17910 - Silicates vs Carbon dust in NGC 6822: determining stellar dust types with WFC3/IR's unique filters

Cycle: 32, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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Dr. Isha Nayak (CoI)	NASA Goddard Space Flight Center

VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) NGC-6822	WFC3/IR	1	14-Jan-2026 14:00:18.0	yes
02	(1) NGC-6822	WFC3/IR	1	14-Jan-2026 14:00:19.0	yes
03	(1) NGC-6822	WFC3/IR	1	14-Jan-2026 14:00:20.0	yes
04	(1) NGC-6822	WFC3/IR	1	14-Jan-2026 14:00:21.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
05	(1) NGC-6822	WFC3/IR	1	14-Jan-2026 14:00:22.0	yes
06	(1) NGC-6822	WFC3/IR	1	14-Jan-2026 14:00:23.0	yes

6 Total Orbits Used

ABSTRACT

Asymptotic Giant Branch (AGB) stars are important drivers of the chemical enrichment of the interstellar medium (ISM) in galaxies. They can form carbonaceous and silicate dust at metallicities as low as 0.6% solar, and can potentially inject mass into the ISM of galaxies 30 Myr after they form. The two species (C- and M-type) are split by different dominant surface chemistry (carbon- and oxygen-rich respectively) which affects the dust grains formed, dust mass, opacity and mass-loss efficiency and in turn, causes them to evolve at different rates. Disentangling these two species is key to understanding the effects they have on their environment. JWST imaged the local dwarf galaxy NGC 6822 and identified ~1200 candidate AGB stars. However, it has been shown that JWST medium- and wide-band photometry is not effective at identifying the chemistry of these stars, especially in low metallicity environments. HST can rectify this. With WFC3/IR F127M, F139M and F153M imaging of the same area, we can reliably constrain the stellar chemistry for SED fitting using the broad baseline (1-21 micron) photometry from JWST. This ensures accurate dust mass and type measurements to assess the contribution that AGB stars have to the dust budget in the early Universe. In addition this will provide validation to the method of identifying AGB species with JWST SED models.

OBSERVING DESCRIPTION

Targets:

We will target 6 fields in NGC6822 that overlaps with JWST GTO #1234 coverage.

Filters:

To take full advantage of the CN+C2 and water features near 1.4 microns, we require observations with F127M, F139M, and F153M. All three filters are necessary, since combinations with the broad-band optical, near-IR, and IR filters do not successfully isolate the carbon stars.

Required exposure times and photometric depth:

To detect all AGB stars, we must achieve full photometric completeness at the tip of the red giant branch (TRGB). The orbit time for our target is 52 min, so we can achieve the necessary photometric depth within a single orbit (as demonstrated by Boyer et al. 2013). This allows for total exposure times of 700-800s in each filter, resulting in S/N > 10 in F127M for Ko=17.5mag, using a Bruzual template for an M6III star, simulating a TRGB

star in the galaxy.

Dithering Strategy:
Dithering diminishes errors associated with where a source is placed on a pixel, undersampling of the WFC3/IR channel, and image artifacts such as cosmic rays. We choose a 4-point dithering strategy to acheive Nyquist sampling of the PSF & to simultaneously allow us to fit the three selected filters into a single orbit. We have entered the dither offsets manually into the target offset entries following the WFC3 handbook WFC3-IR-DITHER-BOX-MIN values from table C.3

Avoiding Saturation:
There are ~10 known stars in the field-of-view that are brighter than Ko=13.5mag saturation limit of the longest exposure (199s). From the sample of >1millions stars, these sources will not affect the science of our program. Other bright stars in the field will be recovered by the WFC3/IR MULTIACCUM sampling.

Parallels:
There are no parallel observations for this program.

Scheduling Constraints:
There are no scheduling constrains for this program.

