



18086 - The impact of stellar feedback as revealed by thousands of resolved HII regions in NGC 253

Cycle: 33, Proposal Category: GO
(Availability Mode: SUPPORTED)

INVESTIGATORS

| <i>Name</i> | <i>Institution</i> |
|--|---|
| Rebecca McClain (PI) (Contact) | The Ohio State University |
| Dr. Adam Leroy (CoI) | The Ohio State University |
| Dr. David Thilker (CoI) | The Johns Hopkins University |
| Dr. Ashley Barnes (CoI) (ESA Member) | European Southern Observatory - Germany |
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| Mr. Ivan Sergeevich Gerasimov (CoI) (ESA Member) | University Cote d'Azur |
| Elias K Oakes (CoI) | University of Connecticut |
| Qiushi Chris Tian (CoI) (ESA Member) | Universiteit Leiden |
| Prof. Laura Lopez (CoI) | The Ohio State University |
| Prof. Alberto Bolatto (CoI) | University of Maryland |

VISITS

| <i>Visit</i> | <i>Targets used in Visit</i> | <i>Configurations used in Visit</i> | <i>Orbits Used</i> | <i>Last Orbit Planner Run</i> | <i>OP Current with Visit?</i> |
|--------------|------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------------|
| 01 | (13) NGC-253-END1 | WFC3/UVIS | 1 | 13-Feb-2026 16:00:14.0 | yes |
| 02 | (14) NGC-253-END12 | WFC3/UVIS | 1 | 13-Feb-2026 16:00:14.0 | yes |
| 03 | (15) NGC-253-END2 | WFC3/UVIS | 1 | 13-Feb-2026 16:00:15.0 | yes |
| 04 | (16) NGC-253-END22 | WFC3/UVIS | 1 | 13-Feb-2026 16:00:15.0 | yes |

| <i>Visit</i> | <i>Targets used in Visit</i> | <i>Configurations used in Visit</i> | <i>Orbits Used</i> | <i>Last Orbit Planner Run</i> | <i>OP Current with Visit?</i> |
|--------------|------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------------|
| 05 | (5) NGC-253-V13 | WFC3/UVIS | 1 | 13-Feb-2026 16:00:15.0 | yes |
| 06 | (6) NGC-253-V14 | WFC3/UVIS | 1 | 13-Feb-2026 16:00:15.0 | yes |
| 07 | (7) NGC-253-V15 | WFC3/UVIS | 1 | 13-Feb-2026 16:00:16.0 | yes |
| 08 | (8) NGC-253-V16 | WFC3/UVIS | 1 | 13-Feb-2026 16:00:16.0 | yes |
| 09 | (9) NGC-253-V17 | WFC3/UVIS | 1 | 13-Feb-2026 16:00:16.0 | yes |
| 10 | (10) NGC-253-V18 | WFC3/UVIS | 1 | 13-Feb-2026 16:00:17.0 | yes |
| 11 | (11) NGC-253-V19 | WFC3/UVIS | 1 | 13-Feb-2026 16:00:17.0 | yes |
| 12 | (12) NGC-253-V20 | WFC3/UVIS | 1 | 13-Feb-2026 16:00:17.0 | yes |

12 Total Orbits Used

ABSTRACT

We propose for full-disk narrowband H-alpha imaging of NGC253, the nearest southern massive, star-forming spiral galaxy. This imaging is critical to resolve the inner structure of 2,500 HII regions known from full-disk VLT/MUSE spectral mapping and JWST/MIRI imaging. The proposed mapping would also complement awarded HST broadband imaging that captures the stellar populations powering these regions. HII regions are the critical locations of pre-supernova stellar feedback. However, even at the 3.5 Mpc distance to NGC253, ground-based observations cannot resolve the size or morphology of the inner cores where this feedback plays out. Only HST can reach the required ~ 1 pc resolution. Combining these new HST data with the VLT/MUSE, JWST, and broadband HST mapping, we will (1) measure the size and morphology of each region, (2) relate these to the mass, location, and age of the powering stellar population, and (3) compare the distribution of ionized gas to the observed PAH and dust emission from JWST, linking the feedback to the surrounding ISM and testing models of PAH destruction in ionized gas. This proposal will be the first-ever data set that combines full optical spectral mapping, JWST IR imaging, pc-resolution ionized gas mapping, and resolved UV-optical mapping of the stellar population. This unprecedented data set is crucial for expanding our understanding of HII region physics and stellar feedback, along with the countless possible applications to resolved sources, ISM, stellar, and galactic wind studies.

OBSERVING DESCRIPTION

We have designed a full-disk survey of NGC 253 to observe the F657N band of WFC3/UVIS. This wavelength probes the H-alpha emission across the galaxy, tracing areas of active star formation on the smallest scales of individual HII regions. In combination with the full-galaxy MUSE and JWST imaging, HST H-alpha imaging will reveal the inner structure and chemical composition of HII regions, providing crucial information on the

impacts of stellar feedback.

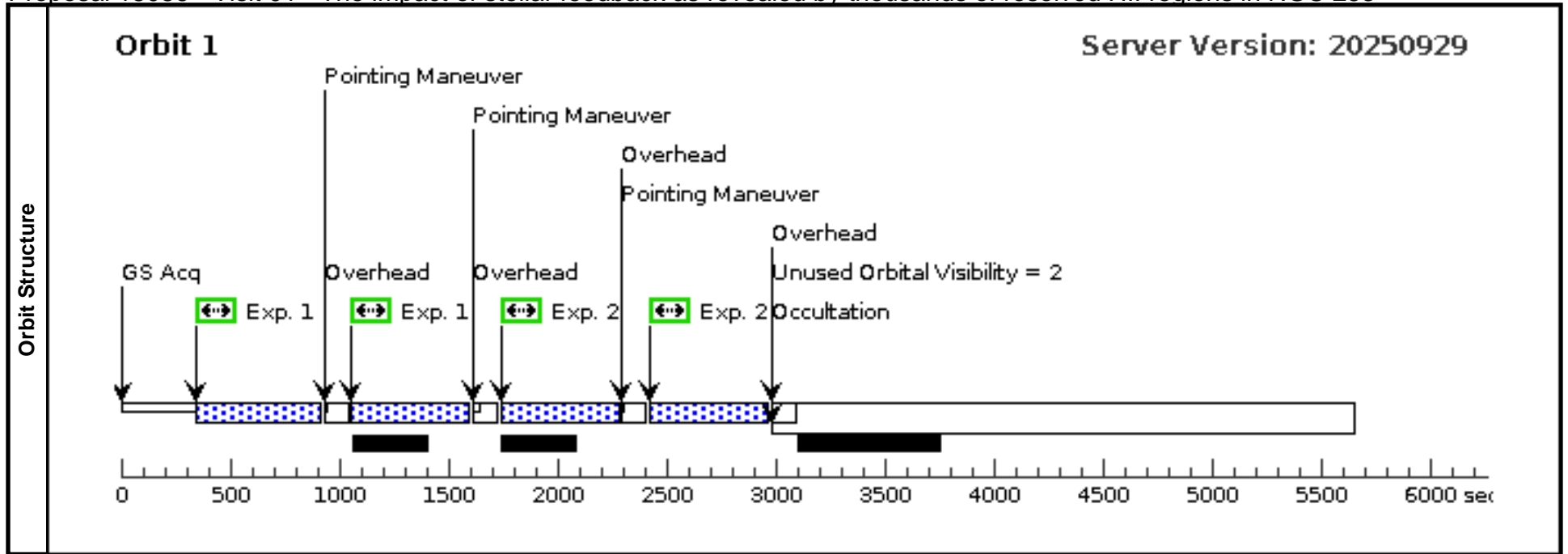
This program has been designed to match the orientation and coverage of the previously awarded observations of NUV-visible filters (GO 17809).

