



13626 - Light Echoes and Environment of SN 2014J in M82

Cycle: 21, Proposal Category: GO/DD

(Availability Mode: SUPPORTED)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
Dr. Stephen S. Lawrence (PI) (Contact)	Hofstra University	stephen.lawrence@hofstra.edu
Dr. Ben E. K. Sugerman (CoI)	Goucher College	ben.sugerman@goucher.edu

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) SN2014J	WFC3/UVIS	1	07-May-2016 21:00:59.0	yes
02	(1) SN2014J	WFC3/UVIS	1	07-May-2016 21:01:04.0	yes
03	(1) SN2014J	WFC3/UVIS	1	07-May-2016 21:01:08.0	yes
04	(1) SN2014J	WFC3/UVIS	2	07-May-2016 21:01:19.0	yes
05	(1) SN2014J	WFC3/UVIS	1	07-May-2016 21:01:25.0	yes

6 Total Orbits Used

ABSTRACT

Supernova 2014J is likely the closest Type Ia SN since 1885. This offers us a unique opportunity to study the environment of SNe Ia, here at a level of detail several times better than any other, farther SN Ia observed by HST. Prime tools for probing this environment, supernova light echoes, are likely to succeed given what we know about where this SN resides in its host galaxy, M82. M82 is a spacial galaxy in terms of star formation activity, and SN 2014J offers a special probe of this galaxy since it is a Ia, not core collapse SN, so more likely to sample the structure of M82 more typically, rather than centered on a region recently producing massive stars, such as a core-collapse progenitor. We describe how the light echo mapping that will be provided by the proposed observations will produce a high-resolution, three-dimensional view of a large part of M82, and how

this can be directly compared to models of the interstellar medium to learn how star formation feeds back into the gaseous structure of galaxies. This comparison is arguably only possible with SN light echoes, of which SN 2014J is likely to provide the most useful example.

OBSERVING DESCRIPTION

The prime purpose of these observations is to obtain unsaturated or only mildly saturated images primarily in broad bands in which the field containing SN 2014J was imaged prior to the SN outburst. These bands are F438W, F555W and F814W. Exposure times will need to be adjusted to provide these, given the somewhat unpredictable variable nature of the source. In addition there are several narrow bands observed before outburst that can be compared to look at new extended sources in atomic line transitions (F487N, F502N, F658N, F673N). For these we need if possible to achieve satisfactory S/N ratio in the background galaxy surface brightness. Finally, we will use some small fraction of exposure time to extend the UV light curve past maximum light and look for extended UV reflection for this unique object (F218W, F225W, F275W, F336W).

Proposal 13626 - sn2014j-quicklook (01) - Light Echoes and Environment of SN 2014J in M82