Visit

Proposal 17910, Tile Visit 01, implementation Wed Jan 14 19:00:24 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: ORIENT 226D TO 231 D

Fixed Targets

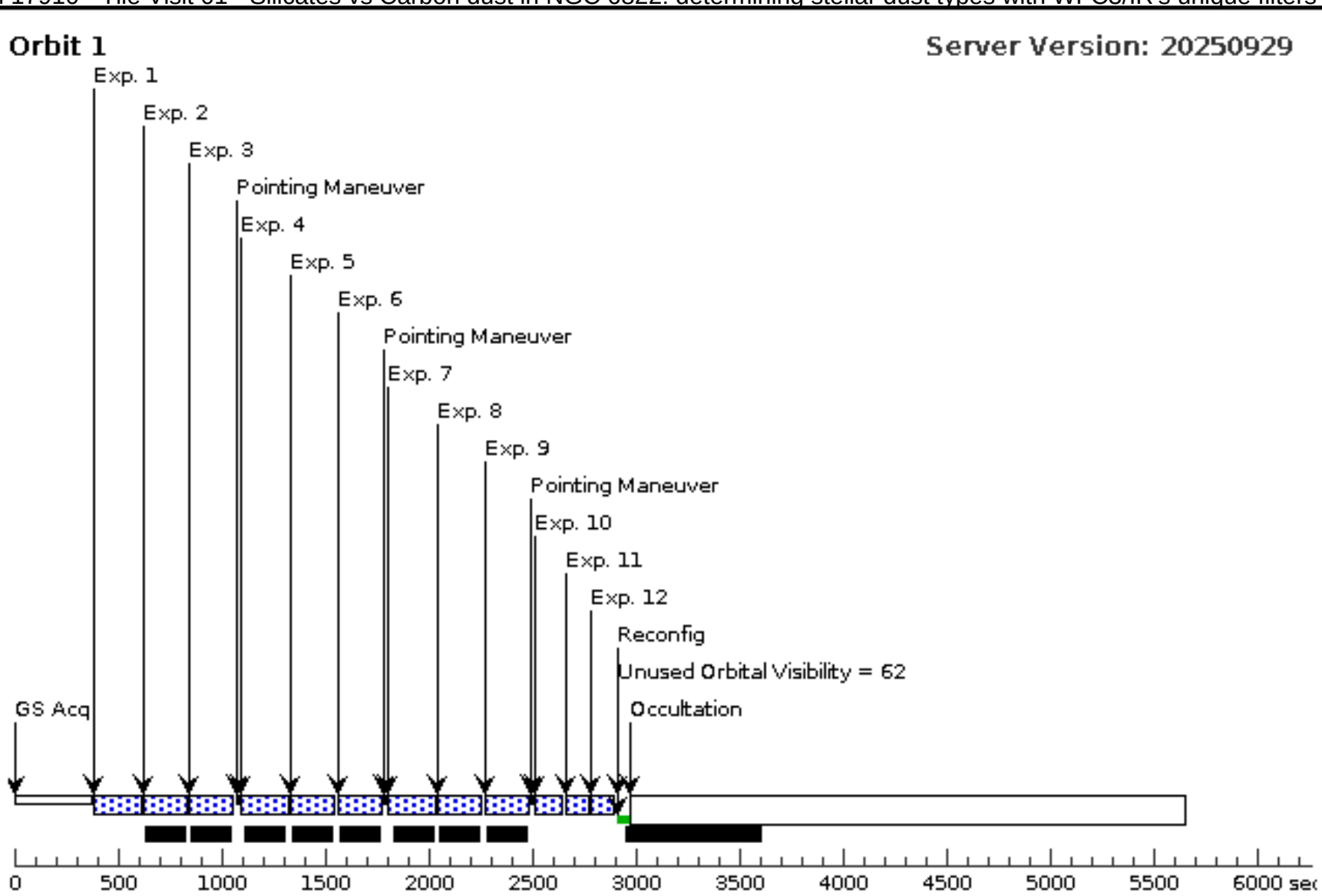
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NGC-6822	RA: 19 44 56.5326 (296.2355525d) Dec: -14 48 7.88 (-14.80219d) Equinox: J2000	Epoch of Position: 2000	V=8.1	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[STAR FORMING REGION, UNDESIGNATED]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M 01	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG -127.91 358,-56.690399999999975		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
2	F139M 01	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG -127.91 358,-56.690399999999975		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
3	F153M 01	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG -127.91 358,-56.690399999999975		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
4	F127M 02	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG -127.37 158,-56.50839999999997		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
5	F139M 02	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG -127.37 158,-56.50839999999997		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
6	F153M 02	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG -127.37 158,-56.50839999999997		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
7	F127M 03	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG -127.57 458,-56.205399999999976		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
8	F139M 03	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG -127.57 458,-56.205399999999976		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
9	F153M 03	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG -127.57 458,-56.205399999999976		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
10	F127M 04	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=7; SAMP-SEQ=STEP100	POS TARG -128.11 658,-56.387399999999998		99.230677 Secs (99.231 Secs) *[==>]*	*[1]*
11	F139M 04	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=7; SAMP-SEQ=STEP100	POS TARG -128.11 658,-56.387399999999998		99.230677 Secs (99.231 Secs) *[==>]*	*[1]*
12	F153M 04	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=7; SAMP-SEQ=STEP100	POS TARG -128.11 658,-56.387399999999998		99.230677 Secs (99.231 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17910, Tile Visit 02, implementation Wed Jan 14 19:00:24 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: SAME ORIENT AS 01

