



13951 - The Burst of the Century

Cycle: 22, Proposal Category: GO

(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) GRB-130427A	WFC3/IR WFC3/UVIS	5	03-Dec-2014 21:10:09.0	yes

5 Total Orbits Used

ABSTRACT

The extraordinarily bright GRB 130427A has provided a multiwavelength data set unprecedented in the history of the field. However the light curve of this burst, like that of the large majority of LAT bursts, shows a puzzling lack of a jet break (the hallmark of a collimated outflow). We propose to continue our long-term monitoring of this GRB through to the end of 2015. A detection of a jet break will give us a direct measure of the absolute energy of the burst; its absence will effectively rule out a rotating neutron star as the central engine of the GRB.

OBSERVING DESCRIPTION

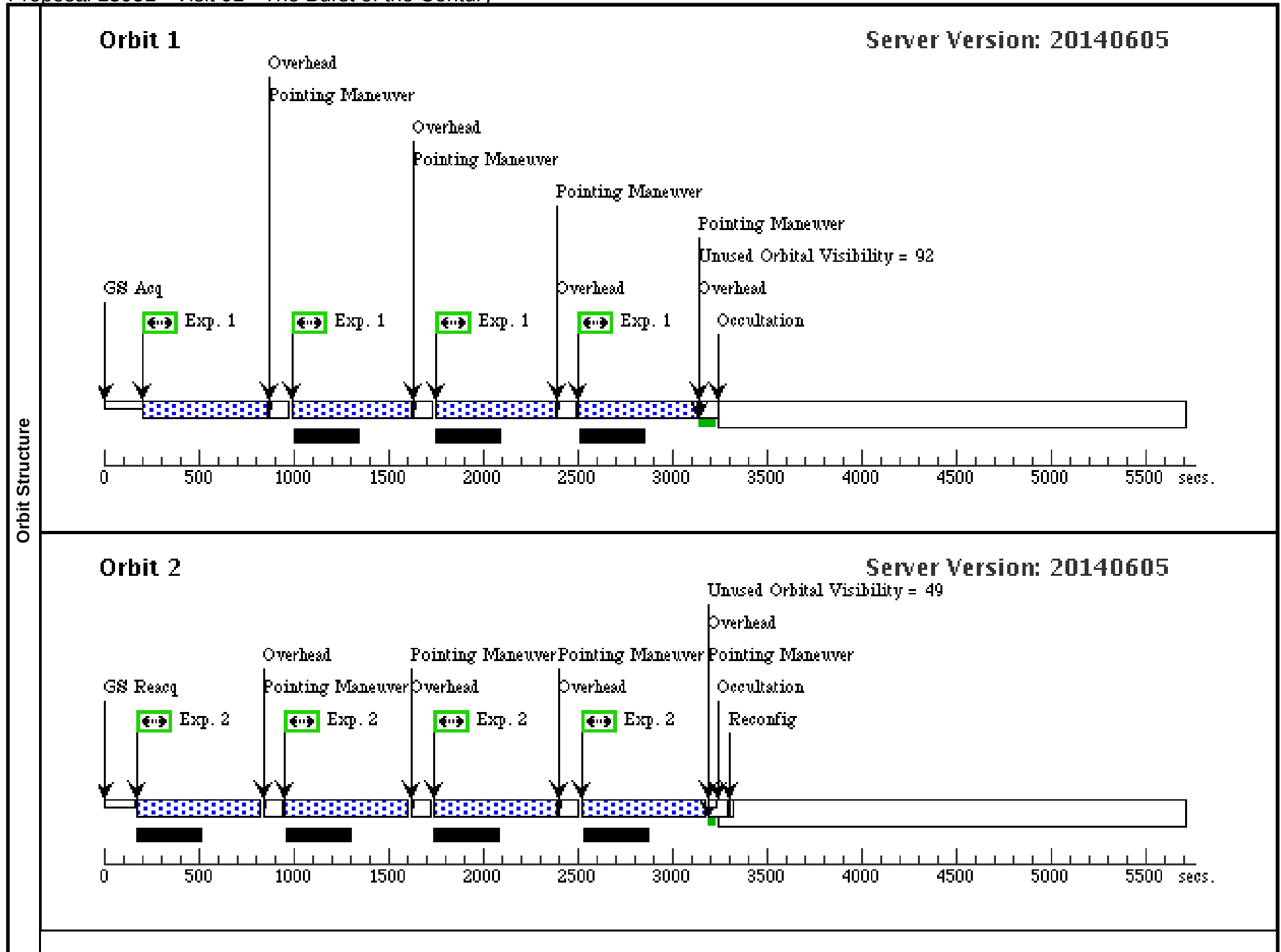
This last visit to GRB 130427A will be taken over two and half years after the burst to allow an accurate host subtraction. We will use the UVIS camera on WFC3 because WFC3 easily has as good sensitivity on point sources as ACS with smaller detector-induced noise sources (CTE, bias-stripping, etc). Two orbits will be taken in the UVIS with three in the IR. These observations will be used in order to better study the environment underlying this extremely energetic burst.