The mosaic is organized in a 2x8 tile layout with 10% overlap. We require the orientation angle to be 272.0-272.4 deg in order to match the in progress HST observations and existing JWST/MIRI imaging. The matching mosaic layout is crucial for continuum subtraction in the proposed bands. Each exposure will be 430 seconds, allowing us to detect HII regions powered by single massive stars within the disk. We will reach S/N of 10 for luminosities 10^{35} erg/s.

Proposal 18086 - Visit 01 - The impact of stellar feedback as revealed by thousands of resolved HII regions in NGC 253

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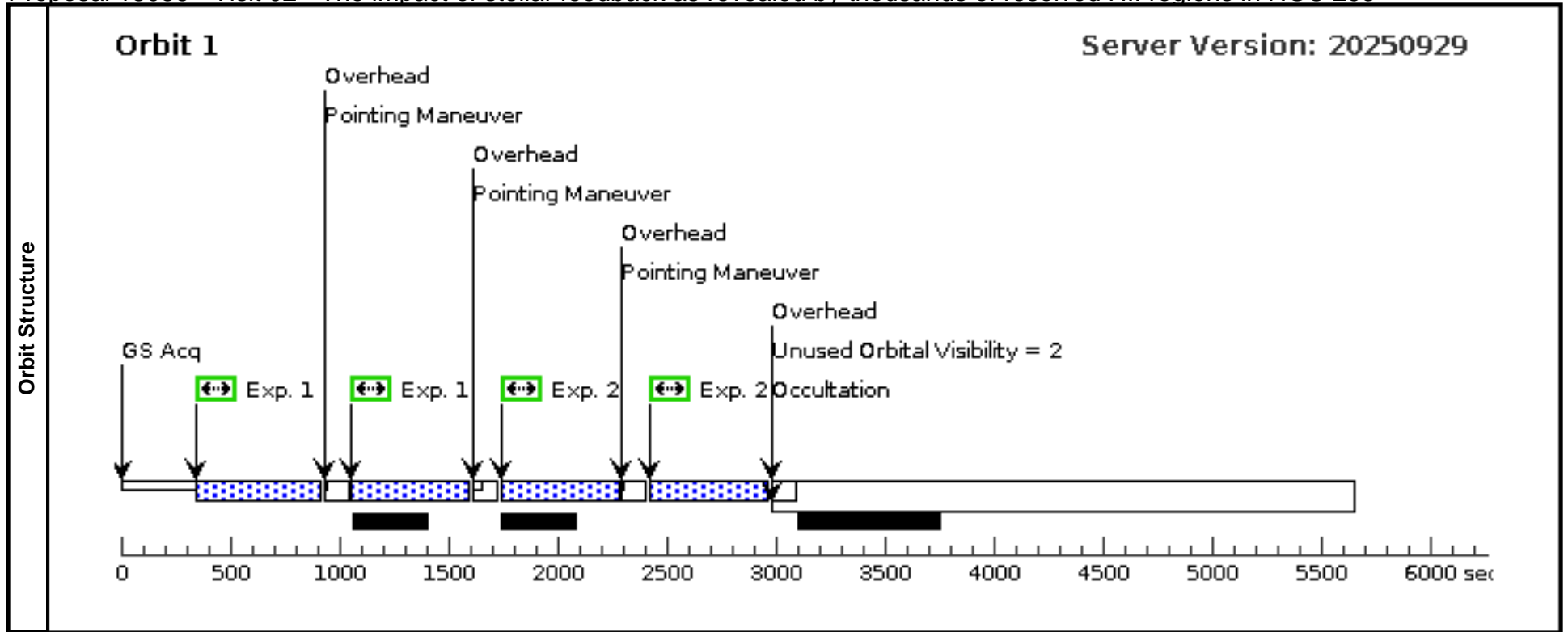
| Visit | Proposal 18086, Visit 01, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: ORIENT 272D TO 272.4 D | | | | | | | | | | |
|---------------|--|-------------------|--|--|--------------------------|---------------------|-------------------------------------|-------------------------------------|---------------------------------|-----|-------|
| | Patterns | # | Primary Pattern | | | Secondary Pattern | | | Exposures | | |
| | | (2) | Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing= | Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false | | | | | (1), (2) | | |
| Fixed Targets | # | Name | Target Coordinates | | Targ. Coord. Corrections | | Fluxes | Miscellaneous | | | |
| | (13) | NGC-253-END1 | RA: 00 47 3.0626 (11.7627608d) Dec: -25 23 4.81 (-25.38467d) Equinox: J2000 | | Epoch of Position: 2000 | | V=7 | Reference Frame: ICRS | | | |
| | <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[SPIRAL ARM] | | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | | Orbit |
| | 1 | | (13) NGC-253-END1 | WFC3/UVIS, ACCUM, UVIS-FIX | F657N | FLASH=20 | POS TARG null,-19.81 | Pattern 2, Exps 1-1 in Visit 01 (2) | 544 Secs (1088 Secs) | | |
| | | | | | | | | | [=>(Pattern 1)] | [1] | |
| | | | | | | | | | [=>(Pattern 2)] | | |
| 2 | | (13) NGC-253-END1 | WFC3/UVIS, ACCUM, UVIS-FIX | F657N | FLASH=20 | POS TARG null,19.81 | Pattern 2, Exps 2-2 in Visit 01 (2) | 544 Secs (1088 Secs) | | | |
| | | | | | | | | | [=>(Pattern 1)] | [1] | |
| | | | | | | | | | [=>(Pattern 2)] | | |



Proposal 18086 - Visit 02 - The impact of stellar feedback as revealed by thousands of resolved HII regions in NGC 253