Fixed Targets

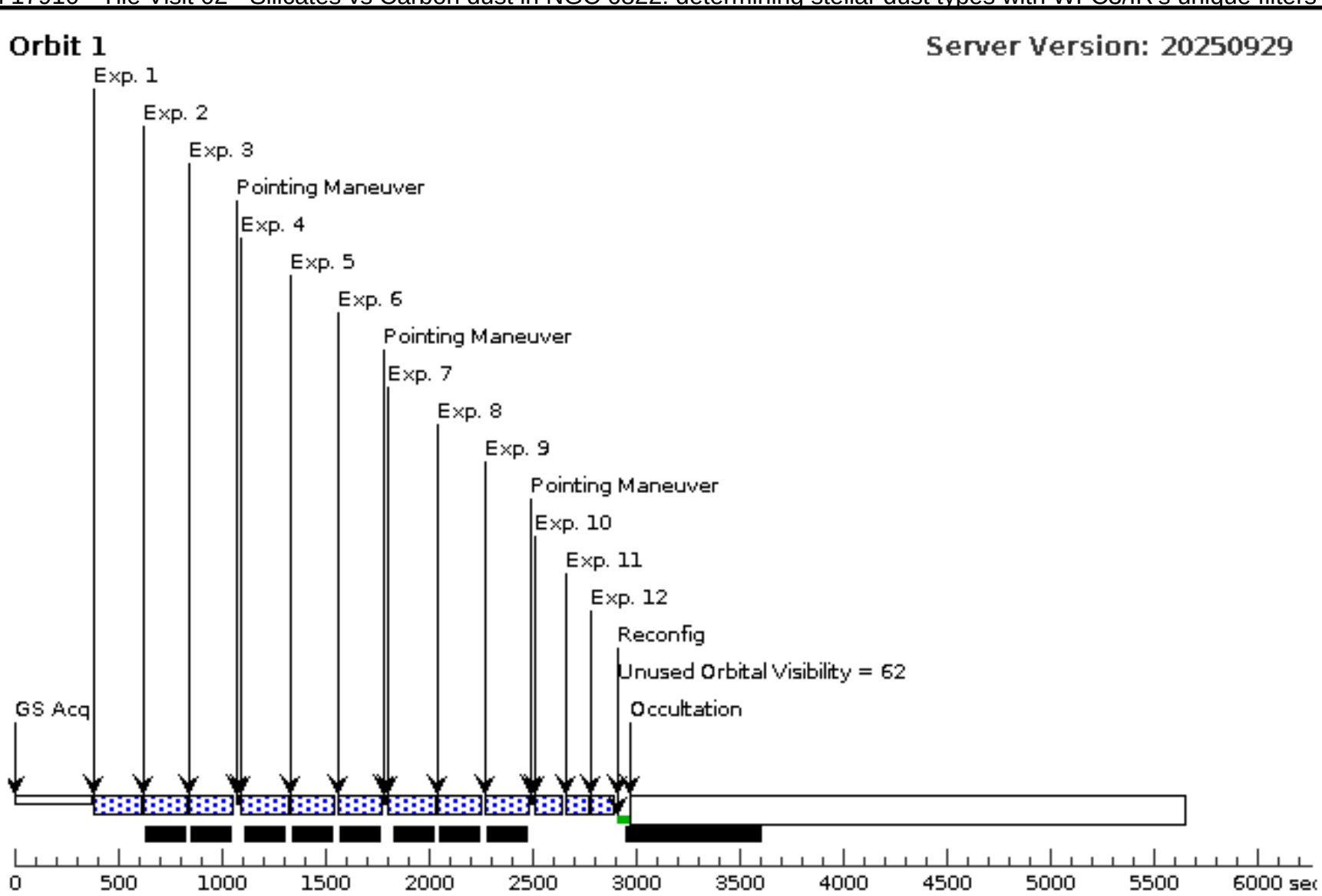
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NGC-6822	RA: 19 44 56.5326 (296.2355525d) Dec: -14 48 7.88 (-14.80219d) Equinox: J2000	Epoch of Position: 2000	V=8.1	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[STAR FORMING REGION, UNDESIGNATED]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M 01	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 0.0,-56.690399999999975		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
2	F139M 01	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 0.0,-56.690399999999975		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
3	F153M 01	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 0.0,-56.690399999999975		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
4	F127M 02	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 0.542,-56.50839999999997		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
5	F139M 02	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 0.542,-56.50839999999997		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
6	F153M 02	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 0.542,-56.50839999999997		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
7	F127M 03	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 0.339,-56.205399999999976		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
8	F139M 03	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 0.339,-56.205399999999976		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
9	F153M 03	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 0.339,-56.205399999999976		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
10	F127M 04	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=7; SAMP-SEQ=STEP100	POS TARG -0.203,-56.38739999999998		99.230677 Secs (99.231 Secs) *[==>]*	*[1]*
11	F139M 04	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=7; SAMP-SEQ=STEP100	POS TARG -0.203,-56.38739999999998		99.230677 Secs (99.231 Secs) *[==>]*	*[1]*
12	F153M 04	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=7; SAMP-SEQ=STEP100	POS TARG -0.203,-56.38739999999998		99.230677 Secs (99.231 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17910, Tile Visit 03, implementation Wed Jan 14 19:00:24 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: SAME ORIENT AS 01

