



# 17199 - Time-delay Cosmography with Strongly Lensed Quasars: Doubles vs. Quads

Cycle: 30, Proposal Category: GO  
(Availability Mode: SUPPORTED)

## INVESTIGATORS

<i>Name</i>	<i>Institution</i>
<b>Dr. Cameron Lemon (PI) (ESA Member) (Contact)</b>	<b>Oskar Klein Centre, Stockholm University</b>
Prof. Sherry H. Suyu (CoI) (ESA Member)	Technical University of Munich
Prof. Christopher Fassnacht (CoI)	University of California - Davis
Prof. Tommaso L. Treu (CoI) (AdminUSPI) (Contact)	University of California - Los Angeles
Dr. Martin Millon (CoI)	Stanford University
Dr. Dominique Sluse (CoI) (ESA Member)	Université de Liège
Dr. Akin Yildirim (CoI) (ESA Member)	Max Planck Institute for Astrophysics
Prof. Simon Birrer (CoI)	State University of New York at Stony Brook
Prof. Frederic Courbin (CoI) (ESA Member)	Ecole Polytechnique Federale de Lausanne
Dr. James Hung-Hsu Chan (CoI)	American Museum of Natural History
Dr. Aymeric Galan (CoI) (ESA Member)	Technische Universitat Munchen
Dr. Geoff Chih-Fan Chen (CoI)	University of California - Los Angeles
Dr. Cristian Eduard Rusu (CoI)	National Astronomical Obs of Japan (NAOJ), Subaru Telescope
Dr. Matthew Auger (CoI) (ESA Member)	University of Cambridge
Dr. Kenneth Wong (CoI)	University of Tokyo
Dr. Anowar J Shajib (CoI)	University of Chicago
Dr. Adriano Agnello (CoI) (ESA Member)	Science and Technology Facilities Council (STFC)

## 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) J1515+1511	WFC3/IR WFC3/UVIS	2	16-Jul-2024 10:01:59.0	yes
10	(1) J1515+1511	WFC3/UVIS	1	16-Jul-2024 10:02:00.0	yes
02	(2) J2325-5229	WFC3/IR WFC3/UVIS	2	16-Jul-2024 10:02:01.0	yes
03	(3) J1442+4055	WFC3/IR WFC3/UVIS	2	16-Jul-2024 10:02:03.0	yes
11	(3) J1442+4055	WFC3/UVIS	1	16-Jul-2024 10:02:03.0	yes
12	(3) J1442+4055	WFC3/UVIS	1	16-Jul-2024 10:02:04.0	yes
04	(4) J0806+2006	WFC3/IR WFC3/UVIS	2	16-Jul-2024 10:02:05.0	yes
05	(5) J1001+5027	WFC3/IR WFC3/UVIS	2	16-Jul-2024 10:02:07.0	yes
13	(5) J1001+5027	WFC3/IR WFC3/UVIS	1	16-Jul-2024 10:02:07.0	yes
06	(6) J0407-5006	WFC3/IR WFC3/UVIS	2	16-Jul-2024 10:02:08.0	yes
07	(7) J1620+1203	WFC3/IR WFC3/UVIS	2	16-Jul-2024 10:02:09.0	yes
08	(8) J0602-4335	WFC3/IR WFC3/UVIS	2	16-Jul-2024 10:02:11.0	yes
09	(4) J0806+2006	WFC3/UVIS	1	16-Jul-2024 10:02:11.0	yes

21 Total Orbits Used

### ABSTRACT

Time delays of strongly lensed quasars provide an independent cosmological probe that is primarily sensitive to the Hubble constant,  $H_0$ . The method relies on precise time-delay measurements from photometric monitoring of the quasar images, which has been accomplished so far for only 7

systems, including 6 quadruply imaged quasars (quads) and 1 doubly imaged quasar (double). With deep HST images and ground-based follow-up, the latest results give  $H_0 = 73.7 \pm 1.5$  km/s/Mpc, compatible with distance ladder measurements but in tension with Planck. Intriguingly, the one double yields the lowest value of  $H_0$ . With the present HST WFC3 imaging proposal our goal is to obtain deep and sharp images of 8 doubles with precisely measured time-delays from decade-long monitoring campaigns and all other necessary ancillary data already in hand. This will make the number of doubles useful as cosmological probes comparable to that of quads, and 1- test for modelling systematics by separately considering doubles and quads, 2- demonstrate the potential of doubles, i.e. 85% of the lens population, for time-delay cosmography, which is particularly important in the context of Rubin-LSST, 3- measure  $H_0$  to 2.2% precision under the assumption of physically motivated models with doubles alone, 4- in the case of no modelling systematics between quads and doubles, to measure  $H_0$  to 1.6% in combination with quads, i.e. competitive to the best probes such as type-Ia supernovae but in a completely independent way.

## **OBSERVING DESCRIPTION**

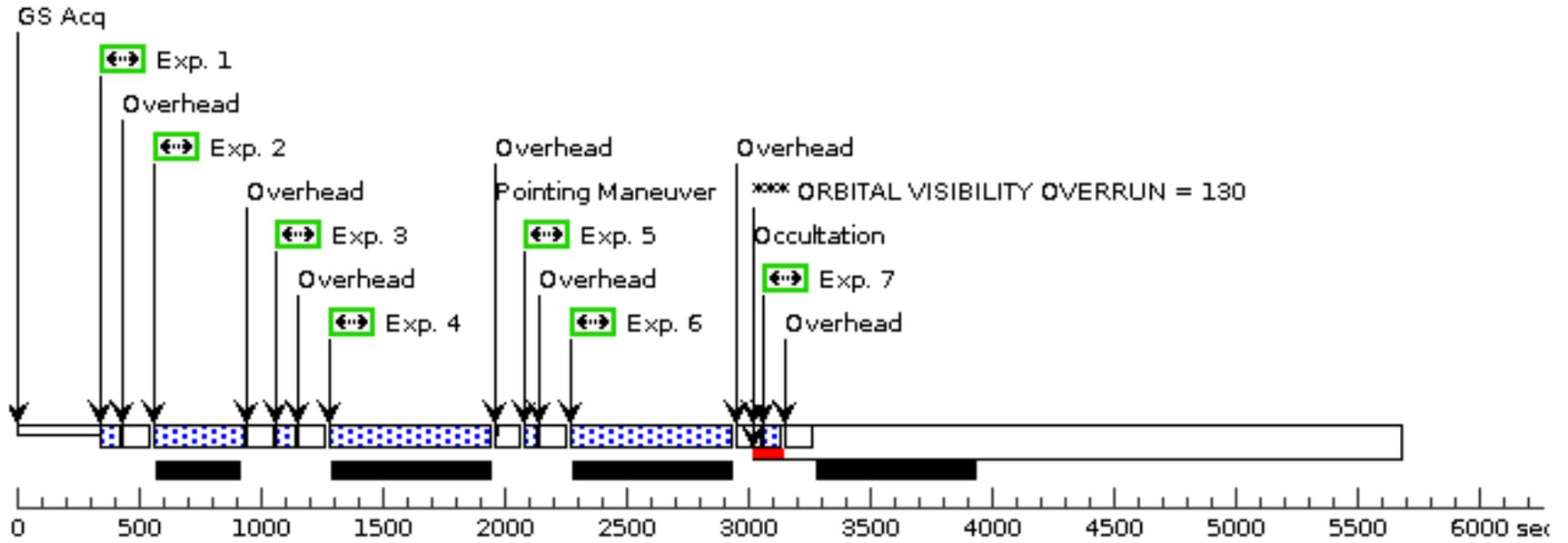
We will obtain multicolour images of a sample of doubly imaged quasars. For each target we will observe approximately 4 exposures in each filter. In the UVIS filters F475X and F814W we will use a 2-point dither pattern and obtain a short (50s) and long exposure at each position to avoid saturating the bright quasar images. In the IR channel filter F160W we use a 4-point dither pattern, and STEP100 readout sequence to guarantee sufficient dynamic range to expose both the bright quasar and the host galaxy.

