13737 - Whimper of a Bang: Documenting the Final Days of the Nearby Type Ia Supernova 2011fe

Cycle: 22, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(2) SN-2011FE-OUTER ANY	ACS/WFC WFC3/IR WFC3/UVIS	4	11-May-2015 11:08:23.0	yes
02	(1) SN-2011FE-CEPHF1 ANY	ACS/WFC WFC3/IR WFC3/UVIS	5	11-May-2015 11:08:31.0	yes
03	(3) SN-2011FE-CEPHF2 ANY	ACS/WFC WFC3/UVIS	4	11-May-2015 11:08:37.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
04	(3) SN-2011FE-CEPHF2 ANY	ACS/WFC WFC3/IR WFC3/UVIS	3	11-May-2015 11:08:42.0	yes

16 Total Orbits Used

ABSTRACT

Even though SNe Ia are crucial to cosmological studies as distance indicators, the exact nature of these systems remains theoretically ambiguous and observationally elusive. However, there is a new hope. Due to nucleosynthetic effects during explosion, single and double degenerate SNe Ia models are predicted to produce vastly differing amounts 57Co and 55Fe. 57Co and 55Fe dominate the power of the very late time light curves of SNe Ia at ~1050 days and ~1500 after the initial explosion, respectively. Broad band observations of the bolometric luminosity at these epochs have the ability to measure the ratio of these two isotopes and thus discriminate between progenitor models. As the brightest SN Ia in nearly 40 years, SN 2011fe offers a prime opportunity to follow a SN Ia to such late epochs. Here we propose HST WFC3 optical and IR photometry of SN 2011fe to observe the transition from a 56Co powered lightcurve to a 57Co powered one. These observations will place unique constraints on progenitor systems of SNe Ia. SN 2011fe is likely to remain the best studied normal SN Ia of our generation and if these observations are not made this cycle, they will likely never be done with Hubble because this measurement will not be possible next cycle for SN 2011fe.

Visit

Proposal 13737, First Epoch (01), completed Mon May 11 15:08:44 GMT 2015

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC

Special Requirements: ORIENT 18D TO 53 D; BETWEEN 01-OCT-2014:00:00:00 AND 20-OCT-2014:00:00:00

Diagnostics

(First Epoch (01)) Warning (Orbit Planner): PATTERN AND COORDINATED PARALLEL MISMATCH
(First Epoch (01)) Warning (Orbit Planner): PATTERN AND COORDINATED PARALLEL MISMATCH
(First Epoch (01)) Warning (Orbit Planner): PATTERN AND COORDINATED PARALLEL MISMATCH
(First Epoch (01)) Warning (Orbit Planner): PATTERN AND COORDINATED PARALLEL MISMATCH
(First Epoch (01)) Warning (Orbit Planner): PATTERN AND COORDINATED PARALLEL MISMATCH

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	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		(1-6)
(2)	Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(7-10)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	SN-2011FE-OUTER	RA: 14 03 6.1357 (210.7755654d) Dec: +54 15 57.76 (54.26604d) Equinox: J2000		V=25.5+/-1.0	Reference Frame: SIMBAD

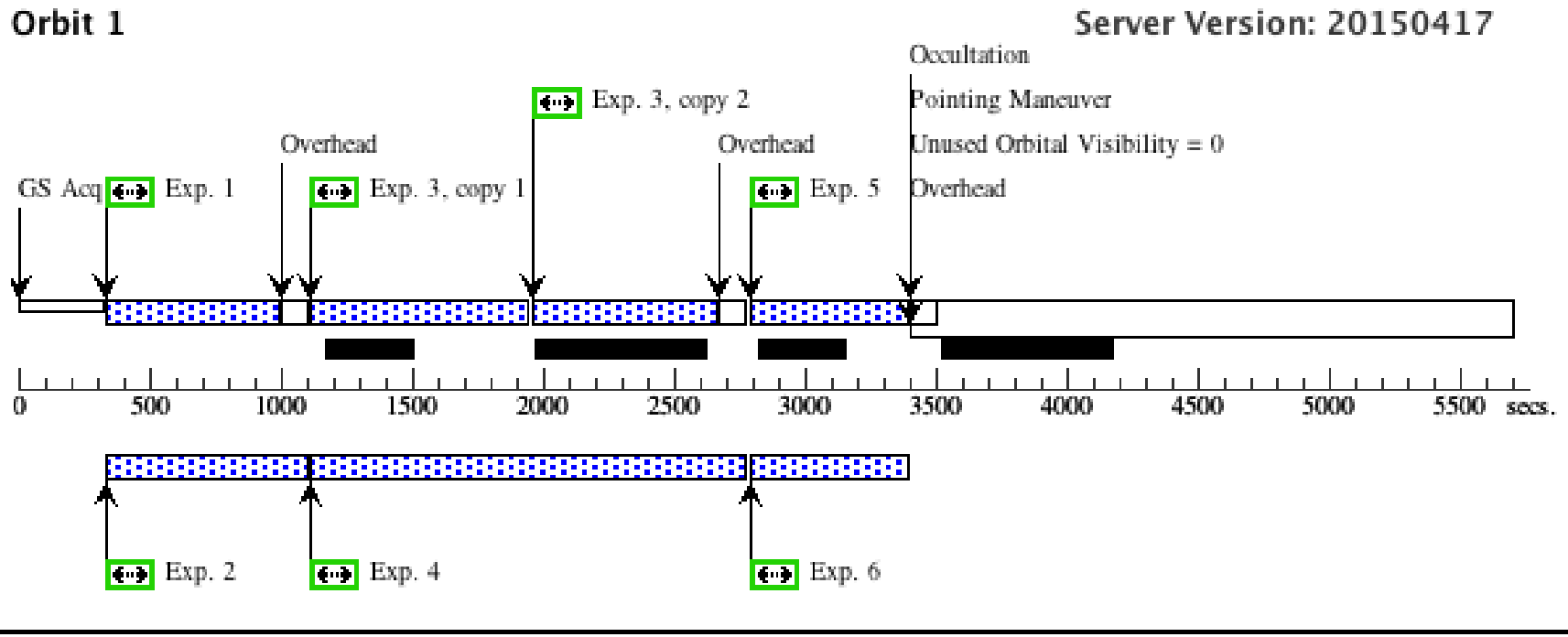
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