Sun May 08 01:01:27 GMT 2016

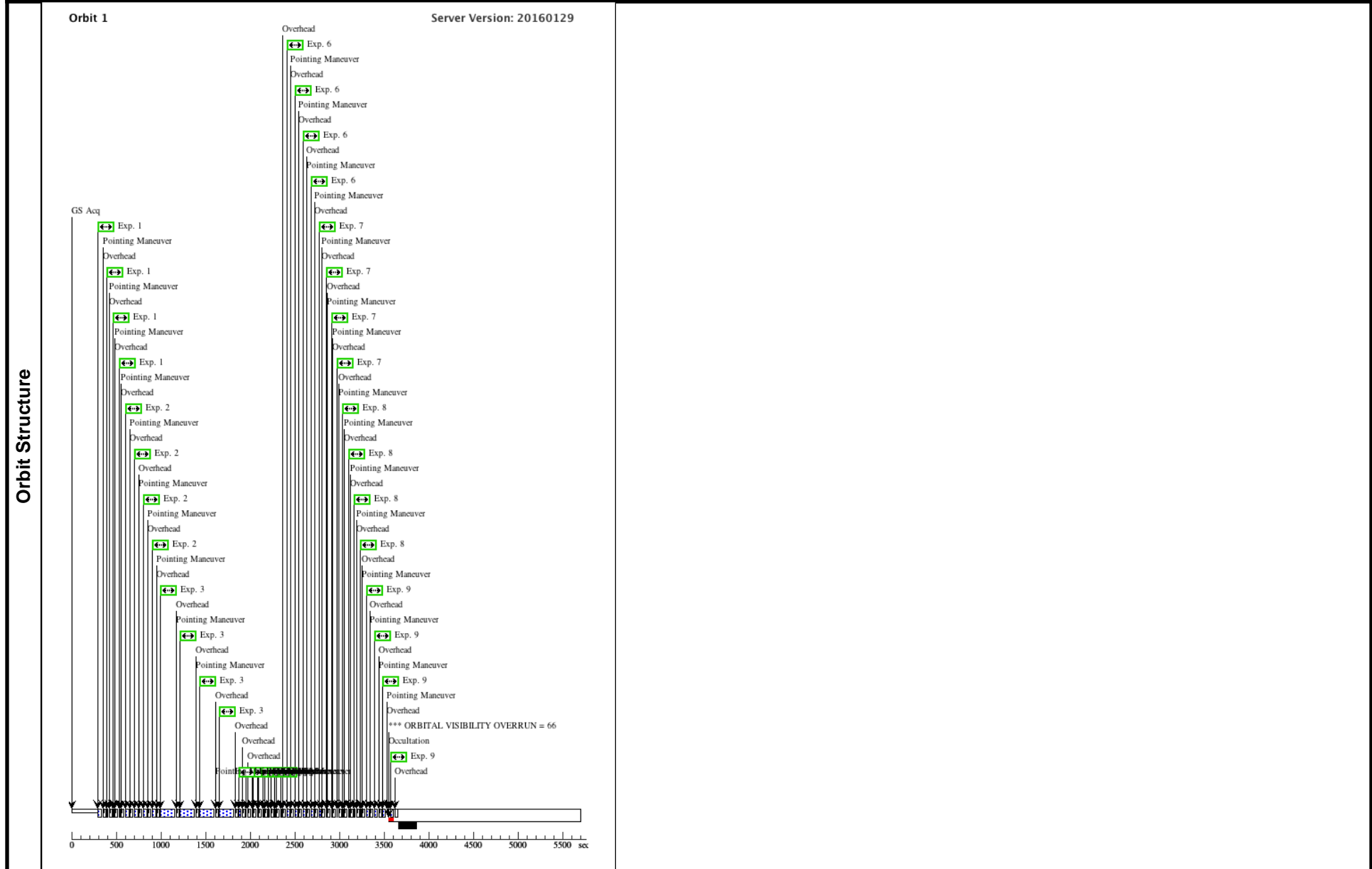
Visit	<p>Proposal 13626, sn2014j-quicklook (01), completed</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: WFC3/UVIS</p> <p>Special Requirements: BETWEEN 11-MAR-2014:00:00:00 AND 18-MAR-2014:00:00:00</p> <p><i>Comments: The purpose of this visit is to obtain immediately post-maximum imaging of SN 2014J in M82 in such a way as not grossly oversaturate the SN point source but still detect the galaxy's surface brightness at good efficiency. This one-orbit visit uses some of the same filters that will be employed on Visit 2, but will verify that we are using the proper selection of exposure times and apertures most effectively.</i></p>					
	Diagnostics	<p>(sn2014j-quicklook (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN</p> <p>(f438w-10-1 (01.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f438w-40-1 (01.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f438w-160-1 (01.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-2-1 (01.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-8-1 (01.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-32-1 (01.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f814w-2-1 (01.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f814w-8-1 (01.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f814w-32-1 (01.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p>				
Patterns		#	Primary Pattern	Secondary Pattern	Exposures	
	(3)	<p>Pattern Type=WFC3-UVIS-DITHER-BOX</p> <p>Purpose=DITHER</p> <p>Number Of Points=4</p> <p>Point Spacing=0.173</p> <p>Line Spacing=0.112</p>	<p>Coordinate Frame=POS-TARG</p> <p>Pattern Orientation=23.884</p> <p>Angle Between Sides=81.785</p> <p>Center Pattern=false</p>	(1), (2), (3), (4), (5), (6), (7), (8), (9)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	SN2014J	<p>RA: 09 55 42.1400 (148.9255833d)</p> <p>Dec: +69 40 26.00 (69.67389d)</p> <p>Equinox: J2000</p>		V=10+/-1	Reference Frame: ICRS

Proposal 13626 - sn2014j-quicklook (01) - Light Echoes and Environment of SN 2014J in M82

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	f438w-10-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F438W	FLASH=6	GS ACQ SCENARI O BASE1B3	Pattern 3, Exps 1-1 i n sn2014j-quicklook (01) (3)	10 Secs (40 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	f438w-40-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F438W	FLASH=6		Pattern 3, Exps 2-2 i n sn2014j-quicklook (01) (3)	40 Secs (160 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3	f438w-160-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F438W	FLASH=6		Pattern 3, Exps 3-3 i n sn2014j-quicklook (01) (3)	160 Secs (640 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	4	f555w-2-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 4-4 i n sn2014j-quicklook (01) (3)	2 Secs (8 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	5	f555w-8-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 5-5 i n sn2014j-quicklook (01) (3)	8 Secs (32 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	6	f555w-32-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 6-6 i n sn2014j-quicklook (01) (3)	32 Secs (128 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	7	f814w-2-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F814W	FLASH=6		Pattern 3, Exps 7-7 i n sn2014j-quicklook (01) (3)	2 Secs (8 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	8	f814w-8-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F814W	FLASH=6		Pattern 3, Exps 8-8 i n sn2014j-quicklook (01) (3)	8 Secs (32 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]