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Visit	Proposal 13951, Visit 01, implementation Thu Dec 04 02:10:12 GMT 2014				
	Diagnostic Status: Warning Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: ORIENT 290D TO 295 D; BETWEEN 01-DEC-2015:00:00:00 AND 31-DEC-2015:00:00:00				
Diagnostics	(Exposure 4 (Pattern 3, Exps 4-4 in Visit 01) special requirements) Warning (Form): Be very careful mixing POS TARG and Center_Pattern = Yes (Exposure 5 (Pattern 3, Exps 5-5 in Visit 01) special requirements) Warning (Form): Be very careful mixing POS TARG and Center_Pattern = Yes				
Patterns	#	Primary Pattern		Secondary Pattern	
	(1)	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	
	(3)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=2 Point Spacing=5.183 Line Spacing=		Pattern Type=WFC3-IR-DITHER-LINE Coordinate Frame=POS-TARG Pattern Orientation=41.788 Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(1)	GRB-130427A	RA: 11 32 32.6300 (173.1359583d) Dec: +27 41 51.70 (27.69769d) Equinox: J2000		V=22+/-1
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.					
Miscellaneous Reference Frame: SIMBAD					

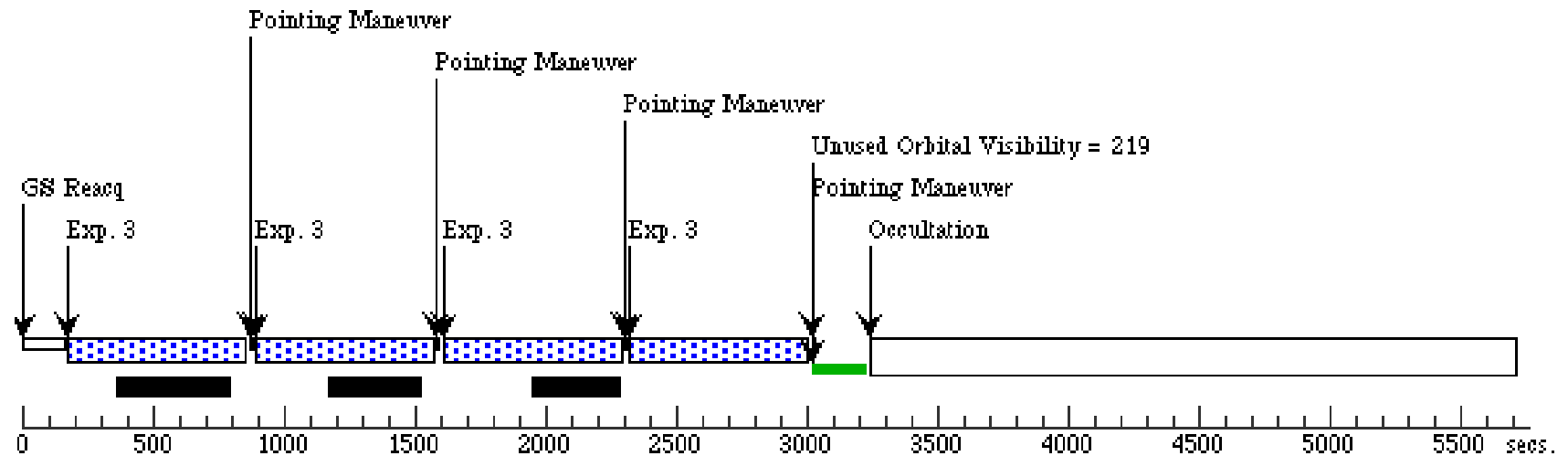
Proposal 13951 - Visit 01 - The Burst of the Century

