



15428 - Sub-Neptune Atmosphere Characterization in a Multi-Planet System

Cycle: 25, Proposal Category: GO

(JWST Initiative)

(Availability Mode: SUPPORTED)

INVESTIGATORS

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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) GJ-9827	WFC3/IR	5	21-Sep-2020 22:00:36.0	yes
02	(1) GJ-9827	WFC3/IR	5	21-Sep-2020 22:00:55.0	yes
03	(1) GJ-9827	WFC3/IR	5	21-Sep-2020 22:01:13.0	yes

15 Total Orbits Used

ABSTRACT

We propose to observe two transits of the planet GJ9827b, which was recently discovered in K2 Campaign 12. The planet is part of a multiplanet system containing three small planets, details of which were announced in September 2017. GJ9827b is one of the top five most amenable small planets for atmospheric follow-up. A second planet in the system (GJ9827d) is also likely to show a strong atmospheric signal and will be observed

Proposal 15428 (STScI Edit Number: 6, Created: Monday, September 21, 2020 at 9:01:15 PM Eastern Standard Time) - Overview in HST proposal 15333. GJ9827b lies near the theoretical boundary between gassy and rocky planets, suggesting it may have a rich atmosphere. These two targets present unique opportunities to characterize the atmospheres of small sub-Neptune planets, constrain their properties and intercompare atmospheres in the same system. With JWST Cycle 1 beginning in 2019, these will make excellent candidates for follow-up if HST can provide proof that they are water-rich and cloud-free. By observing GJ9827b now we can use HST data to compare two planets in the same system and prepare for useful, efficient JWST observations with NIRCam.

OBSERVING DESCRIPTION

We will observe two transits of GJ9827b using WFC3 with the IR G141 grism. The observations will be split into two visits of 5 orbits each, (similar to what has been attempted by several other exoplanet atmosphere proposals.) The observations **MUST** be scheduled during a transit of GJ9827b. Though unlikely, the observation must not be scheduled during a 'double' transit with any of the other planets, as this will interfere with the signal. This has been avoided by adding 'betweens' in APT which exclude transits of other (known) planets occurring within 8 hours of the observation.

We will use the F126N filter to take a wavelength calibration image once per visit, at the beginning of the visit. We will use the forward/reverse scanning mode during the observation for maximum efficiency. We will use the full 1024 array and a slow scan rate to capture as many photons as possible. A scan rate of 0.21 arcsec/s has been chosen, which we anticipate will give a flux of 29000 on each pixel. The use of the full array allows us to collect data and dump to the SSR in parallel, maximising the amount of time on source.

There is a tight timing constraint on our observation to ensure the planet transit occurs in the middle of the fourth orbit. This will ensure we collect the most 'in-transit' points possible.

One of our scans has a lower NSAMP number than the rest (Spatial Scan 1.004). This is due to the guide star acquisition at the beginning of the visit reducing the time we have available in the first orbit. The lower NSAMP (and different POSTARG keywords) allows us to take a grism image with a reduced exposure time.

There is another proposal (15434) which will be using the STIS camera to observe the outer atmosphere of the planet. Having spoken with the PI, we would ideally like to take our observations as close as possible to each other. This will allow for measurements of the lower atmosphere (this proposal with WFC3) and upper atmosphere (15434 with STIS) to be compared, as stellar variability can impact the atmosphere. We propose that the first visits from each proposal are scheduled for two consecutive transits of GJ9827b. We then request a break in the observations to allow the transit

Proposal 15428 (STScI Edit Number: 6, Created: Monday, September 21, 2020 at 9:01:15 PM Eastern Standard Time) - Overview
ephemeris to be measured using the first set of data. This will improve our ability to center the transit. We then propose the second round of visits for each proposal be scheduled for consecutive transits.

Proposal 15428 - VISIT 1 ORIENT 66 NSAMP 2 (01) - Sub-Neptune Atmosphere Characterization in a Multi-Planet System

Tue Sep 22 02:01:15 GMT 2020

Visit	<p>Proposal 15428, VISIT 1 ORIENT 66 NSAMP 2 (01), failed</p> <p>Diagnostic Status: No Diagnostics</p> <p>Scientific Instruments: WFC3/IR</p> <p>Special Requirements: ORIENT 66D TO 66 D; BETWEEN 01-FEB-2018:21:56:41 AND 05-FEB-2018:04:21:55; BETWEEN 09-FEB-2018:04:02:04 AND 12-FEB-2018:10:27:18; BETWEEN 12-FEB-2018:19:04:46 AND 16-FEB-2018:01:30:00; BETWEEN 16-FEB-2018:10:07:28 AND 19-FEB-2018:16:32:41; BETWEEN 20-FEB-2018:01:10:09 AND 23-FEB-2018:07:35:23; BETWEEN 23-FEB-2018:16:12:51 AND 25-FEB-2018:17:37:11; BETWEEN 27-FEB-2018:07:15:32 AND 02-MAR-2018:13:40:47; BETWEEN 04-MAR-2018:03:19:08 AND 06-MAR-2018:04:43:28; BETWEEN 06-MAR-2018:13:20:56 AND 09-MAR-2018:19:46:10; BETWEEN 10-MAR-2018:04:23:38 AND 13-MAR-2018:10:48:51; BETWEEN 13-MAR-2018:19:26:19 AND 15-MAR-2018:20:50:39; BETWEEN 17-MAR-2018:10:29:01 AND 20-MAR-2018:16:54:15; BETWEEN 21-MAR-2018:01:31:43 AND 24-MAR-2018:07:56:56; BETWEEN 24-MAR-2018:16:34:24 AND 27-MAR-2018:22:59:38; BETWEEN 28-MAR-2018:07:37:06 AND 31-MAR-2018:14:02:19; BETWEEN 31-MAR-2018:22:39:47 AND 04-APR-2018:05:05:01; BETWEEN 04-APR-2018:13:42:29 AND 07-APR-2018:20:07:43; BETWEEN 08-APR-2018:04:45:11 AND 10-APR-2018:06:09:31; BETWEEN 11-APR-2018:19:47:53 AND 15-APR-2018:02:13:06; BETWEEN 16-APR-2018:15:51:28 AND 18-APR-2018:17:15:48; BETWEEN 19-APR-2018:01:53:16 AND 22-APR-2018:08:18:30; BETWEEN 22-APR-2018:16:55:58 AND 25-APR-2018:23:21:11; BETWEEN 26-APR-2018:07:58:39 AND 28-APR-2018:09:22:59; BETWEEN 29-APR-2018:23:01:21 AND 03-MAY-2018:05:26:34; BETWEEN 04-MAY-2018:19:04:56 AND 06-MAY-2018:20:29:16; BETWEEN 07-MAY-2018:05:06:44 AND 10-MAY-2018:11:31:57; BETWEEN 10-MAY-2018:20:09:25 AND 14-MAY-2018:02:34:40; BETWEEN 14-MAY-2018:11:12:08 AND 17-MAY-2018:17:37:21; BETWEEN 18-MAY-2018:02:14:49 AND 21-MAY-2018:08:40:03; BETWEEN 21-MAY-2018:17:17:31 AND 29-MAY-2018:19:46:20; BETWEEN 30-MAY-2018:04:23:48 AND 04-JUN-2018:20:50:49; BETWEEN 05-JUN-2018:05:28:17 AND 10-JUN-2018:21:55:19; BETWEEN 11-JUN-2018:06:32:47 AND 16-JUN-2018:22:59:48; BETWEEN 17-JUN-2018:07:37:16 AND 18-JUL-2018:09:23:09; BETWEEN 18-JUL-2018:18:00:37 AND 24-JUL-2018:10:27:39; BETWEEN 24-JUL-2018:19:05:07 AND 30-JUL-2018:11:32:08; BETWEEN 30-JUL-2018:20:09:36 AND 05-AUG-2018:12:36:38; BETWEEN 05-AUG-2018:21:14:06 AND 24-AUG-2018:20:51:00; BETWEEN 25-AUG-2018:05:28:28 AND 28-AUG-2018:11:53:41; BETWEEN 28-AUG-2018:20:31:09 AND 01-SEP-2018:02:56:23; BETWEEN 01-SEP-2018:11:33:51 AND 04-SEP-2018:17:59:04; BETWEEN 06-SEP-2018:07:37:26 AND 08-SEP-2018:09:01:46; BETWEEN 08-SEP-2018:17:39:14 AND 12-SEP-2018:00:04:27; BETWEEN 12-SEP-2018:08:41:55 AND 15-SEP-2018:15:07:10; BETWEEN 15-SEP-2018:23:44:38 AND 18-SEP-2018:01:08:57; BETWEEN 19-SEP-2018:14:47:19 AND 22-SEP-2018:21:12:33; BETWEEN 24-SEP-2018:10:50:55 AND 26-SEP-2018:12:15:15; BETWEEN 26-SEP-2018:20:52:43 AND 30-SEP-2018:03:17:56; BETWEEN 30-SEP-2018:11:55:24 AND 03-OCT-2018:18:20:38; BETWEEN 04-OCT-2018:02:58:06 AND 07-OCT-2018:09:23:19; BETWEEN 07-OCT-2018:18:00:47 AND 11-OCT-2018:00:26:01; BETWEEN 11-OCT-2018:09:03:29 AND 14-OCT-2018:15:28:42; BETWEEN 15-OCT-2018:00:06:10 AND 18-OCT-2018:06:31:25; BETWEEN 19-OCT-2018:20:09:46 AND 21-OCT-2018:21:34:06; BETWEEN 22-OCT-2018:06:11:34 AND 25-OCT-2018:12:36:48; BETWEEN 25-OCT-2018:21:14:16 AND 29-OCT-2018:03:39:30; BETWEEN 29-OCT-2018:12:16:58 AND 31-OCT-2018:13:41:17; BETWEEN 02-NOV-2018:03:19:39 AND 05-NOV-2018:09:44:53; BETWEEN 06-NOV-2018:23:23:15 AND 09-NOV-2018:00:47:34; BETWEEN 09-NOV-2018:09:25:02 AND 12-NOV-2018:15:50:16; BETWEEN 13-NOV-2018:00:27:44 AND 16-NOV-2018:06:52:57; BETWEEN 16-NOV-2018:15:30:25 AND 19-NOV-2018:21:55:39; BETWEEN 20-NOV-2018:06:33:07 AND 23-NOV-2018:12:58:21; BETWEEN 23-NOV-2018:21:35:49 AND 27-NOV-2018:04:01:03; BETWEEN 27-NOV-2018:12:38:31 AND 30-NOV-2018:19:03:45; BETWEEN 01-DEC-2018:03:41:13 AND 04-DEC-2018:10:06:26; BETWEEN 04-DEC-2018:18:43:54 AND 08-DEC-2018:01:09:08; BETWEEN 08-DEC-2018:09:46:36 AND 11-DEC-2018:16:11:49; BETWEEN 12-DEC-2018:00:49:17 AND 14-DEC-2018:02:13:37; BETWEEN 15-DEC-2018:15:51:59 AND 20-DEC-2018:03:18:07; BETWEEN 20-DEC-2018:11:55:35 AND 26-DEC-2018:04:22:36; Period 1.2089802 D AND ZERO-PHASE HJD2457738.82588</p> <p><i>Comments: Short Scans for visit 2 with spars100, nsamp 2.</i></p> <p><i>Calibration star is 384 pixels away from the target star</i></p>																																																						
	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>GJ-9827</td> <td>RA: 23 27 4.8365 (351.7701521d)</td> <td>Proper Motion RA: 373.43 mas/yr</td> <td>V=10.101</td> <td>Reference Frame: SIMBAD</td> </tr> <tr> <td></td> <td>Alt Name1: BD-02-5958</td> <td>Dec: -01 17 10.58 (-1.28627d)</td> <td>Proper Motion Dec: 216.04 mas/yr</td> <td>TYPE=K6V,</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Equinox: J2000</td> <td>Parallax: 0.03298"</td> <td>B-V=1.47,</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>Epoch of Position: 2000</td> <td>E(B-V)=0,</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>Radial Velocity: 27.00 km/sec</td> <td>F-LINE(2796)=0.20e-12,</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>W-LINE(2796)=0.5,</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>F-LINE(1215)=0.34e-12,</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>W-LINE(1215)=0.65</td> <td></td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=STAR</i></p> <p><i>Description=[EXTRA-SOLAR PLANET, EXTRA-SOLAR PLANETARY SYSTEM]</i></p> <p><i>Extended=NO</i></p>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	GJ-9827	RA: 23 27 4.8365 (351.7701521d)	Proper Motion RA: 373.43 mas/yr	V=10.101	Reference Frame: SIMBAD		Alt Name1: BD-02-5958	Dec: -01 17 10.58 (-1.28627d)	Proper Motion Dec: 216.04 mas/yr	TYPE=K6V,				Equinox: J2000	Parallax: 0.03298"	B-V=1.47,					Epoch of Position: 2000	E(B-V)=0,					Radial Velocity: 27.00 km/sec	F-LINE(2796)=0.20e-12,						W-LINE(2796)=0.5,						F-LINE(1215)=0.34e-12,						W-LINE(1215)=0.65
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Proposal 15428 - VISIT 1 ORIENT 66 NSAMP 2 (01) - Sub-Neptune Atmosphere Characterization in a Multi-Planet System