Proposal 13626 - sn2014j-quicklook (01) - Light Echoes and Environment of SN 2014J in M82

9	f814w-32-1 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F814W	FLASH=6	Pattern 3, Exps 9-9 i n sn2014j-quicklook (01) (3)	32 Secs (128 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
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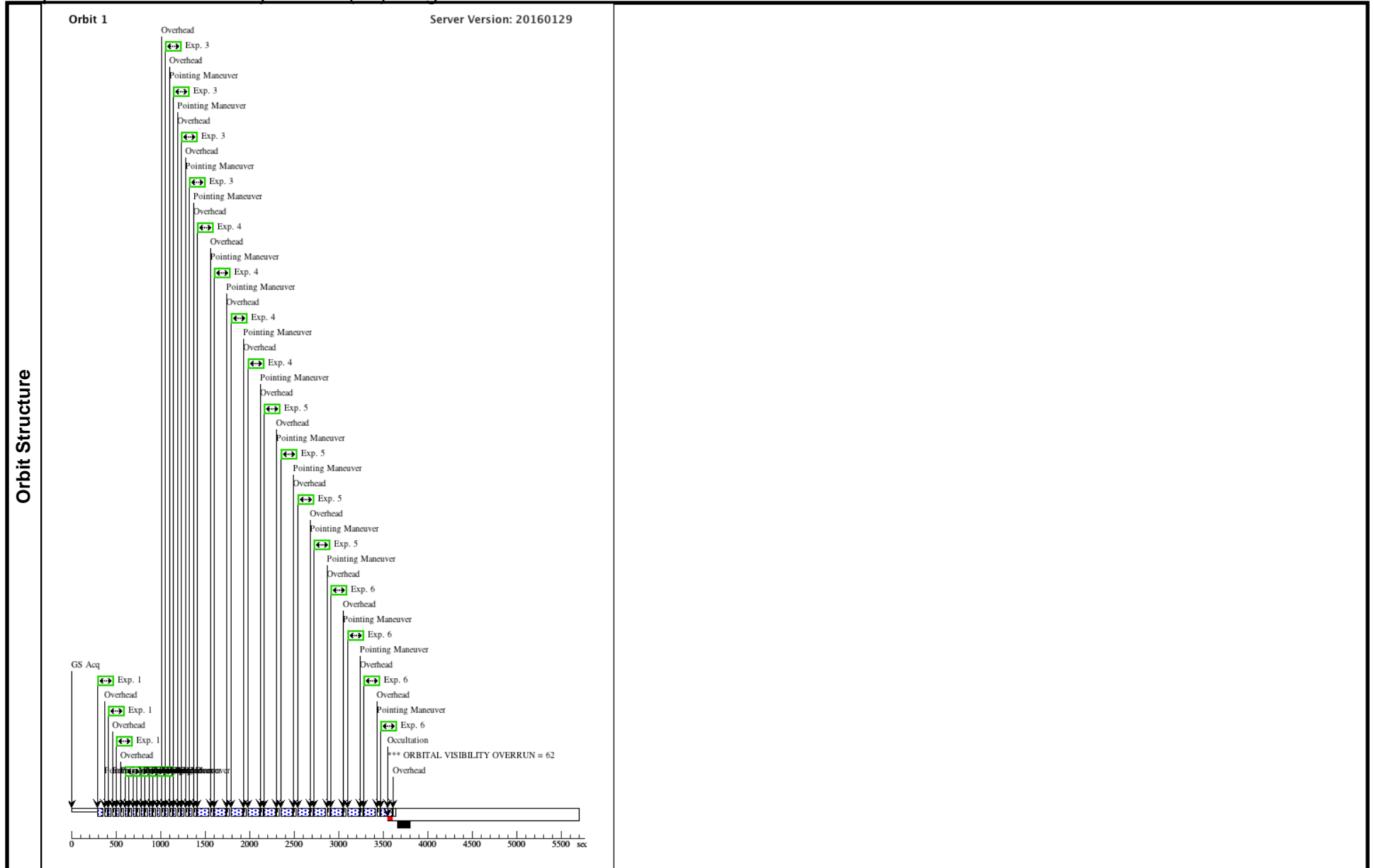
Proposal 13626 - sn2014j-end1st (02) - Light Echoes and Environment of SN 2014J in M82

