



## 17605 - Search for C, N, O in a long-period transiting warm Saturn

Cycle: 31, Proposal Category: GO

(Availability Mode: AVAILABLE)

### INVESTIGATORS

<i>Name</i>	<i>Institution</i>
<b>Dr. Guangwei Fu (PI) (Contact)</b>	<b>The Johns Hopkins University</b>
Dr. Michael Line (CoI)	Arizona State University
Prof. David K. Sing (CoI)	The Johns Hopkins University

### 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	(1) CD-60-1144	WFC3/IR	1	21-Aug-2024 10:00:16.0	yes
02	(1) CD-60-1144	WFC3/IR	1	21-Aug-2024 10:00:17.0	yes
03	(1) CD-60-1144	WFC3/IR	1	21-Aug-2024 10:00:18.0	yes
04	(1) CD-60-1144	WFC3/IR	1	21-Aug-2024 10:00:18.0	yes
05	(1) CD-60-1144	WFC3/IR	1	21-Aug-2024 10:00:19.0	yes
06	(1) CD-60-1144	WFC3/IR	1	21-Aug-2024 10:00:20.0	yes
07	(1) CD-60-1144	WFC3/IR	1	21-Aug-2024 10:00:21.0	yes
08	(1) CD-60-1144	WFC3/IR	1	21-Aug-2024 10:00:23.0	yes
09	(1) CD-60-1144	WFC3/IR	1	21-Aug-2024 10:00:25.0	yes
10	(1) CD-60-1144	WFC3/IR	1	21-Aug-2024 10:00:27.0	yes

10 Total Orbits Used

## **ABSTRACT**

The recently discovered long-period warm Saturn around a bright host star offers a rare opportunity for atmosphere characterization. It has a low equilibrium temperature of ~350K and a 104-day orbital period. Those properties make it more analogous to solar system giants than to typical Hot Jupiters. We propose to measure its transmission spectrum with WFC3/G141 aiming to detect CH<sub>4</sub>, NH<sub>3</sub>, and H<sub>2</sub>O which are the main C, N, and O-bearing molecules for hydrogen-dominated atmospheres at this temperature.

## **OBSERVING DESCRIPTION**

We request that two 5-orbit segments be performed consecutively. Due to problems encountered with APT when trying to specify a single 10-orbit visit, for the purpose of Phase 2 we have split the 10-orbit visit into two 5-orbit "segment1, segment2". We request that these visits be performed back-to-back, to achieve a single 10-orbit visit:

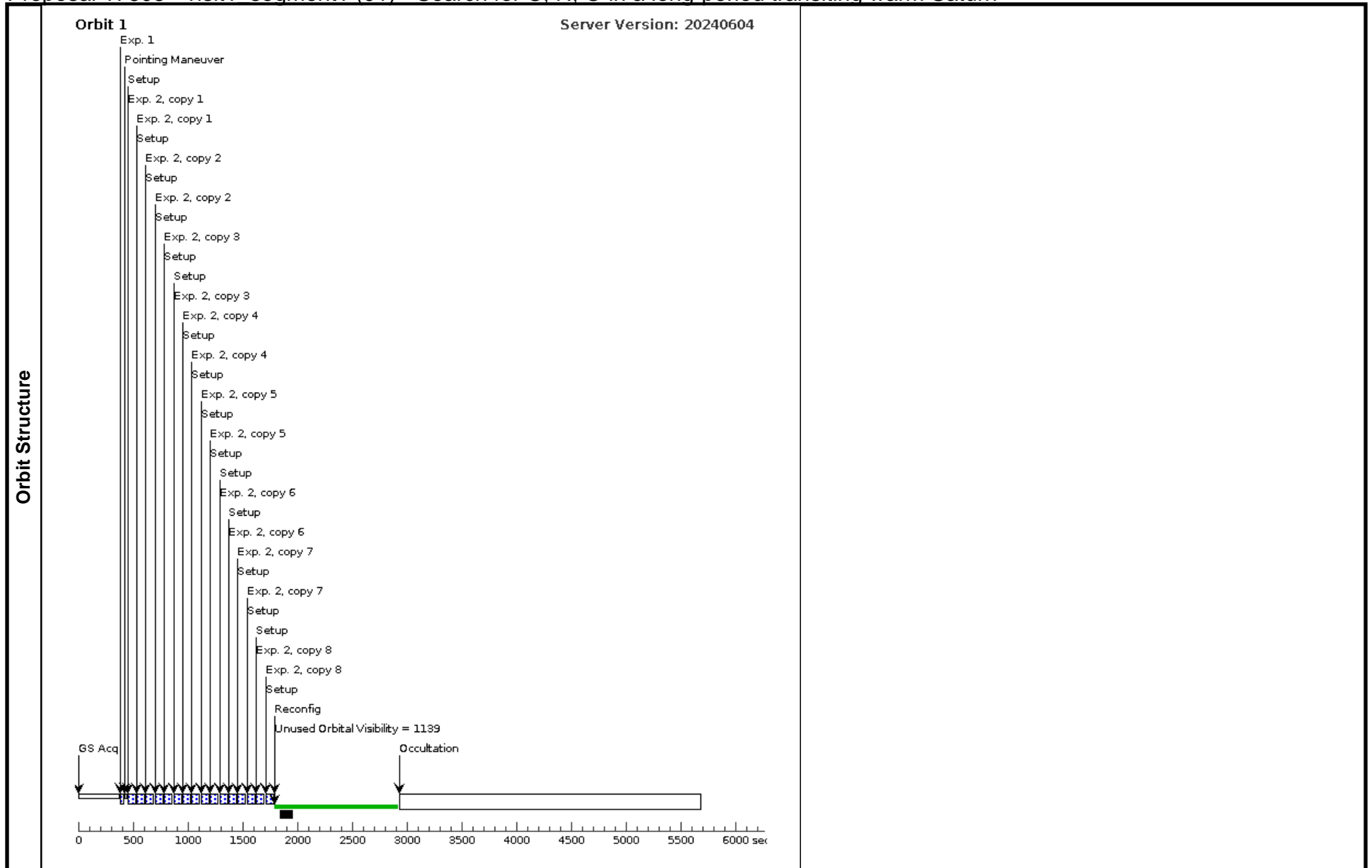
i.e. visit1 = "visit1\_segment1" + "visit1\_segment2"

Proposal 17605 - visit1 segment1 (01) - Search for C, N, O in a long-period transiting warm Saturn