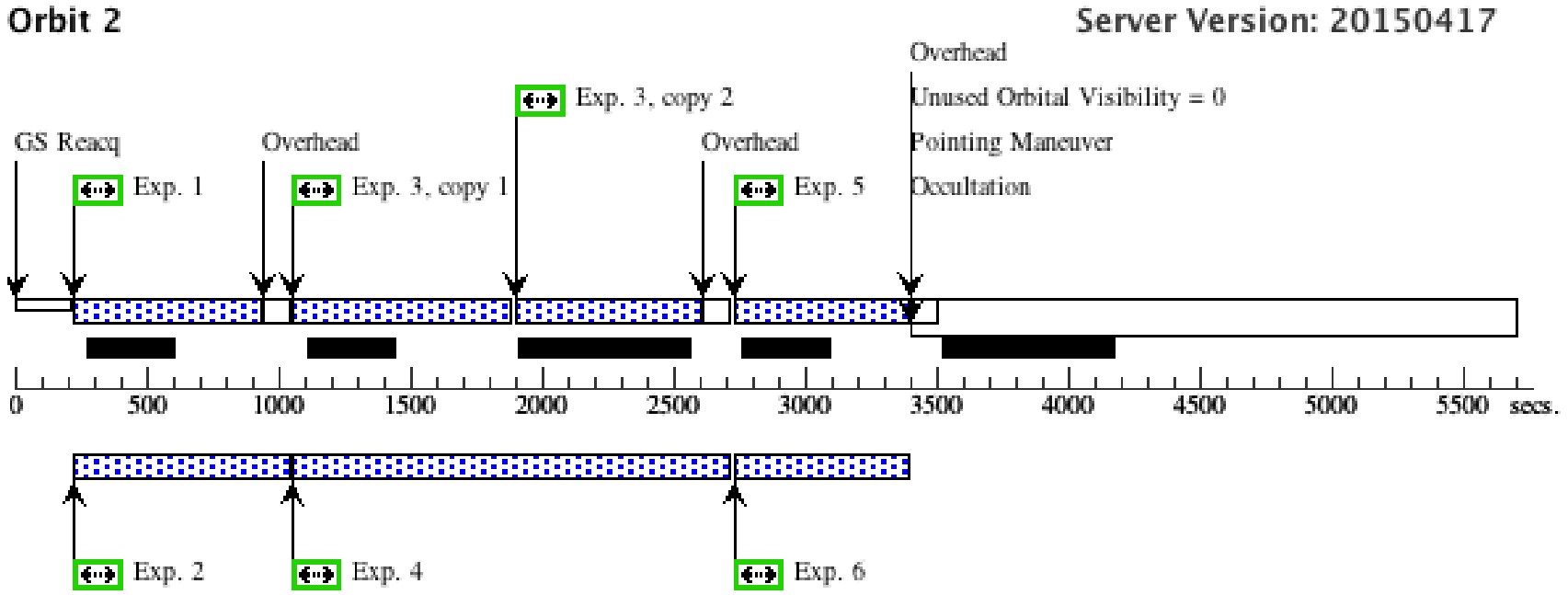
Exposures

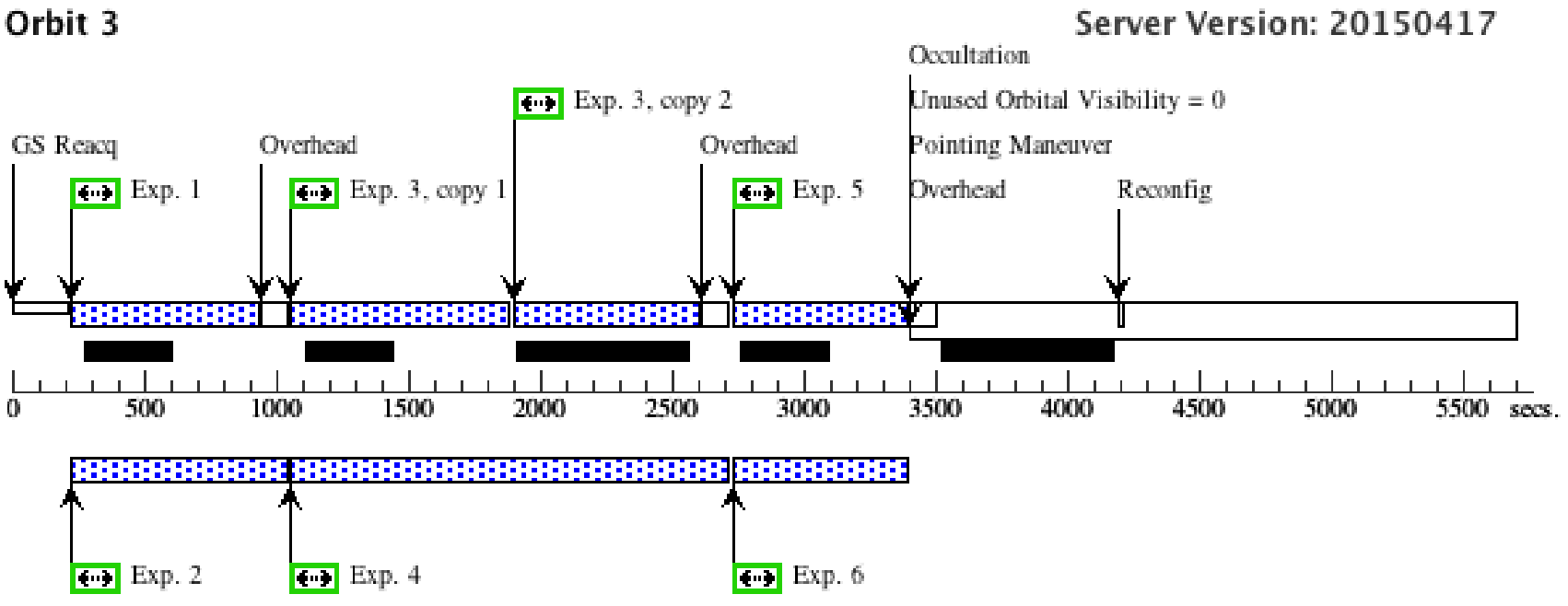
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	WFC3_F438W	(2) SN-2011FE-OUTER	WFC3/UVIS, ACCUM, UVIS	F438W			Pattern 1, Exps 1-6 in First Epoch (01) (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-6 in First Epoch (01)	500 Secs (1998 Secs) *[==>626.0 Secs (Pattern 1)]* *[==>686.0 Secs (Pattern 2)]* *[==>686.0 Secs (Pattern 3)]*	 ***[1]*** ***[2]*** ***[3]***
2	ACS_F555W	ANY	ACS/WFC, ACCUM, WFC	F555W			Pattern 1, Exps 1-6 in First Epoch (01) (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-6 in First Epoch (01)	440 Secs (1884 Secs) *[==>566.0 Secs (Pattern 1)]* *[==>659.0 Secs (Pattern 2)]* *[==>659.0 Secs (Pattern 3)]*	 ***[1]*** ***[2]*** ***[3]***
3	WFC3-F600LP	(2) SN-2011FE-OUTER	WFC3/UVIS, ACCUM, UVIS	F600LP			Pattern 1, Exps 1-6 in First Epoch (01) (1) Prime + Parallel Group 3-4 in Pattern 1, Exps 1-6 in First Epoch (01)	700 Secs X 2 (4200 Secs) *[==>(Pattern 1, Copy 1)]* *[==>(Pattern 1, Copy 2)]* *[==>(Pattern 2, Copy 1)]* *[==>(Pattern 2, Copy 2)]* *[==>(Pattern 3, Copy 1)]* *[==>(Pattern 3, Copy 2)]*	 ***[1]*** ***[2]*** ***[3]***
4	ACS_F435W	ANY	ACS/WFC, ACCUM, WFC	F435W			Pattern 1, Exps 1-6 in First Epoch (01) (1) Prime + Parallel Group 3-4 in Pattern 1, Exps 1-6 in First Epoch (01)	1350 Secs (4464 Secs) *[==>1488.0 Secs (Pattern 1)]* *[==>1488.0 Secs (Pattern 2)]* *[==>1488.0 Secs (Pattern 3)]*	 ***[1]*** ***[2]*** ***[3]***
5	WFC3_F555W	(2) SN-2011FE-OUTER	WFC3/UVIS, ACCUM, UVIS	F555W			Pattern 1, Exps 1-6 in First Epoch (01) (1) Prime + Parallel Group 5-6 in Pattern 1, Exps 1-6 in First Epoch (01)	450 Secs (1848 Secs) *[==>576.0 Secs (Pattern 1)]* *[==>636.0 Secs (Pattern 2)]* *[==>636.0 Secs (Pattern 3)]*	 ***[1]*** ***[2]*** ***[3]***
6	ACS_F814W	ANY	ACS/WFC, ACCUM, WFC	F814W			Pattern 1, Exps 1-6 in First Epoch (01) (1) Prime + Parallel Group 5-6 in Pattern 1, Exps 1-6 in First Epoch (01)	350 Secs (1491 Secs) *[==>457.0 Secs (Pattern 1)]* *[==>517.0 Secs (Pattern 2)]* *[==>517.0 Secs (Pattern 3)]*	 ***[1]*** ***[2]*** ***[3]***
7	WFC3-F160W	(2) SN-2011FE-OUTER	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP100; NSAMP=13		Pattern 2, Exps 7-10 in First Epoch (01) (2) Prime + Parallel Group 7-8 in Pattern 2, Exps 7-10 in First Epoch (01)	699.232615 Secs (1398.465 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[4]***

	8	ACS_F658N	ANY	ACS/WFC, ACCUM, WFC	F658N		Pattern 2, Exps 7-10 in First Epoch (01) (2) Prime + Parallel Group 7-8 in Pattern 2, Exps 7-10 in First Epoch (01)	440 Secs (1163 Secs) *[==>560.0 Secs (Pattern 1)]* *[==>603.0 Secs (Pattern 2)]*	***[4]***
	9	WFC3-F110W	(2) SN-2011FE-OUTER	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100; NSAMP=14	Pattern 2, Exps 7-10 in First Epoch (01) (2) Prime + Parallel Group 9-10 in Pattern 2, Exps 7-10 in First Epoch (01)	799.232938 Secs (1598.466 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[4]***
	10	ACS_F658N	ANY	ACS/WFC, ACCUM, WFC	F658N		Pattern 2, Exps 7-10 in First Epoch (01) (2) Prime + Parallel Group 9-10 in Pattern 2, Exps 7-10 in First Epoch (01)	440 Secs (1406 Secs) *[==>703.0 Secs (Pattern 1)]* *[==>703.0 Secs (Pattern 2)]*	***[4]***

