 Secs (502 Secs) | |
| | | | | | | | | *[==>]* | ***[3]*** |
| 10 | | (2) SDSS-J125644.15+450917.1 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F680N | FLASH=16 | SAME POS AS 1 | | 350 Secs (350 Secs) | |
| | | | | | | | | *[==>]* | ***[3]*** |
| 11 | | (2) SDSS-J125644.15+450917.1 | WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB | F680N | FLASH=16 | SAME POS AS 4 | | 350 Secs (350 Secs) | |
| | | | | | | | | *[==>]* | ***[3]*** |
| 12 | | (2) SDSS-J125644.15+450917.1 | WFC3/IR, MULTIACCUM, IR | F140W | SAMP-SEQ=STEP50; NSAMP=12 | | | 349.232932 Secs (349.233 Secs) | |
| | | | | | | | | *[==>]* | ***[3]*** |
| 13 | | (2) SDSS-J125644.15+450917.1 | WFC3/IR, MULTIACCUM, IR | F140W | SAMP-SEQ=STEP50; NSAMP=11 | POS TARG 0.9788,1.1495 | | 299.232481 Secs (299.232 Secs) | |
| | | | | | | | | *[==>]* | ***[3]*** |
| 14 | | (2) SDSS-J125644.15+450917.1 | WFC3/IR, MULTIACCUM, IR | F140W | SAMP-SEQ=STEP50; NSAMP=11 | POS TARG 1.5525,0.3328 | | 299.232481 Secs (299.232 Secs) | |
| | | | | | | | | *[==>]* | ***[3]*** |
| 15 | | (2) SDSS-J125644.15+450917.1 | WFC3/IR, MULTIACCUM, IR | F140W | SAMP-SEQ=STEP50; NSAMP=9 | POS TARG -0.9113,0.8773 | | 199.231579 Secs (199.232 Secs) | |
| | | | | | | | | *[==>]* | ***[3]*** |

Orbit Structure




Orbit 3
Server Version: 20240604
GS Reacq
Exp. 9
Overhead
Exp. 10
Pointing Maneuver
Overhead
Exp. 11
Pointing Maneuver
Overhead
Reconfig
Pointing Maneuver
Exp. 13
Pointing Maneuver
Exp. 14
Pointing Maneuver
Exp. 15
*** ORBITAL VISIBILITY OVERRUN = 223
Occultation
Exp. 12
Reconfig
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

## Visit

**Proposal 16245, j1154+24 ramps (29), failed** Fri Jun 07 21:00:34 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: ACS/WFC

Special Requirements: (none)

*Comments: Ramp filter observations of H-alpha, H-beta and [OII]*
*No OIII*

## Diagnostics

(j1154+24 ramps (29)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1154+24 ramps (29)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(H-alpha (29.002)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

([OII] (29.004)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(H-beta (29.005)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