Sun May 08 01:01:27 GMT 2016

Visit	<p>Proposal 13626, sn2014j-end1st (02), completed</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: WFC3/UVIS</p> <p>Special Requirements: BETWEEN 25-MAR-2014:00:00:00 AND 30-MAR-2014:00:00:00</p> <p><i>Comments: This Visit 2 defines most of the data for the first epoch of the project, and will be adjusted according to the results of Visit 1. Since SN 2014J is a highly variable and not well-predicted source, we may need to adjust the exposure times in Visit 2 according to Visit 1.</i></p>															
	<p>(sn2014j-end1st (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN</p> <p>(f555w-32-1 (02.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-32-2 (02.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-32-3 (02.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-128-1 (02.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-128-2 (02.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-128-3 (02.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p>															
Diagnosics																
Patterns	<table border="1"> <thead> <tr> <th>#</th> <th>Primary Pattern</th> <th>Secondary Pattern</th> <th>Exposures</th> </tr> </thead> <tbody> <tr> <td>(3)</td> <td> Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112 </td> <td> Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false </td> <td>(1), (2), (3), (4), (5), (6)</td> </tr> </tbody> </table>	#	Primary Pattern	Secondary Pattern	Exposures	(3)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false	(1), (2), (3), (4), (5), (6)							
	#	Primary Pattern	Secondary Pattern	Exposures												
(3)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false	(1), (2), (3), (4), (5), (6)													
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>SN2014J</td> <td> RA: 09 55 42.1400 (148.9255833d) Dec: +69 40 26.00 (69.67389d) Equinox: J2000 </td> <td></td> <td>V=10+/-1</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	SN2014J	RA: 09 55 42.1400 (148.9255833d) Dec: +69 40 26.00 (69.67389d) Equinox: J2000		V=10+/-1	Reference Frame: ICRS			
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous										
(1)	SN2014J	RA: 09 55 42.1400 (148.9255833d) Dec: +69 40 26.00 (69.67389d) Equinox: J2000		V=10+/-1	Reference Frame: ICRS											

Proposal 13626 - sn2014j-end1st (02) - Light Echoes and Environment of SN 2014J in M82

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	f555w-32-1 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6	GS ACQ SCENARI O BASE1B3	Pattern 3, Exps 1-1 i n sn2014j-end1st (02) (3)	32 Secs (128 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	f555w-32-2 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 2-2 i n sn2014j-end1st (02) (3)	32 Secs (128 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3	f555w-32-3 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 3-3 i n sn2014j-end1st (02) (3)	32 Secs (128 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	4	f555w-128-1 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 4-4 i n sn2014j-end1st (02) (3)	128 Secs (512 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	5	f555w-128-2 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 5-5 i n sn2014j-end1st (02) (3)	128 Secs (512 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	6	f555w-128-3 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 6-6 i n sn2014j-end1st (02) (3)	128 Secs (512 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]



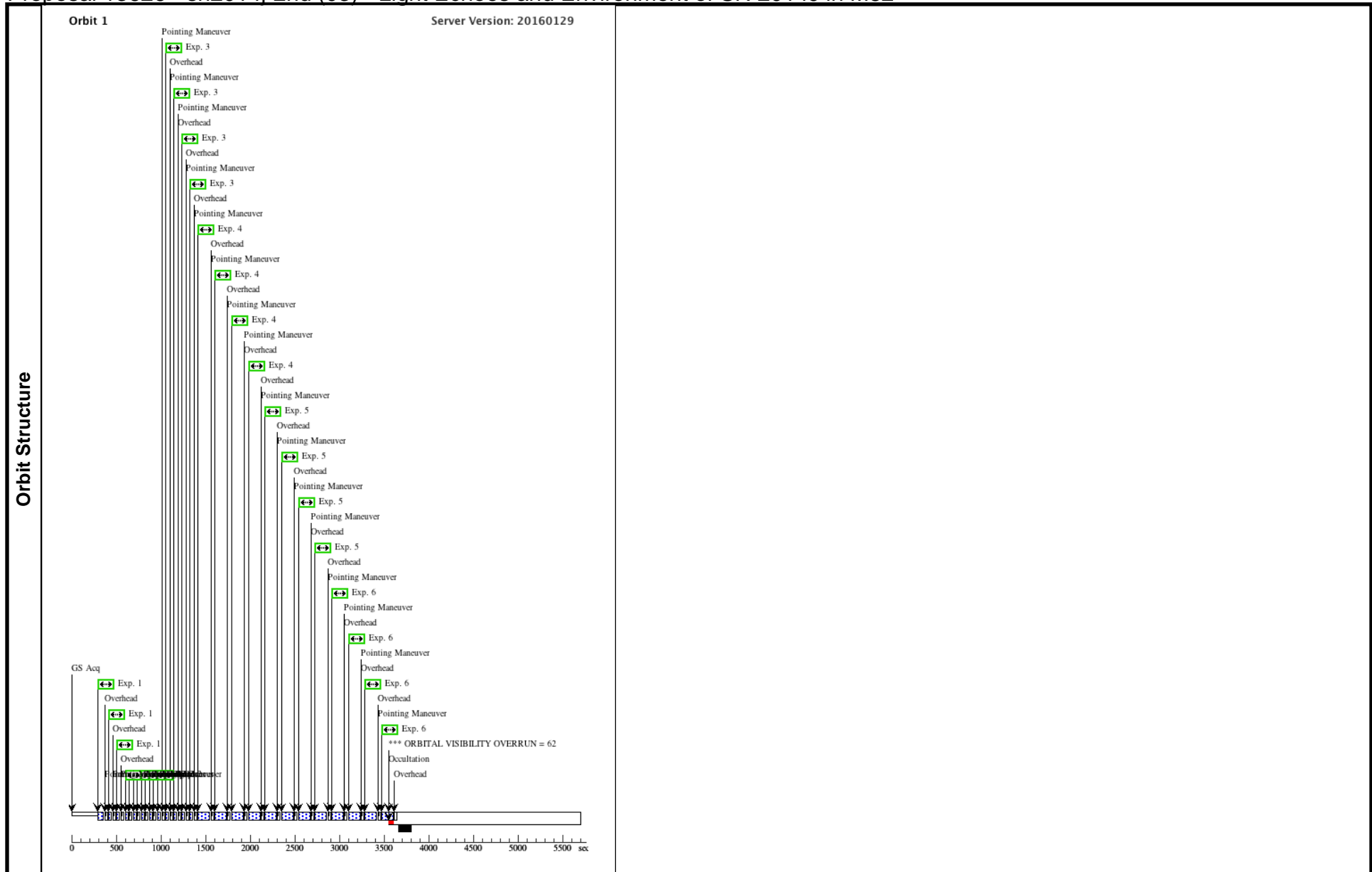
Proposal 13626 - sn2014j-2nd (03) - Light Echoes and Environment of SN 2014J in M82