Proposal 17199 - J1515+1511 (01) - Time-delay Cosmography with Strongly Lensed Quasars: Doubles vs. Quads

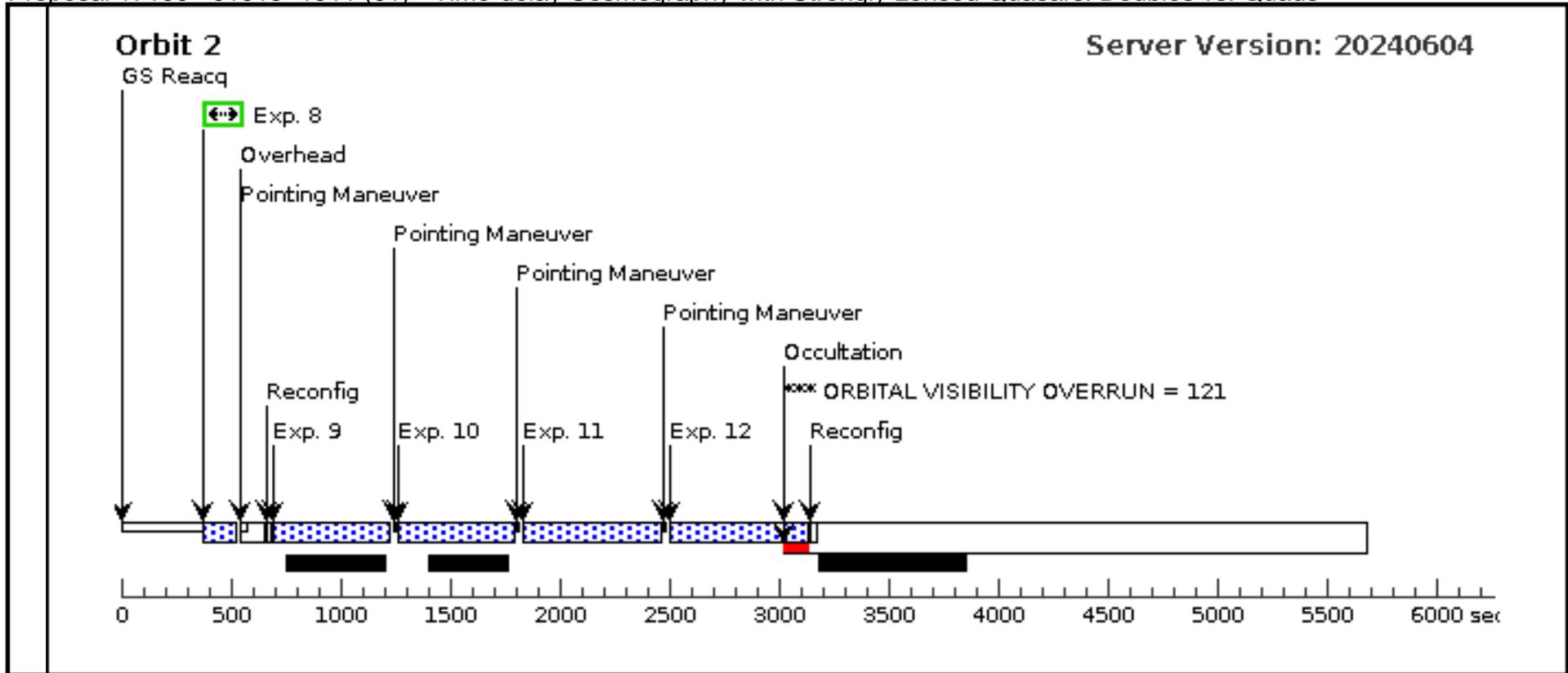
Tue Jul 16 14:02:12 GMT 2024

<b>Visit</b>	<b>Proposal 17199, J1515+1511 (01), failed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	(J1515+1511 (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (J1515+1511 (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(1)	J1515+1511 Alt Name1: SDSSJ1515+1511	RA: 15 15 38.5400 (228.9105833d) Dec: +15 11 35.12 (15.19309d) Equinox: J2000		V=18.0	Reference Frame: ICRS				
Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, QSO, QUASAR]										
<b>Exposures</b>	<b>#</b>	<b>Label</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1	(1) J1515+1511	(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [=>>50.0 Secs ]	[1]
	2	(1) J1515+1511	(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=5			150 Secs (370 Secs) [=>>370.0 Secs ]	[1]
	3	(1) J1515+1511	(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [=>>50.0 Secs ]	[1]
	4	(1) J1515+1511	(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2			664 Secs (664 Secs) [=>>664 Secs ]	[1]
	5	(1) J1515+1511	(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0. 106		50 Secs (50 Secs) [=>>50.0 Secs ]	[1]
	6	(1) J1515+1511	(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2	POS TARG 0.099,0. 106		664 Secs (664 Secs) [=>>664.0 Secs ]	[1]
	7	(1) J1515+1511	(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0. 106		50 Secs (50 Secs) [=>>50.0 Secs ]	[1]
	8	(1) J1515+1511	(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=13	POS TARG 0.099,0. 106		300 Secs (154 Secs) [=>>154.0 Secs ]	[2]
	9	(1) J1515+1511	(1) J1515+1511	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [=>>]	[2]
	10	(1) J1515+1511	(1) J1515+1511	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2. 002		499.234285 Secs (499.234 Secs) [=>>]	[2]
	11	(1) J1515+1511	(1) J1515+1511	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5. 335		599.232292 Secs (599.232 Secs) [=>>]	[2]
12	(1) J1515+1511	(1) J1515+1511	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3. .333		599.232292 Secs (599.232 Secs) [=>>]	[2]	

Orbit 1



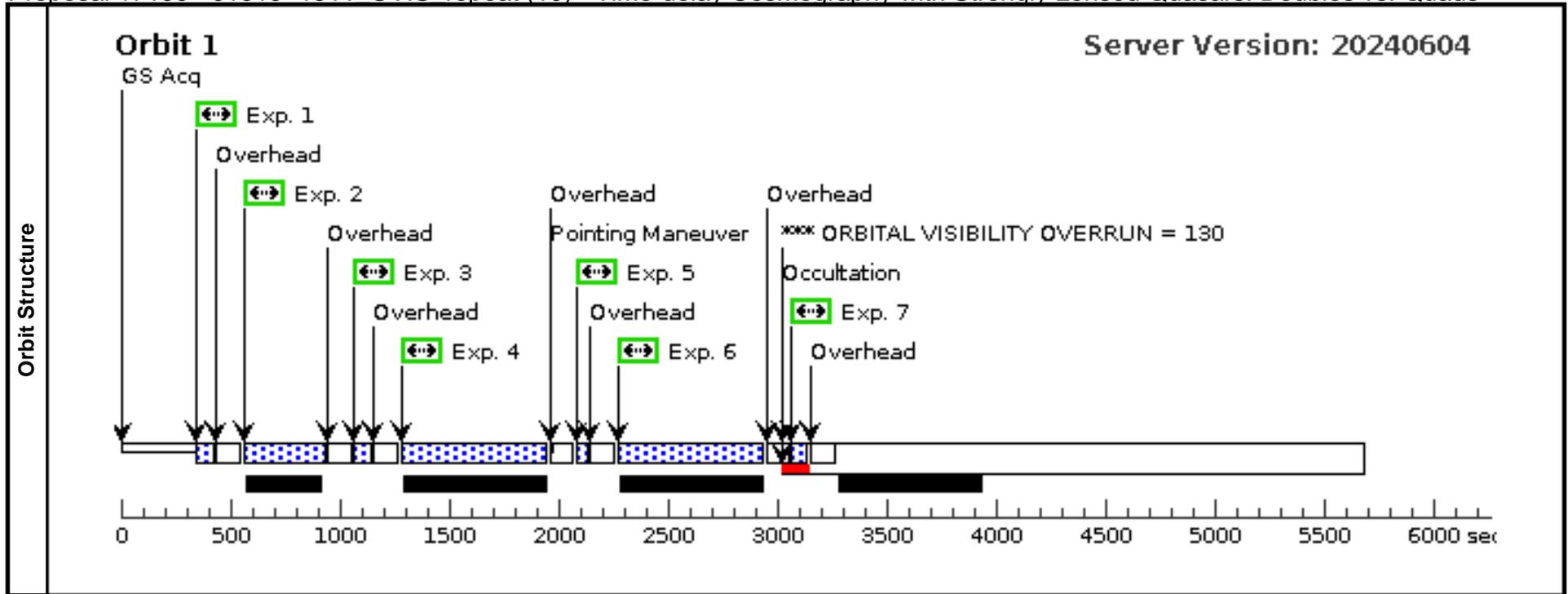
Orbit Structure



Proposal 17199 - J1515+1511 UVIS repeat (10) - Time-delay Cosmography with Strongly Lensed Quasars: Doubles vs. Quads