Orbit Structure



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GS Reacq
Overhead
Overhead
Pointing Maneuver
Exp. 1
Exp. 3, copy 1
Exp. 5
Overhead
Reconfig
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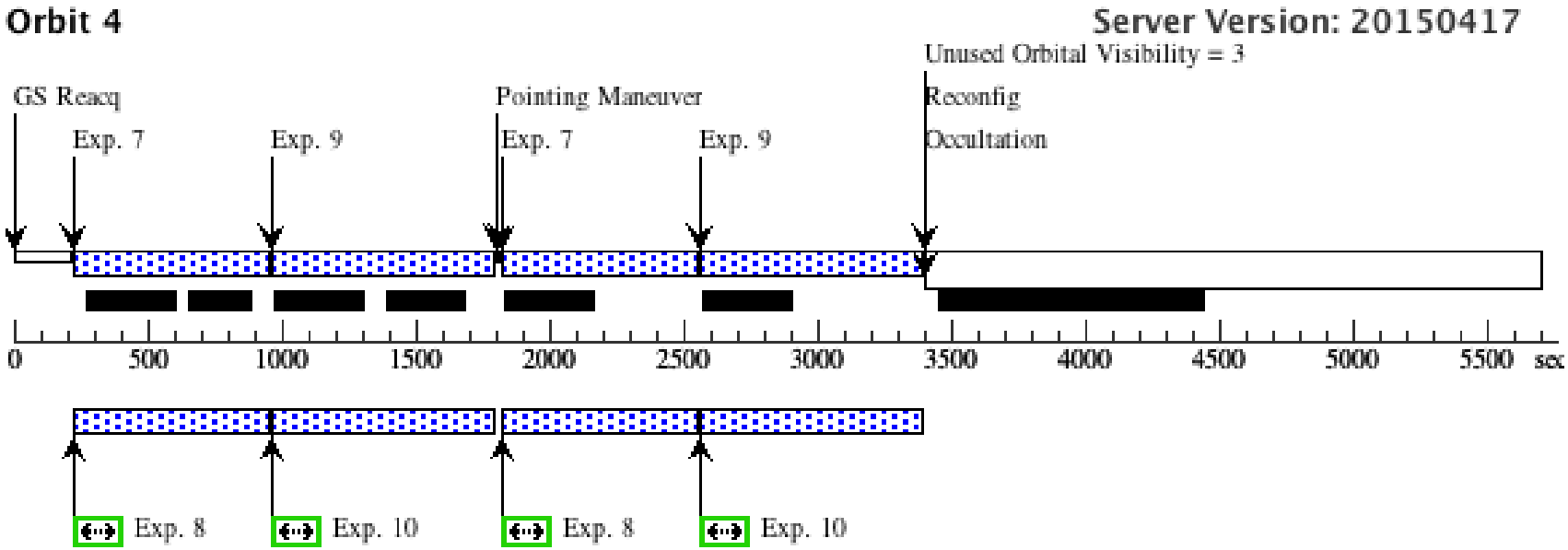
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Exp. 2
Exp. 4
Exp. 6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Server Version: 20150417
Unused Orbital Visibility = 3
GS Reacq
Pointing Maneuver
Reconfig
Exp. 7
Exp. 9
Exp. 7
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Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 8
Exp. 10
Exp. 8
Exp. 10

Visit

Proposal 13737, Second Epoch (02), completed Mon May 11 15:08:45 GMT 2015

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC

Special Requirements: ORIENT 162D TO 178 D; BETWEEN 25-MAR-2015:00:00:00 AND 09-APR-2015:00:00:00

Comments: Needed to reduce the last parallel exposure on the 4th orbit to make the 5th orbit not need a buffer dump.

Diagnostics

(Second Epoch (02)) Warning (Orbit Planner): PATTERN AND COORDINATED PARALLEL MISMATCH

(Second Epoch (02)) Warning (Orbit Planner): PATTERN AND COORDINATED PARALLEL MISMATCH

(Second Epoch (02)) Warning (Orbit Planner): PATTERN AND COORDINATED PARALLEL MISMATCH

(Second Epoch (02)) Warning (Orbit Planner): PATTERN AND COORDINATED PARALLEL MISMATCH

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	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		(1-2), (3-6)
(2)	Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(7-10)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	SN-2011FE-CEPHF1	RA: 14 03 2.9896 (210.7624567d) Dec: +54 16 51.96 (54.28110d) Equinox: J2000		V=25.5+/-1.0	Reference Frame: SIMBAD

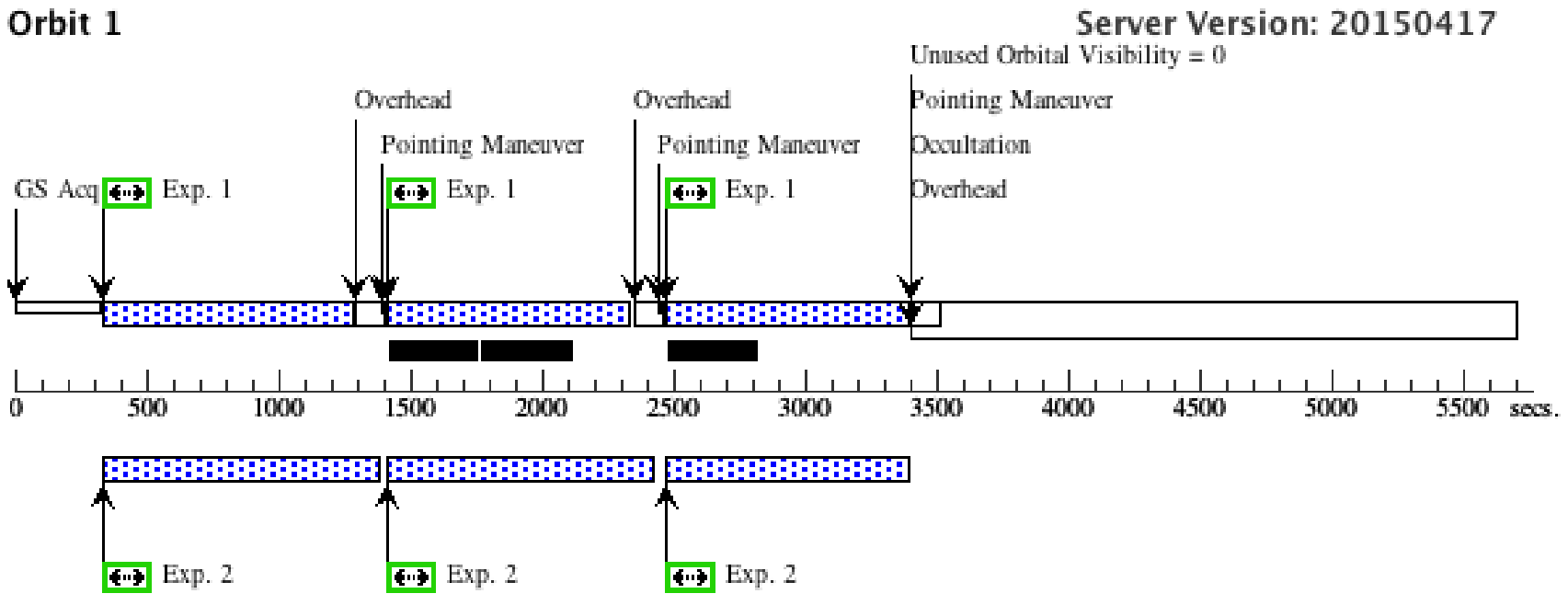
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