## Fixed Targets

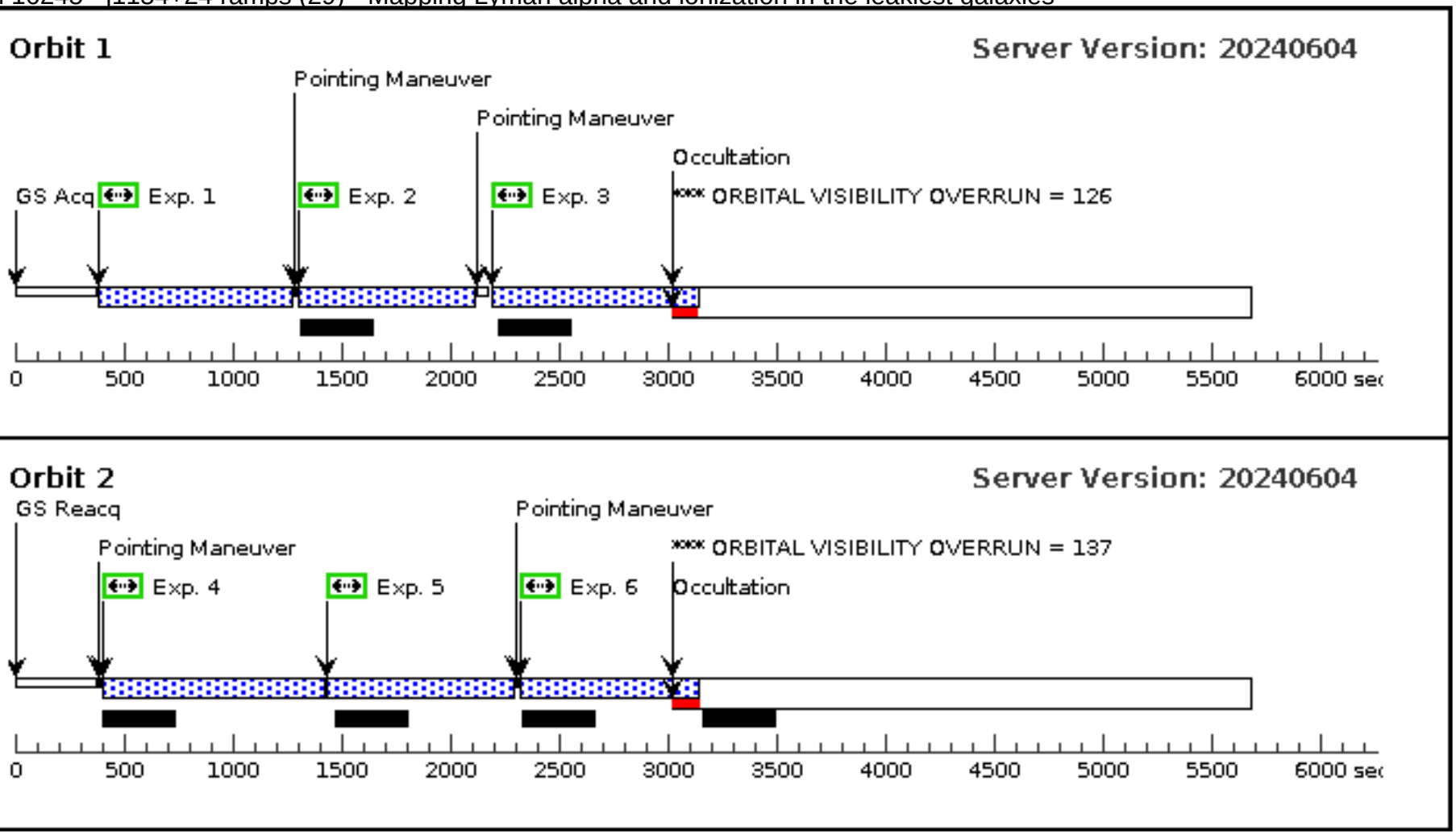
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (3) | SDSS-J115448.85+244333.0 | RA: 11 54 48.8520 (178.7035500d)<br>Dec: +24 43 33.13 (24.72587d)<br>Equinox: J2000 | | V=21.77+/-0.05<br>GALEX FUV = 21.1 mag (AB) | Reference Frame: NED |

*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | H-alpha | (3) SDSS-J115448.85+244333.0 | ACS/WFC, ACCUM, WFC2-ORAMP | FR931N<br>8987 A | | | | 685 Secs (685 Secs)<br>*[==>]* | <br>***[1]*** |
| 2 | H-alpha | (3) SDSS-J115448.85+244333.0 | ACS/WFC, ACCUM, WFC2-ORAMP | FR931N<br>8987 A | | POS TARG 0.2219,0.2189 | | 685 Secs (685 Secs)<br>*[==>]* | <br>***[1]*** |
| 3 | [OII] | (3) SDSS-J115448.85+244333.0 | ACS/WFC, ACCUM, WFC2-MRAMP | FR505N<br>5104 A | | | | 802 Secs (802 Secs)<br>*[==>]* | <br>***[1]*** |
| 4 | [OII] | (3) SDSS-J115448.85+244333.0 | ACS/WFC, ACCUM, WFC2-MRAMP | FR505N<br>5104 A | | POS TARG 0.2219,0.2189 | | 894 Secs (894 Secs)<br>*[==>]* | <br>***[2]*** |
| 5 | H-beta | (3) SDSS-J115448.85+244333.0 | ACS/WFC, ACCUM, WFC2-MRAMP | FR656N<br>6657 A | | POS TARG 0.2219,0.2189 | | 700 Secs (700 Secs)<br>*[==>]* | <br>***[2]*** |
| 6 | H-beta | (3) SDSS-J115448.85+244333.0 | ACS/WFC, ACCUM, WFC2-MRAMP | FR656N<br>6657 A | | | | 700 Secs (700 Secs)<br>*[==>]* | <br>***[2]*** |