Sun May 08 01:01:27 GMT 2016

Visit	<p>Proposal 13626, sn2014j-2nd (03), completed</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: WFC3/UVIS</p> <p>Special Requirements: BETWEEN 04-MAY-2014:00:00:00 AND 10-MAY-2014:00:00:00</p> <p><i>Comments: This Visit 3 defines the data for the second epoch of the project, and will be adjusted according to the results of Visits 1 and 2. Since SN 2014J is a highly variable and not well-predicted source, we may need to adjust the exposure times in Visit 2 according to Visit 1.</i></p>					
	<p>(sn2014j-2nd (03)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN</p> <p>(f555w-32-1 (03.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-32-2 (03.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-32-3 (03.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-128-1 (03.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-128-2 (03.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-128-3 (03.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p>					
Diagnosics						
Patterns	#	Primary Pattern	Secondary Pattern	Exposures		
	(3)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false	(1), (2), (3), (4), (5), (6)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	SN2014J	RA: 09 55 42.1400 (148.9255833d) Dec: +69 40 26.00 (69.67389d) Equinox: J2000		V=10+/-1	Reference Frame: ICRS

Proposal 13626 - sn2014j-2nd (03) - Light Echoes and Environment of SN 2014J in M82

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	f555w-32-1 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6	GS ACQ SCENARI O BASE1B3	Pattern 3, Exps 1-1 in sn2014j-2nd (03) (3)	32 Secs (128 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	f555w-32-2 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 2-2 in sn2014j-2nd (03) (3)	32 Secs (128 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3	f555w-32-3 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 3-3 in sn2014j-2nd (03) (3)	32 Secs (128 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	4	f555w-128-1 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 4-4 in sn2014j-2nd (03) (3)	128 Secs (512 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	5	f555w-128-2 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 5-5 in sn2014j-2nd (03) (3)	128 Secs (512 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	6	f555w-128-3 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 6-6 in sn2014j-2nd (03) (3)	128 Secs (512 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]



Proposal 13626 - sn2014j-3rd (04) - Light Echoes and Environment of SN 2014J in M82

Sun May 08 01:01:28 GMT 2016

Visit	<p>Proposal 13626, sn2014j-3rd (04), completed</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: WFC3/UVIS</p> <p>Special Requirements: BETWEEN 05-SEP-2014:00:00:00 AND 11-SEP-2014:00:00:00</p> <p><i>Comments: This Visit 4 defines the data for the third epoch of the project, and will be adjusted according to the results of Visits 1 through 3. Since SN 2014J is a highly variable and not well-predicted source, we may need to adjust the exposure times in Visit 4 according to Visits 1 through 3. Visit 4 needs to occur about three months after Visit 3.</i></p>					
	Diagnostics	<p>(sn2014j-3rd (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN</p> <p>(sn2014j-3rd (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN</p> <p>(f438w-64-1 (04.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f438w-64-2 (04.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-64-3 (04.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-64-4 (04.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-4-1 (04.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-4-2 (04.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-4-3 (04.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f814w-64-1 (04.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f814w-64-2 (04.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f218w-60-1 (04.010)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f225w-30-1 (04.011)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f275w-10-1 (04.012)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f336w-2-1 (04.013)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f487n-40-1 (04.014)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f502n-40-1 (04.015)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f658n-40-1 (04.016)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f673n-40-1 (04.017)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-32-1 (04.018)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p> <p>(f555w-32-1 (04.019)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser</p>				
Patterns		#	Primary Pattern	Secondary Pattern	Exposures	
	(2)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false	(10), (11), (12), (13), (14), (15), (16), (17)		
	(3)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false	(1), (2), (3), (4), (5), (6), (7), (8), (9), (18), (19)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	SN2014J	RA: 09 55 42.1400 (148.9255833d) Dec: +69 40 26.00 (69.67389d) Equinox: J2000		V=10+/-1	Reference Frame: ICRS