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) GRB-130427A	WFC3/UVIS, ACCUM, UVIS2	F606W		POS TARG -40,-30; GS ACQ SCENARI O SINGLE	Pattern 1, Exps 1-1 i n Visit 01 (1)	625 Secs (2516 Secs) [==>629.0 Secs (Pattern 1)] [==>629.0 Secs (Pattern 2)] [==>629.0 Secs (Pattern 3)] [==>629.0 Secs (Pattern 4)]	[1]
	2		(1) GRB-130427A	WFC3/UVIS, ACCUM, UVIS2	F606W		POS TARG -39.5,-2 9.5	Pattern 1, Exps 2-2 i n Visit 01 (1)	625 Secs (2624 Secs) [==>656.0 Secs (Pattern 1)] [==>656.0 Secs (Pattern 2)] [==>656.0 Secs (Pattern 3)] [==>656.0 Secs (Pattern 4)]	[2]
	3		(1) GRB-130427A	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=14; SAMP-SEQ=SPAR S50		Pattern 3, Exps 3-3 i n Visit 01 (3)	652.938154 Secs (2611.753 Secs) [==>(Pattern 1,1)] [==>(Pattern 1,2)] [==>(Pattern 2,1)] [==>(Pattern 2,2)]	[3]
	4		(1) GRB-130427A	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=14; SAMP-SEQ=SPAR S50	POS TARG -0.5,-0.5	Pattern 3, Exps 4-4 i n Visit 01 (3)	652.938154 Secs (2611.753 Secs) [==>(Pattern 1,1)] [==>(Pattern 1,2)] [==>(Pattern 2,1)] [==>(Pattern 2,2)]	[4]
	5		(1) GRB-130427A	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=14; SAMP-SEQ=SPAR S50	POS TARG 0.5,0.5	Pattern 3, Exps 5-5 i n Visit 01 (3)	652.938154 Secs (2611.753 Secs) [==>(Pattern 1,1)] [==>(Pattern 1,2)] [==>(Pattern 2,1)] [==>(Pattern 2,2)]	[5]



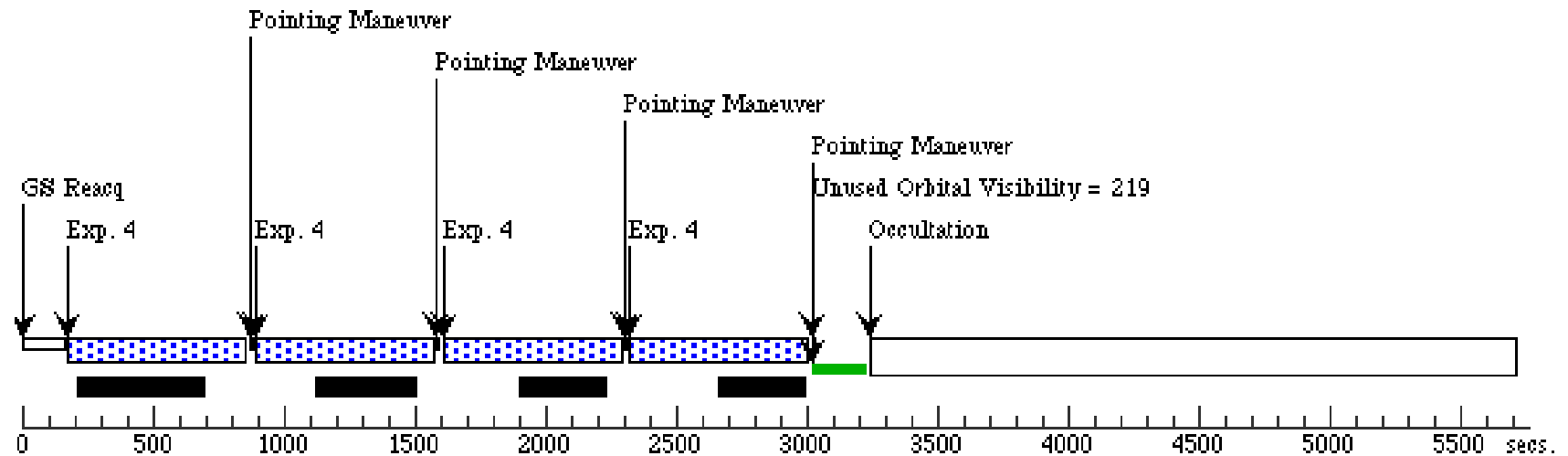
Orbit 3

Server Version: 20140605



Orbit 4

Server Version: 20140605



Orbit 5

Server Version: 20140605