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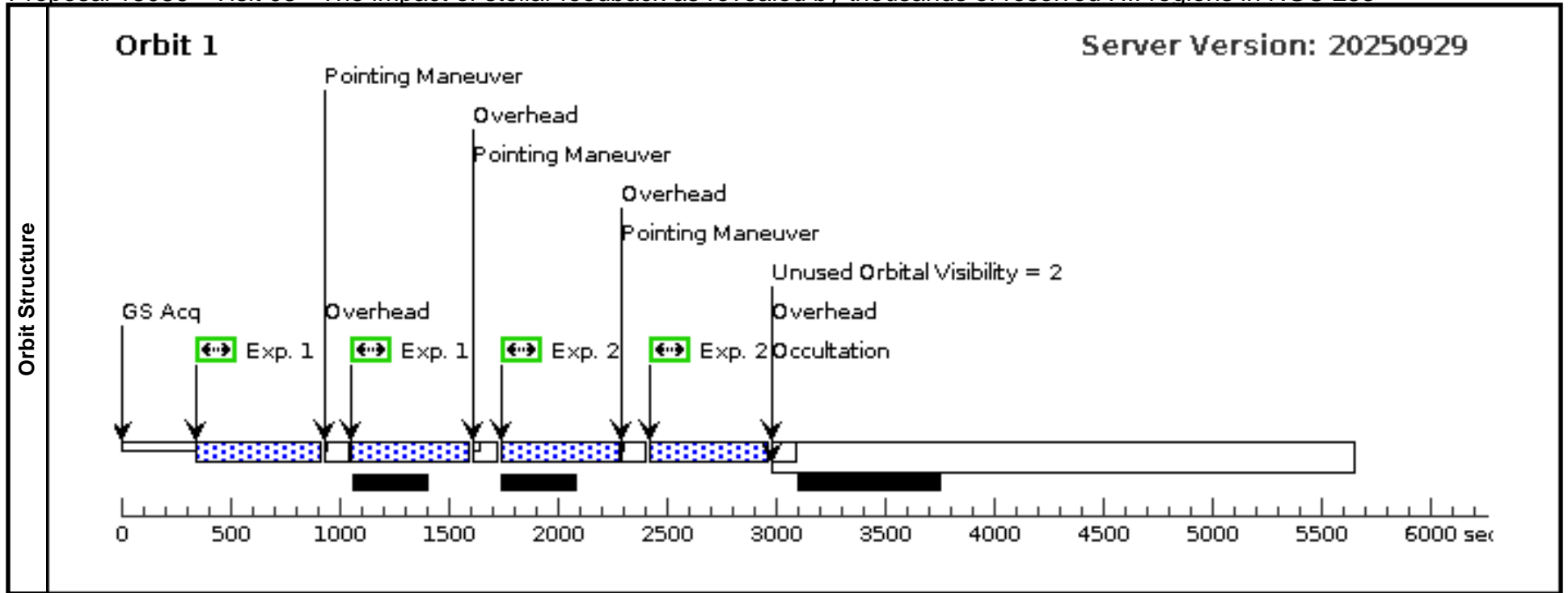
| Visit | Proposal 18086, Visit 02, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: ORIENT 272D TO 272.4 D | | | | | | | | | |
|---------------|--|---------------|--|--|---------------|-----------------------|-------------------|-------------------------------------|---------------------------------|-------|
| | Patterns | # | Primary Pattern | | | Secondary Pattern | | | Exposures | |
| | | (2) | Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing= | Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false | | | | | (1), (2) | |
| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous | | | | |
| | (14) | NGC-253-END12 | RA: 00 47 11.5868 (11.7982783d) Dec: -25 21 30.47 (-25.35846d) Equinox: J2000 | Epoch of Position: 2000 | V=7 | Reference Frame: ICRS | | | | |
| | <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[SPIRAL ARM] | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | | (14) NGC-253-END12 | WFC3/UVIS, ACCUM, UVIS-FIX | F657N | FLASH=20 | POS TARG null,-29 | Pattern 2, Exps 1-1 in Visit 02 (2) | 544 Secs (1088 Secs) | |
| | | | | | | | | [==>(Pattern 1)] | | [1] |
| | | | | | | | | [==>(Pattern 2)] | | |
| | 2 | | (14) NGC-253-END12 | WFC3/UVIS, ACCUM, UVIS-FIX | F657N | FLASH=20 | POS TARG null,29 | Pattern 2, Exps 2-2 in Visit 02 (2) | 544 Secs (1088 Secs) | |
| | | | | | | | | [==>(Pattern 1)] | | [1] |
| | | | | | | | | [==>(Pattern 2)] | | |



Proposal 18086 - Visit 03 - The impact of stellar feedback as revealed by thousands of resolved HII regions in NGC 253

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| Visit | Proposal 18086, Visit 03, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: ORIENT 272D TO 272.4 D | | | | | | | | | |
|---------------|--|-----------------------|--|--|--------------------------|---------------------|-------------------------------------|--|--|-------|
| | Patterns | # | Primary Pattern | | | Secondary Pattern | | | Exposures | |
| | | (2) | Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing= | Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false | | | | | (1), (2) | |
| Fixed Targets | # | Name | Target Coordinates | | Targ. Coord. Corrections | | Fluxes | Miscellaneous | | |
| | (15) | NGC-253-END2 | RA: 00 48 5.0016 (12.0208400d) Dec: -25 11 49.82 (-25.19717d) Equinox: J2000 | | Epoch of Position: 2000 | | V=7 | Reference Frame: ICRS | | |
| | <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[SPIRAL ARM] | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
| | 1 | | (15) NGC-253-END 2 | WFC3/UVIS, ACCUM, UVIS-FIX | F657N | FLASH=20 | POS TARG null,-19.81 | Pattern 2, Exps 1-1 in Visit 03 (2) | 544 Secs (1088 Secs) [=>(Pattern 1)] [=>(Pattern 2)] | [1] |
| 2 | | (15) NGC-253-END 2 | WFC3/UVIS, ACCUM, UVIS-FIX | F657N | FLASH=20 | POS TARG null,19.81 | Pattern 2, Exps 2-2 in Visit 03 (2) | 544 Secs (1088 Secs) [=>(Pattern 1)] [=>(Pattern 2)] | [1] | |



Proposal 18086 - Visit 04 - The impact of stellar feedback as revealed by thousands of resolved HII regions in NGC 253