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NGC-6822	RA: 19 44 56.5326 (296.2355525d) Dec: -14 48 7.88 (-14.80219d) Equinox: J2000	Epoch of Position: 2000	V=8.1	Reference Frame: ICRS

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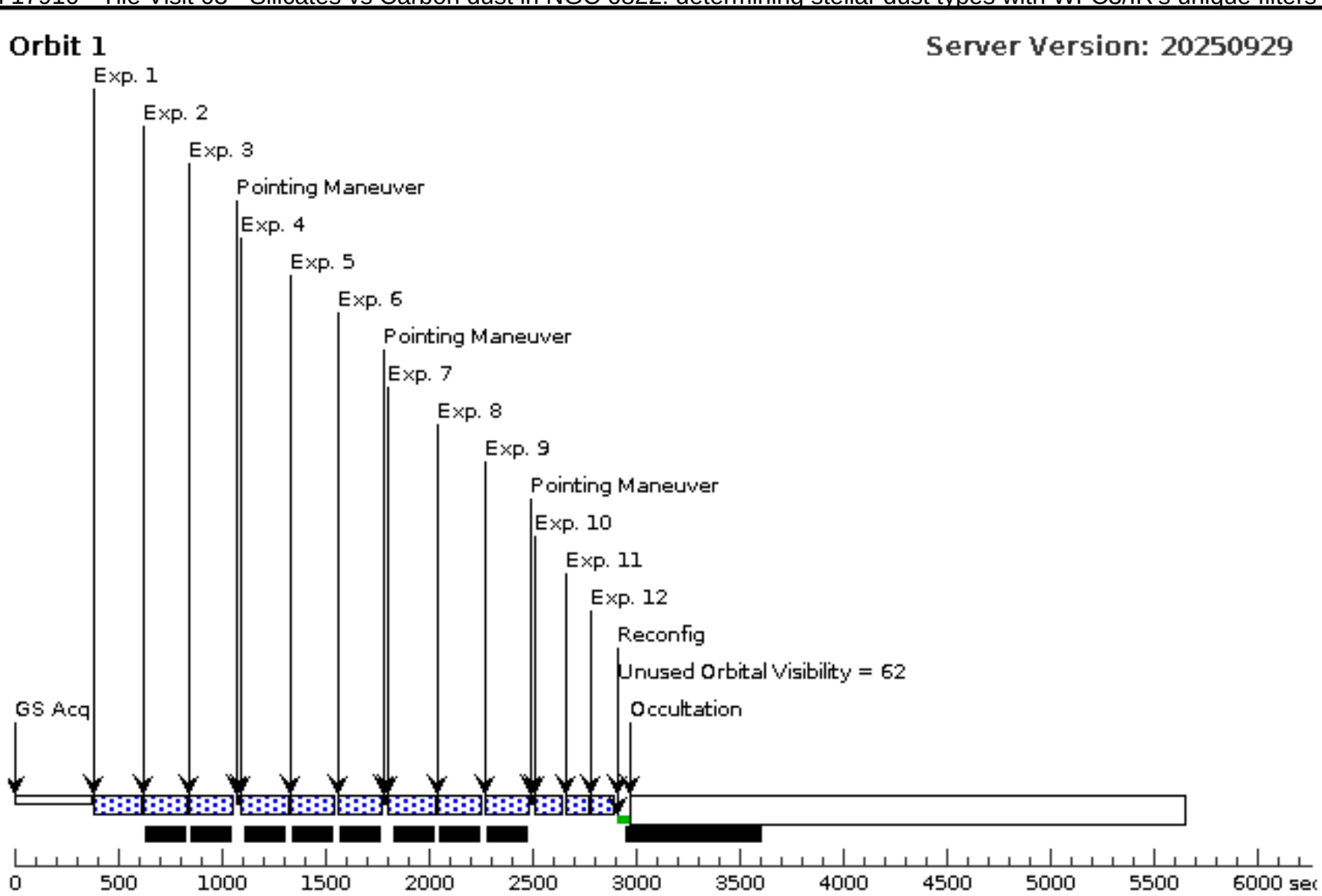
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M 01	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 127.913 58,-56.690399999999975		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
2	F139M 01	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 127.913 58,-56.690399999999975		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
3	F153M 01	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 127.913 58,-56.690399999999975		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
4	F127M 02	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 128.455 58,-56.508399999999997		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
5	F139M 02	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 128.455 58,-56.508399999999997		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
6	F153M 02	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 128.455 58,-56.508399999999997		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
7	F127M 03	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 128.252 58,-56.205399999999976		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
8	F139M 03	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 128.252 58,-56.205399999999976		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
9	F153M 03	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 128.252 58,-56.205399999999976		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
10	F127M 04	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=7; SAMP-SEQ=STEP100	POS TARG 127.710 58,-56.387399999999998		99.230677 Secs (99.231 Secs) *[==>]*	 ***[1]***
11	F139M 04	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=7; SAMP-SEQ=STEP100	POS TARG 127.710 58,-56.387399999999998		99.230677 Secs (99.231 Secs) *[==>]*	 ***[1]***
12	F153M 04	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=7; SAMP-SEQ=STEP100	POS TARG 127.710 58,-56.387399999999998		99.230677 Secs (99.231 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 17910, Tile Visit 04, implementation Wed Jan 14 19:00:24 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: SAME ORIENT AS 01