Wed Aug 21 14:00:28 GMT 2024

Visit	<b>Proposal 17605, visit1_segment1 (01), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: SCHED 100%; Period 104.854 D AND ZERO-PHASE HJD2458256.1286									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	CD-60-1144	RA: 05 20 25.3152 (80.1054800d) Dec: -59 53 44.46 (-59.89568d) Equinox: J2000	Proper Motion RA: 45.864 mas/yr Proper Motion Dec: 58.44499999999999 mas/yr Epoch of Position: 2000	V=10.7	Reference Frame: SIMBAD				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=EXT-STAR Description=[EXTRA-SOLAR PLANET]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) CD-60-1144	WFC3/IR, MULTIACCUM, GRISM256	F130N	NSAMP=3; SAMP-SEQ=RAPID	SAA CONTOUR 02; PHASE 0.99676388 88888888 TO 0.9971 692782344975	Sequence 1-2 Non-Int in visit1_segment1 (01)	0.833445 Secs (0.833 Secs) [==>]	[1]
	2		(1) CD-60-1144	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=3; SAMP-SEQ=SPARS25	POS TARG null,-10; SPATIAL SCAN 0.1 12283,90.0 Degrees, Round trip; SAA CONTOUR 02	Sequence 1-2 Non-Int in visit1_segment1 (01)	44.969893 Secs X 8 (719.518 Secs) [==>(Copy 1, Forward)] [==>(Copy 1, Reverse)] [==>(Copy 2, Forward)] [==>(Copy 2, Reverse)] [==>(Copy 3, Forward)] [==>(Copy 3, Reverse)] [==>(Copy 4, Forward)] [==>(Copy 4, Reverse)] [==>(Copy 5, Forward)] [==>(Copy 5, Reverse)] [==>(Copy 6, Forward)] [==>(Copy 6, Reverse)] [==>(Copy 7, Forward)] [==>(Copy 7, Reverse)] [==>(Copy 8, Forward)] [==>(Copy 8, Reverse)]	[1]

Proposal 17605 - visit1 segment1 (01) - Search for C, N, O in a long-period transiting warm Saturn



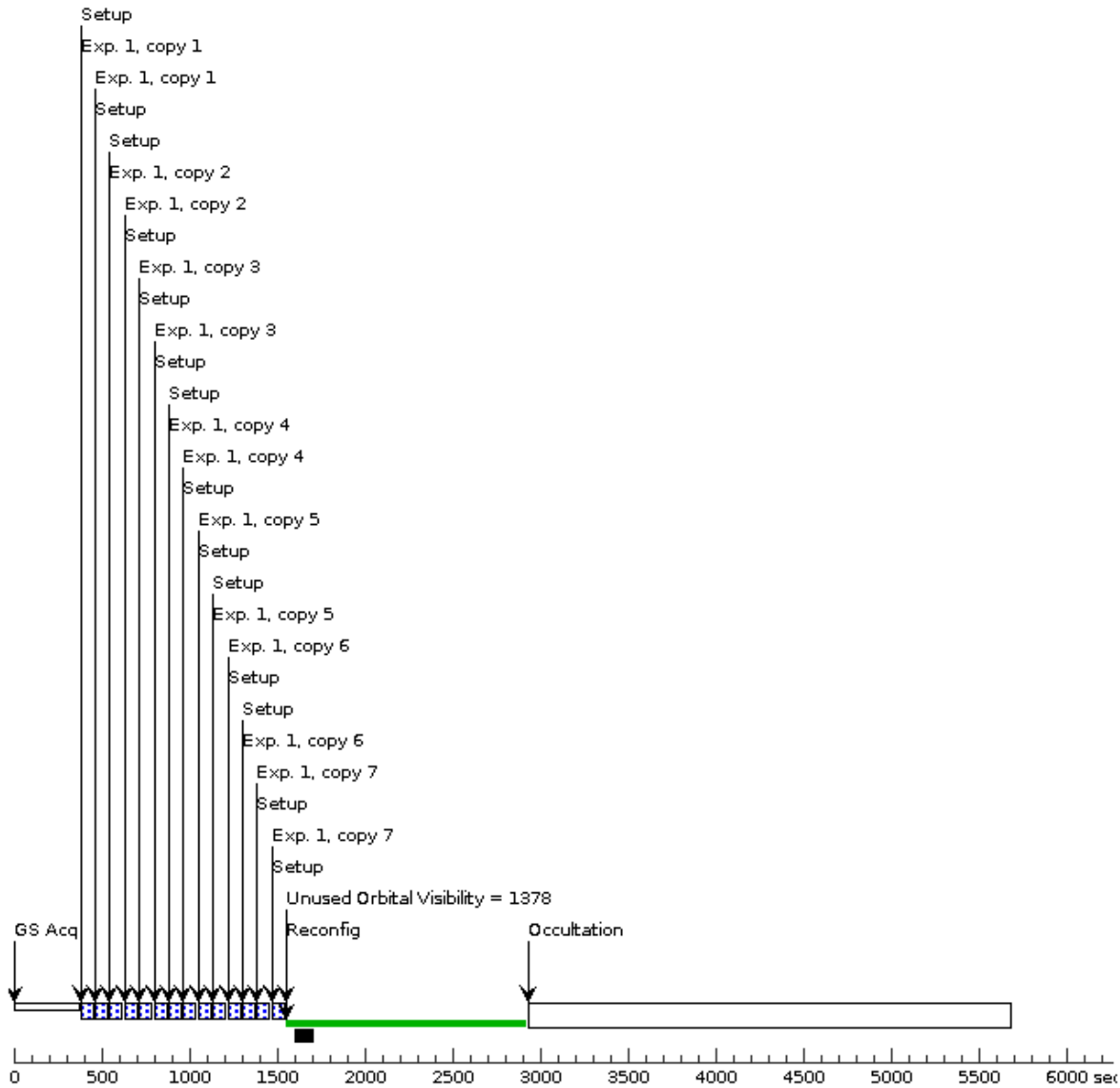
Proposal 17605 - Visit 02 - Search for C, N, O in a long-period transiting warm Saturn

Wed Aug 21 14:00:28 GMT 2024

<b>Visit</b>	<b>Proposal 17605, Visit 02, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: SCHED 100%; AFTER 01 BY 0.8 Orbits TO 1.2 Orbits; SEQ 02,03,04,05,06,07,08,09,10 WITHIN 8.5 Orbits <i>Comments: no orbit 6B with nsamp 3</i>									
	<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>			
(1)		CD-60-1144	RA: 05 20 25.3152 (80.1054800d) Dec: -59 53 44.46 (-59.89568d) Equinox: J2000	Proper Motion RA: 45.864 mas/yr Proper Motion Dec: 58.44499999999999 mas/yr Epoch of Position: 2000	V=10.7	Reference Frame: SIMBAD				
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=EXT-STAR Description=[EXTRA-SOLAR PLANET]										
<b>Exposures</b>	<b>#</b>	<b>Label</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1	(1) CD-60-1144	(1) CD-60-1144	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=3; SAMP-SEQ=SPAR S25	POS TARG null,-10; SPATIAL SCAN 0.1 12283,90.0 Degrees, Round trip; SAA CONTOUR 02	Sequence 1-1 Non-Int in Visit 02	44.969893 Secs X 7 (629.579 Secs)	[1]
									[=>(Copy 1, Forward)] [=>(Copy 1, Reverse)] [=>(Copy 2, Forward)] [=>(Copy 2, Reverse)] [=>(Copy 3, Forward)] [=>(Copy 3, Reverse)] [=>(Copy 4, Forward)] [=>(Copy 4, Reverse)] [=>(Copy 5, Forward)] [=>(Copy 5, Reverse)] [=>(Copy 6, Forward)] [=>(Copy 6, Reverse)] [=>(Copy 7, Forward)] [=>(Copy 7, Reverse)]	