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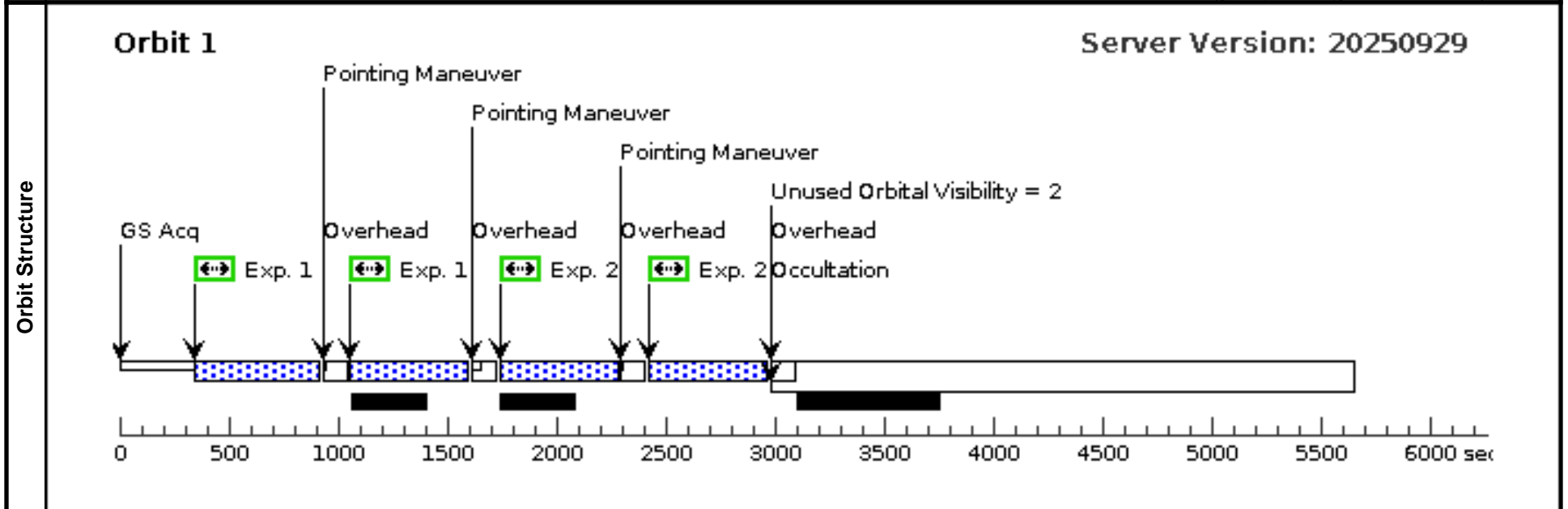
| | | | |
|--------------|---|--|--|
| Visit | Proposal 18086, Visit 04, implementation | | |
| | Diagnostic Status: No Diagnostics | | |
| | Scientific Instruments: WFC3/UVIS | | |
| | Special Requirements: ORIENT 272D TO 272.4 D | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|--|--|-----------|
| | (2) | Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing= | Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|------|---------------|---|--------------------------|--------|-----------------------|
| | (16) | NGC-253-END22 | RA: 00 47 56.2515 (11.9843812d) Dec: -25 13 25.43 (-25.22373d) Equinox: J2000 | Epoch of Position: 2000 | V=7 | Reference Frame: ICRS |

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
 Category=GALAXY
 Description=[SPIRAL ARM]

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|--------------------|----------------------------|----------------------------|---------------|------------------|-------------------------------------|-------------------------------------|---------------------------------|-------|
| | 1 | | (16) NGC-253-END22 | WFC3/UVIS, ACCUM, UVIS-FIX | F657N | FLASH=20 | POS TARG null,-29 | Pattern 2, Exps 1-1 in Visit 04 (2) | 544 Secs (1088 Secs) | [1] |
| 2 | | (16) NGC-253-END22 | WFC3/UVIS, ACCUM, UVIS-FIX | F657N | FLASH=20 | POS TARG null,29 | Pattern 2, Exps 2-2 in Visit 04 (2) | 544 Secs (1088 Secs) | [1] | |



Proposal 18086 - Visit 05 - The impact of stellar feedback as revealed by thousands of resolved HII regions in NGC 253

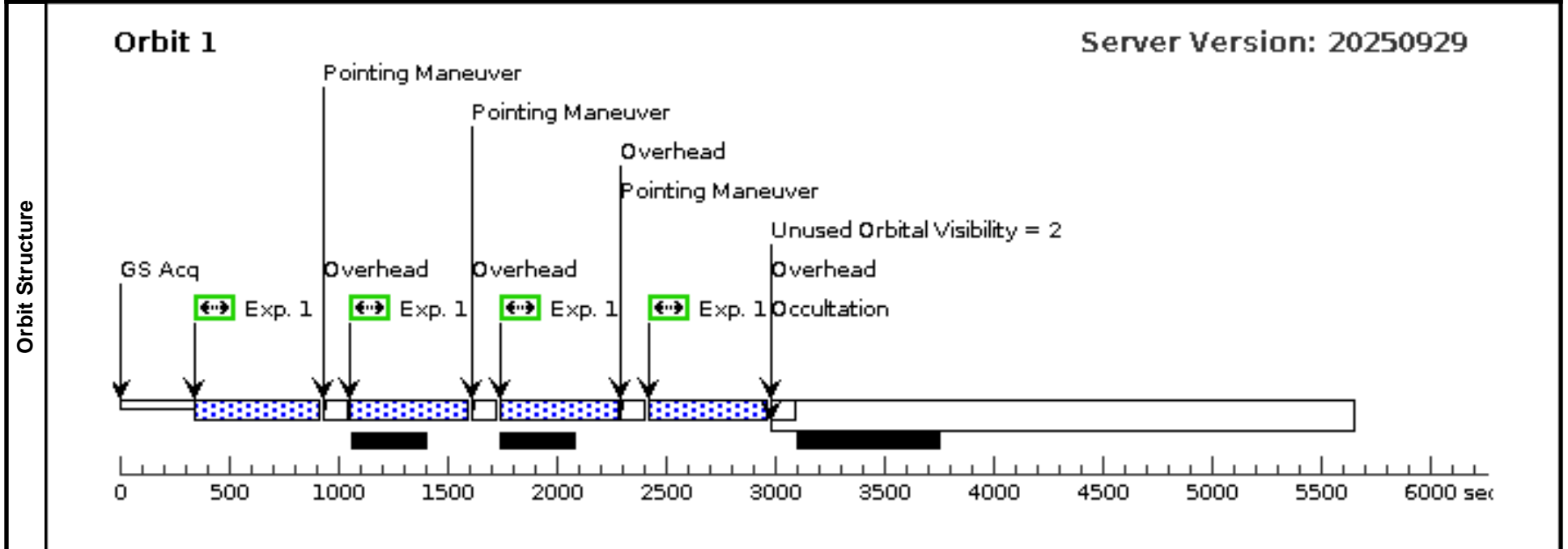
Fri Feb 13 21:00:18 GMT 2026

| | | | |
|--------------|--|--|--|
| Visit | Proposal 18086, Visit 05, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: ORIENT 272D TO 272.4 D | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|--|-------------------|-----------|
| | (1) | Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=4 Point Spacing=0.135 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false | | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|-------------|---|--------------------------|--------|-----------------------|
| | (5) | NGC-253-V13 | RA: 00 47 50.9061 (11.9621088d) Dec: -25 15 56.09 (-25.26558d) Equinox: J2000 | Epoch of Position: 2000 | V=7 | Reference Frame: ICRS |
| | <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[SPIRAL ARM] | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-----------------|----------------------------|---------------|--------------|---------------|-------------------------------------|--|-------|
| | 1 | | (5) NGC-253-V13 | WFC3/UVIS, ACCUM, UVIS-FIX | F657N | FLASH=20 | | Pattern 1, Exps 1-1 in Visit 05 (1) | 544 Secs (2176 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 18086 - Visit 06 - The impact of stellar feedback as revealed by thousands of resolved HII regions in NGC 253