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	Direct Image	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	F126N	SAMP-SEQ=SPARS5; NSAMP=2	POS TARG 10,10; PHASE 0.815 TO 0.825; GS ACQ SCENARIO BASE1B3	Sequence 1-7 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	7.933062 Secs (7.933 Secs) [==>]	[1]
	2	Spatial Scan	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPARS100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-7 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[1]
	3	Spatial Scan	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPARS100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-7 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[1]
	4	Spatial Scan	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPARS100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-7 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[1]
	5	Spatial Scan	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPARS100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-7 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[1]
	6	Spatial Scan	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPARS100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-7 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[1]
	7	Spatial Scan	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPARS100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-7 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[1]
	8	Spatial Scan	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPARS100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 8-16 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[2]
	9	Spatial Scan	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPARS100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 8-16 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[2]
	10	Spatial Scan	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPARS100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 8-16 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[2]
	11	Spatial Scan	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPARS100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 8-16 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[2]
	12	Spatial Scan	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPARS100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 8-16 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[2]

Proposal 15428 - VISIT 1 ORIENT 66 NSAMP 2 (01) - Sub-Neptune Atmosphere Characterization in a Multi-Planet System

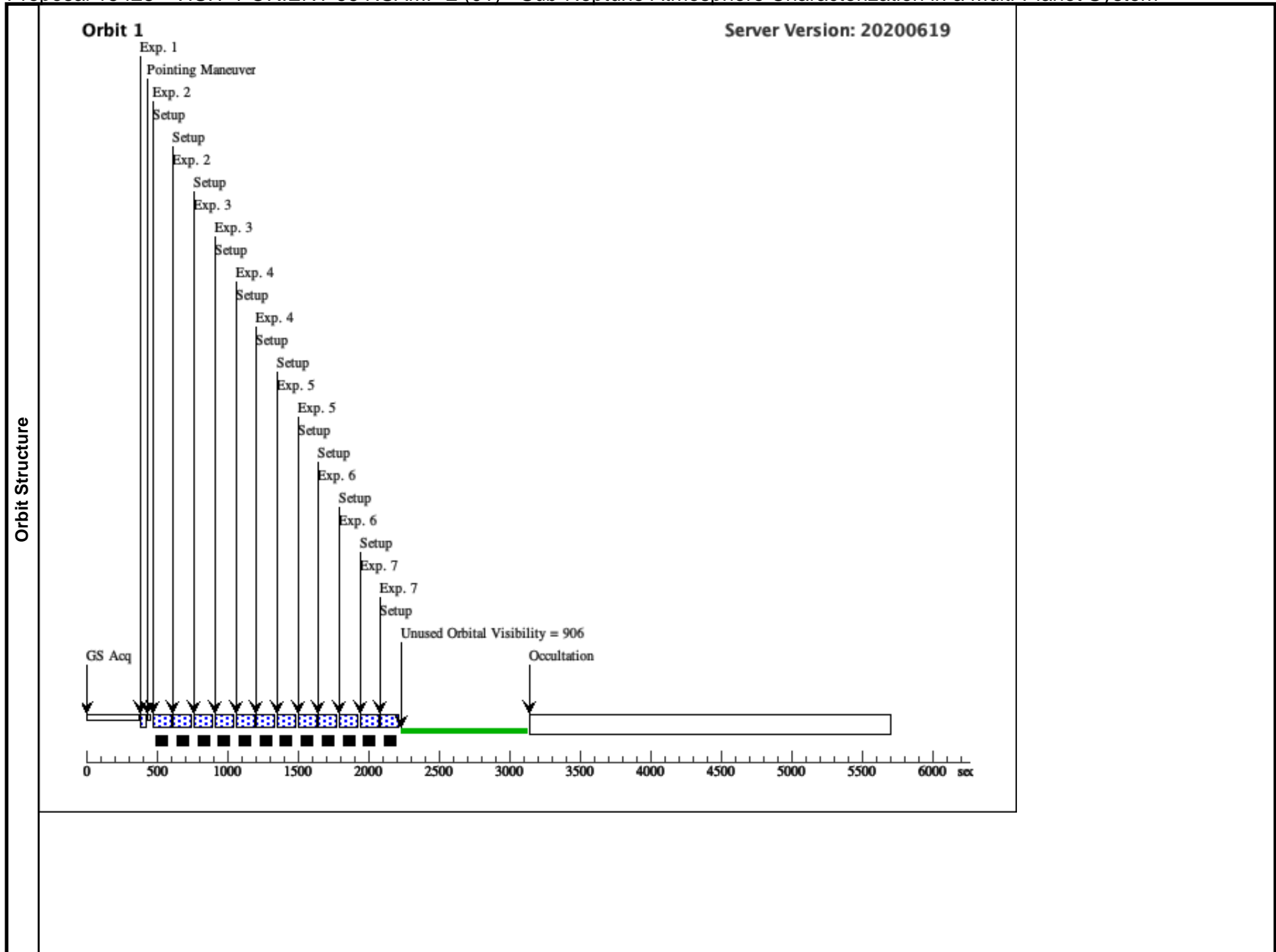
13	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 8-16 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[2]
14	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 8-16 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[2]
15	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 8-16 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[2]
16	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Forward	Sequence 8-16 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (102.933 Secs) [==>]	[2]
17	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 17-25 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[3]
18	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 17-25 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[3]
19	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 17-25 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[3]
20	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 17-25 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[3]
21	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 17-25 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[3]
22	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 17-25 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[3]
23	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 17-25 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[3]
24	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 17-25 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[3]
25	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Forward	Sequence 17-25 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (102.933 Secs) [==>]	[3]

Proposal 15428 - VISIT 1 ORIENT 66 NSAMP 2 (01) - Sub-Neptune Atmosphere Characterization in a Multi-Planet System