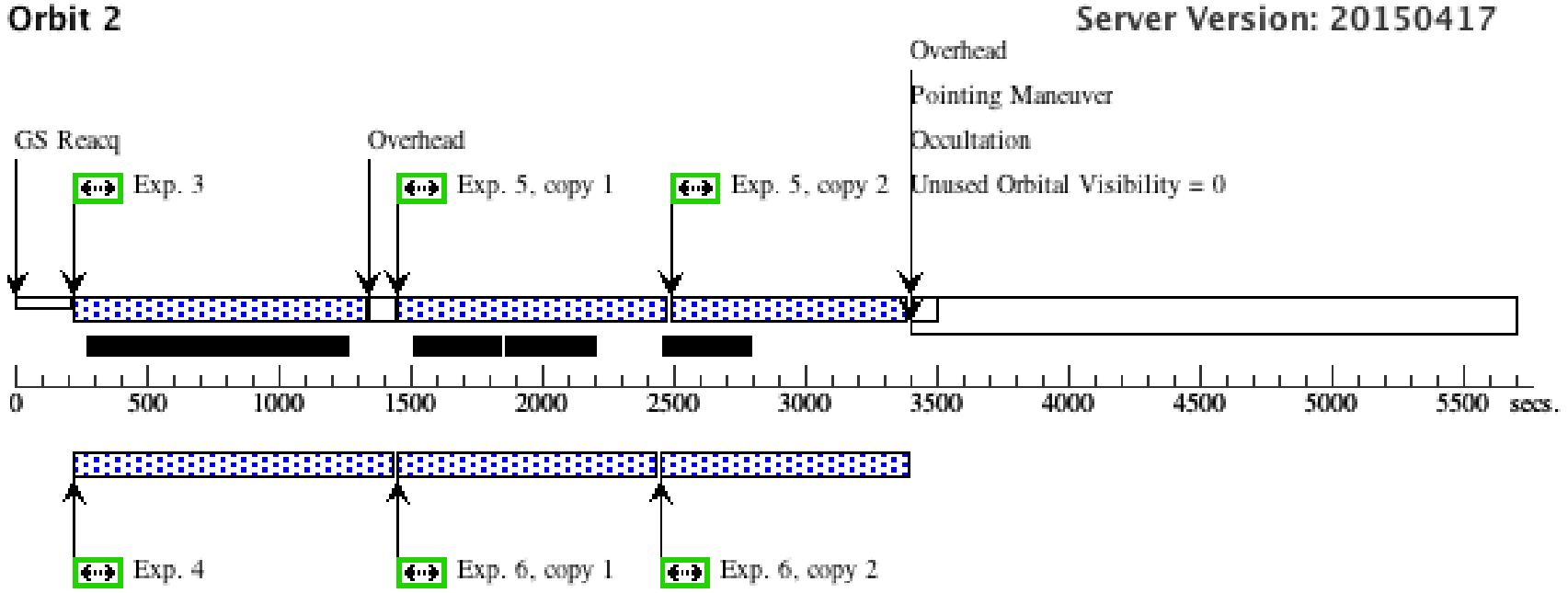
Exposures

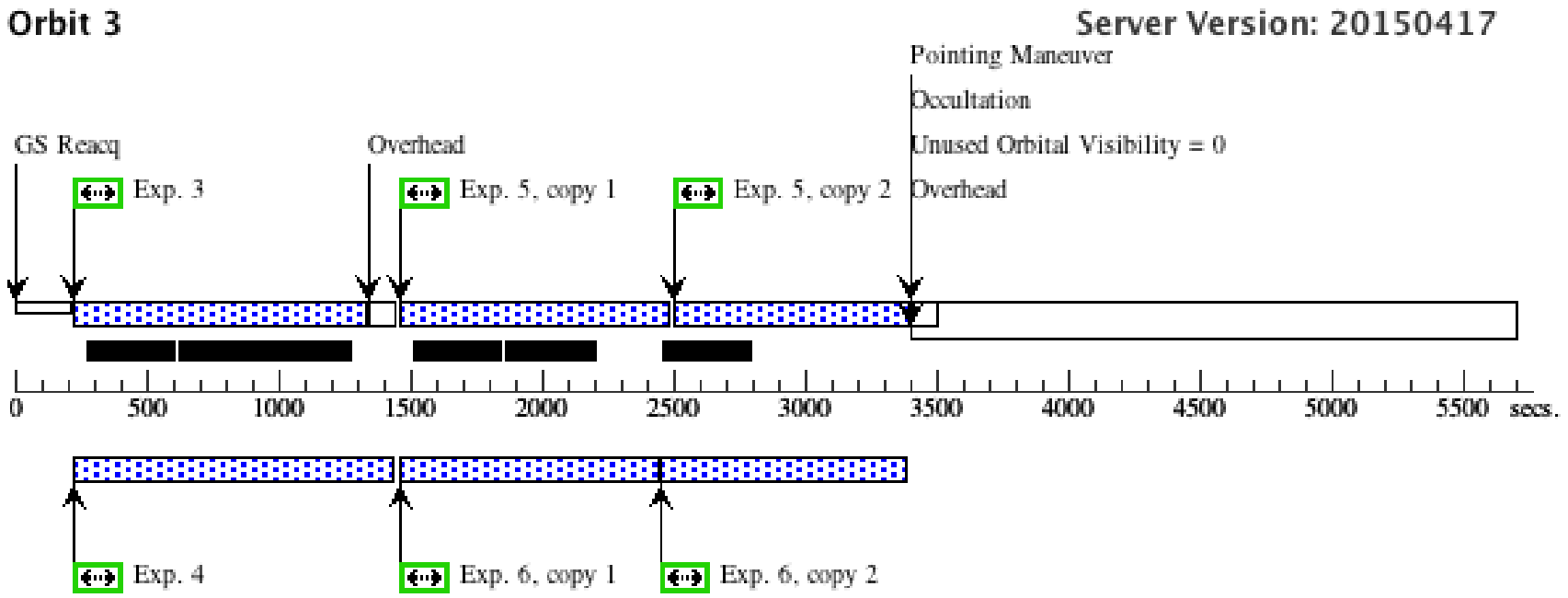
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	WFC3_F438W	(1) SN-2011FE-CEPHF1	WFC3/UVIS, ACCUM, UVIS	F438W	FLASH=5.0	GS ACQ SCENARIO BASE1B3	Pattern 1, Exps 1-2 in Second Epoch (02) (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Second Epoch (02)	800 Secs (2768 Secs) *[==>922.0 Secs (Pattern 1)]* *[==>923.0 Secs (Pattern 2)]* *[==>923.0 Secs (Pattern 3)]*	***[1]***
Comments: Added 5 e- flash to avoid CTE effects. ETC estimated an electron count of 7.6 e- given the filter, exp time, RA and Dec, and rough date of the exposures.									
2	ACS_F814W	ANY	ACS/WFC, ACCUM, WFC	F814W			Pattern 1, Exps 1-2 in Second Epoch (02) (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Second Epoch (02)	600 Secs (2522 Secs) *[==>840.0 Secs (Pattern 1)]* *[==>890.0 Secs (Pattern 2)]* *[==>792.0 Secs (Pattern 3)]*	***[1]***
3	WFC3_F555W	(1) SN-2011FE-CEPHF1	WFC3/UVIS, ACCUM, UVIS	F555W			Pattern 1, Exps 3-6 in Second Epoch (02) (1) Prime + Parallel Group 3-4 in Pattern 1, Exps 3-6 in Second Epoch (02)	850 Secs (3247 Secs) *[==>1085.0 Secs (Pattern 1)]* ***[2]*** *[==>1085.0 Secs (Pattern 2)]* ***[3]*** *[==>1077.0 Secs (Pattern 3)]*	***[4]***
4	ACS_F555W	ANY	ACS/WFC, ACCUM, WFC	F555W			Pattern 1, Exps 3-6 in Second Epoch (02) (1) Prime + Parallel Group 3-4 in Pattern 1, Exps 3-6 in Second Epoch (02)	700 Secs (3124 Secs) *[==>1046.0 Secs (Pattern 1)]* ***[2]*** *[==>1039.0 Secs (Pattern 2)]* ***[3]*** *[==>1039.0 Secs (Pattern 3)]*	***[4]***
5	WFC3-F600LP	(1) SN-2011FE-CEPHF1	WFC3/UVIS, ACCUM, UVIS	F600LP			Pattern 1, Exps 3-6 in Second Epoch (02) (1) Prime + Parallel Group 5-6 in Pattern 1, Exps 3-6 in Second Epoch (02)	900 Secs X 2 (5372 Secs) *[==>894.0 Secs (Pattern 1, Copy 1)]* *[==>894.0 Secs (Pattern 1, Copy 2)]* ***[2]*** *[==>894.0 Secs (Pattern 2, Copy 1)]* *[==>894.0 Secs (Pattern 2, Copy 2)]* ***[3]*** *[==>898.0 Secs (Pattern 3, Copy 1)]* *[==>898.0 Secs (Pattern 3, Copy 2)]* ***[4]***	

	6	ACS_F435W	ANY	ACS/WFC, ACCUM, WFC	F435W		Pattern 1, Exps 3-6 in Second Epoch (02) (1) Prime + Parallel Group 5-6 in Pattern 1, Exps 3-6 in Second Epoch (02)	650 Secs X 2 (4614 Secs) *[==>814.0 Secs (Pattern 1, Copy 1)]* *[==>814.0 Secs (Pattern 1, Copy 2)]* *[==>808.0 Secs (Pattern 2, Copy 1)]* *[==>808.0 Secs (Pattern 2, Copy 2)]* *[==>650.0 Secs (Pattern 3, Copy 1)]* *[==>720.0 Secs (Pattern 3, Copy 2)]*	***[2]*** ***[3]*** ***[4]***
	7	WFC3-F160W	(1) SN-2011FE-CEPHF1	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP100; NSAMP=13	Pattern 2, Exps 7-10 in Second Epoch (02) (2) Prime + Parallel Group 7-8 in Pattern 2, Exps 7-10 in Second Epoch (02)	699.232615 Secs (1398.465 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[5]***
	8	ACS_F658N	ANY	ACS/WFC, ACCUM, WFC	F658N	FLASH=15	Pattern 2, Exps 7-10 in Second Epoch (02) (2) Prime + Parallel Group 7-8 in Pattern 2, Exps 7-10 in Second Epoch (02)	440 Secs (1143 Secs) *[==>546.0 Secs (Pattern 1)]* *[==>597.0 Secs (Pattern 2)]*	***[5]***
	Comments: Added 15 e- flash to avoid CTE effects. ETC estimated an electron count of 5.9 e- given the filter, exp time, RA and Dec, and rough date of the exposures.								
	9	WFC3-F110W	(1) SN-2011FE-CEPHF1	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100; NSAMP=14	Pattern 2, Exps 7-10 in Second Epoch (02) (2) Prime + Parallel Group 9-10 in Pattern 2, Exps 7-10 in Second Epoch (02)	799.232938 Secs (1598.466 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[5]***
	10	ACS_F658N	ANY	ACS/WFC, ACCUM, WFC	F658N		Pattern 2, Exps 7-10 in Second Epoch (02) (2) Prime + Parallel Group 9-10 in Pattern 2, Exps 7-10 in Second Epoch (02)	440 Secs (1397 Secs) *[==>703.0 Secs (Pattern 1)]* *[==>694.0 Secs (Pattern 2)]*	***[5]***