Tue Jul 16 14:02:12 GMT 2024

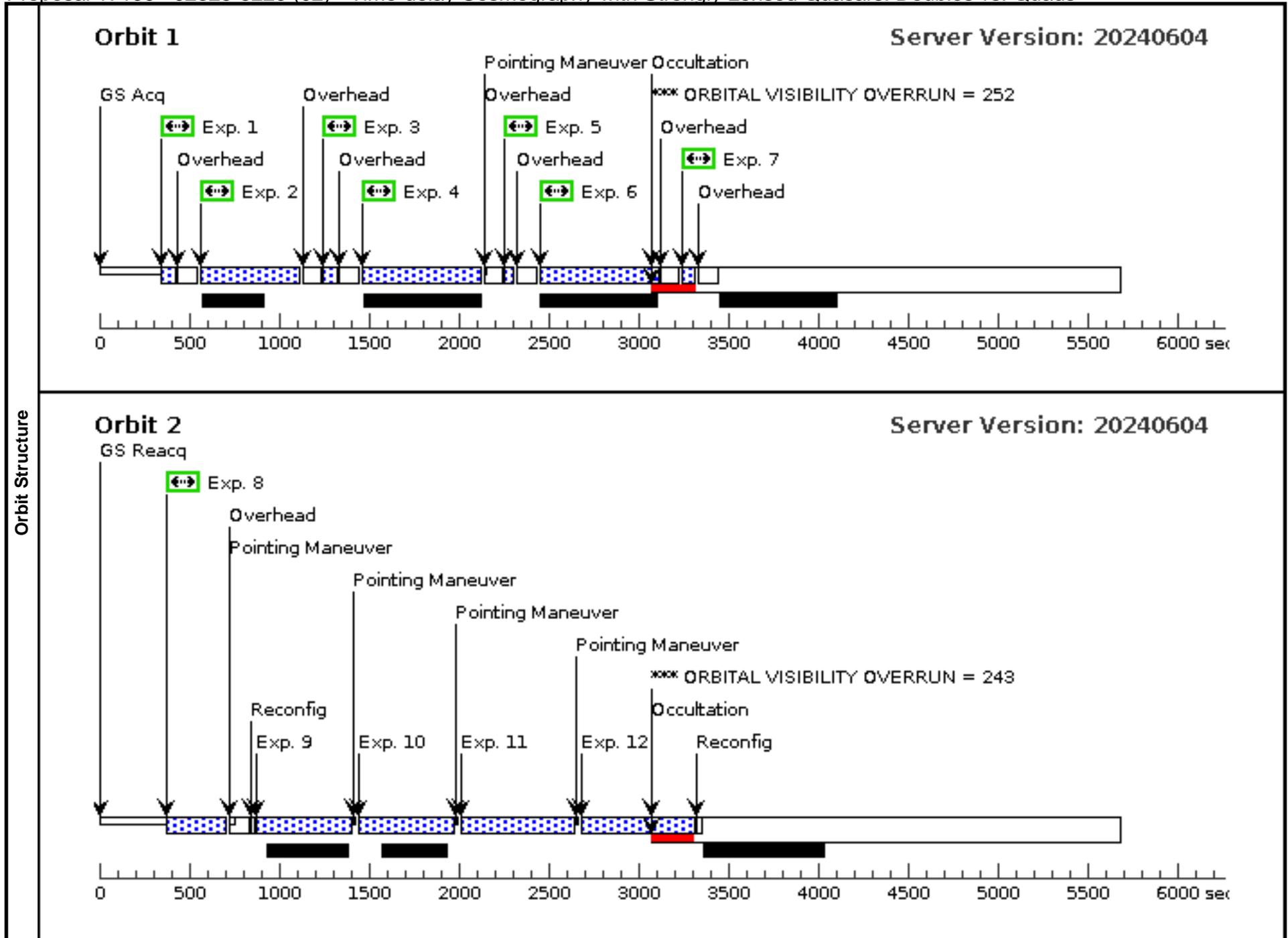
<b>Visit</b>	<b>Proposal 17199, J1515+1511_UVIS_repeat (10), completed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none) <i>Comments: Repeat of the UVIS observations of Visit 01, which failed due to FGS acquisition failure. Two F475X exposures are unaffected, so we keep all four originally planned F814W exposures, and three of the four F475X exposures, in order to fit all UVIS observations into 1 orbit, as was granted by the HOPR (92574) request.</i>																																																																																				
	(J1515+1511_UVIS_repeat (10)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN																																																																																				
<b>Fixed Targets</b>	<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>J1515+1511</td> <td>RA: 15 15 38.5400 (228.9105833d) Dec: +15 11 35.12 (15.19309d) Equinox: J2000</td> <td></td> <td>V=18.0</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	J1515+1511	RA: 15 15 38.5400 (228.9105833d) Dec: +15 11 35.12 (15.19309d) Equinox: J2000		V=18.0	Reference Frame: ICRS	<i>Comments:</i> Category=GALAXY Description=[GRAVITATIONAL LENS, OSO, QUASAR]																																																																							
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<table border="1"> <thead> <tr> <th>#</th> <th>Label</th> <th>Target</th> <th>Config,Mode,Aperture</th> <th>Spectral Els.</th> <th>Opt. Params.</th> <th>Special Reqs.</th> <th>Groups</th> <th>Exp. Time (Total)/[Actual Dur.]</th> <th>Orbit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td>(1) J1515+1511</td> <td>WFC3/UVIS, ACCUM, UVIS2</td> <td>F475X</td> <td>CR-SPLIT=NO; FLASH=18</td> <td></td> <td></td> <td>50 Secs (50 Secs) [=&gt;50.0 Secs ]</td> <td>[1]</td> </tr> <tr> <td>2</td> <td></td> <td>(1) J1515+1511</td> <td>WFC3/UVIS, ACCUM, UVIS2</td> <td>F475X</td> <td>CR-SPLIT=NO; FLASH=5</td> <td></td> <td></td> <td>150 Secs (370 Secs) [=&gt;370.0 Secs ]</td> <td>[1]</td> </tr> <tr> <td>3</td> <td></td> <td>(1) J1515+1511</td> <td>WFC3/UVIS, ACCUM, UVIS2</td> <td>F814W</td> <td>CR-SPLIT=NO; FLASH=18</td> <td></td> <td></td> <td>50 Secs (50 Secs) [=&gt;50.0 Secs ]</td> <td>[1]</td> </tr> <tr> <td>4</td> <td></td> <td>(1) J1515+1511</td> <td>WFC3/UVIS, ACCUM, UVIS2</td> <td>F814W</td> <td>CR-SPLIT=NO; FLASH=2</td> <td></td> <td></td> <td>664 Secs (664 Secs) [=&gt;664 Secs ]</td> <td>[1]</td> </tr> <tr> <td>5</td> <td></td> <td>(1) J1515+1511</td> <td>WFC3/UVIS, ACCUM, UVIS2</td> <td>F814W</td> <td>CR-SPLIT=NO; FLASH=18</td> <td>POS TARG 0.099,0.106</td> <td></td> <td>50 Secs (50 Secs) [=&gt;50.0 Secs ]</td> <td>[1]</td> </tr> <tr> <td>6</td> <td></td> <td>(1) J1515+1511</td> <td>WFC3/UVIS, ACCUM, UVIS2</td> <td>F814W</td> <td>CR-SPLIT=NO; FLASH=2</td> <td>POS TARG 0.099,0.106</td> <td></td> <td>664 Secs (664 Secs) [=&gt;664.0 Secs ]</td> <td>[1]</td> </tr> <tr> <td>7</td> <td></td> <td>(1) J1515+1511</td> <td>WFC3/UVIS, ACCUM, UVIS2</td> <td>F475X</td> <td>CR-SPLIT=NO; FLASH=18</td> <td>POS TARG 0.099,0.106</td> <td></td> <td>50 Secs (50 Secs) [=&gt;50.0 Secs ]</td> <td>[1]</td> </tr> </tbody> </table>						#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	1		(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [=>50.0 Secs ]	[1]	2		(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=5			150 Secs (370 Secs) [=>370.0 Secs ]	[1]	3		(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [=>50.0 Secs ]	[1]	4		(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2			664 Secs (664 Secs) [=>664 Secs ]	[1]	5		(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0.106		50 Secs (50 Secs) [=>50.0 Secs ]	[1]	6		(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2	POS TARG 0.099,0.106		664 Secs (664 Secs) [=>664.0 Secs ]	[1]	7		(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0.106		50 Secs (50 Secs) [=>50.0 Secs ]	[1]
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit																																																																												
1		(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [=>50.0 Secs ]	[1]																																																																												
2		(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=5			150 Secs (370 Secs) [=>370.0 Secs ]	[1]																																																																												
3		(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [=>50.0 Secs ]	[1]																																																																												
4		(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2			664 Secs (664 Secs) [=>664 Secs ]	[1]																																																																												
5		(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0.106		50 Secs (50 Secs) [=>50.0 Secs ]	[1]																																																																												
6		(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2	POS TARG 0.099,0.106		664 Secs (664 Secs) [=>664.0 Secs ]	[1]																																																																												
7		(1) J1515+1511	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0.106		50 Secs (50 Secs) [=>50.0 Secs ]	[1]																																																																												