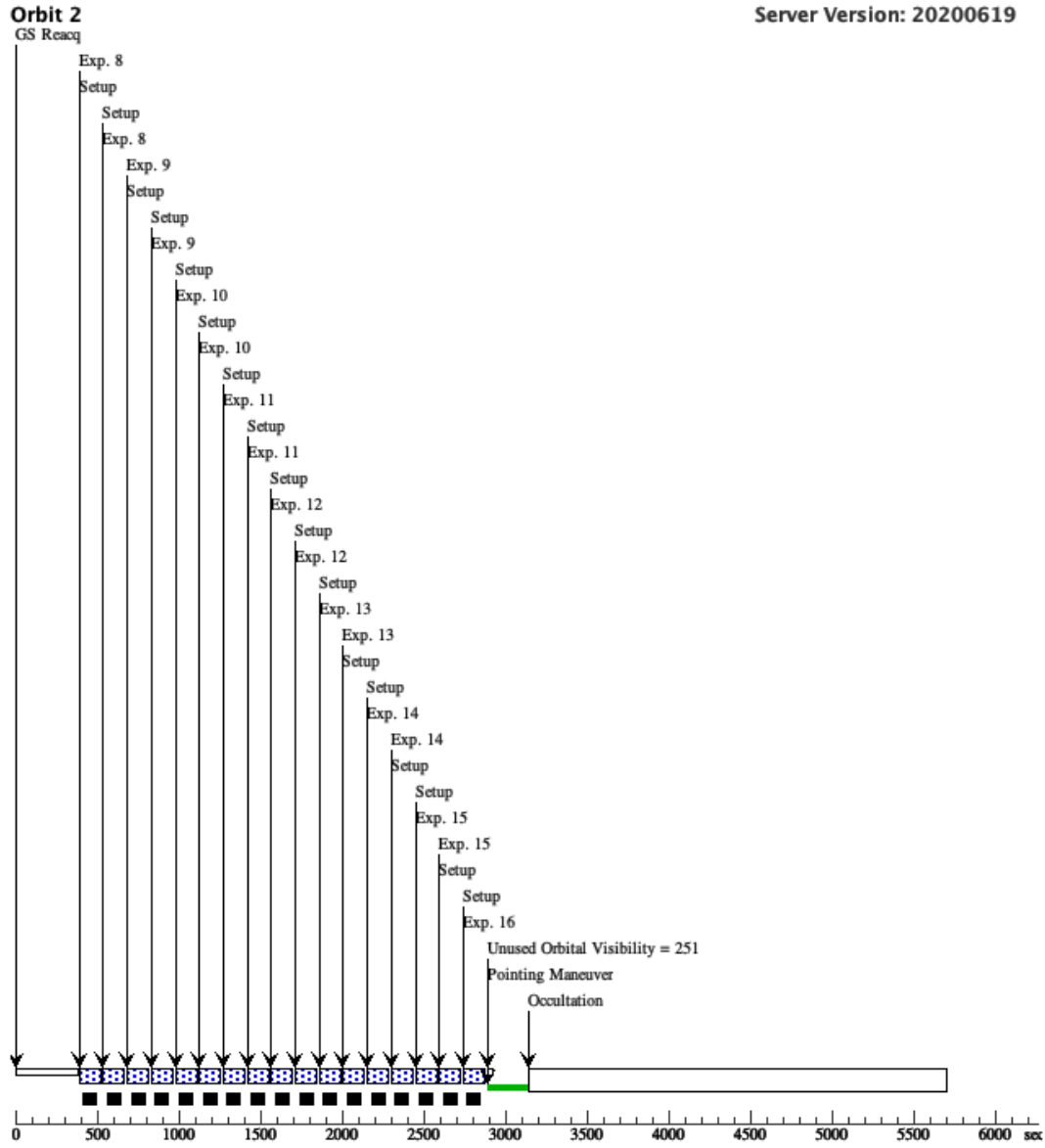
26	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 26-34 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[4]
27	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 26-34 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[4]
28	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 26-34 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[4]
29	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 26-34 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[4]
30	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 26-34 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[4]
31	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 26-34 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[4]
32	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 26-34 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[4]
33	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 26-34 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[4]
34	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Forward	Sequence 26-34 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (102.933 Secs) [==>]	[4]
35	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 35-43 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[5]
36	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 35-43 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[5]
37	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 35-43 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[5]
38	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 35-43 Non-Int in VISIT 1 ORIENT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[5]

Proposal 15428 - VISIT 1 ORIENT 66 NSAMP 2 (01) - Sub-Neptune Atmosphere Characterization in a Multi-Planet System

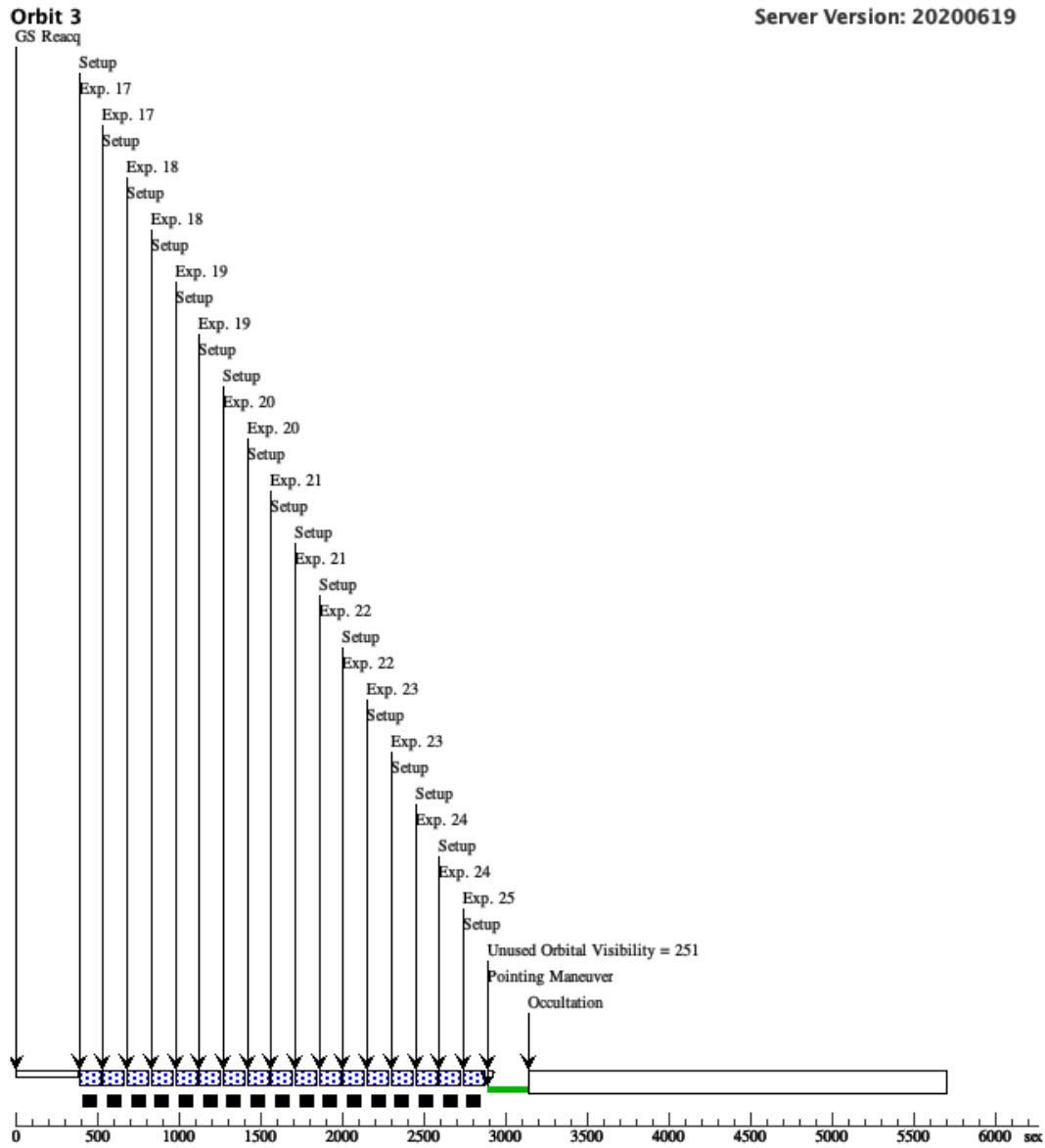
39	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 35-43 Non -Int in VISIT 1 ORIE NT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[5]
40	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 35-43 Non -Int in VISIT 1 ORIE NT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[5]
41	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 35-43 Non -Int in VISIT 1 ORIE NT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[5]
42	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 35-43 Non -Int in VISIT 1 ORIE NT 66 NSAMP 2 (01)	102.932614 Secs (205.865 Secs) [==>(Forward)] [==>(Reverse)]	[5]
43	Spatial Scan (1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=2; SAMP-SEQ=SPAR S100	POS TARG -6.5,-9; SPATIAL SCAN 0.3 65,90.0 Degrees,For ward	Sequence 35-43 Non -Int in VISIT 1 ORIE NT 66 NSAMP 2 (01)	102.932614 Secs (102.933 Secs) [==>]	[5]