Orbit Structure

**Orbit 1**



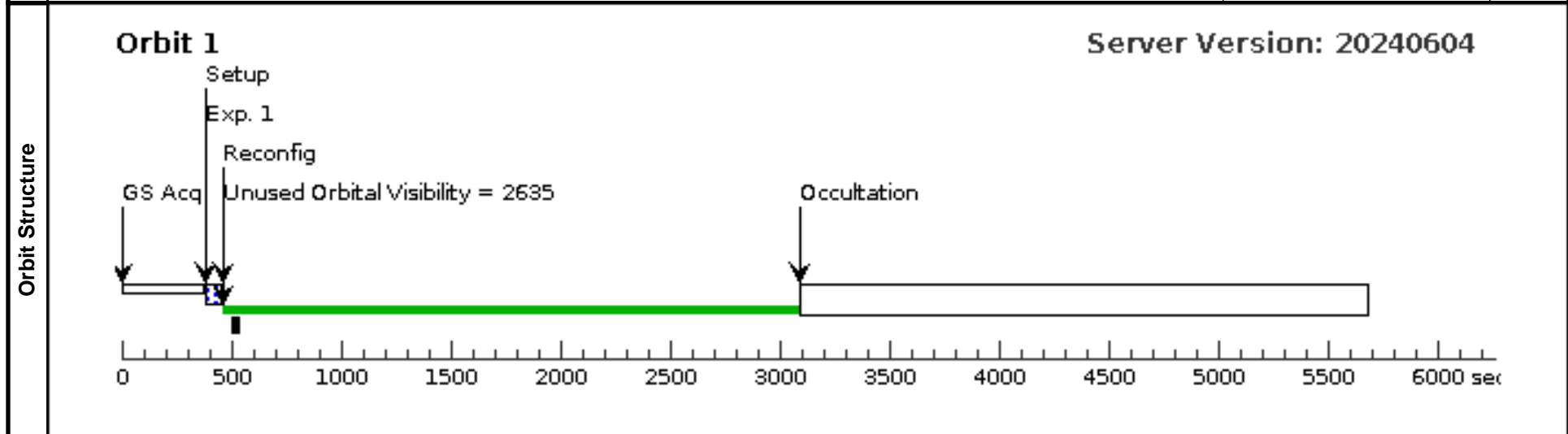
Proposal 17605 - Visit 03 - Search for C, N, O in a long-period transiting warm Saturn

Wed Aug 21 14:00:28 GMT 2024

<b>Visit</b>	<b>Proposal 17605, Visit 03, implementation</b>				
	<b>Diagnostic Status: No Diagnostics</b>				
	Scientific Instruments: WFC3/IR				
	Special Requirements: (none)				

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	CD-60-1144	RA: 05 20 25.3152 (80.1054800d) Dec: -59 53 44.46 (-59.89568d) Equinox: J2000	Proper Motion RA: 45.864 mas/yr Proper Motion Dec: 58.44499999999999 mas/yr Epoch of Position: 2000	V=10.7	Reference Frame: SIMBAD
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>					
	Category=EXT-STAR Description=[EXTRA-SOLAR PLANET]					

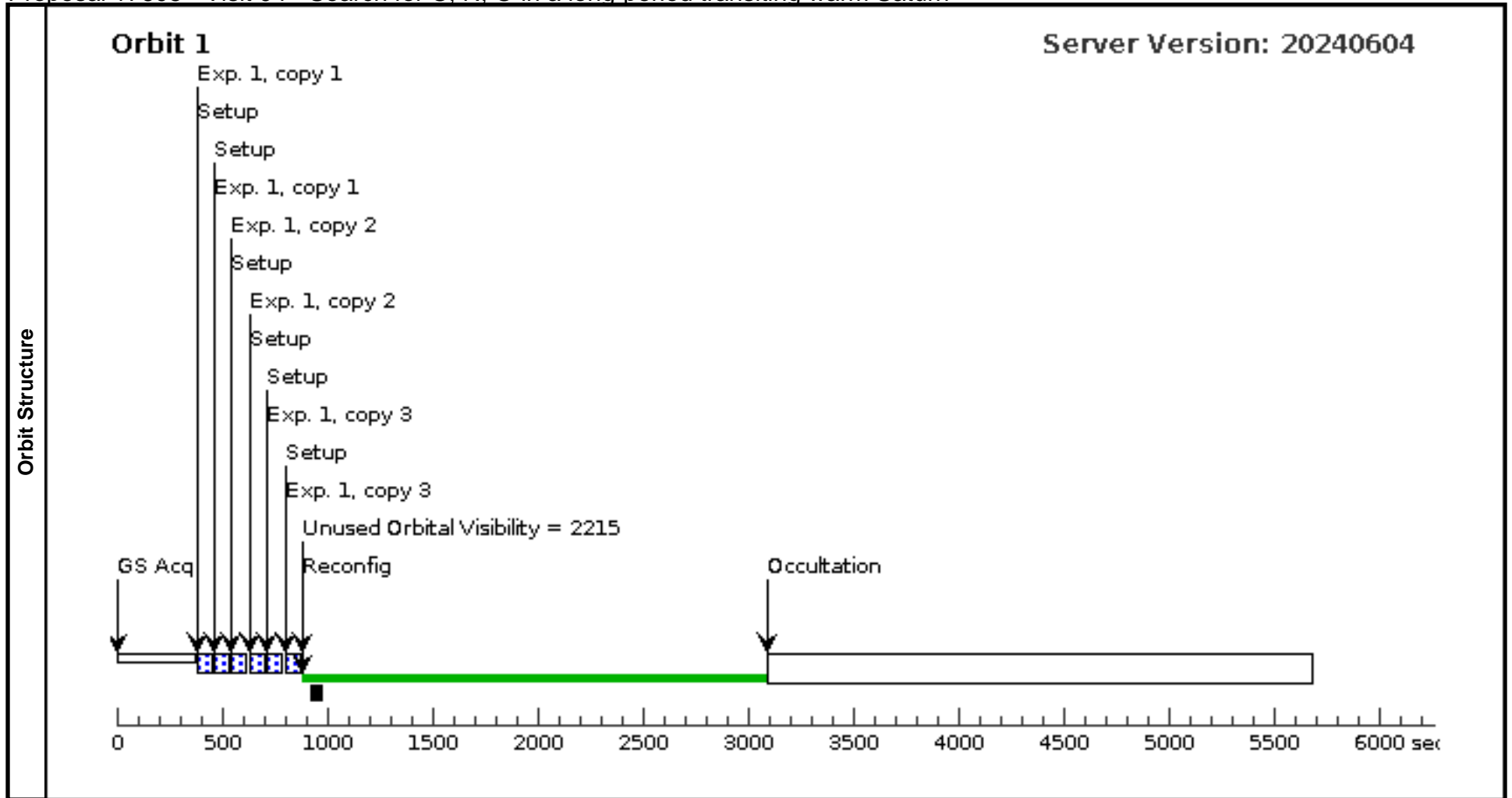
<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) CD-60-1144	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=3; SAMP-SEQ=SPAR S25	POS TARG null,-10; SPATIAL SCAN 0.1 12283,90.0 Degrees, Reverse; SAA CONTOUR 02	Sequence 1-1 Non-Int in Visit 03	44.969893 Secs (44.97 Secs) [==>]	[1]