Proposal 17199 - J2325-5229 (02) - Time-delay Cosmography with Strongly Lensed Quasars: Doubles vs. Quads

Tue Jul 16 14:02:12 GMT 2024

<b>Visit</b>	Proposal 17199, J2325-5229 (02), completed Diagnostic Status: Warning Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	(J2325-5229 (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (J2325-5229 (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (J2325-5229 (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	J2325-5229 Alt Name1: VDESJ2325-5229	RA: 23 25 41.2100 (351.4217083d) Dec: -52 29 15.00 (-52.48750d) Equinox: J2000		V=20.0	Reference Frame: ICRS				
Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, QSO, QUASAR]										
<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(2) J2325-5229		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	2	(2) J2325-5229		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			150 Secs (552 Secs) [==>552.0 Secs ]	[1]
	3	(2) J2325-5229		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	4	(2) J2325-5229		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2			664 Secs (664 Secs) [==>664 Secs ]	[1]
	5	(2) J2325-5229		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	6	(2) J2325-5229		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>664.0 Secs ]	[1]
	7	(2) J2325-5229		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	8	(2) J2325-5229		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=6	POS TARG 0.099,0.106		300 Secs (336 Secs) [==>336.0 Secs ]	[2]
	9	(2) J2325-5229		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10	(2) J2325-5229		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11	(2) J2325-5229		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]
12	(2) J2325-5229		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]	

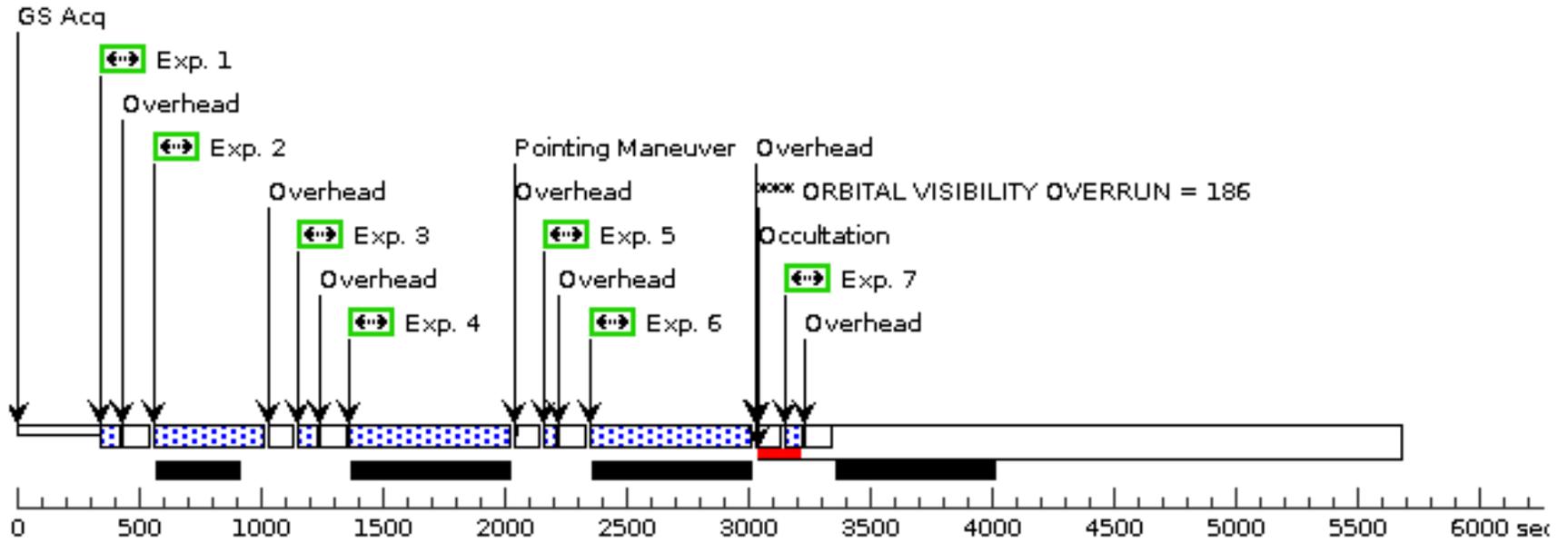


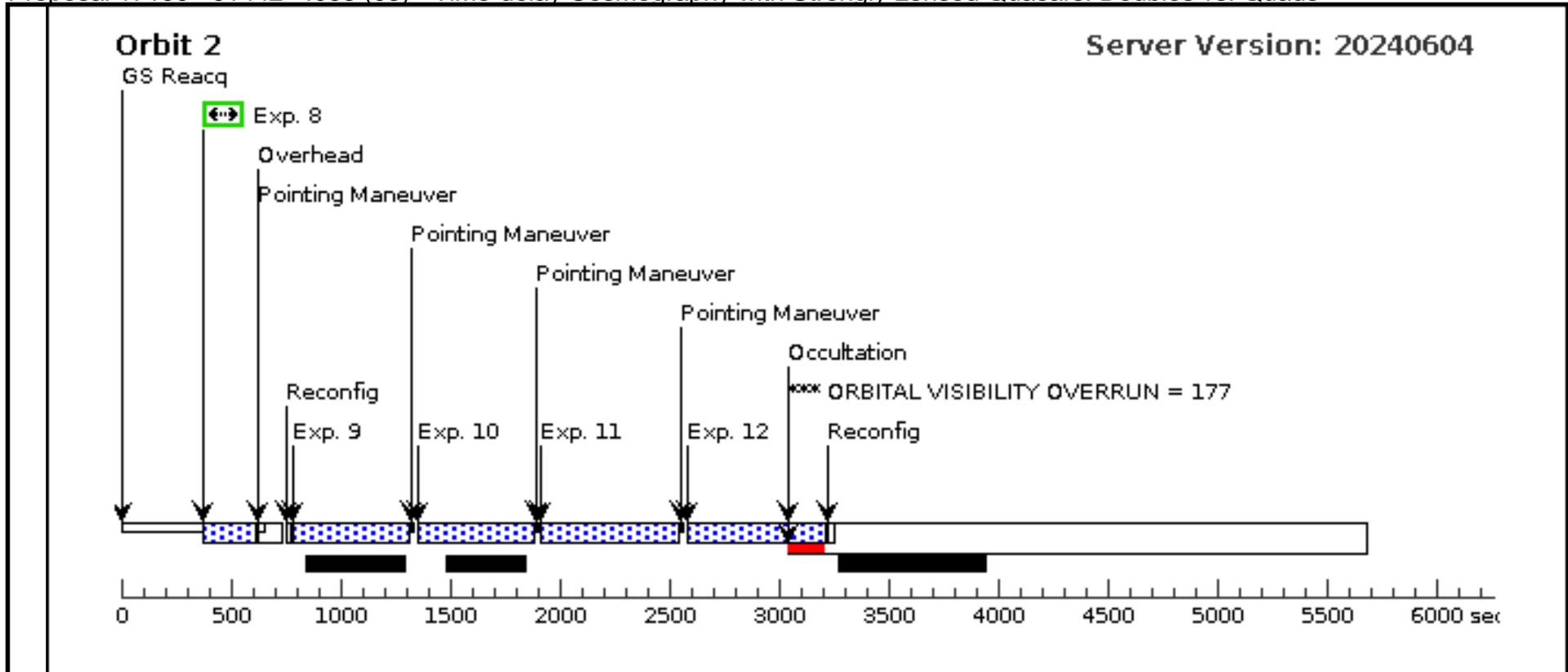
Proposal 17199 - J1442+4055 (03) - Time-delay Cosmography with Strongly Lensed Quasars: Doubles vs. Quads