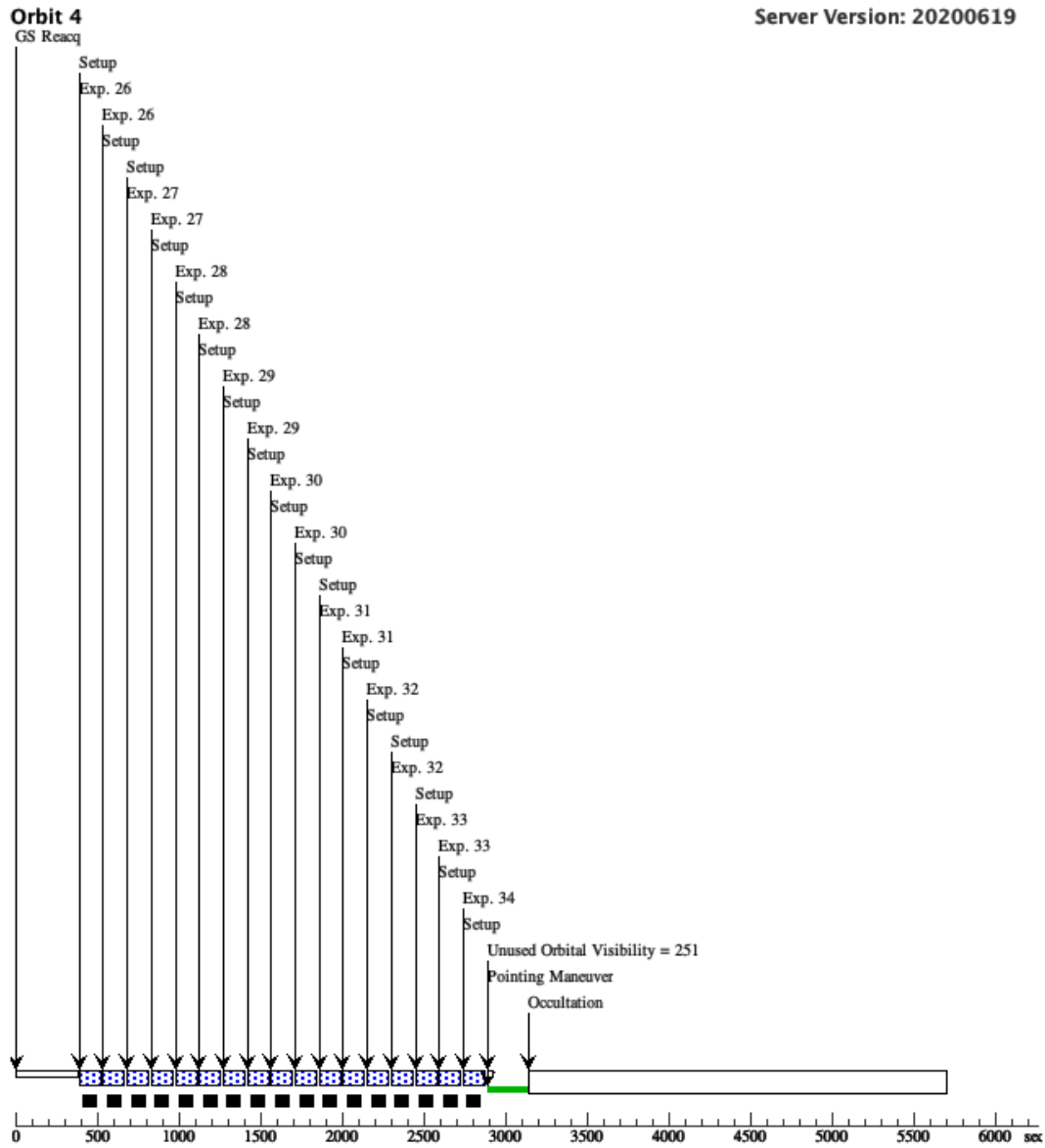
Server Version: 20200619

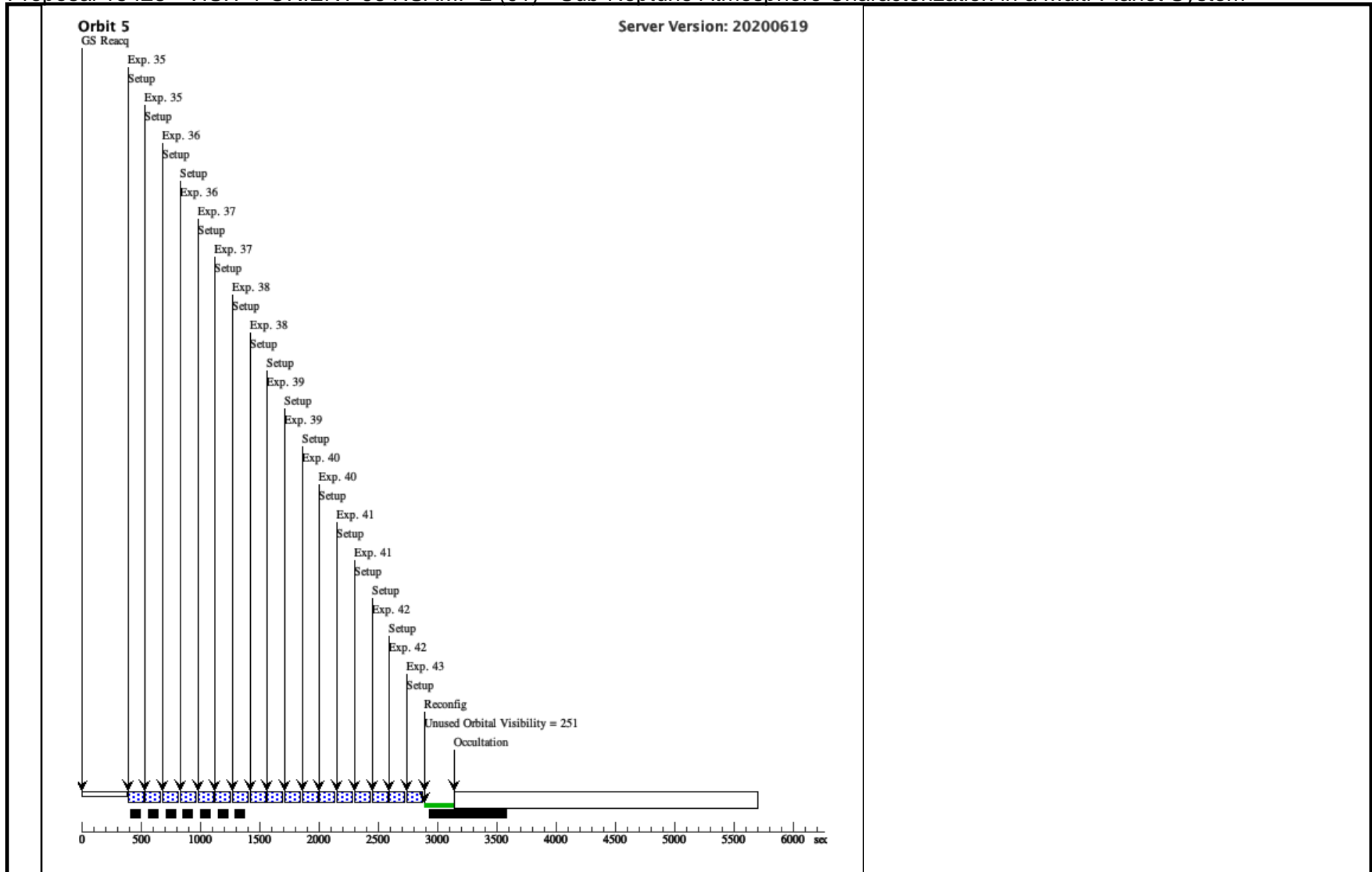


Server Version: 20200619



Server Version: 20200619





Proposal 15428 - Visit 1, RETRY (02) - Sub-Neptune Atmosphere Characterization in a Multi-Planet System

Tue Sep 22 02:01:16 GMT 2020

Visit	<p>Proposal 15428, Visit 1, RETRY (02), completed</p> <p>Diagnostic Status: No Diagnostics</p> <p>Scientific Instruments: WFC3/IR</p> <p>Special Requirements: BETWEEN 19-MAR-2019:00:52:32 AND 22-MAR-2019:15:55:27; BETWEEN 23-MAR-2019:20:56:32 AND 28-MAR-2019:17:00:27; BETWEEN 29-MAR-2019:22:01:32 AND 13-APR-2019:10:12:27; BETWEEN 15-APR-2019:20:14:32 AND 18-APR-2019:06:15:27; BETWEEN 20-APR-2019:16:17:32 AND 21-APR-2019:21:18:27; BETWEEN 23-APR-2019:02:19:32 AND 25-APR-2019:12:21:27; BETWEEN 26-APR-2019:17:22:32 AND 29-APR-2019:03:24:27; BETWEEN 30-APR-2019:08:25:32 AND 02-MAY-2019:18:27:27; BETWEEN 03-MAY-2019:23:28:32 AND 05-MAY-2019:04:29:27; BETWEEN 07-MAY-2019:14:30:32 AND 10-MAY-2019:00:32:27; BETWEEN 12-MAY-2019:10:34:32 AND 13-MAY-2019:15:35:27; BETWEEN 14-MAY-2019:20:36:32 AND 17-MAY-2019:06:38:27; BETWEEN 18-MAY-2019:11:39:32 AND 20-MAY-2019:21:41:27; BETWEEN 22-MAY-2019:02:42:32 AND 24-MAY-2019:12:43:27; BETWEEN 25-MAY-2019:17:44:32 AND 26-MAY-2019:22:45:27; BETWEEN 29-MAY-2019:08:47:32 AND 31-MAY-2019:18:49:27; BETWEEN 03-JUN-2019:04:51:32 AND 04-JUN-2019:09:52:27; BETWEEN 05-JUN-2019:14:53:32 AND 08-JUN-2019:00:55:27; BETWEEN 09-JUN-2019:05:55:32 AND 11-JUN-2019:15:57:27; BETWEEN 12-JUN-2019:20:58:32 AND 15-JUN-2019:07:00:27; BETWEEN 16-JUN-2019:12:01:32 AND 18-JUN-2019:22:03:27; BETWEEN 20-JUN-2019:03:04:32 AND 23-JUN-2019:18:07:27; BETWEEN 24-JUN-2019:23:08:32 AND 29-JUN-2019:19:11:27; BETWEEN 01-JUL-2019:00:12:32 AND 15-JUL-2019:12:23:27; BETWEEN 16-JUL-2019:17:24:32 AND 21-JUL-2019:13:28:27; BETWEEN 22-JUL-2019:18:29:32 AND 27-JUL-2019:14:33:27; BETWEEN 28-JUL-2019:19:34:32 AND 31-JUL-2019:05:36:27; BETWEEN 01-AUG-2019:10:36:32 AND 03-AUG-2019:20:38:27; BETWEEN 05-AUG-2019:01:39:32 AND 06-AUG-2019:06:40:27; BETWEEN 08-AUG-2019:16:42:32 AND 11-AUG-2019:02:44:27; BETWEEN 13-AUG-2019:12:46:32 AND 14-AUG-2019:17:47:27; BETWEEN 15-AUG-2019:22:48:32 AND 18-AUG-2019:08:50:27; BETWEEN 19-AUG-2019:13:50:32 AND 21-AUG-2019:23:52:27; BETWEEN 23-AUG-2019:04:53:32 AND 25-AUG-2019:14:55:27; BETWEEN 26-AUG-2019:19:56:32 AND 29-AUG-2019:05:58:27; BETWEEN 30-AUG-2019:10:59:32 AND 01-SEP-2019:21:01:27; BETWEEN 04-SEP-2019:07:03:32 AND 05-SEP-2019:12:04:27; BETWEEN 06-SEP-2019:17:04:32 AND 09-SEP-2019:03:06:27; BETWEEN 10-SEP-2019:08:07:32 AND 12-SEP-2019:18:09:27; BETWEEN 13-SEP-2019:23:10:32 AND 16-SEP-2019:09:12:27; BETWEEN 17-SEP-2019:14:13:32 AND 20-SEP-2019:00:15:27; BETWEEN 21-SEP-2019:05:16:32 AND 23-SEP-2019:15:18:27; BETWEEN 26-SEP-2019:01:19:32 AND 27-SEP-2019:06:20:27; BETWEEN 28-SEP-2019:11:21:32 AND 30-SEP-2019:21:23:27; BETWEEN 02-OCT-2019:02:24:32 AND 06-OCT-2019:22:28:27; BETWEEN 08-OCT-2019:03:29:32 AND 22-OCT-2019:15:40:27; BETWEEN 23-OCT-2019:20:41:32 AND 28-OCT-2019:16:45:27; BETWEEN 29-OCT-2019:21:45:32 AND 08-NOV-2019:13:53:27; BETWEEN 09-NOV-2019:18:54:32 AND 12-NOV-2019:04:56:27; BETWEEN 14-NOV-2019:14:58:32 AND 15-NOV-2019:19:59:27; BETWEEN 17-NOV-2019:00:59:32 AND 19-NOV-2019:11:01:27; BETWEEN 20-NOV-2019:16:02:32 AND 23-NOV-2019:02:04:27; BETWEEN 24-NOV-2019:07:05:32 AND 26-NOV-2019:17:07:27; BETWEEN 27-NOV-2019:22:08:32 AND 30-NOV-2019:08:10:27; BETWEEN 01-DEC-2019:13:11:32 AND 03-DEC-2019:23:12:27; BETWEEN 06-DEC-2019:09:14:32 AND 07-DEC-2019:14:15:27; BETWEEN 08-DEC-2019:19:16:32 AND 11-DEC-2019:05:18:27; BETWEEN 12-DEC-2019:10:19:32 AND 14-DEC-2019:20:21:27; BETWEEN 16-DEC-2019:01:22:32 AND 17-DEC-2019:06:23:27; BETWEEN 19-DEC-2019:16:25:32 AND 22-DEC-2019:02:26:27; BETWEEN 23-DEC-2019:07:27:32 AND 25-DEC-2019:17:29:27; BETWEEN 26-DEC-2019:22:30:32 AND 29-DEC-2019:08:32:27; BETWEEN 30-DEC-2019:13:33:32 AND 01-JAN-2020:23:35:27; BETWEEN 03-JAN-2020:04:36:32 AND 05-JAN-2020:14:38:27; BETWEEN 06-JAN-2020:19:38:32 AND 08-JAN-2020:00:39:27; BETWEEN 10-JAN-2020:10:41:32 AND 12-JAN-2020:20:43:27; BETWEEN 14-JAN-2020:01:44:32 AND 23-JAN-2020:17:52:27; BETWEEN 24-JAN-2020:22:52:32 AND 29-JAN-2020:18:56:27; BETWEEN 30-JAN-2020:23:57:32 AND 04-FEB-2020:20:01:27; BETWEEN 06-FEB-2020:01:02:32 AND 14-FEB-2020:12:08:27; BETWEEN 15-FEB-2020:17:09:32 AND 20-FEB-2020:13:13:27; BETWEEN 21-FEB-2020:18:14:32 AND 24-FEB-2020:04:16:27; BETWEEN 25-FEB-2020:09:17:32 AND 26-FEB-2020:14:18:27; BETWEEN 29-FEB-2020:00:19:32 AND 02-MAR-2020:10:21:27; BETWEEN 03-MAR-2020:15:22:32 AND 06-MAR-2020:01:24:27; BETWEEN 07-MAR-2020:06:25:32 AND 09-MAR-2020:16:27:27; BETWEEN 10-MAR-2020:21:28:32 AND 13-MAR-2020:07:30:27; BETWEEN 14-MAR-2020:12:31:32 AND 16-MAR-2020:22:33:27; BETWEEN 18-MAR-2020:03:33:32 AND 19-MAR-2020:08:34:27; Period 1.20898 D AND ZERO-PHASE HJD2458562.14142</p> <p><i>Comments: Rescheduling visit 1 after Gyro failure.</i></p> <p><i>Betweenes have been set such that transits where other planets (GJ 9827c/d) transit or eclipse within 0.2 days of GJ 9827 b have been excluded. This ensures a clean observation of the transit.</i></p> <p><i>Phase argument has been set to allow 15 minutes of possible time to schedule. It is beneficial to our science case to schedule the observations as close to phase 0.82987074 as possible.</i></p>						
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
		(1)	GJ-9827 Alt Name1: BD-02-5958	RA: 23 27 4.8365 (351.7701521d) Dec: -01 17 10.58 (-1.28627d) Equinox: J2000	Proper Motion RA: 373.43 mas/yr Proper Motion Dec: 216.04 mas/yr Parallax: 0.03298" Epoch of Position: 2000 Radial Velocity: 27.00 km/sec	V=10.101 TYPE=K6V, B-V=1.47, E(B-V)=0, F-LINE(2796)=0.20e-12, W-LINE(2796)=0.5, F-LINE(1215)=0.34e-12, W-LINE(1215)=0.65	Reference Frame: SIMBAD
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p>Category=STAR Description=[EXTRA-SOLAR PLANET, EXTRA-SOLAR PLANETARY SYSTEM] Extended=NO</p>						