Proposal 13626 - sn2014j-3rd (04) - Light Echoes and Environment of SN 2014J in M82

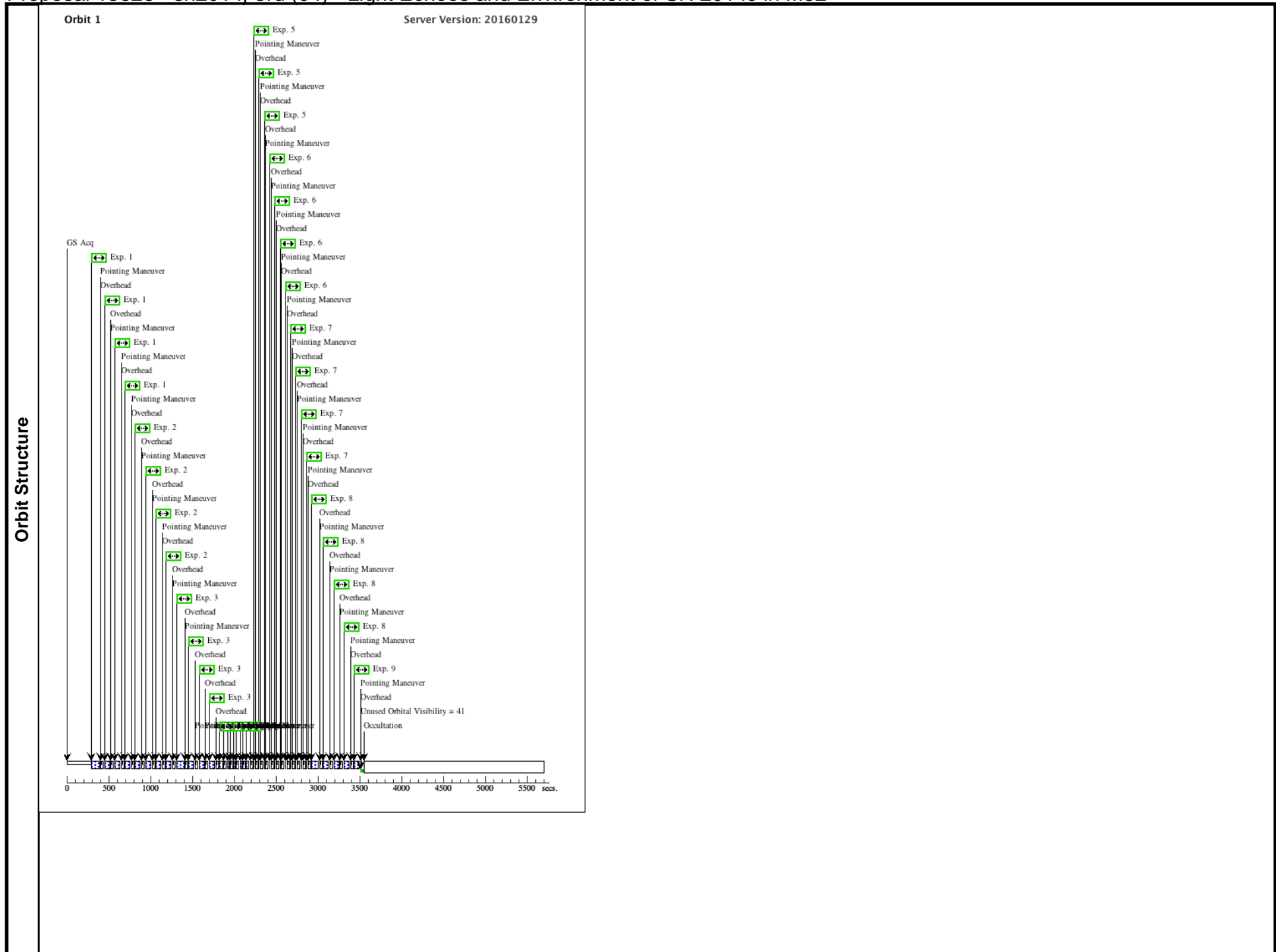
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	f438w-64-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F438W	FLASH=6	GS ACQ SCENARI O BASE1B3	Pattern 3, Exps 1-1 i n sn2014j-3rd (04) (3)	64 Secs (256 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	f438w-64-2	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F438W	FLASH=6		Pattern 3, Exps 2-2 i n sn2014j-3rd (04) (3)	64 Secs (256 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3	f555w-64-3	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 3-3 i n sn2014j-3rd (04) (3)	64 Secs (256 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	4	f555w-64-4	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F438W	FLASH=6		Pattern 3, Exps 4-4 i n sn2014j-3rd (04) (3)	16 Secs (64 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	5	f555w-4-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 5-5 i n sn2014j-3rd (04) (3)	4 Secs (16 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	6	f555w-4-2	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 6-6 i n sn2014j-3rd (04) (3)	4 Secs (16 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	7	f555w-4-3	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 7-7 i n sn2014j-3rd (04) (3)	4 Secs (16 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	8	f814w-64-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F814W	FLASH=6		Pattern 3, Exps 8-8 i n sn2014j-3rd (04) (3)	64 Secs (256 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]