Orbit Structure



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Pointing Maneuver
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Overhead
Exp. 3
Exp. 5, copy 1
Exp. 5, copy 2
Overhead
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3000
3500
4000
4500
5000
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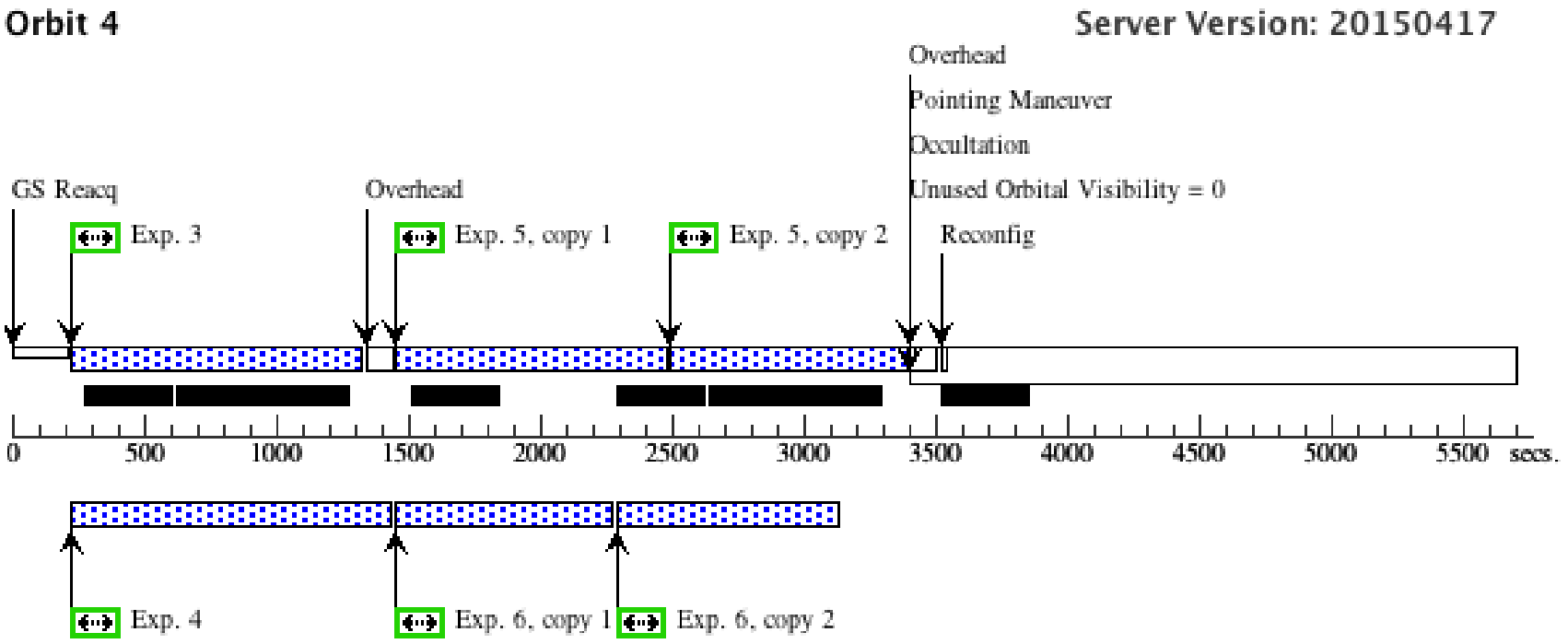
secs.
Exp. 4
Exp. 6, copy 1
Exp. 6, copy 2


Orbit 4
Server Version: 20150417
Overhead
Pointing Maneuver
Occultation
Unused Orbital Visibility = 0
GS Reacq
Overhead
Exp. 3
Exp. 5, copy 1
Exp. 5, copy 2
Reconfig
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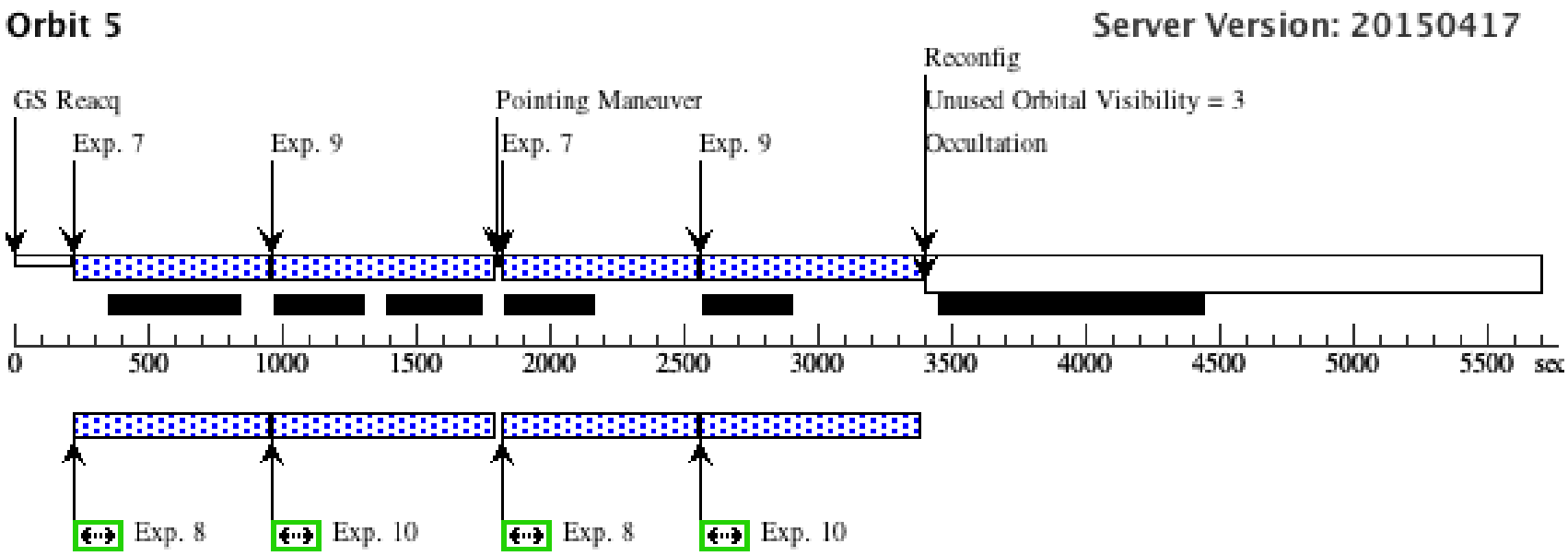
4500
5000
5500
secs.
Exp. 4
Exp. 6, copy 1
Exp. 6, copy 2


Orbit 5
Server Version: 20150417
Reconfig
GS Reacq
Pointing Maneuver
Unused Orbital Visibility = 3
Exp. 7
Exp. 9
Exp. 7
Exp. 9
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 8
Exp. 10
Exp. 8
Exp. 10

Visit

Proposal 13737, Third Epoch (1st Visit) (03), implementation Mon May 11 15:08:46 GMT 2015

Diagnostic Status: Warning

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: ORIENT 106D TO 113 D; BETWEEN 10-JUL-2015:00:00:00 AND 25-JUL-2015:00:00:00; ON HOLD

Comments: 7 orbits were not schedulable together, so we had to split the thrid epoch into two visits.

On Hold Comments: The exposure times for the third visit will be adjusted depending on the second visits observations. It is not possible to know the SED at these times because no SN Ia has been observed this late.

Diagnostics

(Third Epoch (1st Visit) (03)) Warning (Orbit Planner): PATTERN AND COORDINATED PARALLEL MISMATCH

(Third Epoch (1st Visit) (03)) Warning (Orbit Planner): PATTERN AND COORDINATED PARALLEL MISMATCH

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		(1-4)

Fixed Targets

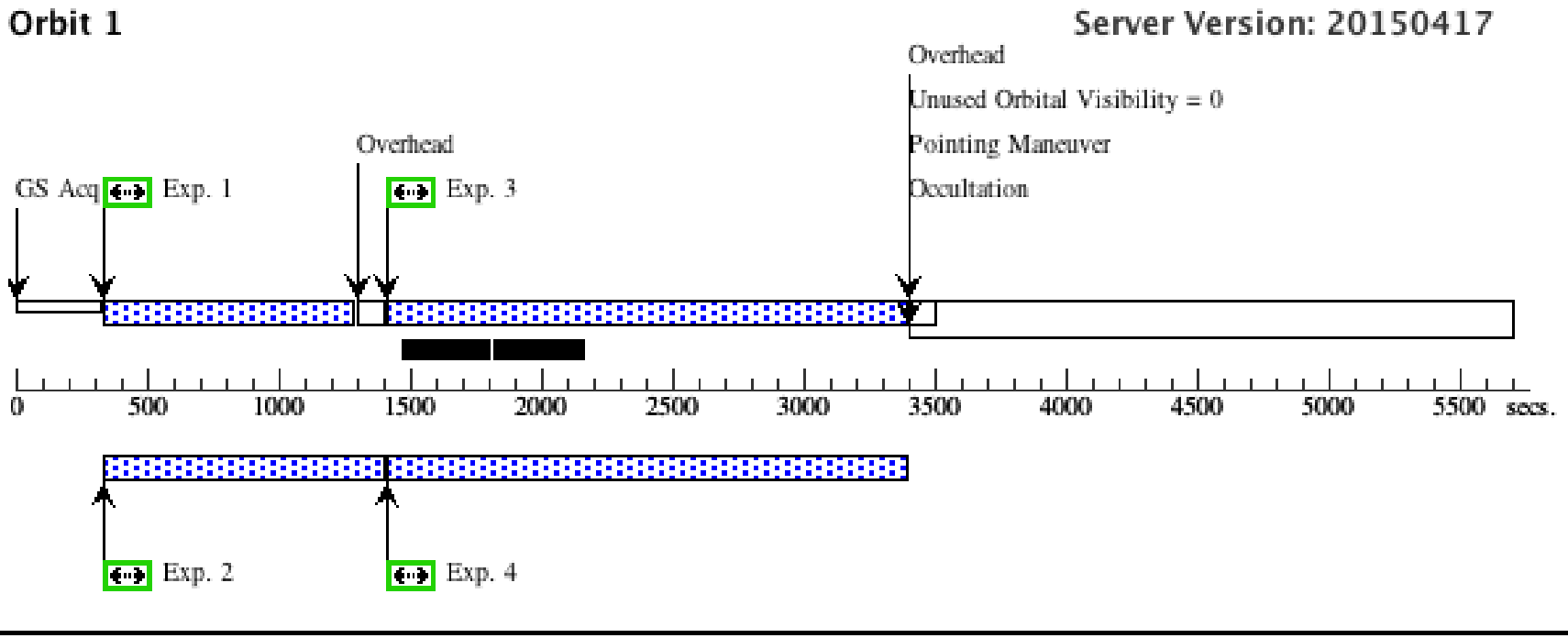
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	SN-2011FE-CEPHF2	RA: 14 03 5.8820 (210.7745083d) Dec: +54 15 40.49 (54.26125d) Equinox: J2000		V=25.5+/-1.0	Reference Frame: SIMBAD