Proposal 15428 - Visit 1, RETRY (02) - Sub-Neptune Atmosphere Characterization in a Multi-Planet System

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	GJ9827b DI MAGE	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	F126N	NSAMP=3; SAMP-SEQ=SPAR S5	PHASE 0.82552 TO 0.834212; GS ACQ SCENARIO BASE1B3	Sequence 1-10 Non-Int in Visit 1, RETRY (02)	6.696041 Secs (6.696 Secs) [==>]	[1]
	2	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-10 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[1]
	3	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-10 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[1]
	4	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-10 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[1]
	5	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-10 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[1]
	6	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-10 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[1]
	7	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-10 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[1]
	8	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-10 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[1]
	9	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-10 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[1]
	10	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Forward	Sequence 1-10 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (92.538 Secs) [==>]	[1]
	11	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 11-18 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[2]

Proposal 15428 - Visit 1, RETRY (02) - Sub-Neptune Atmosphere Characterization in a Multi-Planet System

12	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 11-18 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[2]
13	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 11-18 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[2]
14	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 11-18 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[2]
15	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 11-18 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[2]
16	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 11-18 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[2]
17	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 11-18 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[2]
18	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 11-18 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[2]
19	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 19-26 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[3]
20	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 19-26 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[3]
21	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 19-26 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[3]
22	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 19-26 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[3]

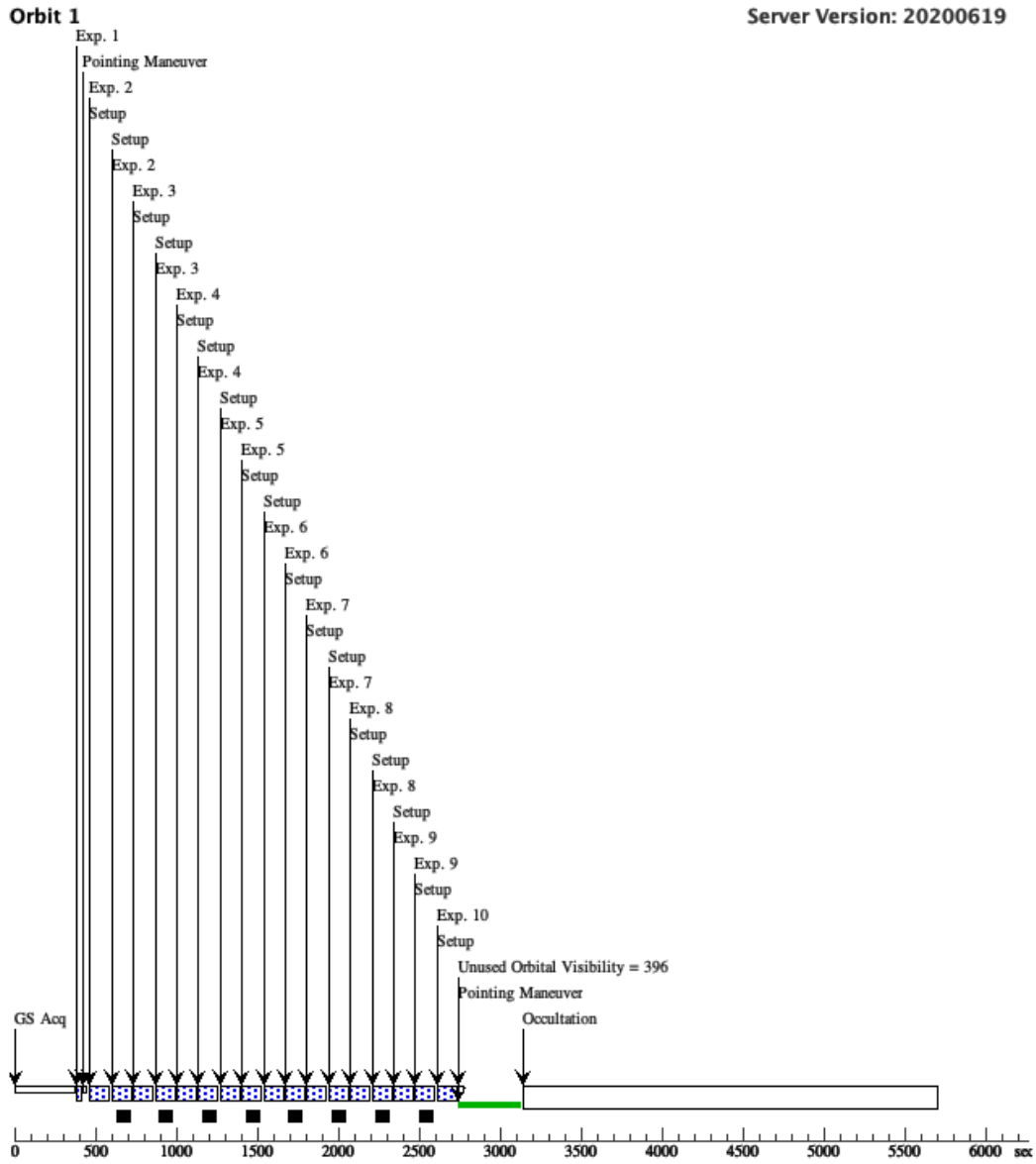
Proposal 15428 - Visit 1, RETRY (02) - Sub-Neptune Atmosphere Characterization in a Multi-Planet System

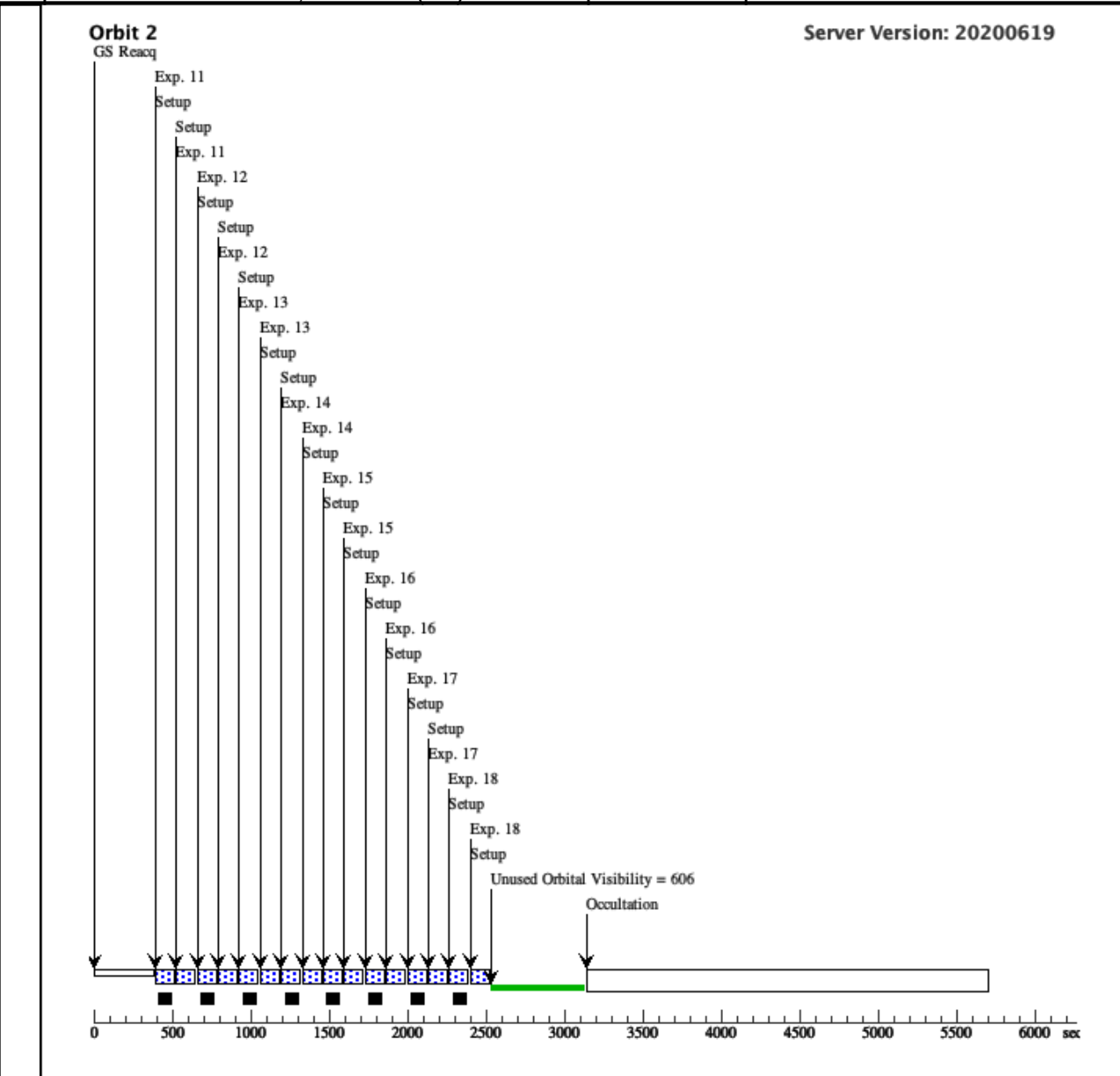
23	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 19-26 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[3]
24	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 19-26 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[3]
25	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 19-26 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[3]
26	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 19-26 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[3]
27	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 27-35 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[4]
28	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 27-35 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[4]
29	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 27-35 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[4]
30	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 27-35 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[4]
31	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 27-35 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[4]
32	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 27-35 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[4]
33	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 27-35 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[4]