Fixed Targets

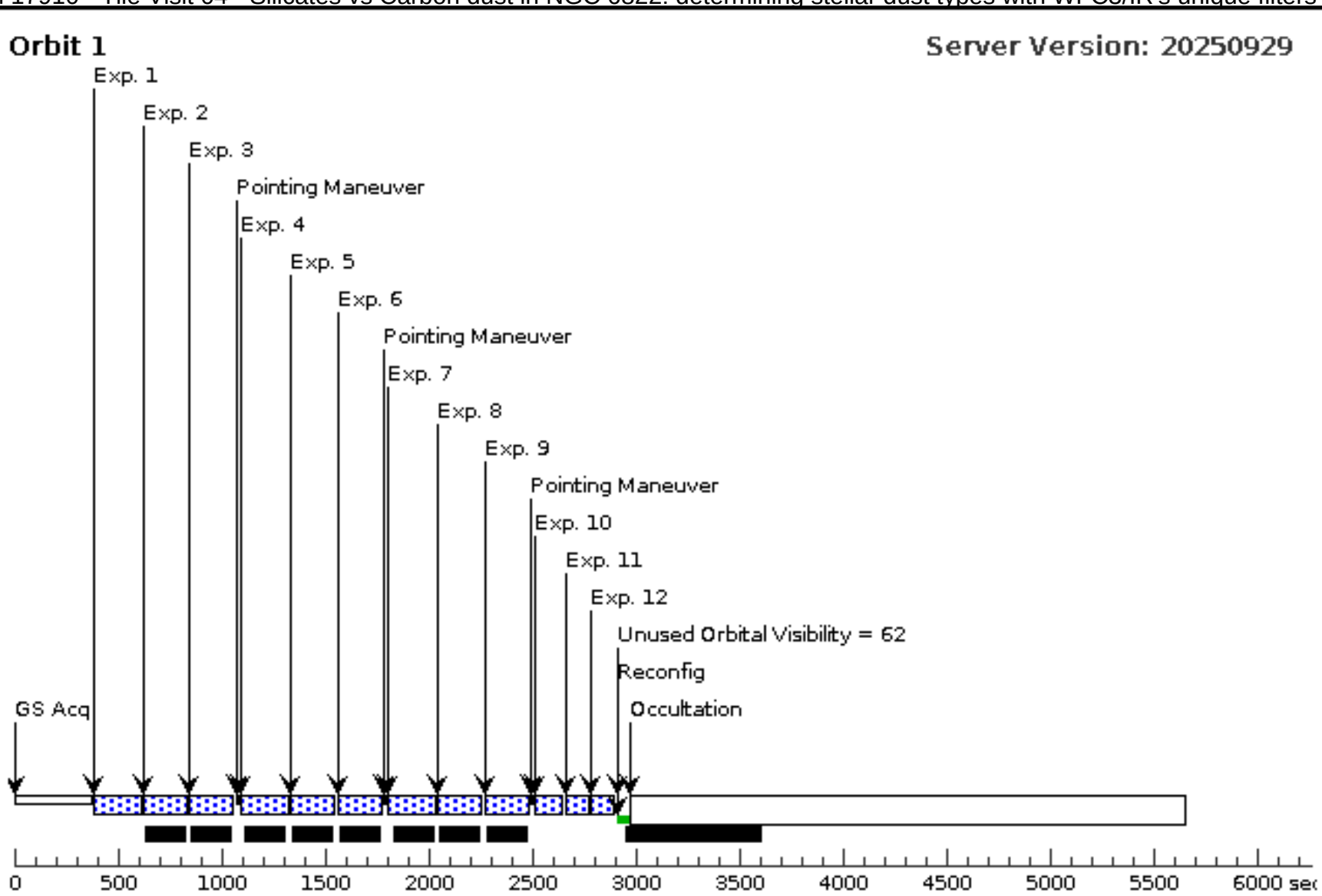
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NGC-6822	RA: 19 44 56.5326 (296.2355525d) Dec: -14 48 7.88 (-14.80219d) Equinox: J2000	Epoch of Position: 2000	V=8.1	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[STAR FORMING REGION, UNDESIGNATED]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M 01	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG -127.91 358,56.690399999996		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
2	F139M 01	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG -127.91 358,56.690399999996		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
3	F153M 01	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG -127.91 358,56.690399999996		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
4	F127M 02	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG -127.37 158,56.872399999996		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
5	F139M 02	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG -127.37 158,56.872399999996		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
6	F153M 02	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG -127.37 158,56.872399999996		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
7	F127M 03	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG -127.57 458,57.175399999996		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
8	F139M 03	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG -127.57 458,57.175399999996		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
9	F153M 03	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG -127.57 458,57.175399999996		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
10	F127M 04	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=7; SAMP-SEQ=STEP100	POS TARG -128.11 658,56.993399999996		99.230677 Secs (99.231 Secs) *[==>]*	*[1]*
11	F139M 04	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=7; SAMP-SEQ=STEP100	POS TARG -128.11 658,56.993399999996		99.230677 Secs (99.231 Secs) *[==>]*	*[1]*
12	F153M 04	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=7; SAMP-SEQ=STEP100	POS TARG -128.11 658,56.993399999996		99.230677 Secs (99.231 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17910, Tile Visit 05, implementation Wed Jan 14 19:00:24 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: SAME ORIENT AS 01