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| | | | |
|--------------|--|--|--|
| Visit | Proposal 18086, Visit 06, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: ORIENT 272D TO 272.4 D | | |
| | | | |

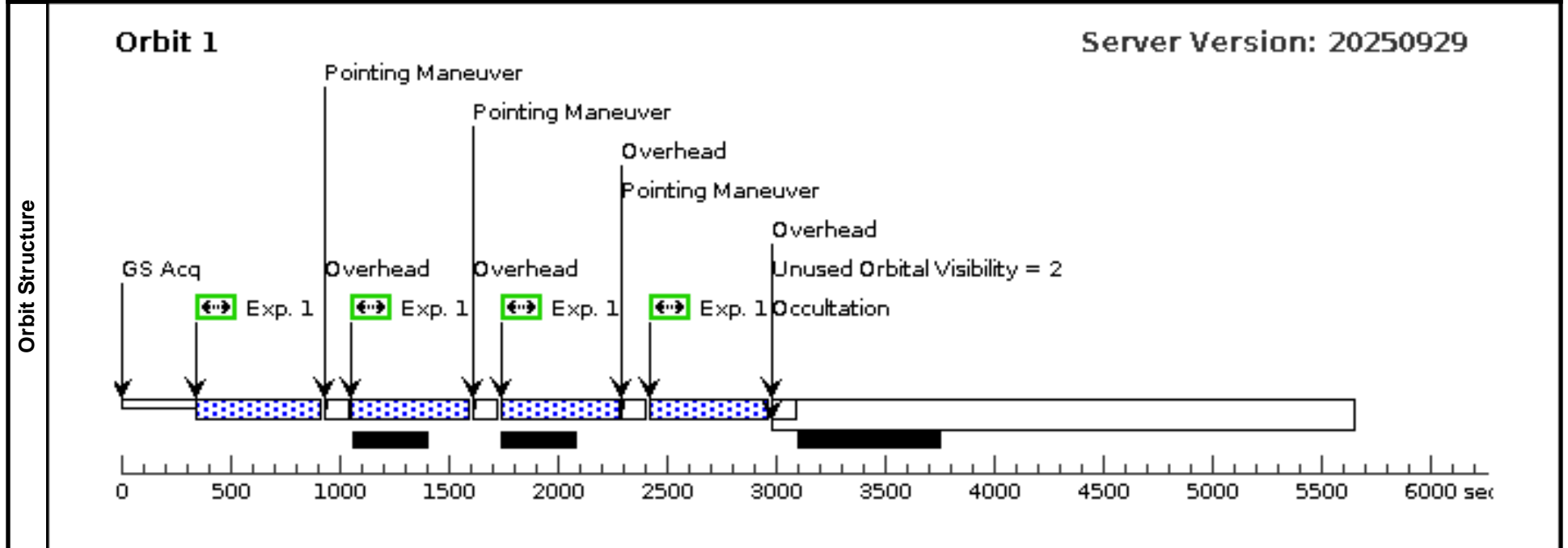
| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|--|--|-----------|
| | (1) | Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=4 Point Spacing=0.135 Line Spacing= | Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|-----|-------------|---|--------------------------|--------|-----------------------|
| | (6) | NGC-253-V14 | RA: 00 47 41.9790 (11.9249125d) Dec: -25 17 34.07 (-25.29280d) Equinox: J2000 | Epoch of Position: 2000 | V=7 | Reference Frame: ICRS |

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
 Category=GALAXY
 Description=[SPIRAL ARM]

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-----------------|----------------------------|---------------|--------------|---------------|--------|-------------------------------------|----------------------|
| | 1 | | (6) NGC-253-V14 | WFC3/UVIS, ACCUM, UVIS-FIX | F657N | FLASH=20 | | | Pattern 1, Exps 1-1 in Visit 06 (1) | 544 Secs (2176 Secs) |

[=>(Pattern 1)]
 [=>(Pattern 2)]
 [=>(Pattern 3)]
 [=>(Pattern 4)]



Proposal 18086 - Visit 07 - The impact of stellar feedback as revealed by thousands of resolved HII regions in NGC 253