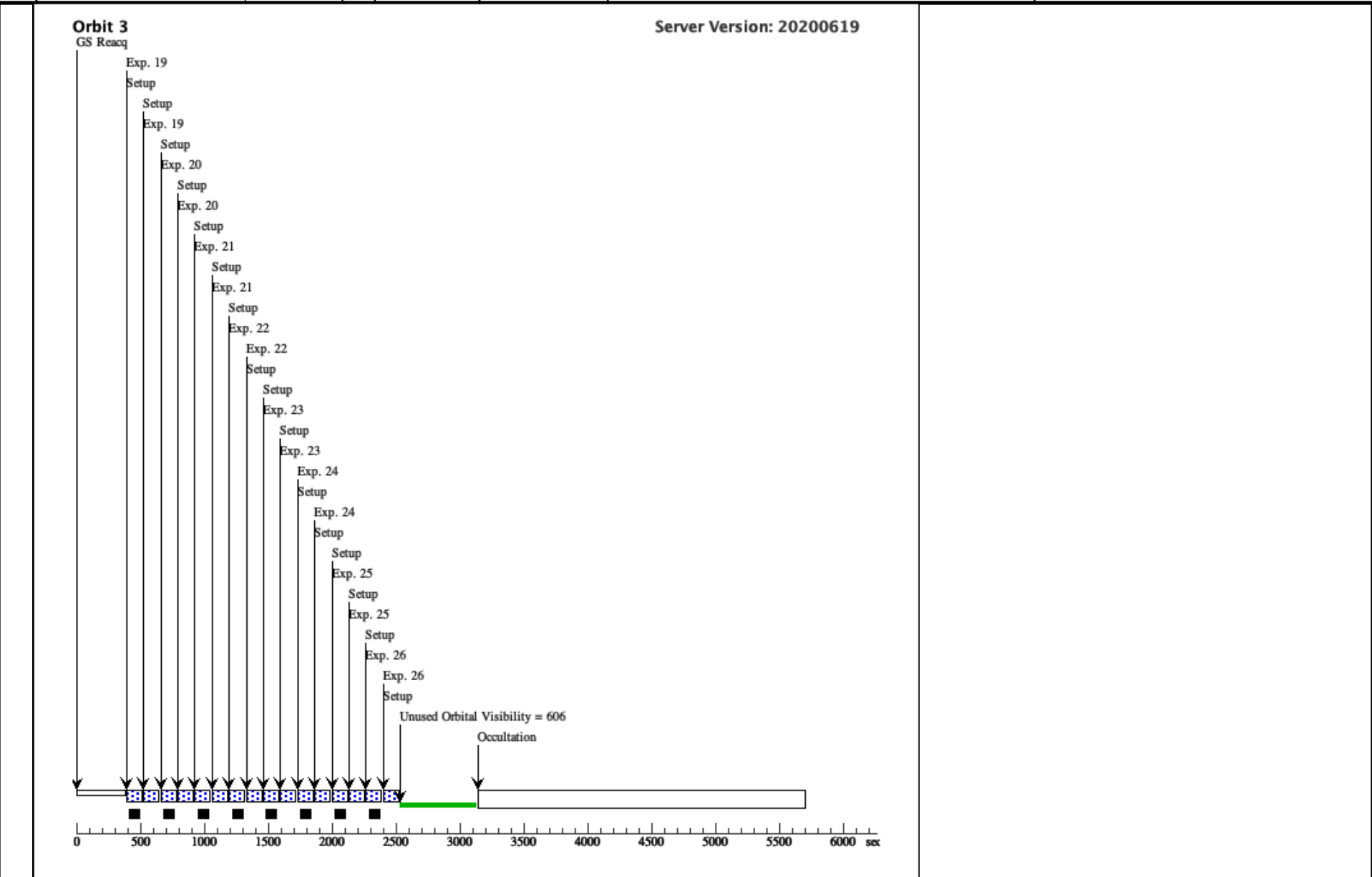
Proposal 15428 - Visit 1, RETRY (02) - Sub-Neptune Atmosphere Characterization in a Multi-Planet System

34	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 27-35 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[4]
35	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 27-35 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[4]
36	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 36-43 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[5]
37	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 36-43 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[5]
38	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 36-43 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[5]
39	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 36-43 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[5]
40	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 36-43 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[5]
41	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 36-43 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[5]
42	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 36-43 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[5]
43	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 36-43 Non-Int in Visit 1, RETRY (02)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[5]