Orbit Structure



## Visit

**Proposal 16245, j1154+24 ramps, partial repeat of 29 (Z9), implementation** Fri Jun 07 21:00:34 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: ACS/WFC

Special Requirements: (none)

*Comments: Ramp filter observations of H-alpha and [OII]*

*Repeat of first failed orbit in visit 29 following HOPR 92624*

## Diagnostics

(j1154+24 ramps, partial repeat of 29 (Z9)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(H-alpha (Z9.002)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

## Fixed Targets

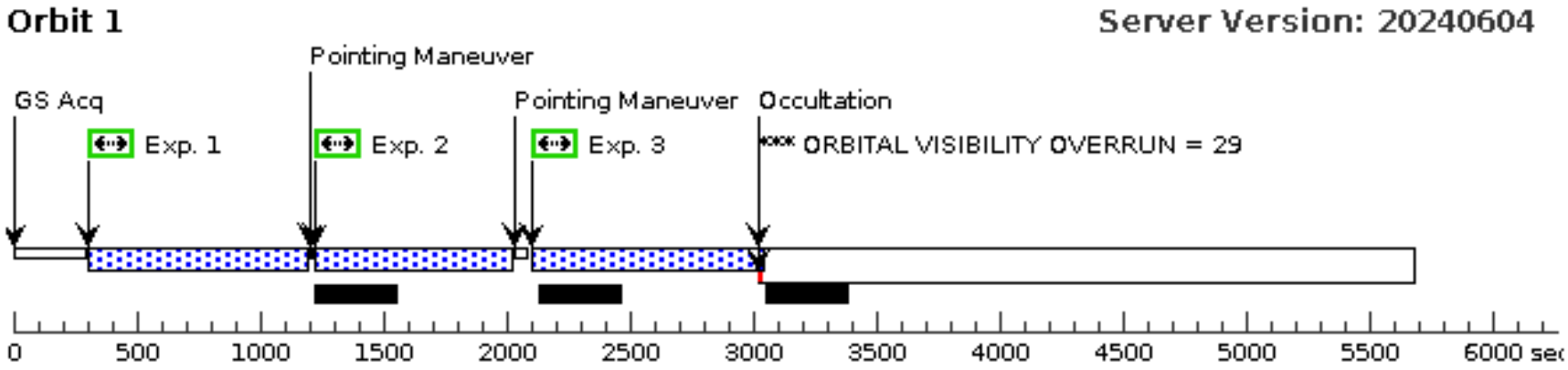
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (3) | SDSS-J115448.85+244333.0 | RA: 11 54 48.8520 (178.7035500d)<br>Dec: +24 43 33.13 (24.72587d)<br>Equinox: J2000 | | V=21.77+/-0.05<br>GALEX FUV = 21.1 mag (AB) | Reference Frame: NED |

*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | H-alpha | (3) SDSS-J115448.85+244333.0 | ACS/WFC, ACCUM, WFC2-ORAMP | FR931N 8987 A | | GS ACQ SCENARIO SINGLE | | 680 Secs (680 Secs)<br>*[==>]* | <br>***[1]*** |
| 2 | H-alpha | (3) SDSS-J115448.85+244333.0 | ACS/WFC, ACCUM, WFC2-ORAMP | FR931N 8987 A | | POS TARG 0.2219,0.2189 | | 680 Secs (680 Secs)<br>*[==>]* | <br>***[1]*** |
| 3 | [OII] | (3) SDSS-J115448.85+244333.0 | ACS/WFC, ACCUM, WFC2-MRAMP | FR505N 5104 A | | | | 794 Secs (794 Secs)<br>*[==>]* | <br>***[1]*** |

## Orbit Structure



## Visit

**Proposal 16245, j1256+45 ramps (28), completed** Fri Jun 07 21:00:34 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: ACS/WFC

Special Requirements: (none)

*Comments: Ramp filter observations of H-alpha, H-beta and [OII]*
*No OIII*

## Diagnostics

(j1256+45 ramps (28)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(j1256+45 ramps (28)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(H-alpha (28.002)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