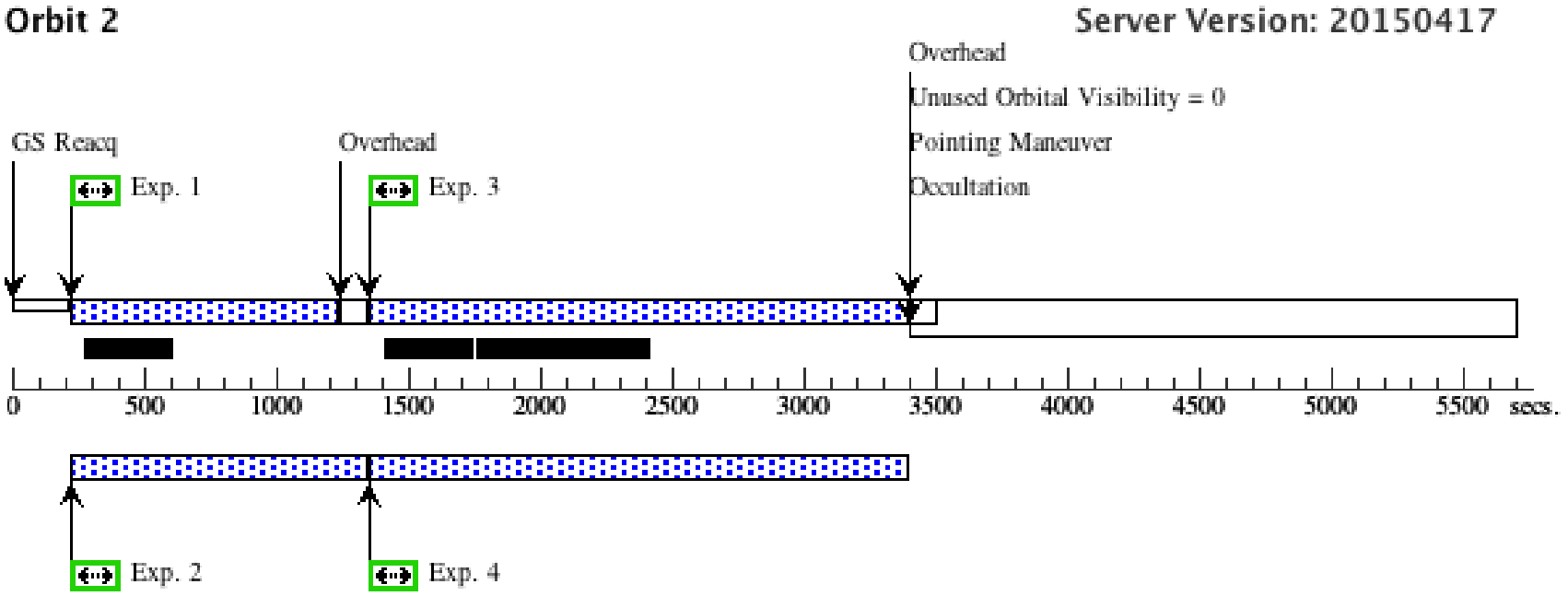
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