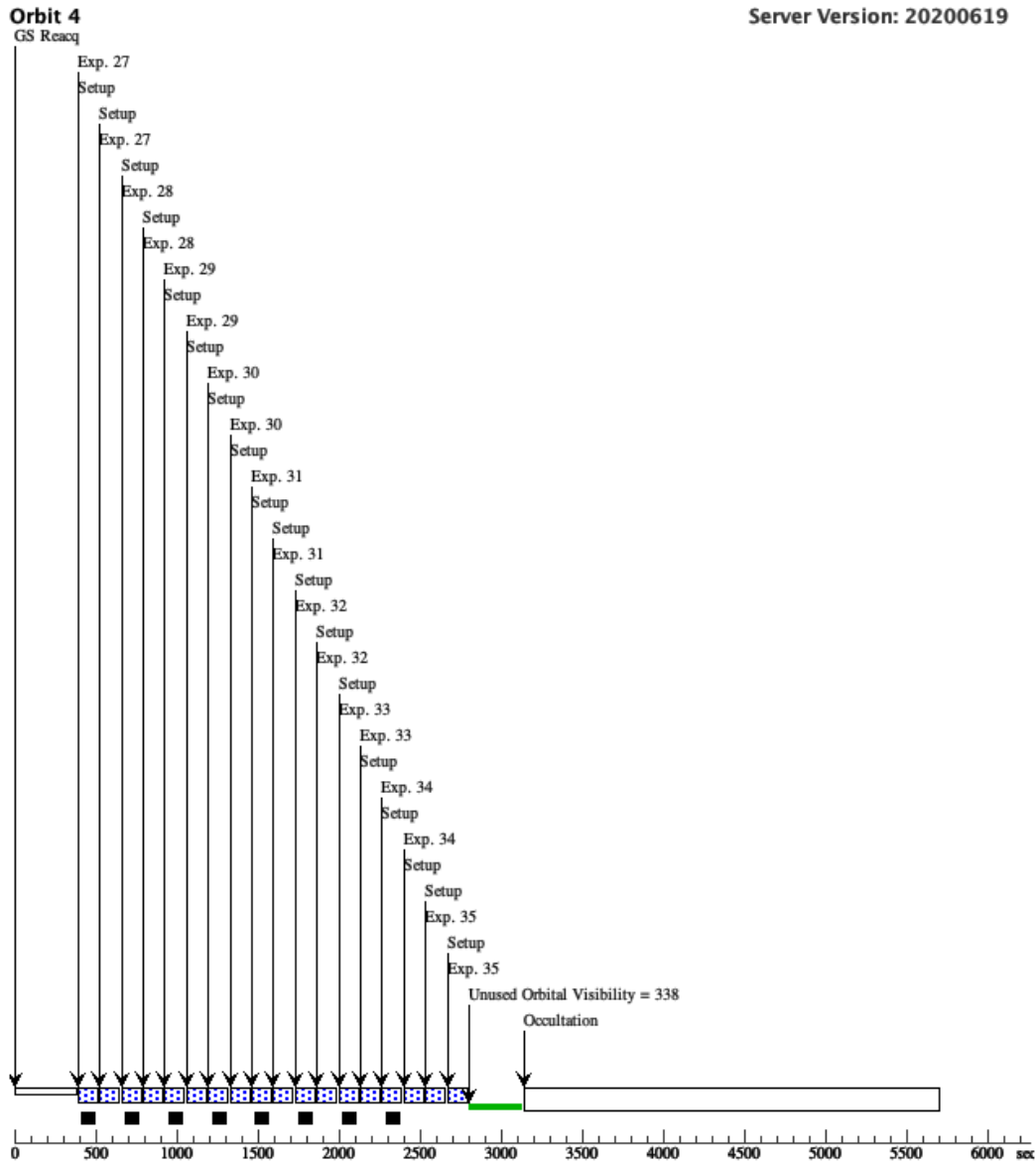
Orbit Structure

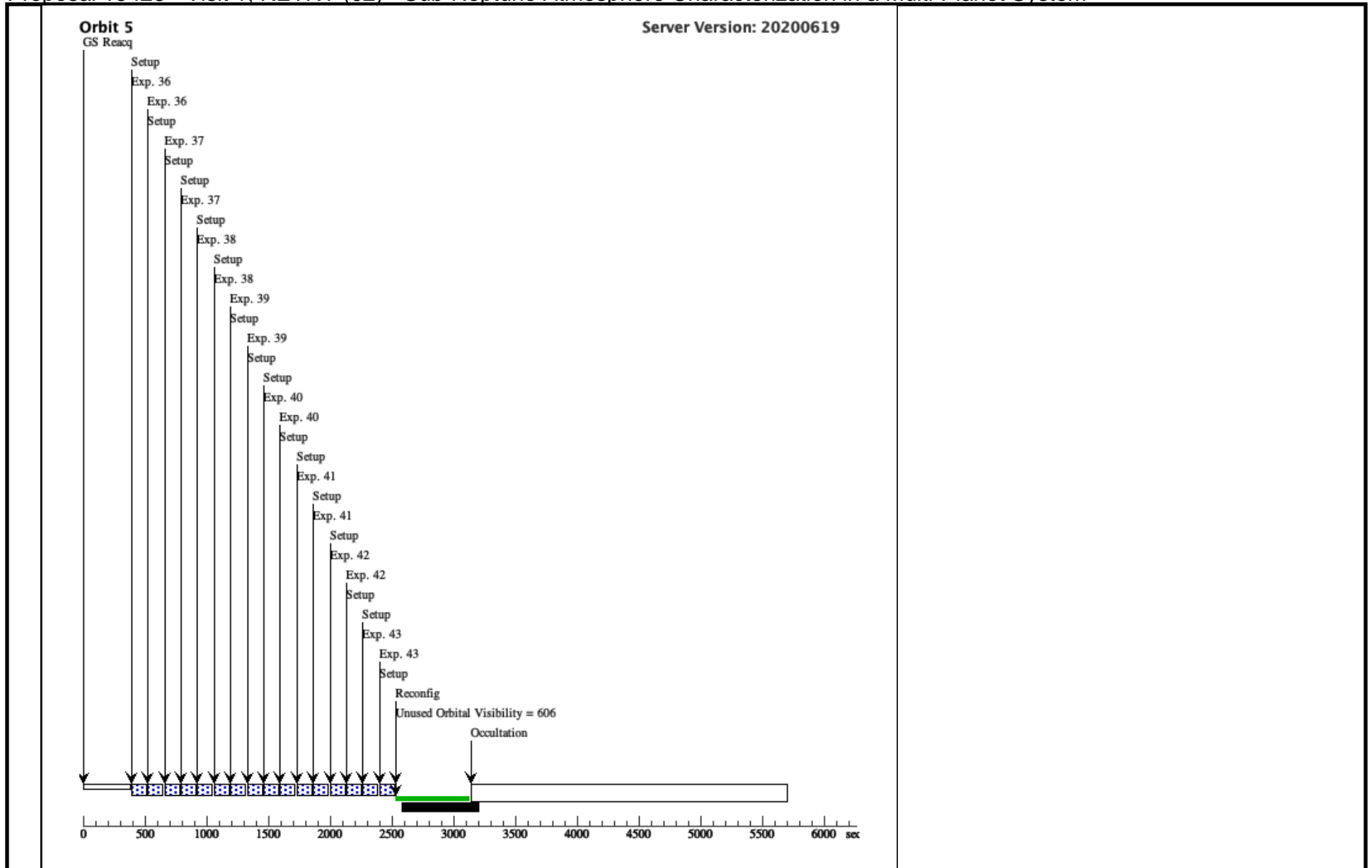






Server Version: 20200619





Proposal 15428 - Visit 2 (03) - Sub-Neptune Atmosphere Characterization in a Multi-Planet System

Tue Sep 22 02:01:16 GMT 2020

Visit	<p>Proposal 15428, Visit 2 (03), implementation</p> <p>Diagnostic Status: No Diagnostics</p> <p>Scientific Instruments: WFC3/IR</p> <p>Special Requirements: BETWEEN 19-MAR-2019:00:52:32 AND 22-MAR-2019:15:55:27; BETWEEN 23-MAR-2019:20:56:32 AND 28-MAR-2019:17:00:27; BETWEEN 29-MAR-2019:22:01:32 AND 13-APR-2019:10:12:27; BETWEEN 15-APR-2019:20:14:32 AND 18-APR-2019:06:15:27; BETWEEN 20-APR-2019:16:17:32 AND 21-APR-2019:21:18:27; BETWEEN 23-APR-2019:02:19:32 AND 25-APR-2019:12:21:27; BETWEEN 26-APR-2019:17:22:32 AND 29-APR-2019:03:24:27; BETWEEN 30-APR-2019:08:25:32 AND 02-MAY-2019:18:27:27; BETWEEN 03-MAY-2019:23:28:32 AND 05-MAY-2019:04:29:27; BETWEEN 07-MAY-2019:14:30:32 AND 10-MAY-2019:00:32:27; BETWEEN 12-MAY-2019:10:34:32 AND 13-MAY-2019:15:35:27; BETWEEN 14-MAY-2019:20:36:32 AND 17-MAY-2019:06:38:27; BETWEEN 18-MAY-2019:11:39:32 AND 20-MAY-2019:21:41:27; BETWEEN 22-MAY-2019:02:42:32 AND 24-MAY-2019:12:43:27; BETWEEN 25-MAY-2019:17:44:32 AND 26-MAY-2019:22:45:27; BETWEEN 29-MAY-2019:08:47:32 AND 31-MAY-2019:18:49:27; 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BETWEEN 18-FEB-2021:02:12:32 AND 21-FEB-2021:08:19:55; BETWEEN 21-FEB-2021:17:20:47 AND 11-MAR-2021:09:00:53; BETWEEN 11-MAR-2021:20:43:59 AND 23-APR-2021:21:27:45; Period 1.20898190 D AND ZERO-PHASE HJD2457738.82586</p>				
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Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	GJ-9827 Alt Name1: BD-02-5958	RA: 23 27 4.8365 (351.7701521d) Dec: -01 17 10.58 (-1.28627d) Equinox: J2000	Proper Motion RA: 373.43 mas/yr Proper Motion Dec: 216.04 mas/yr Parallax: 0.03298" Epoch of Position: 2000 Radial Velocity: 27.00 km/sec	V=10.101 TYPE=K6V, B-V=1.47, E(B-V)=0, F-LINE(2796)=0.20e-12, W-LINE(2796)=0.5, F-LINE(1215)=0.34e-12, W-LINE(1215)=0.65	Reference Frame: SIMBAD
<p>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=STAR Description=[EXTRA-SOLAR PLANET, EXTRA-SOLAR PLANETARY SYSTEM] Extended=NO</p>						

Proposal 15428 - Visit 2 (03) - Sub-Neptune Atmosphere Characterization in a Multi-Planet System

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	GJ9827b DI MAGE	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	F126N	NSAMP=3; SAMP-SEQ=SPAR S5	PHASE 0.81752 TO 0.826212; GS ACQ SCENARIO BASE1B3	Sequence 1-10 Non-Int in Visit 2 (03)	6.696041 Secs (6.696 Secs)	[1]
	2	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-10 Non-Int in Visit 2 (03)	92.538031 Secs (185.076 Secs)	[1]
	3	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-10 Non-Int in Visit 2 (03)	92.538031 Secs (185.076 Secs)	[1]
	4	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-10 Non-Int in Visit 2 (03)	92.538031 Secs (185.076 Secs)	[1]
	5	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-10 Non-Int in Visit 2 (03)	92.538031 Secs (185.076 Secs)	[1]
	6	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-10 Non-Int in Visit 2 (03)	92.538031 Secs (185.076 Secs)	[1]
	7	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-10 Non-Int in Visit 2 (03)	92.538031 Secs (185.076 Secs)	[1]
	8	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-10 Non-Int in Visit 2 (03)	92.538031 Secs (185.076 Secs)	[1]
	9	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 1-10 Non-Int in Visit 2 (03)	92.538031 Secs (185.076 Secs)	[1]
	10	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Forward	Sequence 1-10 Non-Int in Visit 2 (03)	92.538031 Secs (92.538 Secs)	[1]
	11	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Round trip	Sequence 11-18 Non-Int in Visit 2 (03)	92.538031 Secs (185.076 Secs)	[2]

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12	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 11-18 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[2]
13	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 11-18 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[2]
14	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 11-18 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[2]
15	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 11-18 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[2]
16	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 11-18 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[2]
17	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 11-18 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[2]
18	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 11-18 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[2]
19	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 19-26 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[3]
20	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 19-26 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[3]
21	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 19-26 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[3]
22	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 19-26 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[3]

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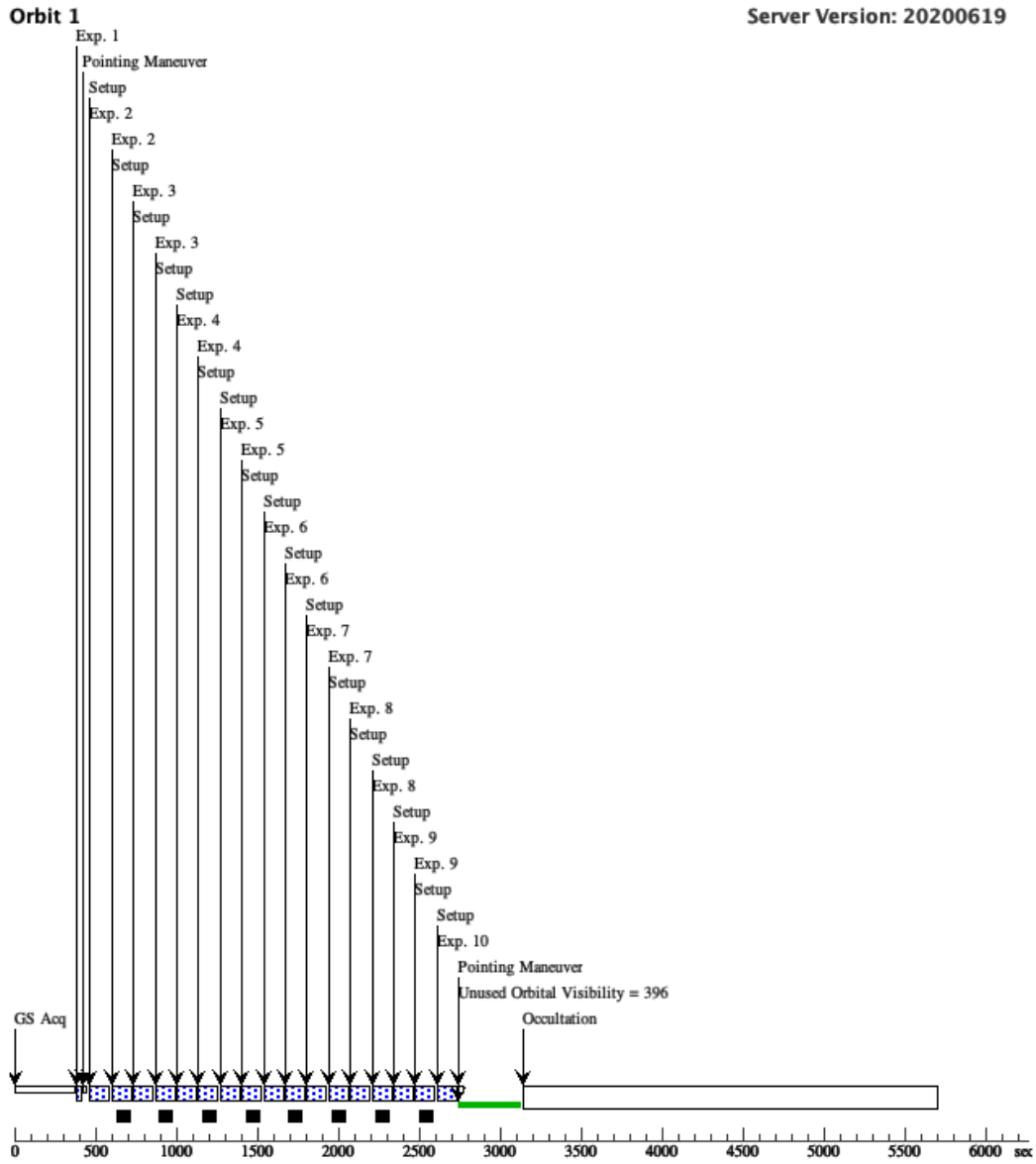
23	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 19-26 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[3]
24	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 19-26 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[3]
25	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 19-26 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[3]
26	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 19-26 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[3]
27	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 27-35 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[4]
28	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 27-35 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[4]
29	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 27-35 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[4]
30	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 27-35 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[4]
31	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 27-35 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[4]
32	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 27-35 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[4]
33	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 27-35 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[4]