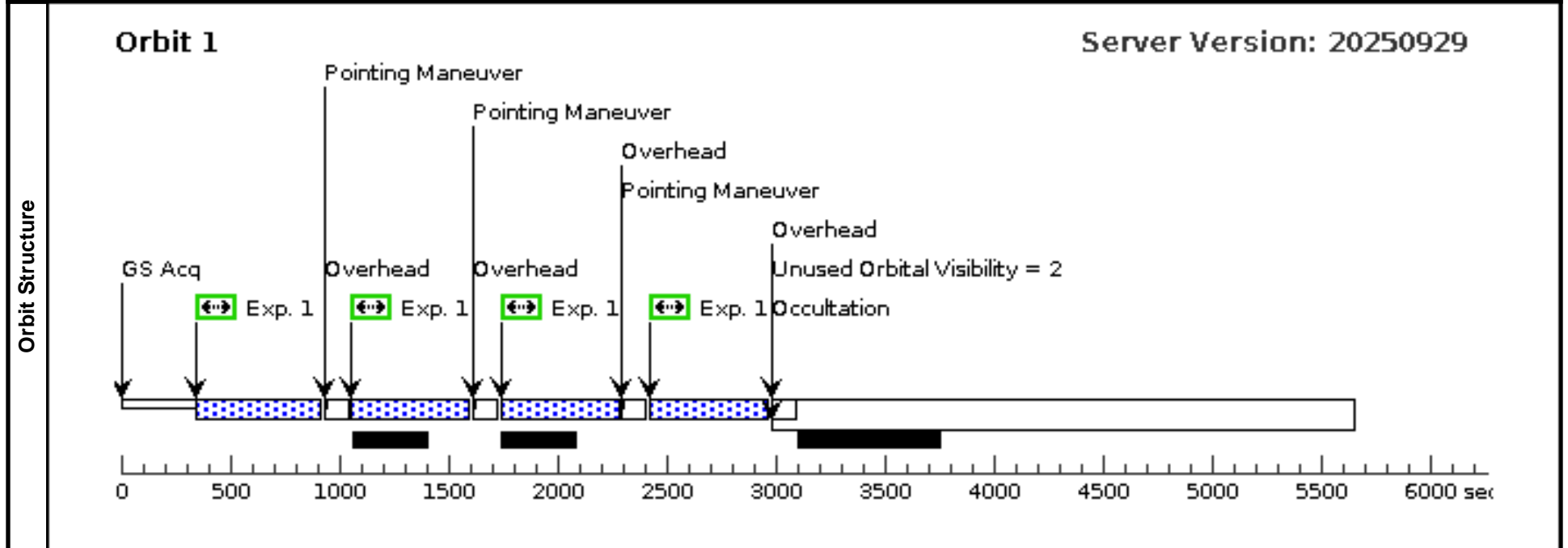
Fri Feb 13 21:00:18 GMT 2026

| | | | |
|--------------|--|--|--|
| Visit | Proposal 18086, Visit 07, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: ORIENT 272D TO 272.4 D | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|--|--|-----------|
| | (1) | Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=4 Point Spacing=0.135 Line Spacing= | Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false | (1) |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|---|-------------|---|--------------------------|--------|-----------------------|
| | (7) | NGC-253-V15 | RA: 00 47 33.0520 (11.8877167d) Dec: -25 19 12.01 (-25.32000d) Equinox: J2000 | Epoch of Position: 2000 | V=7 | Reference Frame: ICRS |
| | <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[SPIRAL ARM] | | | | | |

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-----------------|----------------------------|---------------|--------------|---------------|-------------------------------------|--|-------|
| | 1 | | (7) NGC-253-V15 | WFC3/UVIS, ACCUM, UVIS-FIX | F657N | FLASH=20 | | Pattern 1, Exps 1-1 in Visit 07 (1) | 544 Secs (2176 Secs) | |
| | | | | | | | | | [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] | [1] |



Proposal 18086 - Visit 08 - The impact of stellar feedback as revealed by thousands of resolved HII regions in NGC 253

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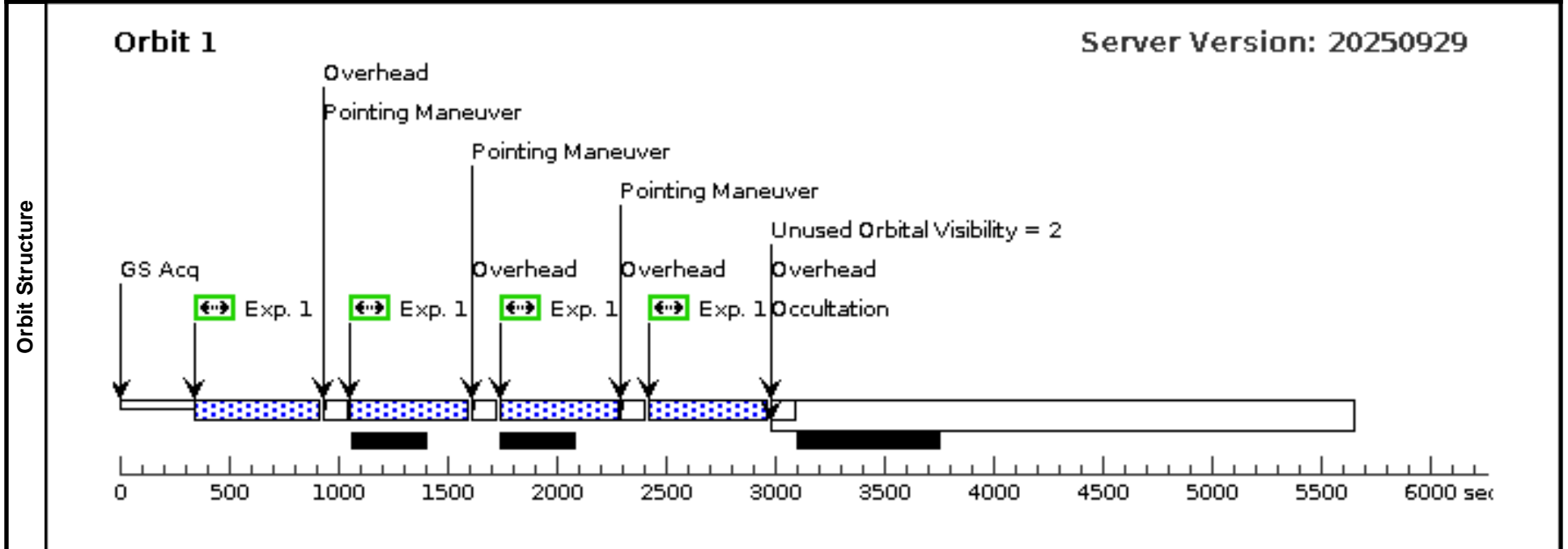
| | | | |
|--------------|--|--|--|
| Visit | Proposal 18086, Visit 08, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: ORIENT 272D TO 272.4 D | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|--|--|-----------|
| | (1) | Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=4 Point Spacing=0.135 Line Spacing= | Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|-----|-------------|---|--------------------------|--------|-----------------------|
| | (8) | NGC-253-V16 | RA: 00 47 24.1249 (11.8505204d) Dec: -25 20 49.93 (-25.34720d) Equinox: J2000 | Epoch of Position: 2000 | V=7 | Reference Frame: ICRS |

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
 Category=GALAXY
 Description=[SPIRAL ARM]

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-----------------|----------------------------|---------------|--------------|---------------|--------|--|----------------------|
| | 1 | | (8) NGC-253-V16 | WFC3/UVIS, ACCUM, UVIS-FIX | F657N | FLASH=20 | | | Pattern 1, Exps 1-1 in Visit 08 (1) | 544 Secs (2176 Secs) |
| | | | | | | | | | [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] |



Proposal 18086 - Visit 09 - The impact of stellar feedback as revealed by thousands of resolved HII regions in NGC 253

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| | | | |
|--------------|---|--|--|
| Visit | Proposal 18086, Visit 09, implementation | | |
| | Diagnostic Status: No Diagnostics | | |
| | Scientific Instruments: WFC3/UVIS | | |
| | Special Requirements: ORIENT 341D TO 349 D | | |