Tue Jul 16 14:02:12 GMT 2024

<b>Visit</b>	Proposal 17199, J1442+4055 (03), failed Diagnostic Status: Warning Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	(J1442+4055 (03)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (J1442+4055 (03)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(3)	J1442+4055 Alt Name1: SDSSJ1442+4055	RA: 14 42 54.7000 (220.7279167d) Dec: +40 55 35.62 (40.92656d) Equinox: J2000		V=18.1	Reference Frame: ICRS				
Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, QSO, QUASAR]										
<b>Exposures</b>	<b>#</b>	<b>Label</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1	(3) J1442+4055		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	2	(3) J1442+4055		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=2			150 Secs (454 Secs) [==>454.0 Secs ]	[1]
	3	(3) J1442+4055		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	4	(3) J1442+4055		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2			664 Secs (664 Secs) [==>664 Secs ]	[1]
	5	(3) J1442+4055		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0. 106		50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	6	(3) J1442+4055		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2	POS TARG 0.099,0. 106		664 Secs (664 Secs) [==>664.0 Secs ]	[1]
	7	(3) J1442+4055		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0. 106		50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	8	(3) J1442+4055		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=9	POS TARG 0.099,0. 106		300 Secs (240 Secs) [==>240.0 Secs ]	[2]
	9	(3) J1442+4055		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10	(3) J1442+4055		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2. 002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11	(3) J1442+4055		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5. 335		599.232292 Secs (599.232 Secs) [==>]	[2]
12	(3) J1442+4055		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3 .333		599.232292 Secs (599.232 Secs) [==>]	[2]	

**Orbit 1**

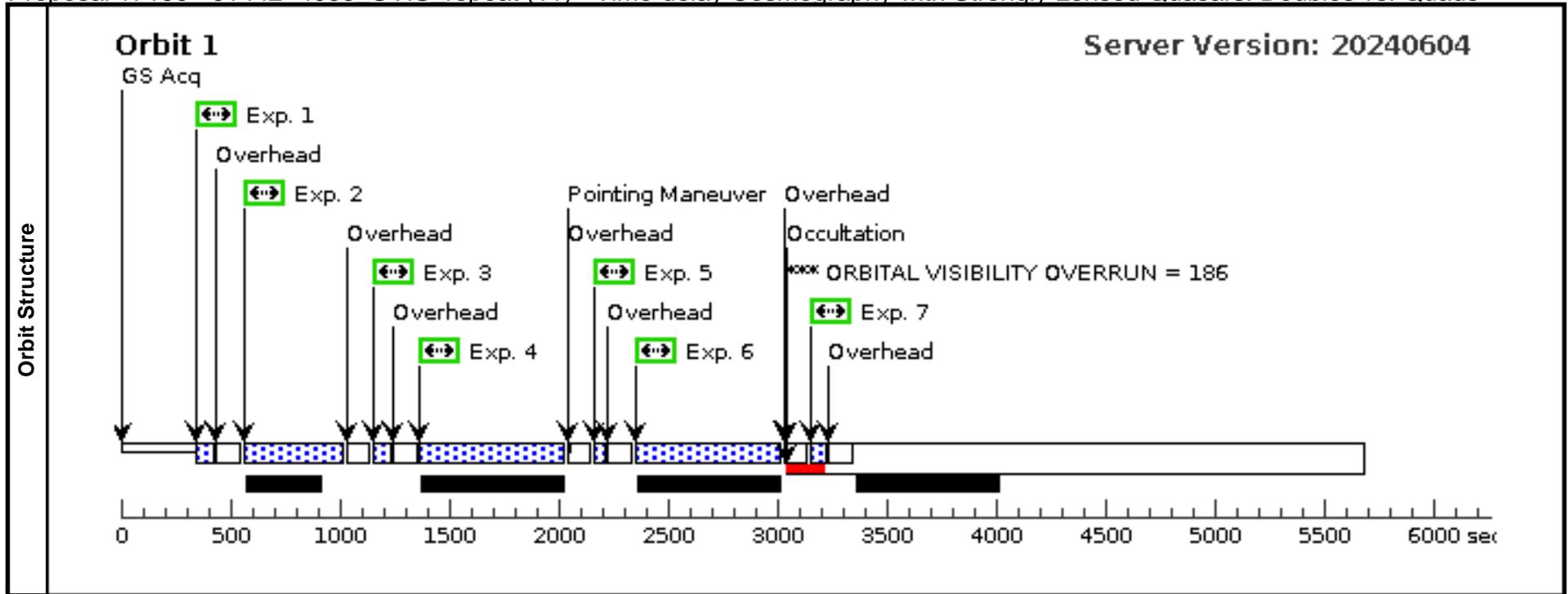




Proposal 17199 - J1442+4055 UVIS repeat (11) - Time-delay Cosmography with Strongly Lensed Quasars: Doubles vs. Quads

Tue Jul 16 14:02:12 GMT 2024

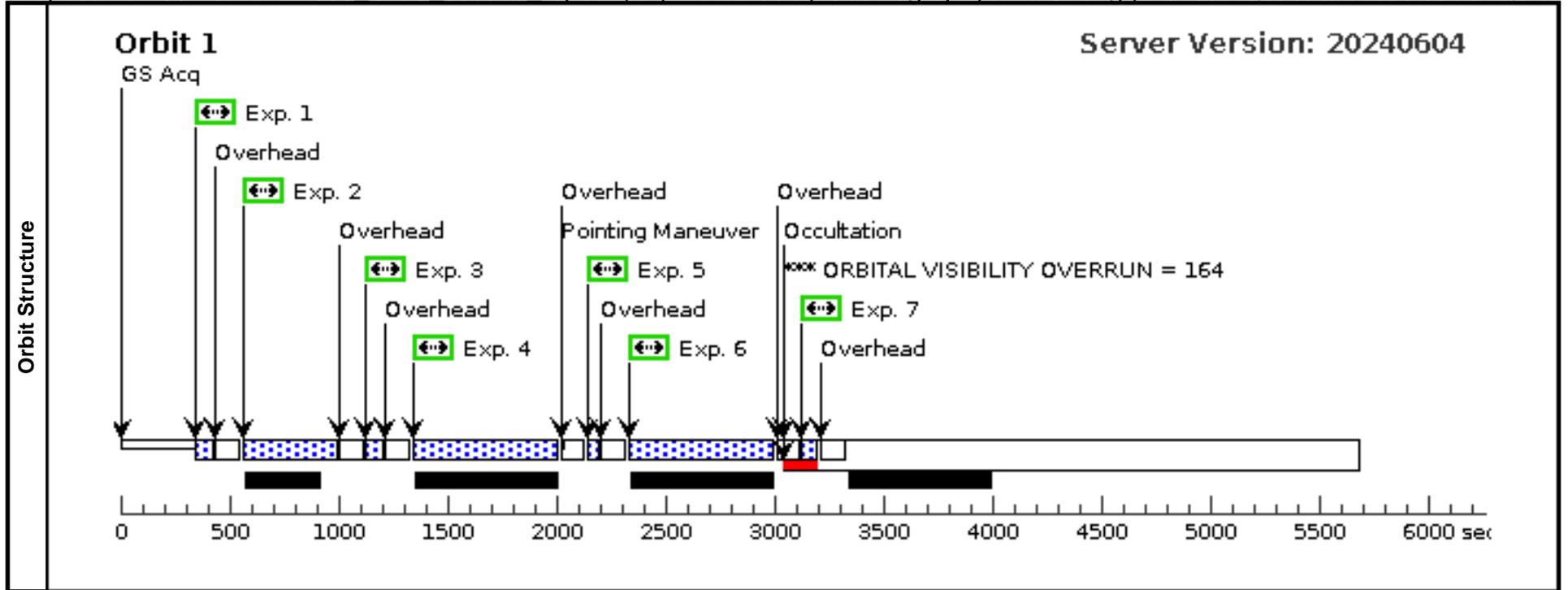
<b>Visit</b>	<b>Proposal 17199, J1442+4055_UVIS_repeat (11), failed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none) <i>Comments: Repeat of the UVIS observations of Visit 03, which failed due to FGS acquisition failure. One F475X exposures are unaffected, so we keep all four originally planned F814W exposures, and three of the four F475X exposures, in order to fit all UVIS observations into 1 orbit, as was granted by the HOPR (92575) request.</i>																																																																																				
	(J1442+4055_UVIS_repeat (11)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN																																																																																				
<b>Fixed Targets</b>	<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>(3)</td> <td>J1442+4055</td> <td>RA: 14 42 54.7000 (220.7279167d) Dec: +40 55 35.62 (40.92656d) Equinox: J2000</td> <td></td> <td>V=18.1</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(3)	J1442+4055	RA: 14 42 54.7000 (220.7279167d) Dec: +40 55 35.62 (40.92656d) Equinox: J2000		V=18.1	Reference Frame: ICRS	<i>Comments:</i> Category=GALAXY Description=[GRAVITATIONAL LENS, OSO, QUASAR]																																																																							
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Proposal 17199 - J1442+4055 UVIS second repeat (12) - Time-delay Cosmography with Strongly Lensed Quasars: Doubles vs. Qu...