Proposal 17605 - Visit 04 - Search for C, N, O in a long-period transiting warm Saturn

Wed Aug 21 14:00:28 GMT 2024

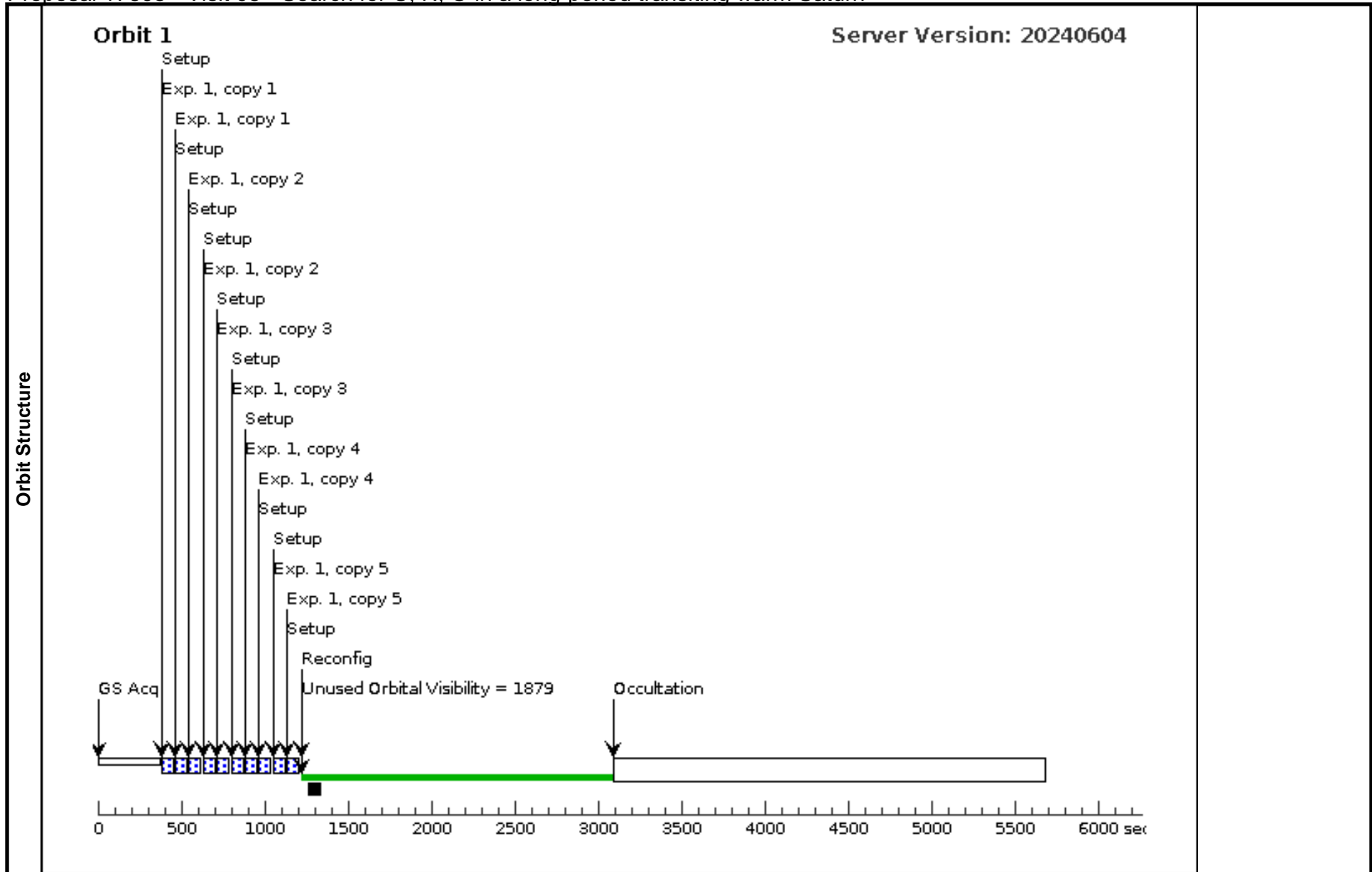
Visit	<b>Proposal 17605, Visit 04, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: (none)																													
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>CD-60-1144</td> <td>RA: 05 20 25.3152 (80.1054800d) Dec: -59 53 44.46 (-59.89568d) Equinox: J2000</td> <td>Proper Motion RA: 45.864 mas/yr Proper Motion Dec: 58.44499999999999 mas/yr Epoch of Position: 2000</td> <td>V=10.7</td> <td>Reference Frame: SIMBAD</td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>                      Category=EXT-STAR                      Description=[EXTRA-SOLAR PLANET]</p>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	CD-60-1144	RA: 05 20 25.3152 (80.1054800d) Dec: -59 53 44.46 (-59.89568d) Equinox: J2000	Proper Motion RA: 45.864 mas/yr Proper Motion Dec: 58.44499999999999 mas/yr Epoch of Position: 2000	V=10.7	Reference Frame: SIMBAD							
#		Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																								
(1)	CD-60-1144	RA: 05 20 25.3152 (80.1054800d) Dec: -59 53 44.46 (-59.89568d) Equinox: J2000	Proper Motion RA: 45.864 mas/yr Proper Motion Dec: 58.44499999999999 mas/yr Epoch of Position: 2000	V=10.7	Reference Frame: SIMBAD																									
Exposures	<table border="1"> <thead> <tr> <th>#</th> <th>Label</th> <th>Target</th> <th>Config,Mode,Aperture</th> <th>Spectral Els.</th> <th>Opt. Params.</th> <th>Special Reqs.</th> <th>Groups</th> <th>Exp. Time (Total)/[Actual Dur.]</th> <th>Orbit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td>(1) CD-60-1144</td> <td>WFC3/IR, MULTIACCUM, GRISM256</td> <td>G141</td> <td>NSAMP=3; SAMP-SEQ=SPAR S25</td> <td>POS TARG null,-10; SPATIAL SCAN 0.1 12283,90.0 Degrees, Round trip; SAA CONTOUR 02</td> <td>Sequence 1-1 Non-Int in Visit 04</td> <td>44.969893 Secs X 3 (269.819 Secs) [=&gt;(Copy 1, Forward)] [=&gt;(Copy 1, Reverse)] [=&gt;(Copy 2, Forward)] [=&gt;(Copy 2, Reverse)] [=&gt;(Copy 3, Forward)] [=&gt;(Copy 3, Reverse)]</td> <td>[1]</td> </tr> </tbody> </table>										#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	1		(1) CD-60-1144	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=3; SAMP-SEQ=SPAR S25	POS TARG null,-10; SPATIAL SCAN 0.1 12283,90.0 Degrees, Round trip; SAA CONTOUR 02	Sequence 1-1 Non-Int in Visit 04	44.969893 Secs X 3 (269.819 Secs) [=>(Copy 1, Forward)] [=>(Copy 1, Reverse)] [=>(Copy 2, Forward)] [=>(Copy 2, Reverse)] [=>(Copy 3, Forward)] [=>(Copy 3, Reverse)]	[1]
	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit																				
1		(1) CD-60-1144	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=3; SAMP-SEQ=SPAR S25	POS TARG null,-10; SPATIAL SCAN 0.1 12283,90.0 Degrees, Round trip; SAA CONTOUR 02	Sequence 1-1 Non-Int in Visit 04	44.969893 Secs X 3 (269.819 Secs) [=>(Copy 1, Forward)] [=>(Copy 1, Reverse)] [=>(Copy 2, Forward)] [=>(Copy 2, Reverse)] [=>(Copy 3, Forward)] [=>(Copy 3, Reverse)]	[1]																					