([OII] (28.004)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(H-beta (28.005)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

## Fixed Targets

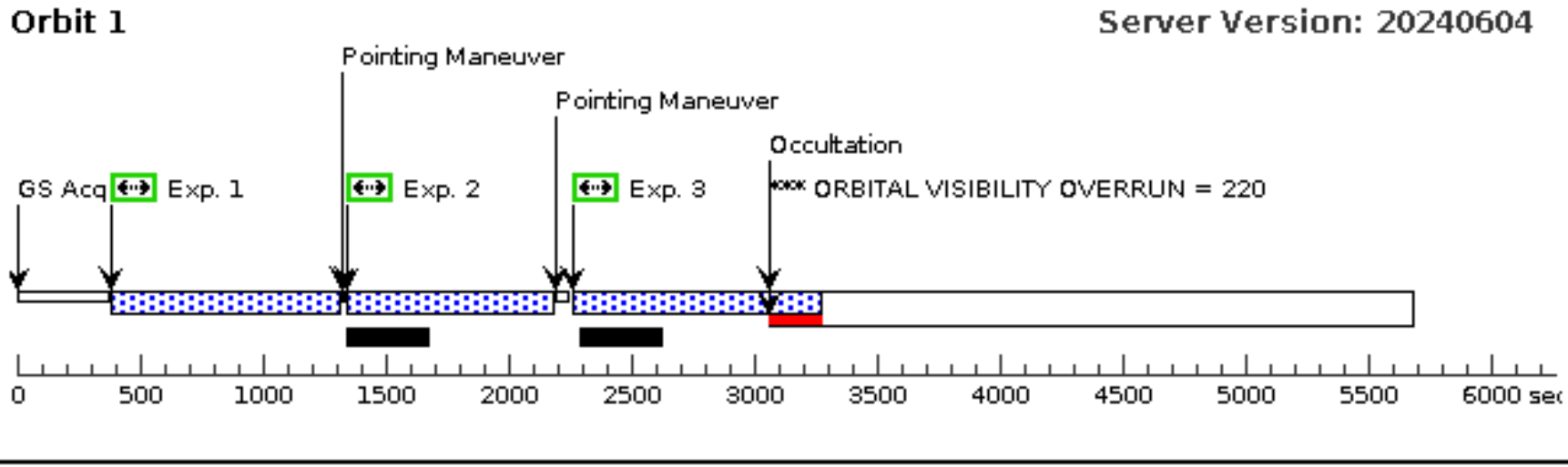
| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (2) | SDSS-J125644.15+450917.1 | RA: 12 56 44.1528 (194.1839700d)<br>Dec: +45 09 17.21 (45.15478d)<br>Equinox: J2000 | | V=21.22+/-0.05<br>GALEX FUV = 21.66 mag (AB) | Reference Frame: NED |