Proposal 13626 - sn2014j-3rd (04) - Light Echoes and Environment of SN 2014J in M82

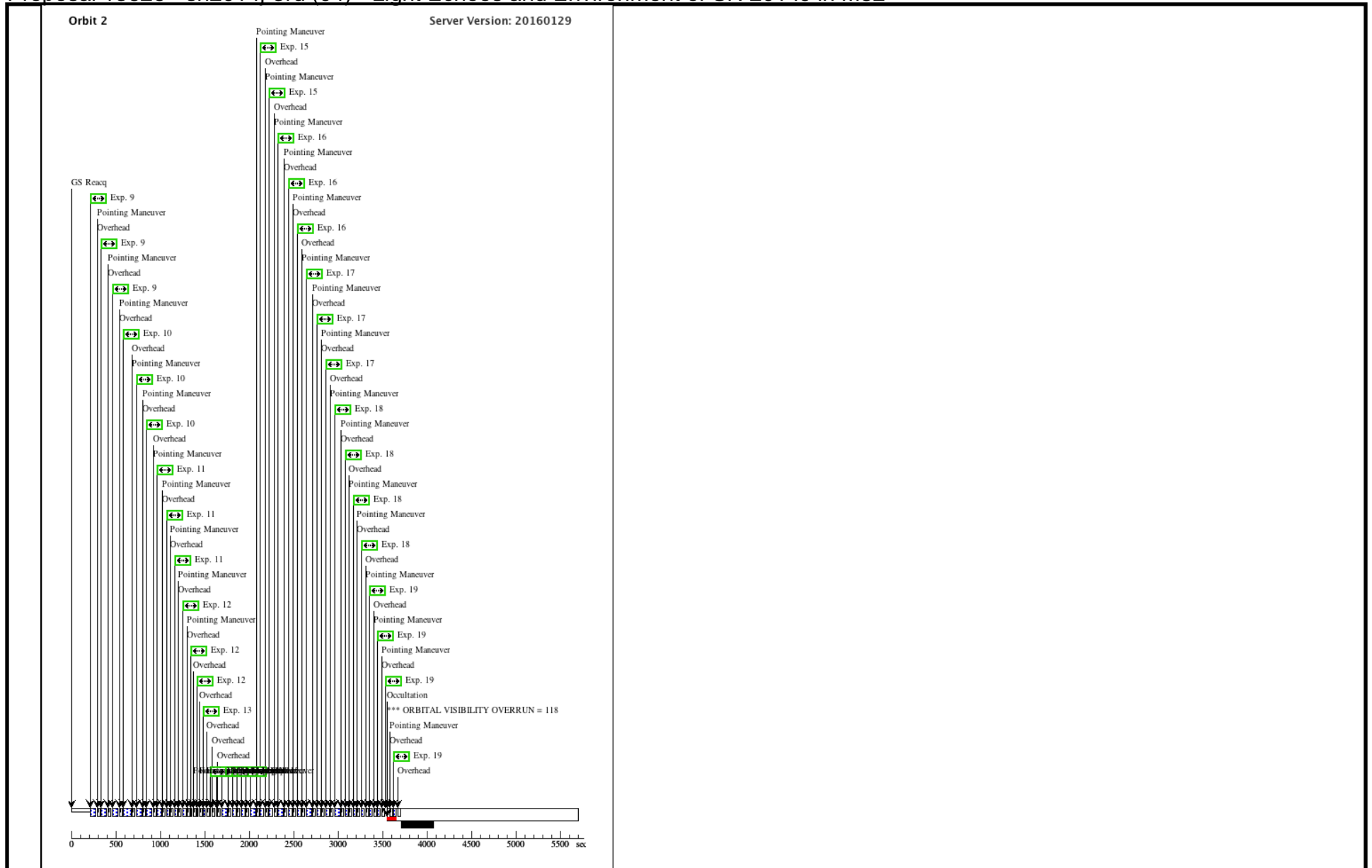
9	f814w-64-2	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F814W	FLASH=6	Pattern 3, Exps 9-9 in sn2014j-3rd (04) (3)	64 Secs (256 Secs)	
							[==>(Pattern 1)]	[1]
							[==>(Pattern 2)]	
							[==>(Pattern 3)]	[2]
							[==>(Pattern 4)]	
10	f218w-60-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F218W	FLASH=6	Pattern 2, Exps 10-10 in sn2014j-3rd (04) (2)	60 Secs (180 Secs)	
							[==>(Pattern 1)]	
							[==>(Pattern 2)]	[2]
							[==>(Pattern 3)]	
11	f225w-30-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F225W	FLASH=6	Pattern 2, Exps 11-11 in sn2014j-3rd (04) (2)	30 Secs (90 Secs)	
							[==>(Pattern 1)]	
							[==>(Pattern 2)]	[2]
							[==>(Pattern 3)]	
12	f275w-10-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F275W	FLASH=6	Pattern 2, Exps 12-12 in sn2014j-3rd (04) (2)	10 Secs (30 Secs)	
							[==>(Pattern 1)]	
							[==>(Pattern 2)]	[2]
							[==>(Pattern 3)]	
13	f336w-2-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=6	Pattern 2, Exps 13-13 in sn2014j-3rd (04) (2)	2 Secs (6 Secs)	
							[==>(Pattern 1)]	
							[==>(Pattern 2)]	[2]
							[==>(Pattern 3)]	
14	f487n-40-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F487N	FLASH=6	Pattern 2, Exps 14-14 in sn2014j-3rd (04) (2)	40 Secs (120 Secs)	
							[==>(Pattern 1)]	
							[==>(Pattern 2)]	[2]
							[==>(Pattern 3)]	
15	f502n-40-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F502N	FLASH=6	Pattern 2, Exps 15-15 in sn2014j-3rd (04) (2)	40 Secs (120 Secs)	
							[==>(Pattern 1)]	
							[==>(Pattern 2)]	[2]
							[==>(Pattern 3)]	
16	f658n-40-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F658N	FLASH=6	Pattern 2, Exps 16-16 in sn2014j-3rd (04) (2)	40 Secs (120 Secs)	
							[==>(Pattern 1)]	
							[==>(Pattern 2)]	[2]
							[==>(Pattern 3)]	
17	f673n-40-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F673N	FLASH=6	Pattern 2, Exps 17-17 in sn2014j-3rd (04) (2)	40 Secs (120 Secs)	
							[==>(Pattern 1)]	
							[==>(Pattern 2)]	[2]
							[==>(Pattern 3)]	
18	f555w-32-1	(1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6	Pattern 3, Exps 18-18 in sn2014j-3rd (04) (3)	32 Secs (128 Secs)	
							[==>(Pattern 1)]	
							[==>(Pattern 2)]	
							[==>(Pattern 3)]	
							[==>(Pattern 4)]	[2]