Proposal 17605 - Visit 05 - Search for C, N, O in a long-period transiting warm Saturn

Wed Aug 21 14:00:28 GMT 2024

Visit	<b>Proposal 17605, Visit 05, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: (none)																													
Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>CD-60-1144</td> <td>RA: 05 20 25.3152 (80.1054800d) Dec: -59 53 44.46 (-59.89568d) Equinox: J2000</td> <td>Proper Motion RA: 45.864 mas/yr Proper Motion Dec: 58.44499999999999 mas/yr Epoch of Position: 2000</td> <td>V=10.7</td> <td>Reference Frame: SIMBAD</td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>                      Category=EXT-STAR                      Description=[EXTRA-SOLAR PLANET]</p>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	CD-60-1144	RA: 05 20 25.3152 (80.1054800d) Dec: -59 53 44.46 (-59.89568d) Equinox: J2000	Proper Motion RA: 45.864 mas/yr Proper Motion Dec: 58.44499999999999 mas/yr Epoch of Position: 2000	V=10.7	Reference Frame: SIMBAD								
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																									
(1)	CD-60-1144	RA: 05 20 25.3152 (80.1054800d) Dec: -59 53 44.46 (-59.89568d) Equinox: J2000	Proper Motion RA: 45.864 mas/yr Proper Motion Dec: 58.44499999999999 mas/yr Epoch of Position: 2000	V=10.7	Reference Frame: SIMBAD																									
Exposures	<table border="1"> <thead> <tr> <th>#</th> <th>Label</th> <th>Target</th> <th>Config,Mode,Aperture</th> <th>Spectral Els.</th> <th>Opt. Params.</th> <th>Special Reqs.</th> <th>Groups</th> <th>Exp. Time (Total)/[Actual Dur.]</th> <th>Orbit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>(1) CD-60-1144</td> <td>(1) CD-60-1144</td> <td>WFC3/IR, MULTIACCUM, GRISM256</td> <td>G141</td> <td>NSAMP=3; SAMP-SEQ=SPAR S25</td> <td>POS TARG null,-10; SPATIAL SCAN 0.1 12283,90.0 Degrees, Round trip; SAA CONTOUR 02</td> <td>Sequence 1-1 Non-Int in Visit 05</td> <td>44.969893 Secs X 5 (449.699 Secs) [=&gt;(Copy 1, Forward)] [=&gt;(Copy 1, Reverse)] [=&gt;(Copy 2, Forward)] [=&gt;(Copy 2, Reverse)] [=&gt;(Copy 3, Forward)] [=&gt;(Copy 3, Reverse)] [=&gt;(Copy 4, Forward)] [=&gt;(Copy 4, Reverse)] [=&gt;(Copy 5, Forward)] [=&gt;(Copy 5, Reverse)]</td> <td>[1]</td> </tr> </tbody> </table>										#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	1	(1) CD-60-1144	(1) CD-60-1144	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=3; SAMP-SEQ=SPAR S25	POS TARG null,-10; SPATIAL SCAN 0.1 12283,90.0 Degrees, Round trip; SAA CONTOUR 02	Sequence 1-1 Non-Int in Visit 05	44.969893 Secs X 5 (449.699 Secs) [=>(Copy 1, Forward)] [=>(Copy 1, Reverse)] [=>(Copy 2, Forward)] [=>(Copy 2, Reverse)] [=>(Copy 3, Forward)] [=>(Copy 3, Reverse)] [=>(Copy 4, Forward)] [=>(Copy 4, Reverse)] [=>(Copy 5, Forward)] [=>(Copy 5, Reverse)]	[1]
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit																					
1	(1) CD-60-1144	(1) CD-60-1144	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=3; SAMP-SEQ=SPAR S25	POS TARG null,-10; SPATIAL SCAN 0.1 12283,90.0 Degrees, Round trip; SAA CONTOUR 02	Sequence 1-1 Non-Int in Visit 05	44.969893 Secs X 5 (449.699 Secs) [=>(Copy 1, Forward)] [=>(Copy 1, Reverse)] [=>(Copy 2, Forward)] [=>(Copy 2, Reverse)] [=>(Copy 3, Forward)] [=>(Copy 3, Reverse)] [=>(Copy 4, Forward)] [=>(Copy 4, Reverse)] [=>(Copy 5, Forward)] [=>(Copy 5, Reverse)]	[1]																					