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NGC-6822	RA: 19 44 56.5326 (296.2355525d) Dec: -14 48 7.88 (-14.80219d) Equinox: J2000	Epoch of Position: 2000	V=8.1	Reference Frame: ICRS

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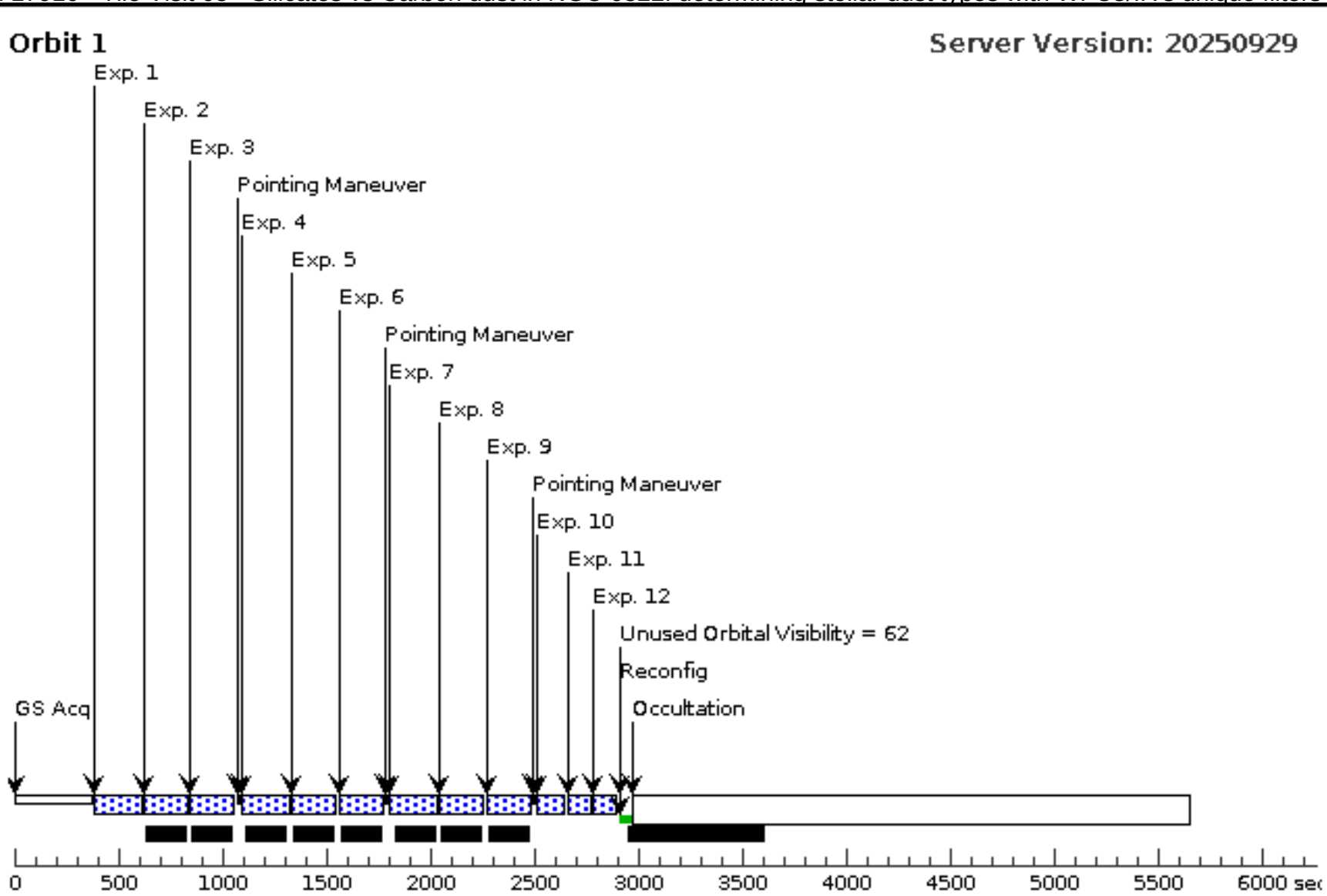
Description=[STAR FORMING REGION, UNDESIGNATED]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M 01	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 0.0,56.69039999999996		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
2	F139M 01	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 0.0,56.69039999999996		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
3	F153M 01	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 0.0,56.69039999999996		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
4	F127M 02	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 0.542,56.87239999999996		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
5	F139M 02	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 0.542,56.87239999999996		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
6	F153M 02	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 0.542,56.87239999999996		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
7	F127M 03	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 0.339,57.17539999999996		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
8	F139M 03	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 0.339,57.17539999999996		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
9	F153M 03	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 0.339,57.17539999999996		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
10	F127M 04	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=7; SAMP-SEQ=STEP100	POS TARG -0.203,56.99339999999996		99.230677 Secs (99.231 Secs) *[==>]*	*[1]*
11	F139M 04	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=7; SAMP-SEQ=STEP100	POS TARG -0.203,56.99339999999996		99.230677 Secs (99.231 Secs) *[==>]*	*[1]*
12	F153M 04	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=7; SAMP-SEQ=STEP100	POS TARG -0.203,56.99339999999996		99.230677 Secs (99.231 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17910, Tile Visit 06, implementation Wed Jan 14 19:00:24 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: SAME ORIENT AS 01