Tue Jul 16 14:02:12 GMT 2024

<b>Visit</b>	<b>Proposal 17199, J1442+4055_UVIS_second_repeat (12), completed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none) <i>Comments: Repeat of the UVIS observations of Visit 11, which failed due to FGS acquisition failure. Please see the details in Visit 11, which itself was a repeat HOPR visit to perform UVIS observations. This will follow exactly the same observing strategy as Visit 11.</i>																																																																																					
	(J1442+4055_UVIS_second_repeat (12)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN																																																																																					
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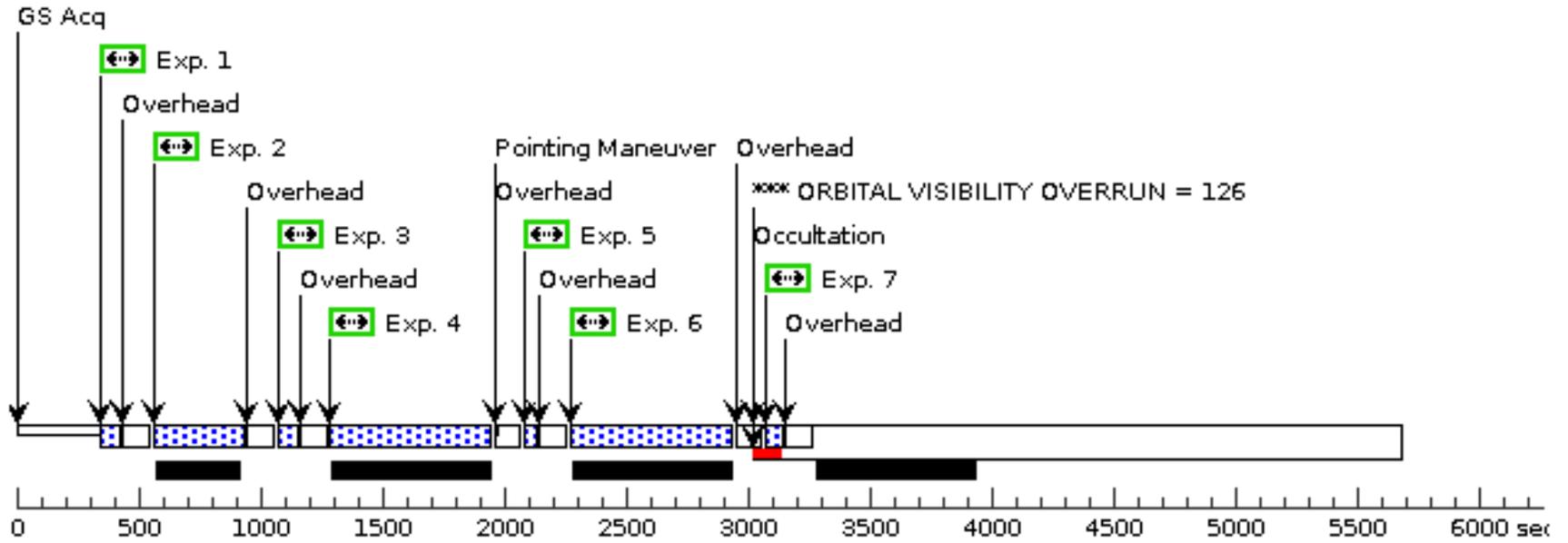


Proposal 17199 - J0806+2006 (04) - Time-delay Cosmography with Strongly Lensed Quasars: Doubles vs. Quads

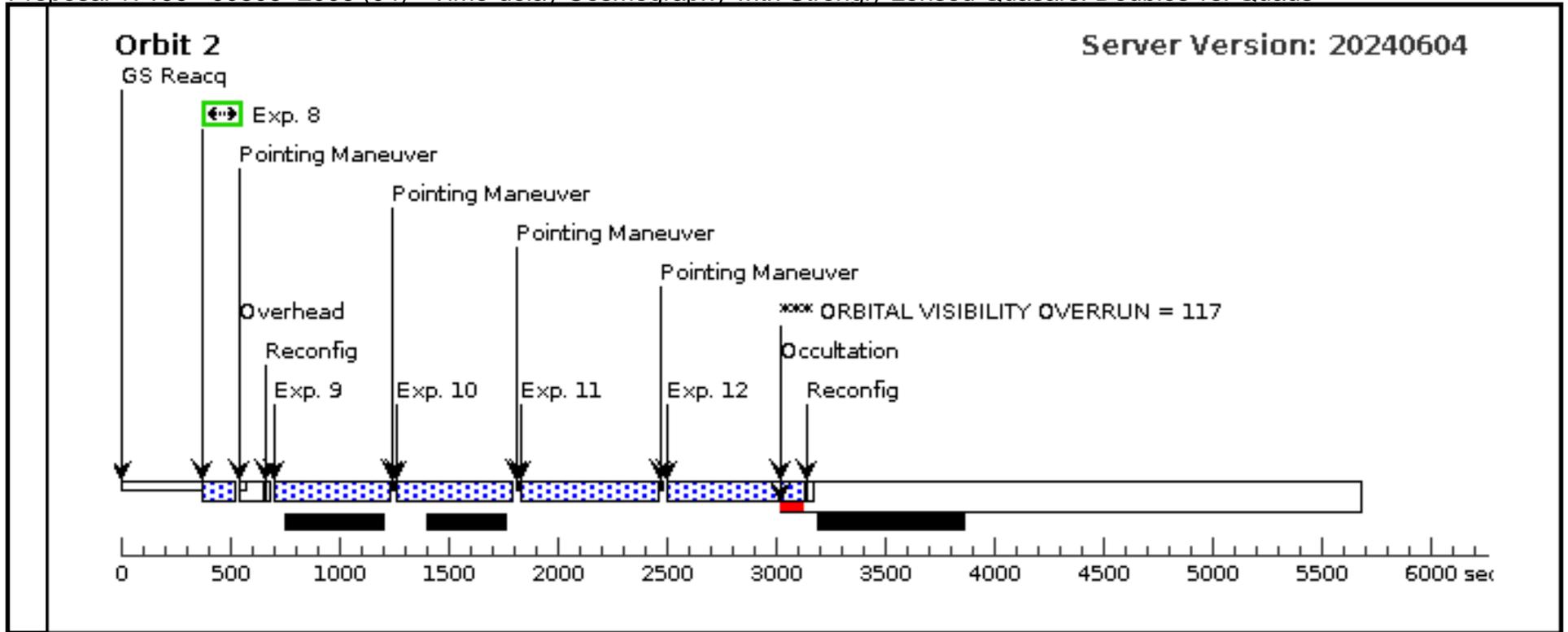
Tue Jul 16 14:02:12 GMT 2024

<b>Visit</b>	Proposal 17199, J0806+2006 (04), failed Diagnostic Status: Warning Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	(J0806+2006 (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (J0806+2006 (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(4)	J0806+2006 Alt Name1: SDSSJ0806+2006	RA: 08 06 23.6800 (121.5986667d) Dec: +20 06 31.46 (20.10874d) Equinox: J2000		V=19.3	Reference Frame: ICRS				
Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, QSO, QUASAR]										
<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(4) J0806+2006		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	2	(4) J0806+2006		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=5			150 Secs (371 Secs) [==>371.0 Secs ]	[1]
	3	(4) J0806+2006		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	4	(4) J0806+2006		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2			664 Secs (664 Secs) [==>664 Secs ]	[1]
	5	(4) J0806+2006		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	6	(4) J0806+2006		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>664.0 Secs ]	[1]
	7	(4) J0806+2006		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	8	(4) J0806+2006		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=13	POS TARG 0.099,0.106		300 Secs (155 Secs) [==>155.0 Secs ]	[2]
	9	(4) J0806+2006		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10	(4) J0806+2006		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11	(4) J0806+2006		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]
12	(4) J0806+2006		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]	