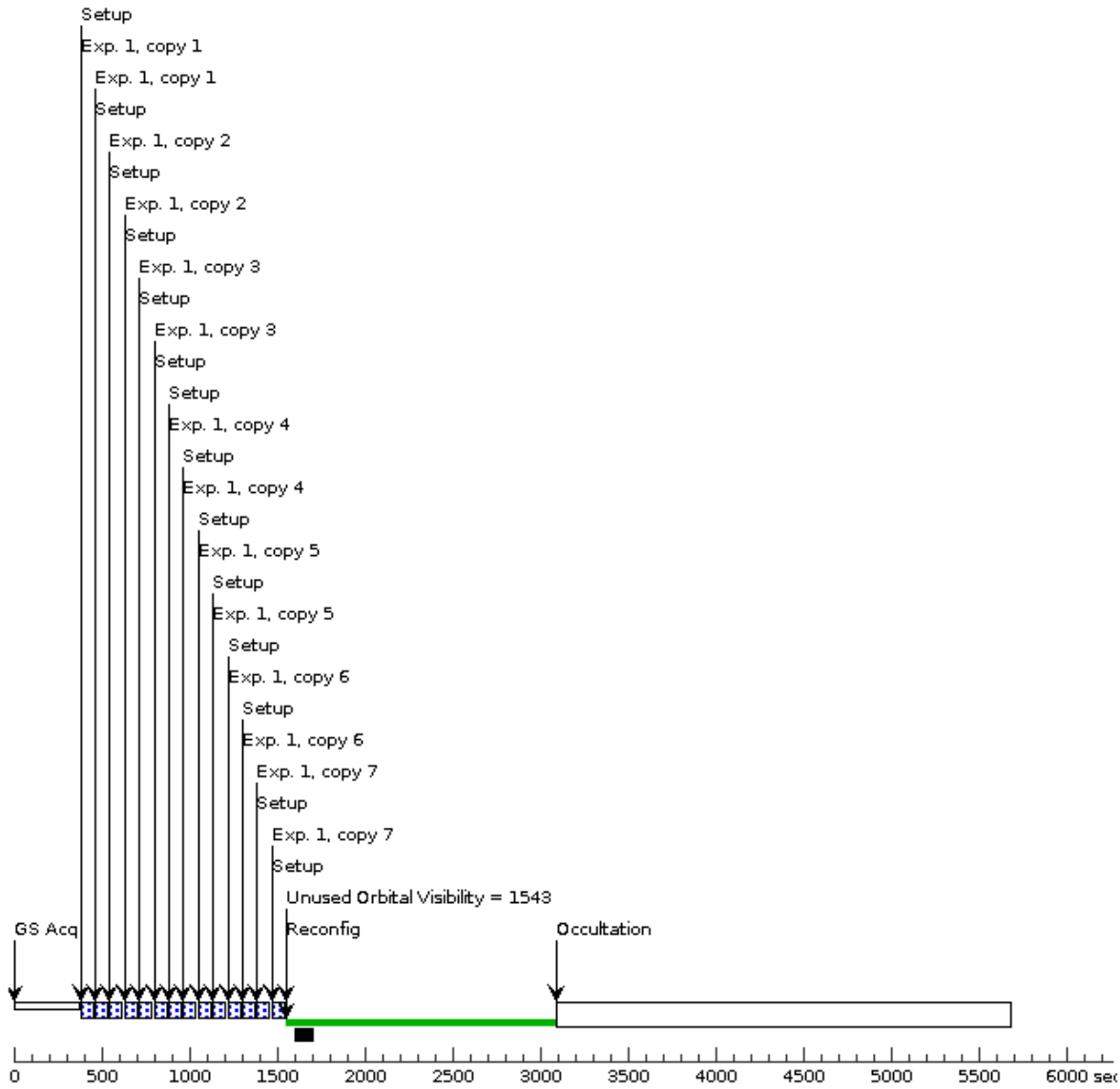
Proposal 17605 - Visit 06 - Search for C, N, O in a long-period transiting warm Saturn

Wed Aug 21 14:00:28 GMT 2024

Visit	<b>Proposal 17605, Visit 06, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	CD-60-1144	RA: 05 20 25.3152 (80.1054800d) Dec: -59 53 44.46 (-59.89568d) Equinox: J2000	Proper Motion RA: 45.864 mas/yr Proper Motion Dec: 58.44499999999999 mas/yr Epoch of Position: 2000	V=10.7	Reference Frame: SIMBAD				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=EXT-STAR Description=[EXTRA-SOLAR PLANET]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(1) CD-60-1144	(1) CD-60-1144	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=3; SAMP-SEQ=SPAR S25	POS TARG null,-10; SPATIAL SCAN 0.1 Round trip; SAA CONTOUR 02	Sequence 1-1 Non-Int in Visit 06	44.969893 Secs X 7 (629.579 Secs)	[1]
									[==>(Copy 1, Forward)] [==>(Copy 1, Reverse)] [==>(Copy 2, Forward)] [==>(Copy 2, Reverse)] [==>(Copy 3, Forward)] [==>(Copy 3, Reverse)] [==>(Copy 4, Forward)] [==>(Copy 4, Reverse)] [==>(Copy 5, Forward)] [==>(Copy 5, Reverse)] [==>(Copy 6, Forward)] [==>(Copy 6, Reverse)] [==>(Copy 7, Forward)] [==>(Copy 7, Reverse)]	

Orbit Structure

**Orbit 1**



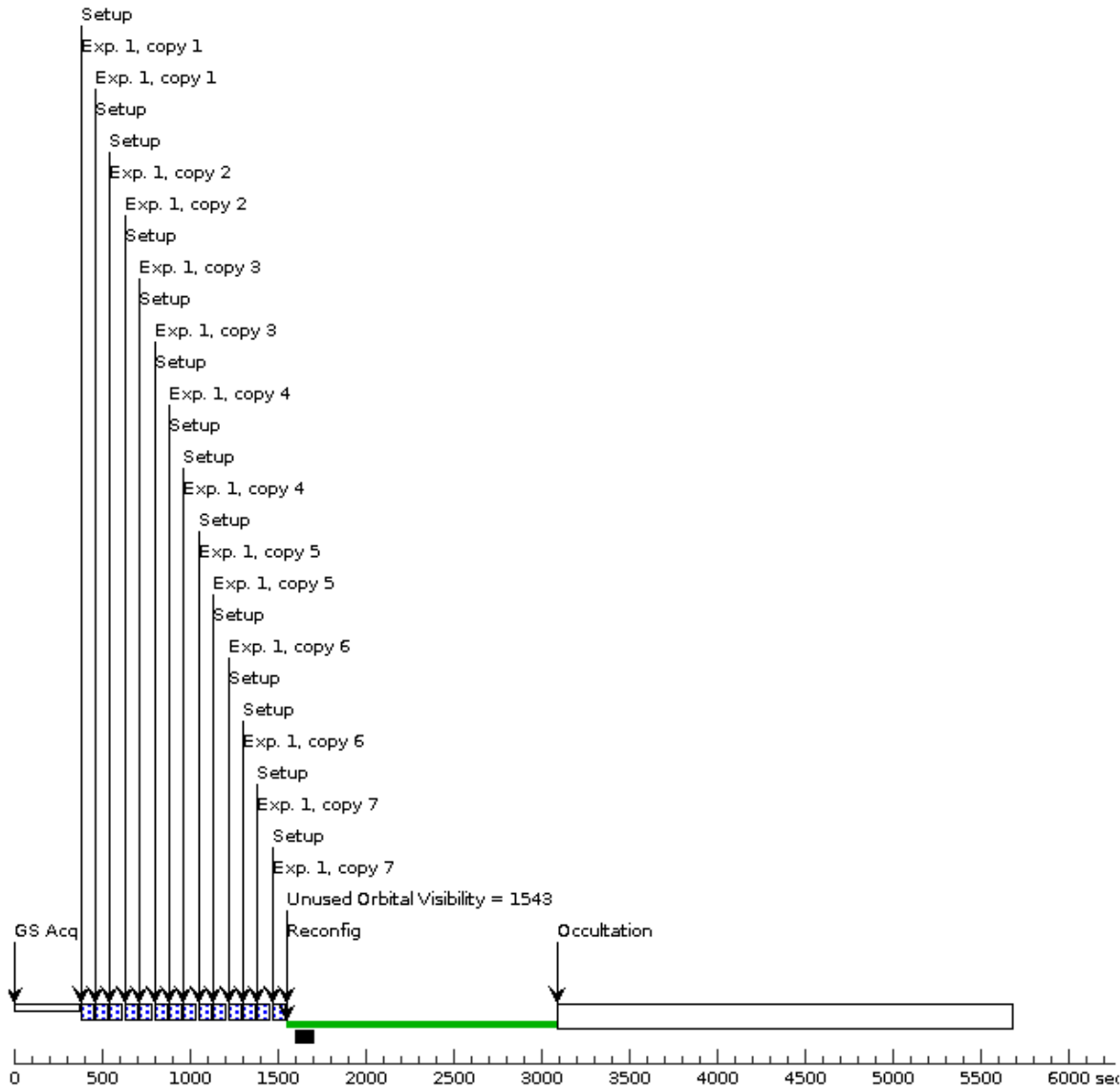
Proposal 17605 - Visit 07 - Search for C, N, O in a long-period transiting warm Saturn