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NGC-6822	RA: 19 44 56.5326 (296.2355525d) Dec: -14 48 7.88 (-14.80219d) Equinox: J2000	Epoch of Position: 2000	V=8.1	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[STAR FORMING REGION, UNDESIGNATED]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M 01	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 127.913 58,56.690399999999 96; GS ACQ SCENARIO ONEB1OR		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
2	F139M 01	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 127.913 58,56.690399999999 96		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
3	F153M 01	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 127.913 58,56.690399999999 96		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
4	F127M 02	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 128.455 58,56.872399999999 96		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
5	F139M 02	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 128.455 58,56.872399999999 96		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
6	F153M 02	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 128.455 58,56.872399999999 96		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
7	F127M 03	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 128.252 58,57.175399999999 96		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
8	F139M 03	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 128.252 58,57.175399999999 96		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
9	F153M 03	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=8; SAMP-SEQ=STEP200	POS TARG 128.252 58,57.175399999999 96		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
10	F127M 04	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F127M	NSAMP=7; SAMP-SEQ=STEP100	POS TARG 127.710 58,56.993399999999 96		99.230677 Secs (99.231 Secs) *[==>]*	*[1]*
11	F139M 04	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F139M	NSAMP=7; SAMP-SEQ=STEP100	POS TARG 127.710 58,56.993399999999 96		99.230677 Secs (99.231 Secs) *[==>]*	*[1]*
12	F153M 04	(1) NGC-6822	WFC3/IR, MULTIACCUM, IR	F153M	NSAMP=7; SAMP-SEQ=STEP100	POS TARG 127.710 58,56.993399999999 96		99.230677 Secs (99.231 Secs) *[==>]*	*[1]*

Orbit Structure