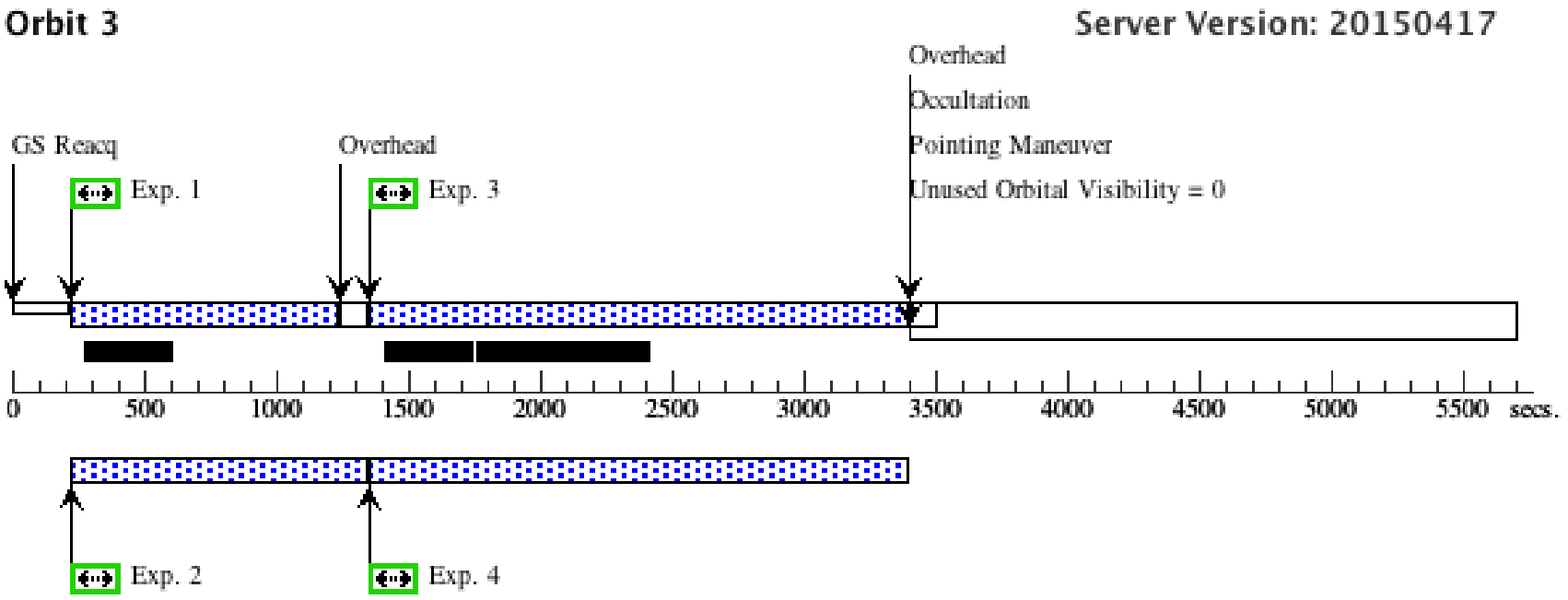
Exposures

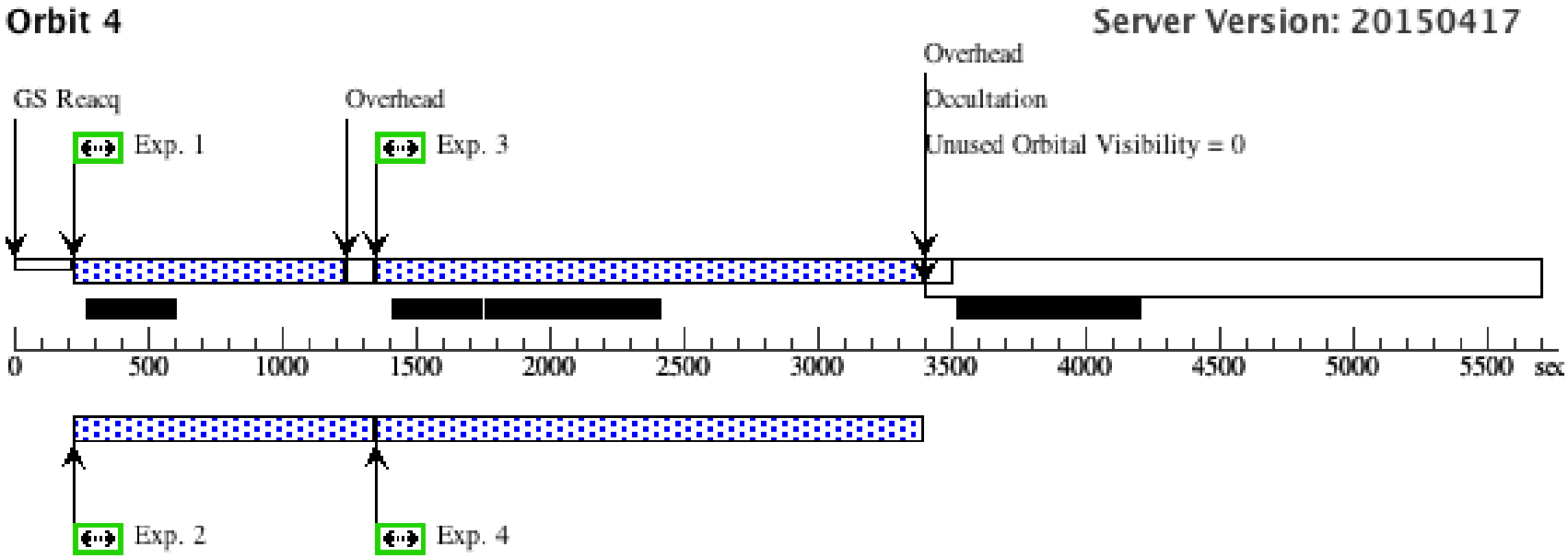
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	WFC3_F555W	(3) SN-2011FE-CEPHF2	WFC3/UVIS, ACCUM, UVIS	F555W			Pattern 3, Exps 1-4 in Third Epoch (1st Visit) (03) (3)	920 Secs (3880 Secs)	
								[==>925.0 Secs (Pattern 1)]	***[1]***
								[==>985.0 Secs (Pattern 2)]	***[2]***
							Prime + Parallel Group 1-2 in Pattern 3, Exps 1-4 in Third Epoch (1st Visit) (03)	*[==>985.0 Secs (Pattern 3)]*	***[3]***
								[==>985.0 Secs (Pattern 4)]	***[4]***
2	ACS_F555W	ANY	ACS/WFC, ACCUM, WFC	F555W			Pattern 3, Exps 1-4 in Third Epoch (1st Visit) (03) (3)	850 Secs (3715 Secs)	
								[==>865.0 Secs (Pattern 1)]	***[1]***
								[==>950.0 Secs (Pattern 2)]	***[2]***
							Prime + Parallel Group 1-2 in Pattern 3, Exps 1-4 in Third Epoch (1st Visit) (03)	*[==>950.0 Secs (Pattern 3)]*	***[3]***
								[==>950.0 Secs (Pattern 4)]	***[4]***
3	WFC3_F438W	(3) SN-2011FE-CEPHF2	WFC3/UVIS, ACCUM, UVIS	F438W			Pattern 3, Exps 1-4 in Third Epoch (1st Visit) (03) (3)	1950 Secs (8000 Secs)	
								[==>1955.0 Secs (Pattern 1)]	***[1]***
								[==>2015.0 Secs (Pattern 2)]	***[2]***
							Prime + Parallel Group 3-4 in Pattern 3, Exps 1-4 in Third Epoch (1st Visit) (03)	*[==>2015.0 Secs (Pattern 3)]*	***[3]***
								[==>2015.0 Secs (Pattern 4)]	***[4]***
4	ACS_F435W	ANY	ACS/WFC, ACCUM, WFC	F435W			Pattern 3, Exps 1-4 in Third Epoch (1st Visit) (03) (3)	1800 Secs (7404 Secs)	
								[==>1806.0 Secs (Pattern 1)]	***[1]***
								[==>1866.0 Secs (Pattern 2)]	***[2]***
							Prime + Parallel Group 3-4 in Pattern 3, Exps 1-4 in Third Epoch (1st Visit) (03)	*[==>1866.0 Secs (Pattern 3)]*	***[3]***
								[==>1866.0 Secs (Pattern 4)]	***[4]***

Orbit Structure






Orbit 3
Server Version: 20150417
Overhead
Occultation
Pointing Maneuver
Unused Orbital Visibility = 0
GS Reacq
Overhead
Exp. 1
Exp. 3
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Exp. 2
Exp. 4


Orbit 4
Server Version: 20150417
Overhead
Occultation
Unused Orbital Visibility = 0
GS Reacq
Overhead
Exp. 1
Exp. 3
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 2
Exp. 4

Visit

Proposal 13737, Third Epoch (2nd Visit) (04), implementation Mon May 11 15:08:46 GMT 2015

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC

Special Requirements: ORIENT 106D TO 113 D; BETWEEN 10-JUL-2015:00:00:00 AND 25-JUL-2015:00:00:00; ON HOLD

Comments: 7 orbits were not schedulable together, so we had to split the thrid epoch into two visits.

Needed to reduce the last parallel exposure on the 4th orbit to make the 5th orbit not need a buffer dump.

On Hold Comments: The exposure times for the third visit will be adjusted depending on the second visits observations. It is not possible to know the SED at these times because no SN Ia has been observed this late.

Diagnostics

(Third Epoch (2nd Visit) (04)) Warning (Orbit Planner): PATTERN AND COORDINATED PARALLEL MISMATCH

(Third Epoch (2nd Visit) (04)) Warning (Orbit Planner): PATTERN AND COORDINATED PARALLEL MISMATCH

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(3-6)
(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)

Fixed Targets

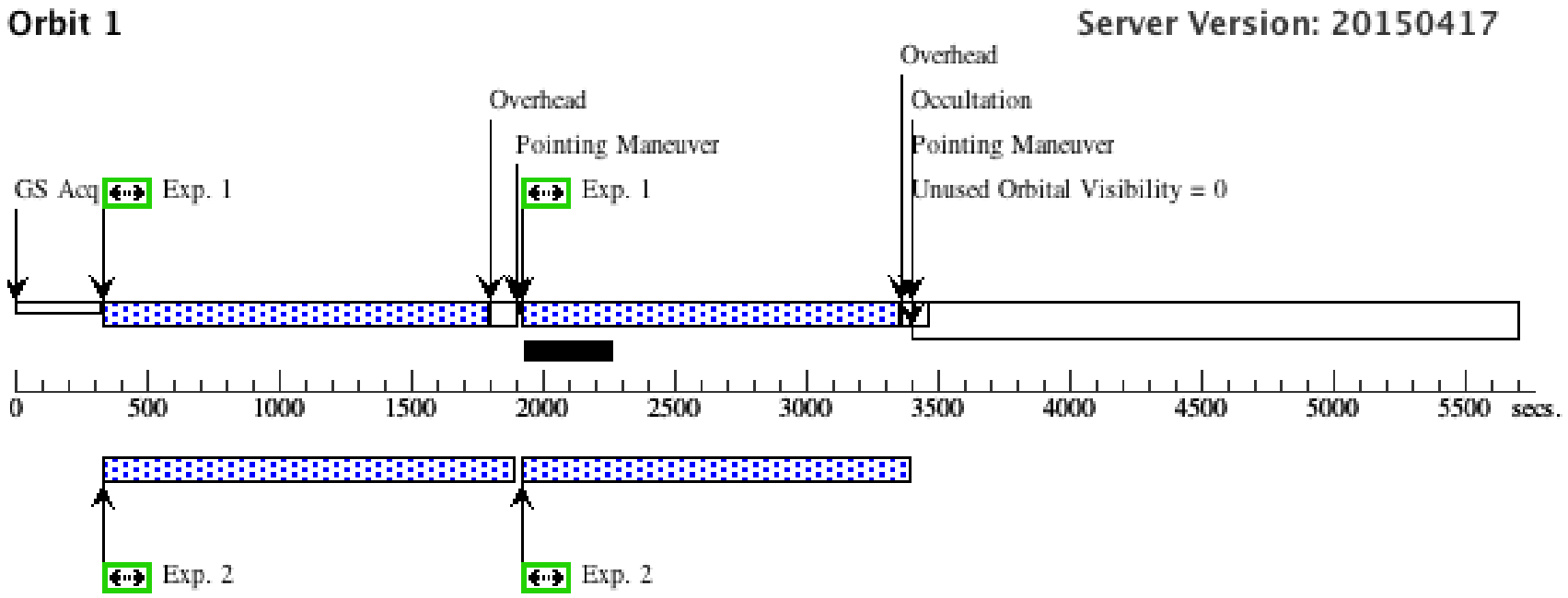
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	SN-2011FE-CEPHF2	RA: 14 03 5.8820 (210.7745083d) Dec: +54 15 40.49 (54.26125d) Equinox: J2000		V=25.5+/-1.0	Reference Frame: SIMBAD