Wed Aug 21 14:00:28 GMT 2024

Visit	<b>Proposal 17605, Visit 07, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	CD-60-1144	RA: 05 20 25.3152 (80.1054800d) Dec: -59 53 44.46 (-59.89568d) Equinox: J2000	Proper Motion RA: 45.864 mas/yr Proper Motion Dec: 58.44499999999999 mas/yr Epoch of Position: 2000	V=10.7	Reference Frame: SIMBAD				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=EXT-STAR Description=[EXTRA-SOLAR PLANET]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) CD-60-1144	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=3; SAMP-SEQ=SPAR S25	POS TARG null,-10; SPATIAL SCAN 0.1 12283,90.0 Degrees, Round trip; SAA CONTOUR 02	Sequence 1-1 Non-Int in Visit 07	44.969893 Secs X 7 (629.579 Secs)	[1]
									[=>(Copy 1, Forward)] [=>(Copy 1, Reverse)] [=>(Copy 2, Forward)] [=>(Copy 2, Reverse)] [=>(Copy 3, Forward)] [=>(Copy 3, Reverse)] [=>(Copy 4, Forward)] [=>(Copy 4, Reverse)] [=>(Copy 5, Forward)] [=>(Copy 5, Reverse)] [=>(Copy 6, Forward)] [=>(Copy 6, Reverse)] [=>(Copy 7, Forward)] [=>(Copy 7, Reverse)]	

Orbit Structure

Orbit 1



Proposal 17605 - Visit 08 - Search for C, N, O in a long-period transiting warm Saturn

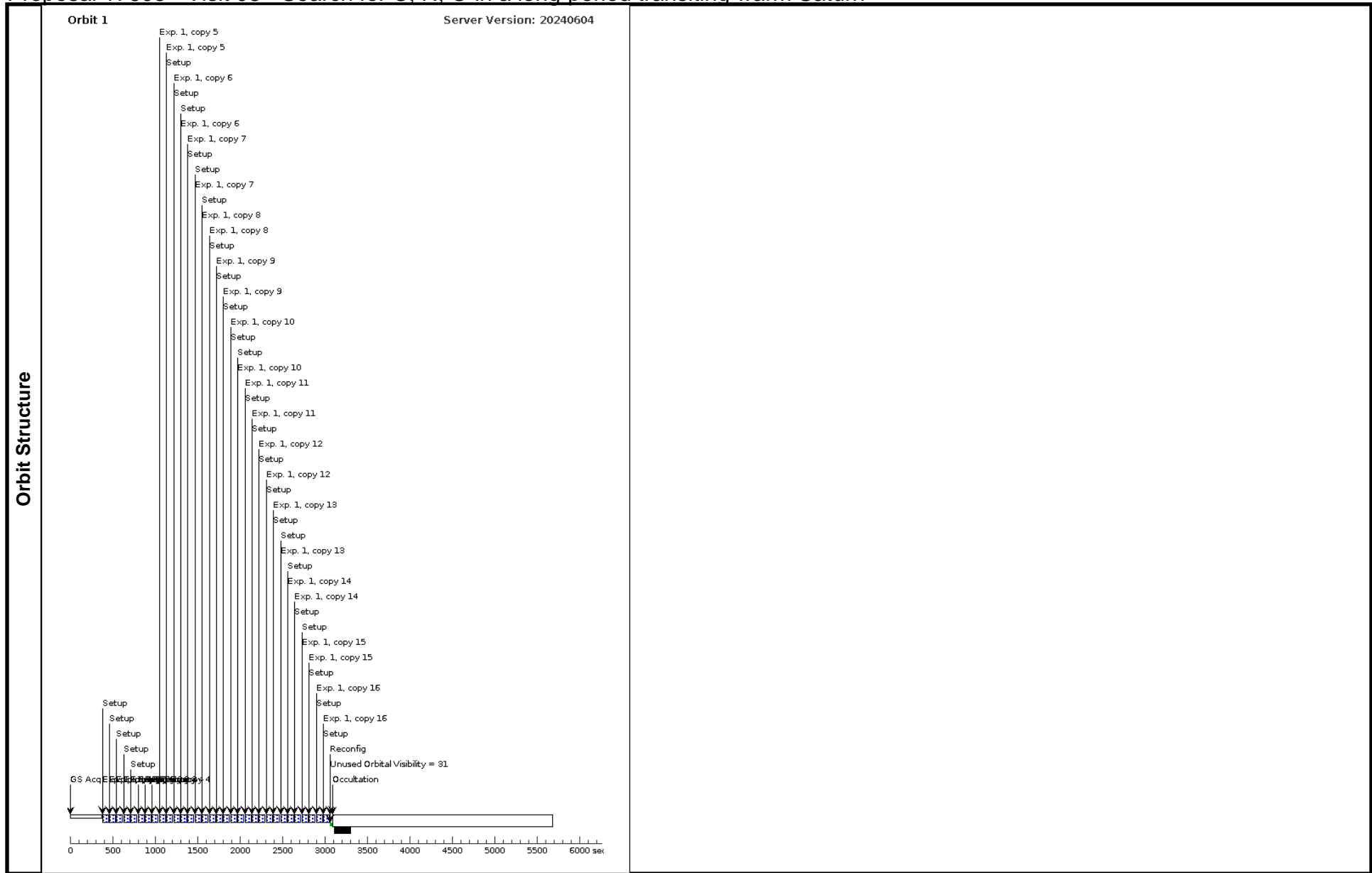
<b>Visit</b>	<b>Proposal 17605, Visit 08, implementation</b> <span style="float: right;">Wed Aug 21 14:00:28 GMT 2024</span>					
	<b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: (none)					
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(1)	CD-60-1144	RA: 05 20 25.3152 (80.1054800d) Dec: -59 53 44.46 (-59.89568d) Equinox: J2000	Proper Motion RA: 45.864 mas/yr Proper Motion Dec: 58.44499999999999 mas/yr Epoch of Position: 2000	V=10.7	Reference Frame: SIMBAD
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=EXT-STAR Description=[EXTRA-SOLAR PLANET]						