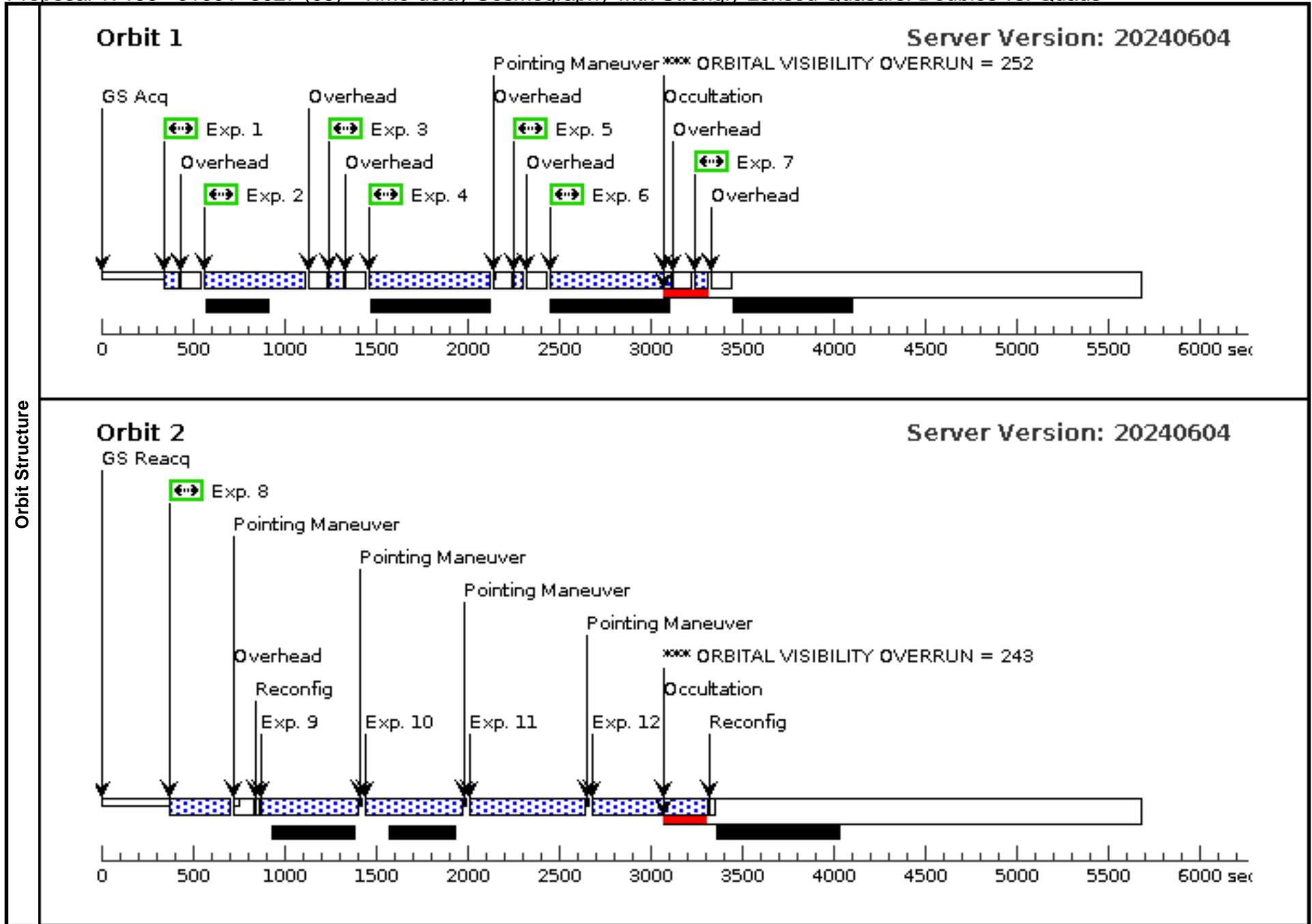
**Orbit 1**



Orbit Structure



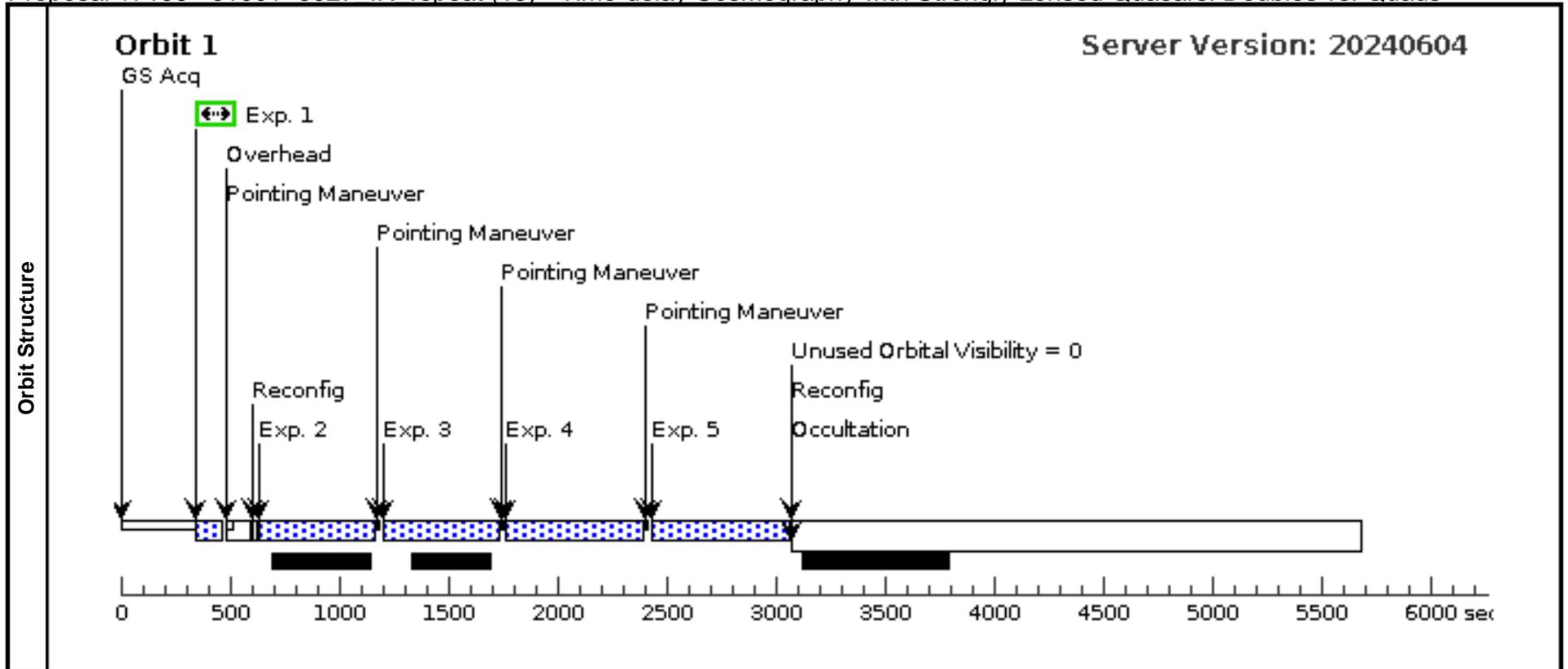




Proposal 17199 - J1001+5027 IR repeat (13) - Time-delay Cosmography with Strongly Lensed Quasars: Doubles vs. Quads