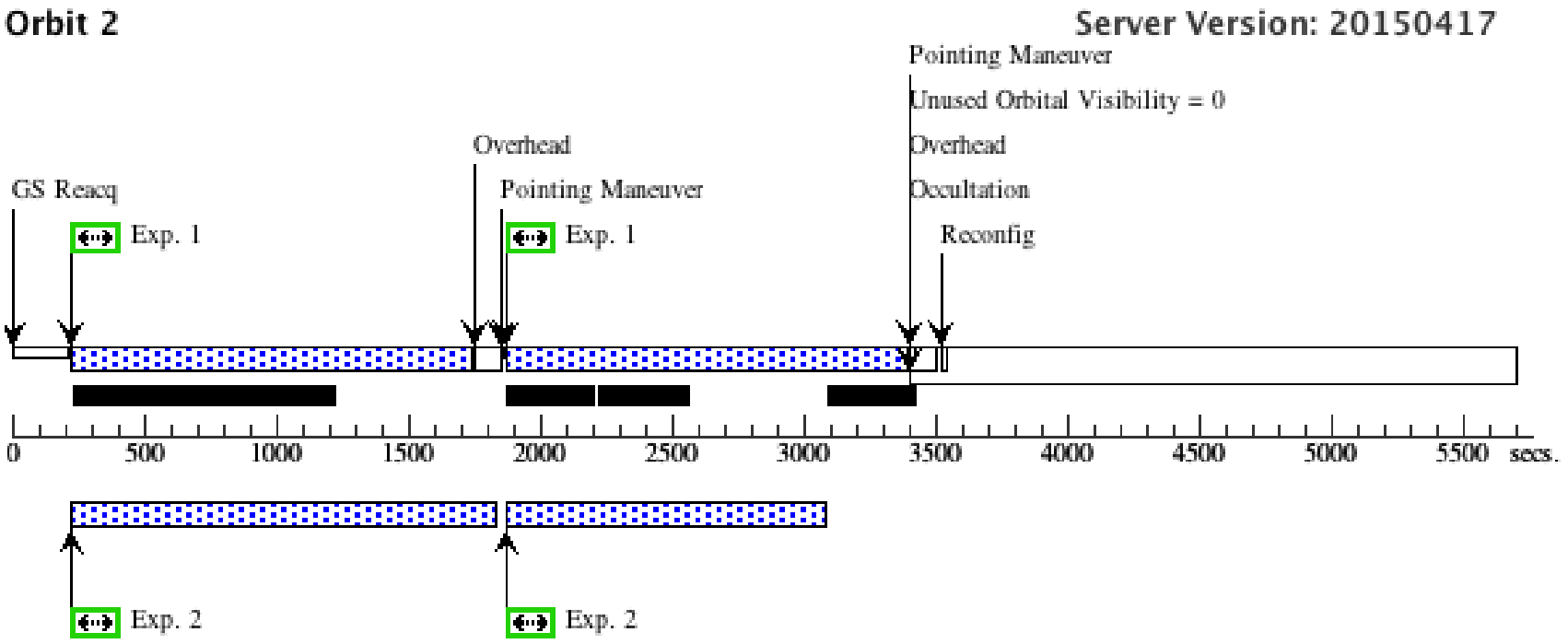
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	WFC3-F600LP	(3) SN-2011FE-CEPHF2	WFC3/UVIS, ACCUM, UVIS	F600LP			Pattern 3, Exps 1-2 in Third Epoch (2nd Visit) (04) (3) Prime + Parallel Group 1-2 in Pattern 3, Exps 1-2 in Third Epoch (2nd Visit) (04)	1400 Secs (5905 Secs) *[==>1429.0 Secs (Pattern 1)]* *[==>1429.0 Secs (Pattern 2)]* *[==>1520.0 Secs (Pattern 3)]* *[==>1527.0 Secs (Pattern 4)]*	 ***[1]*** ***[2]***
2	ACS_F814W	ANY	ACS/WFC, ACCUM, WFC	F814W			Pattern 3, Exps 1-2 in Third Epoch (2nd Visit) (04) (3) Prime + Parallel Group 1-2 in Pattern 3, Exps 1-2 in Third Epoch (2nd Visit) (04)	1350 Secs (5278 Secs) *[==>1350.0 Secs (Pattern 1)]* *[==>1348.0 Secs (Pattern 2)]* *[==>1490.0 Secs (Pattern 3)]* *[==>1090.0 Secs (Pattern 4)]*	 ***[1]*** ***[2]***
3	WFC3-F160W	(3) SN-2011FE-CEPHF2	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP100; NSAMP=13		Pattern 2, Exps 3-6 in Third Epoch (2nd Visit) (04) (2) Prime + Parallel Group 3-4 in Pattern 2, Exps 3-6 in Third Epoch (2nd Visit) (04)	699.232615 Secs (1398.465 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[3]***
4	ACS_F658N	ANY	ACS/WFC, ACCUM, WFC	F658N	FLASH=15		Pattern 2, Exps 3-6 in Third Epoch (2nd Visit) (04) (2) Prime + Parallel Group 3-4 in Pattern 2, Exps 3-6 in Third Epoch (2nd Visit) (04)	440 Secs (1143 Secs) *[==>546.0 Secs (Pattern 1)]* *[==>597.0 Secs (Pattern 2)]*	 ***[3]***
Comments: Added 15 e- flash to avoid CTE effects. ETC estimated an electron count of 5.5 e- given the filter, adjusted exp time of each exposure, RA and Dec, and rough date of the exposures.									
5	WFC3-F110W	(3) SN-2011FE-CEPHF2	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100; NSAMP=14		Pattern 2, Exps 3-6 in Third Epoch (2nd Visit) (04) (2) Prime + Parallel Group 5-6 in Pattern 2, Exps 3-6 in Third Epoch (2nd Visit) (04)	799.232938 Secs (1598.466 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[3]***
6	ACS_F658N	ANY	ACS/WFC, ACCUM, WFC	F658N	FLASH=13		Pattern 2, Exps 3-6 in Third Epoch (2nd Visit) (04) (2) Prime + Parallel Group 5-6 in Pattern 2, Exps 3-6 in Third Epoch (2nd Visit) (04)	440 Secs (1398.5 Secs) *[==>699.0 Secs (Pattern 1)]* *[==>699.5 Secs (Pattern 2)]*	 ***[3]***
Comments: Added 13 e- flash to avoid CTE effects. ETC estimated an electron count of 7 e- given the filter of each exposure, adjusted exp time, RA and Dec, and rough date of the exposures.									

Orbit Structure

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Pointing Maneuver
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Overhead
Overhead
GS Reacq
Pointing Maneuver
Occultation
Exp. 1
Exp. 1
Reconfig
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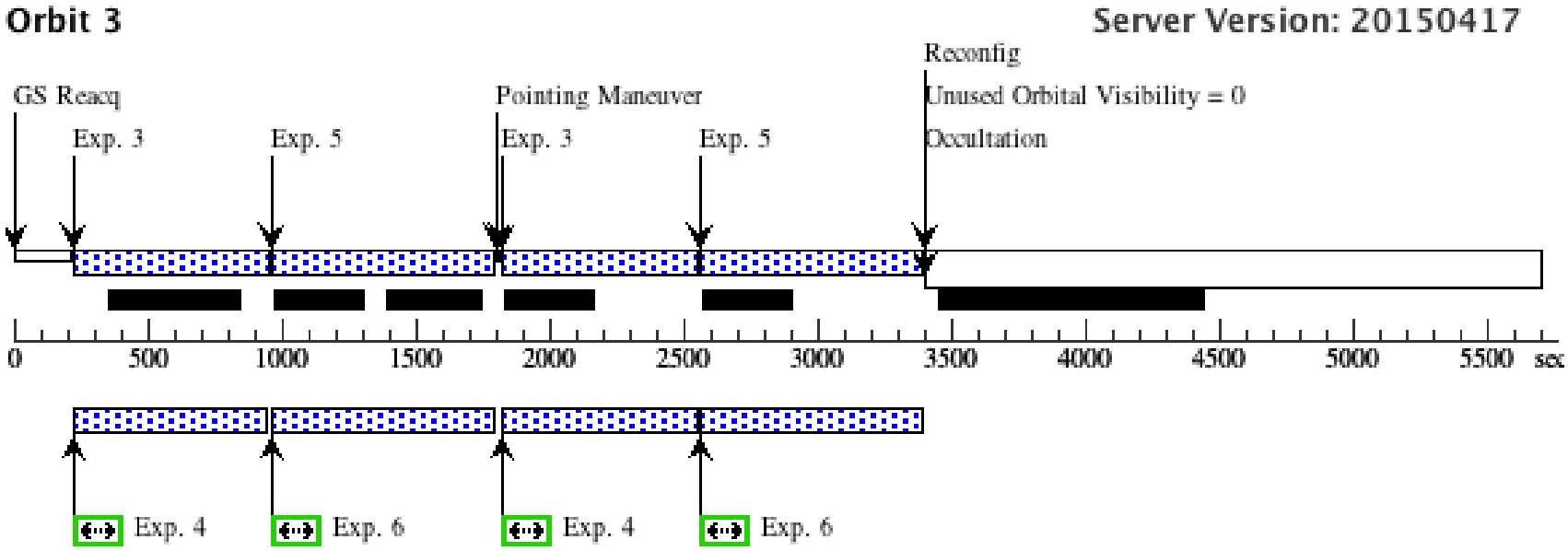
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Exp. 2
Exp. 2


Orbit 3
Server Version: 20150417
Reconfig
GS Reacq
Pointing Maneuver
Unused Orbital Visibility = 0
Exp. 3
Exp. 5
Exp. 3
Exp. 5
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 4
Exp. 6
Exp. 4
Exp. 6