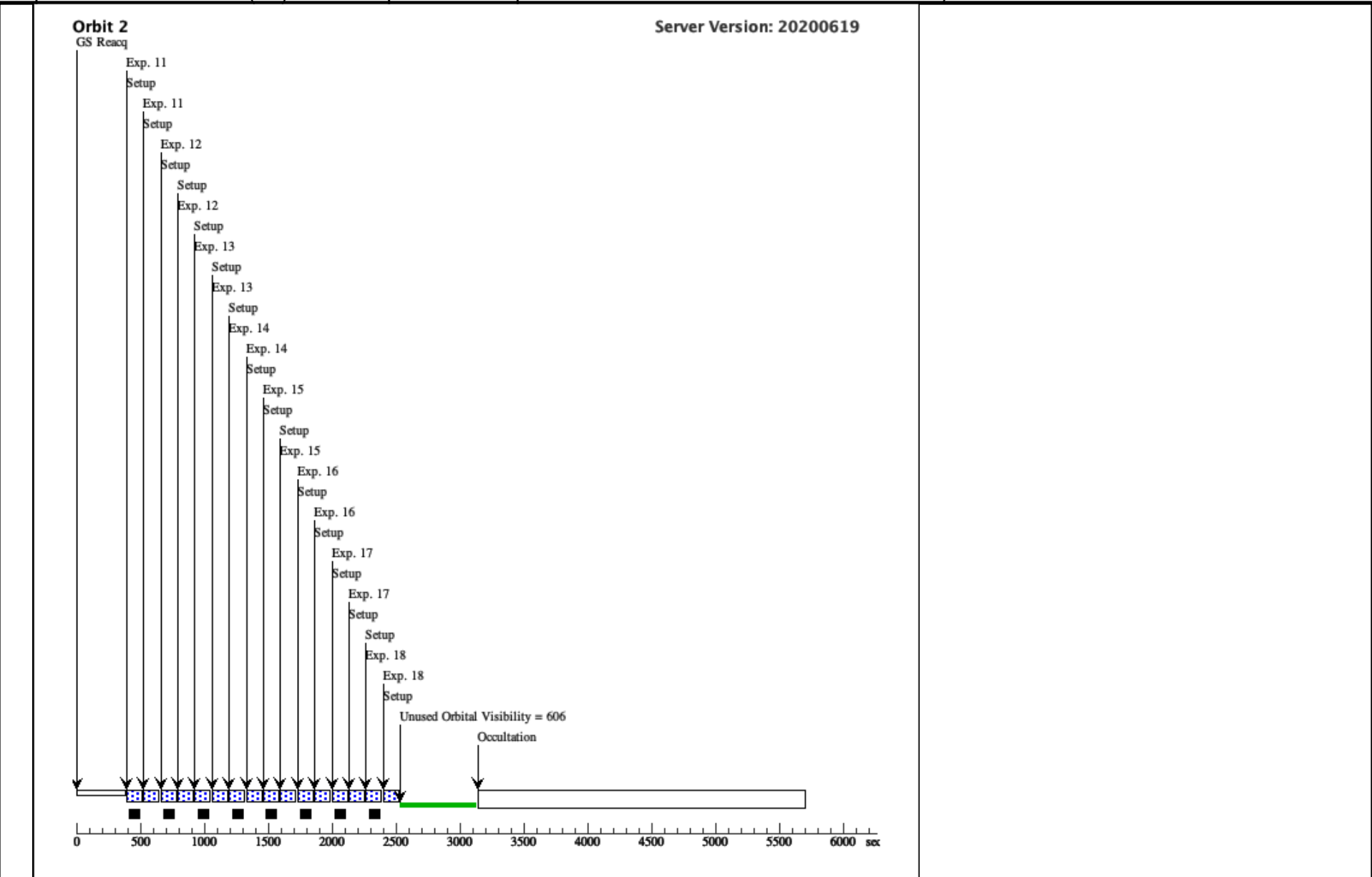
Proposal 15428 - Visit 2 (03) - Sub-Neptune Atmosphere Characterization in a Multi-Planet System

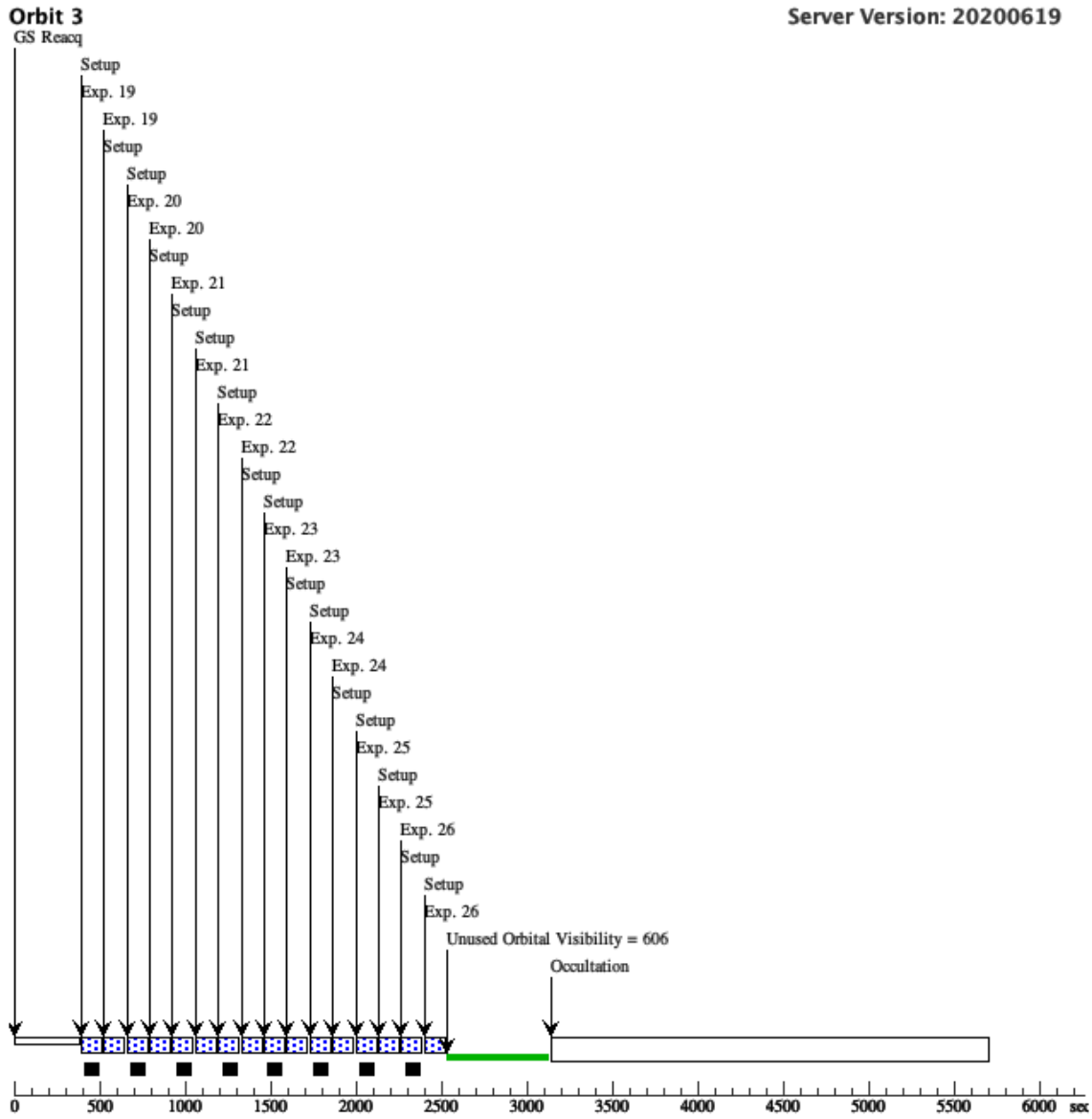
34	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 27-35 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[4]
35	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 27-35 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[4]
36	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 36-43 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[5]
37	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 36-43 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[5]
38	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 36-43 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[5]
39	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 36-43 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[5]
40	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 36-43 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[5]
41	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 36-43 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[5]
42	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 36-43 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[5]
43	Grism	(1) GJ-9827	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=5; SAMP-SEQ=SPAR S25	POS TARG -16.5,-19; SPATIAL SCAN 0.3 65,90.0 Degrees,Rou nd trip	Sequence 36-43 Non -Int in Visit 2 (03)	92.538031 Secs (185.076 Secs) [==>(Forward)] [==>(Reverse)]	[5]

Server Version: 20200619

Orbit Structure







Server Version: 20200619