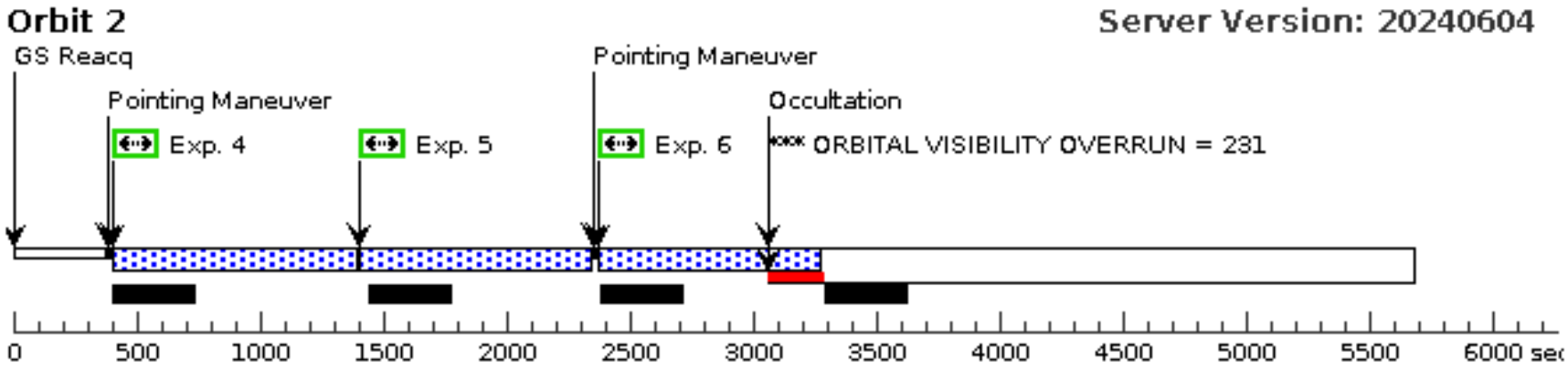
*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | H-alpha | (2) SDSS-J125644.15+450917.1 | ACS/WFC, ACCUM, WFC1-IRAMP | FR853N<br>8882 A | | | | 720 Secs (720 Secs)<br>*[==>]* | <br>***[1]*** |
| 2 | H-alpha | (2) SDSS-J125644.15+450917.1 | ACS/WFC, ACCUM, WFC1-IRAMP | FR853N<br>8882 A | | POS TARG 0.2219,0.2189 | | 720 Secs (720 Secs)<br>*[==>]* | <br>***[1]*** |
| 3 | [OII] | (2) SDSS-J125644.15+450917.1 | ACS/WFC, ACCUM, WFC1-MRAMP | FR505N<br>5045 A | | | | 861 Secs (861 Secs)<br>*[==>]* | <br>***[1]*** |
| 4 | [OII] | (2) SDSS-J125644.15+450917.1 | ACS/WFC, ACCUM, WFC1-MRAMP | FR505N<br>5045 A | | POS TARG 0.2219,0.2189 | | 862 Secs (862 Secs)<br>*[==>]* | <br>***[2]*** |
| 5 | H-beta | (2) SDSS-J125644.15+450917.1 | ACS/WFC, ACCUM, WFC1-MRAMP | FR656N<br>6579 A | | POS TARG 0.2219,0.2189 | | 780 Secs (780 Secs)<br>*[==>]* | <br>***[2]*** |
| 6 | H-beta | (2) SDSS-J125644.15+450917.1 | ACS/WFC, ACCUM, WFC1-MRAMP | FR656N<br>6579 A | | | | 780 Secs (780 Secs)<br>*[==>]* | <br>***[2]*** |

Orbit Structure



## Visit

**Proposal 16245, HOPR 18 (Z8), completed** Fri Jun 07 21:00:34 GMT 2024

**Diagnostic Status: Warning**

Scientific Instruments: ACS/WFC

Special Requirements: (none)

*Comments: ramp filter observations of [OII] and [OIII]*

## Diagnostics

(HOPR 18 (Z8)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

([OII] (Z8.001)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

([OIII] (Z8.003)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

## Fixed Targets

| # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|---|---|---|---|---|---|
| (1) | SDSS-J124300.62+464650.5 | RA: 12 43 0.6360 (190.7526500d)<br>Dec: +46 46 50.59 (46.78072d)<br>Equinox: J2000 | | V=21.48+/-0.04<br>GALEX FUV = 21.31 mag (AB) | Reference Frame: NED |

*Comments: This object was generated by the targetselector and retrieved from the NED database.*
*z=0.43*
*Category=GALAXY*
*Description=[STARBURST]*
*Extended=YES*

## Exposures

| # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|---|---|---|---|---|---|---|---|---|---|
| 1 | [OII] | (1) SDSS-J124300.62+464650.5 | ACS/WFC, ACCUM, WFC1-IRAMP | FR551N 5338 A | | POS TARG -0.2137, -0.2108 | | 1179 Secs (1179 Secs)<br>*[==>]* | <br>***[1]*** |
| 2 | [OIII] | (1) SDSS-J124300.62+464650.5 | ACS/WFC, ACCUM, WFC1-IRAMP | FR716N 7170 A | | | | 575 Secs (575 Secs)<br>*[==>]* | <br>***[1]*** |
| 3 | [OIII] | (1) SDSS-J124300.62+464650.5 | ACS/WFC, ACCUM, WFC1-IRAMP | FR716N 7170 A | | POS TARG 0.2219,0.2189 | | 575 Secs (575 Secs)<br>*[==>]* | <br>***[1]*** |

## Orbit Structure