Proposal 17605 - Visit 08 - Search for C, N, O in a long-period transiting warm Saturn

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	(1) CD-60-1144	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=3; SAMP-SEQ=SPAR S25	POS TARG null,-10; SPATIAL SCAN 0.1 12283,90.0 Degrees, Round trip; SAA CONTOUR 02	Sequence 1-1 Non-Int in Visit 08	44.969893 Secs X 16 (1439.037 Secs)	
								[==>(Copy 1, Forward)]	
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Proposal 17605 - Visit 08 - Search for C, N, O in a long-period transiting warm Saturn



Proposal 17605 - Visit 09 - Search for C, N, O in a long-period transiting warm Saturn

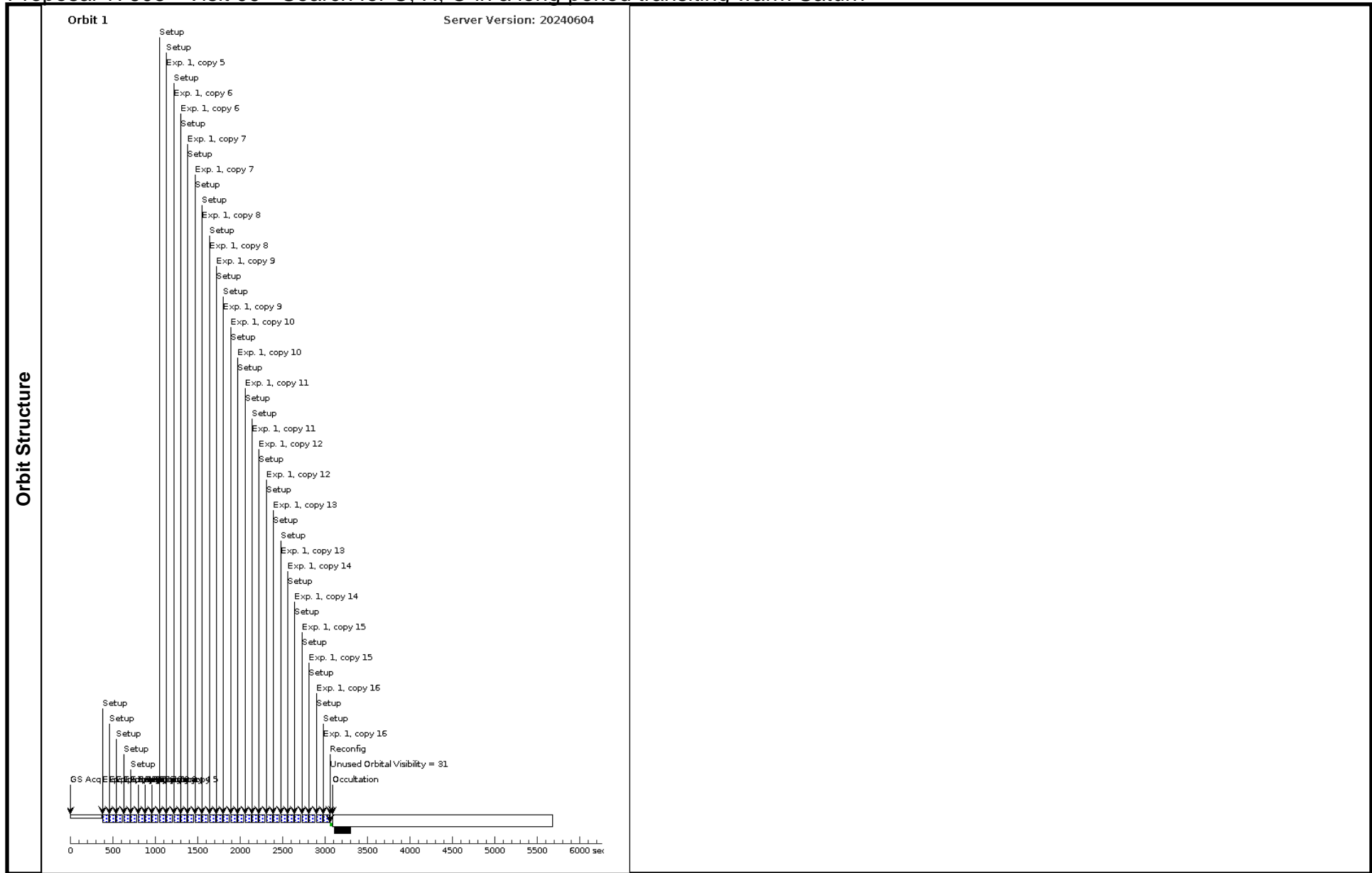
<b>Visit</b>	<b>Proposal 17605, Visit 09, implementation</b> <span style="float: right;">Wed Aug 21 14:00:29 GMT 2024</span> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: (none)					
	<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>
(1)		CD-60-1144	RA: 05 20 25.3152 (80.1054800d) Dec: -59 53 44.46 (-59.89568d) Equinox: J2000	Proper Motion RA: 45.864 mas/yr Proper Motion Dec: 58.44499999999999 mas/yr Epoch of Position: 2000	V=10.7	Reference Frame: SIMBAD
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=EXT-STAR Description=[EXTRA-SOLAR PLANET]						

Proposal 17605 - Visit 09 - Search for C, N, O in a long-period transiting warm Saturn

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	(1) CD-60-1144	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=3; SAMP-SEQ=SPAR S25	POS TARG null,-10; SPATIAL SCAN 0.1 12283,90.0 Degrees, Round trip	Sequence 1-1 Non-Int in Visit 09	44.969893 Secs X 16 (1439.037 Secs)	
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# Proposal 17605 - Visit 09 - Search for C, N, O in a long-period transiting warm Saturn



Proposal 17605 - Visit 10 - Search for C, N, O in a long-period transiting warm Saturn

<b>Visit</b>	<b>Proposal 17605, Visit 10, implementation</b> <span style="float: right;">Wed Aug 21 14:00:29 GMT 2024</span>					
	<b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: (none)					
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(1)	CD-60-1144	RA: 05 20 25.3152 (80.1054800d) Dec: -59 53 44.46 (-59.89568d) Equinox: J2000	Proper Motion RA: 45.864 mas/yr Proper Motion Dec: 58.44499999999999 mas/yr Epoch of Position: 2000	V=10.7	Reference Frame: SIMBAD
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=EXT-STAR Description=[EXTRA-SOLAR PLANET]						

Proposal 17605 - Visit 10 - Search for C, N, O in a long-period transiting warm Saturn

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	(1) CD-60-1144	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=3; SAMP-SEQ=SPAR S25	POS TARG null,-10; SPATIAL SCAN 0.1 12283,90.0 Degrees, Round trip	Sequence 1-1 Non-Int in Visit 10	44.969893 Secs X 16 (1439.037 Secs)	
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# Proposal 17605 - Visit 10 - Search for C, N, O in a long-period transiting warm Saturn