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	19 f555w-32-1 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6	Pattern 3, Exps 19-1 9 in sn2014j-3rd (04) (3)	32 Secs (128 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]
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Proposal 13626 - sn2014j-3rd (04) - Light Echoes and Environment of SN 2014J in M82



Proposal 13626 - sn2014j-4th (05) - Light Echoes and Environment of SN 2014J in M82

Sun May 08 01:01:28 GMT 2016

Visit	Proposal 13626, sn2014j-4th (05), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: BETWEEN 01-JAN-2015:00:00:00 AND 25-MAR-2015:00:00:00 <i>Comments: This Visit 5 defines the data for the fourth epoch of the project.</i>					
	Diagnosics (sn2014j-4th (05)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (f555w-32-1 (05.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (f555w-32-2 (05.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (f555w-32-3 (05.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (f438w-128-1 (05.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (f438w-128-2 (05.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (f438w-128-3 (05.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser					
Patterns	#	Primary Pattern	Secondary Pattern	Exposures		
	(3)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112 Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1), (2), (3), (4), (5), (6)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	SN2014J	RA: 09 55 42.1400 (148.9255833d) Dec: +69 40 26.00 (69.67389d) Equinox: J2000		V=10+/-1	Reference Frame: ICRS

Proposal 13626 - sn2014j-4th (05) - Light Echoes and Environment of SN 2014J in M82

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	f555w-32-1 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6	GS ACQ SCENARIO BASE1B3	Pattern 3, Exps 1-1 in sn2014j-4th (05) (3)	32 Secs (128 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	f555w-32-2 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 2-2 in sn2014j-4th (05) (3)	32 Secs (128 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3	f555w-32-3 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=6		Pattern 3, Exps 3-3 in sn2014j-4th (05) (3)	32 Secs (128 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	4	f438w-128-1 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F438W	FLASH=4		Pattern 3, Exps 4-4 in sn2014j-4th (05) (3)	128 Secs (512 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	5	f438w-128-2 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F438W	FLASH=4		Pattern 3, Exps 5-5 in sn2014j-4th (05) (3)	128 Secs (512 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	6	f438w-128-3 (1) SN2014J	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F438W	FLASH=4		Pattern 3, Exps 6-6 in sn2014j-4th (05) (3)	128 Secs (512 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]