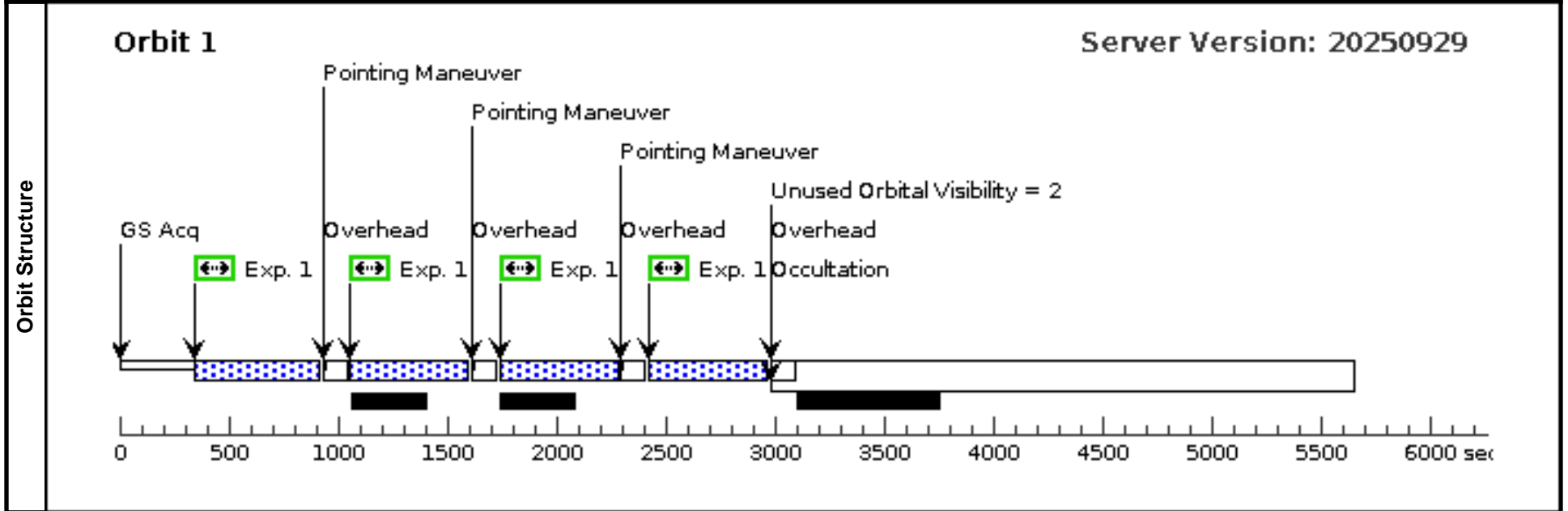
| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|--|--|-----------|
| | (1) | Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=4 Point Spacing=0.135 Line Spacing= | Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|-----|-------------|---|--------------------------|--------|-----------------------|
| | (9) | NGC-253-V17 | RA: 00 47 43.0018 (11.9291742d) Dec: -25 14 22.11 (-25.23948d) Equinox: J2000 | Epoch of Position: 2000 | V=7 | Reference Frame: ICRS |

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
 Category=GALAXY
 Description=[SPIRAL ARM]

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|-----------------|----------------------------|---------------|--------------|---------------|-------------------------------------|---------------------------------|-------|
| | 1 | | (9) NGC-253-V17 | WFC3/UVIS, ACCUM, UVIS-FIX | F657N | FLASH=20 | | Pattern 1, Exps 1-1 in Visit 09 (1) | 544 Secs (2176 Secs) | |

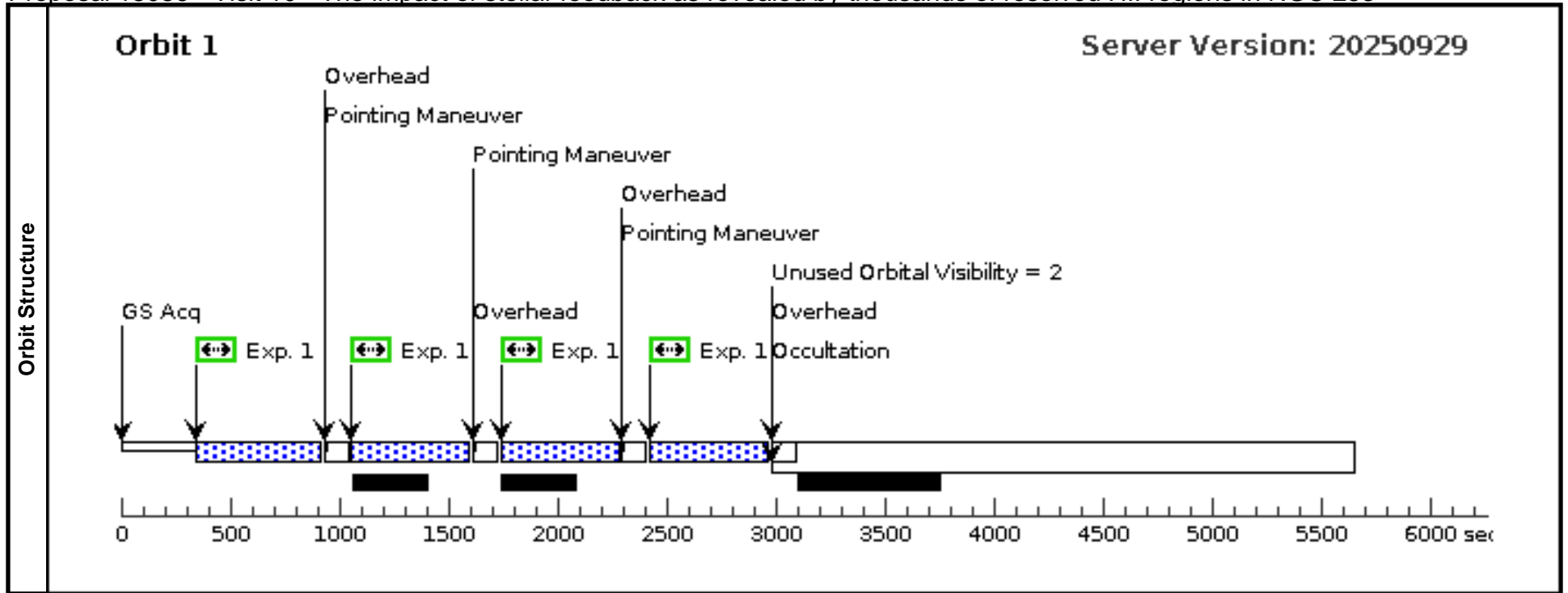
[=>(Pattern 1)]
 [=>(Pattern 2)]
 [=>(Pattern 3)]
 [=>(Pattern 4)]



Proposal 18086 - Visit 10 - The impact of stellar feedback as revealed by thousands of resolved HII regions in NGC 253

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| Visit | Proposal 18086, Visit 10, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: ORIENT 272D TO 272.4 D | | | | | | | | | | |
|---------------|--|-------------|--|--|--------------------------|--------------|-----------------------|---|--|-----------|-------|
| | Patterns | # | Primary Pattern | | | | Secondary Pattern | | | Exposures | |
| | | (1) | Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=4 Point Spacing=0.135 Line Spacing= | Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false | | | | | | (1) | |
| Fixed Targets | # | Name | Target Coordinates | | Targ. Coord. Corrections | | Fluxes | Miscellaneous | | | |
| | (10) | NGC-253-V18 | RA: 00 47 34.0747 (11.8919779d) Dec: -25 15 39.00 (-25.26083d) Equinox: J2000 | | Epoch of Position: 2000 | V=7 | Reference Frame: ICRS | | | | |
| | <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[SPIRAL ARM] | | | | | | | | | | |
| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | | Orbit |
| | 1 | | (10) NGC-253-V18 | WFC3/UVIS, ACCUM, UVIS-FIX | F657N | FLASH=20 | | Pattern 1, Exps 1-1 i n Visit 10 (1) | 544 Secs (2176 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] | [1] | |



Proposal 18086 - Visit 11 - The impact of stellar feedback as revealed by thousands of resolved HII regions in NGC 253

Fri Feb 13 21:00:18 GMT 2026

| | | | |
|--------------|---|--|--|
| Visit | Proposal 18086, Visit 11, implementation | | |
| | Diagnostic Status: No Diagnostics | | |
| | Scientific Instruments: WFC3/UVIS | | |
| | Special Requirements: ORIENT 272D TO 272.4 D | | |

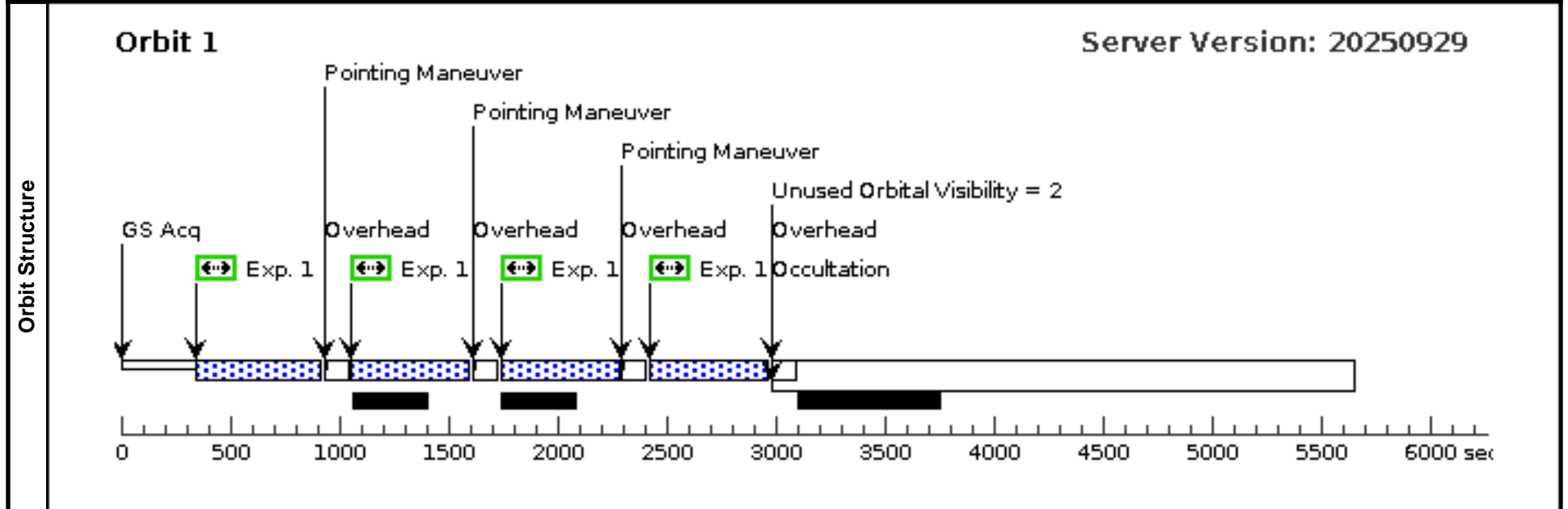
| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|--|--|-----------|
| | (1) | Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=4 Point Spacing=0.135 Line Spacing= | Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|------|-------------|---|--------------------------|--------|-----------------------|
| | (11) | NGC-253-V19 | RA: 00 47 25.1476 (11.8547817d) Dec: -25 17 16.91 (-25.28803d) Equinox: J2000 | Epoch of Position: 2000 | V=7 | Reference Frame: ICRS |

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
 Category=GALAXY
 Description=[SPIRAL ARM]

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|------------------|----------------------------|---------------|--------------|---------------|--------|-------------------------------------|----------------------|
| | 1 | | (11) NGC-253-V19 | WFC3/UVIS, ACCUM, UVIS-FIX | F657N | FLASH=20 | | | Pattern 1, Exps 1-1 in Visit 11 (1) | 544 Secs (2176 Secs) |

[=>(Pattern 1)]
 [=>(Pattern 2)]
 [=>(Pattern 3)]
 [=>(Pattern 4)]



Proposal 18086 - Visit 12 - The impact of stellar feedback as revealed by thousands of resolved HII regions in NGC 253

Fri Feb 13 21:00:18 GMT 2026

| | | | |
|--------------|--|--|--|
| Visit | Proposal 18086, Visit 12, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: ORIENT 272D TO 272.4 D | | |
| | | | |

| Patterns | # | Primary Pattern | Secondary Pattern | Exposures |
|-----------------|-----|--|--|-----------|
| | (1) | Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=4 Point Spacing=0.135 Line Spacing= | Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false | |

| Fixed Targets | # | Name | Target Coordinates | Targ. Coord. Corrections | Fluxes | Miscellaneous |
|----------------------|------|-------------|---|--------------------------|--------|-----------------------|
| | (12) | NGC-253-V20 | RA: 00 47 16.2205 (11.8175854d) Dec: -25 18 54.80 (-25.31522d) Equinox: J2000 | Epoch of Position: 2000 | V=7 | Reference Frame: ICRS |

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
 Category=GALAXY
 Description=[SPIRAL ARM]

| Exposures | # | Label | Target | Config,Mode,Aperture | Spectral Els. | Opt. Params. | Special Reqs. | Groups | Exp. Time (Total)/[Actual Dur.] | Orbit |
|------------------|---|-------|------------------|----------------------------|---------------|--------------|---------------|--------|-------------------------------------|----------------------|
| | 1 | | (12) NGC-253-V20 | WFC3/UVIS, ACCUM, UVIS-FIX | F657N | FLASH=20 | | | Pattern 1, Exps 1-1 in Visit 12 (1) | 544 Secs (2176 Secs) |

[=>(Pattern 1)]
 [=>(Pattern 2)]
 [=>(Pattern 3)]
 [=>(Pattern 4)]