Tue Jul 16 14:02:12 GMT 2024

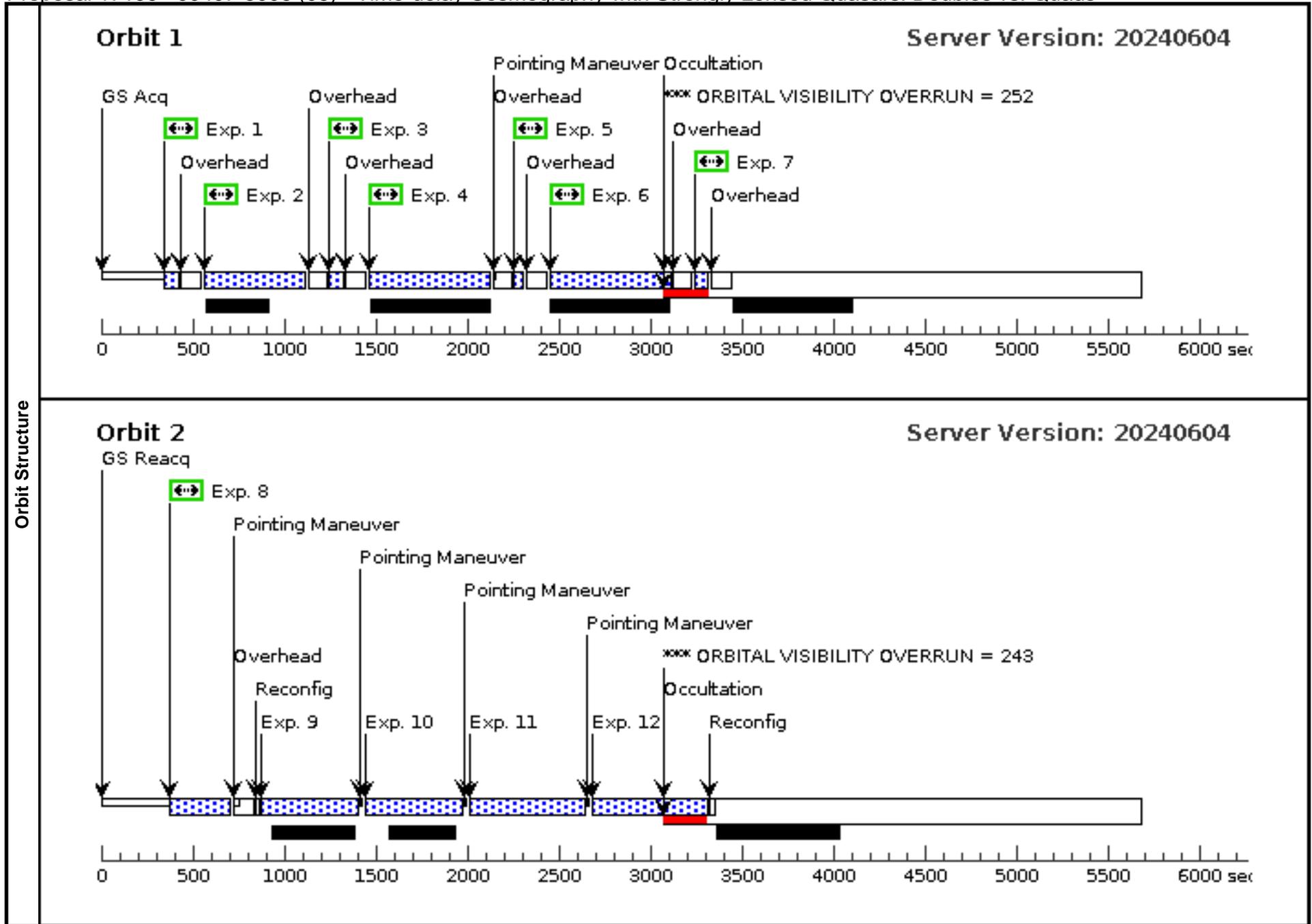
Visit	<b>Proposal 17199, J1001+5027_IR_repeat (13)</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(5)	J1001+5027	RA: 10 01 28.5000 (150.3687500d)		V=17.6	Reference Frame: ICRS				
		Alt Name1: SDSSJ1001+5027	Dec: +50 27 57.42 (50.46595d)	Equinox: J2000						
	Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, QSO, QUASAR]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(5) J1001+5027	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=14	POS TARG 0.099,0.106		300 Secs (93 Secs)	
									[==>93.0 Secs ]	[1]
	2		(5) J1001+5027	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs)	
									[==>]	[1]
	3		(5) J1001+5027	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs)	
								[==>]	[1]	
4		(5) J1001+5027	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs)		
								[==>]	[1]	
5		(5) J1001+5027	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs)		
								[==>]	[1]	



Proposal 17199 - J0407-5006 (06) - Time-delay Cosmography with Strongly Lensed Quasars: Doubles vs. Quads

Tue Jul 16 14:02:12 GMT 2024

<b>Visit</b>	Proposal 17199, J0407-5006 (06), completed Diagnostic Status: Warning Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	(J0407-5006 (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (J0407-5006 (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (J0407-5006 (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(6)	J0407-5006 Alt Name1: DESJ0407-5006	RA: 04 07 10.2720 (61.7928000d) Dec: -50 06 1.51 (-50.10042d) Equinox: J2000		V=18.3	Reference Frame: ICRS				
Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, QSO, QUASAR]										
<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(6) J0407-5006	(6) J0407-5006	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	2	(6) J0407-5006	(6) J0407-5006	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			150 Secs (552 Secs) [==>552.0 Secs ]	[1]
	3	(6) J0407-5006	(6) J0407-5006	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	4	(6) J0407-5006	(6) J0407-5006	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2			664 Secs (664 Secs) [==>664 Secs ]	[1]
	5	(6) J0407-5006	(6) J0407-5006	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	6	(6) J0407-5006	(6) J0407-5006	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>664.0 Secs ]	[1]
	7	(6) J0407-5006	(6) J0407-5006	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	8	(6) J0407-5006	(6) J0407-5006	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=6	POS TARG 0.099,0.106		300 Secs (336 Secs) [==>336.0 Secs ]	[2]
	9	(6) J0407-5006	(6) J0407-5006	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10	(6) J0407-5006	(6) J0407-5006	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11	(6) J0407-5006	(6) J0407-5006	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]
12	(6) J0407-5006	(6) J0407-5006	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]	

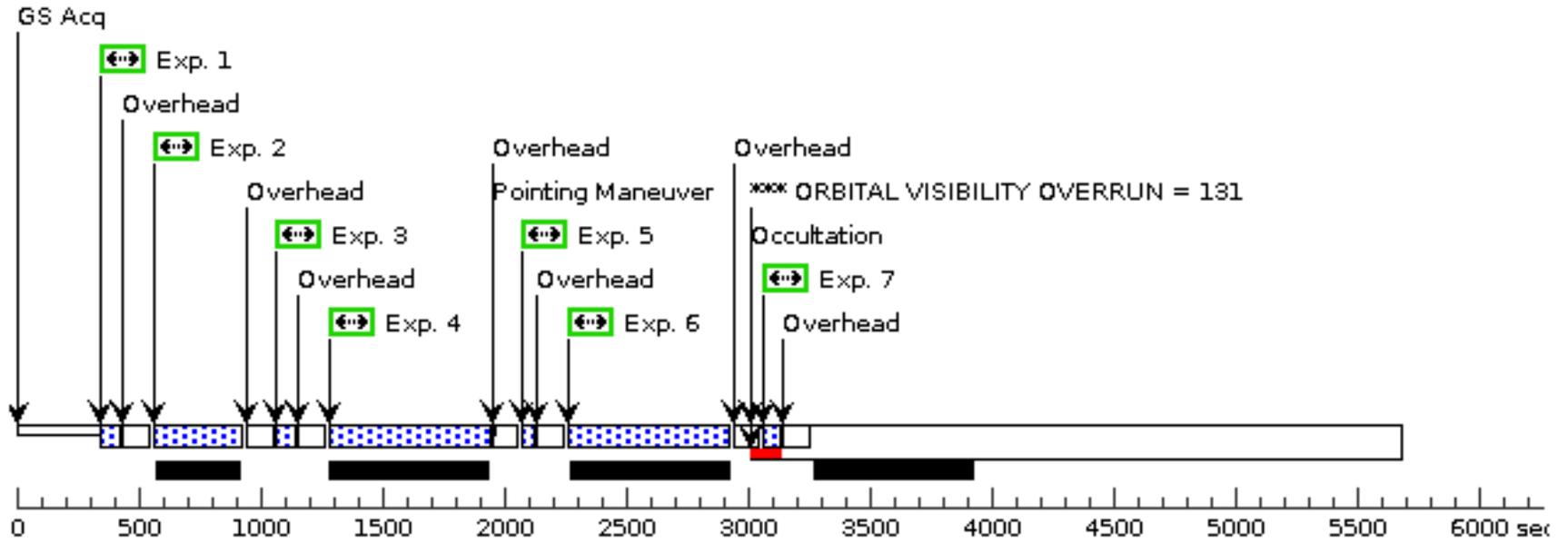


Proposal 17199 - J1602+1203 (07) - Time-delay Cosmography with Strongly Lensed Quasars: Doubles vs. Quads

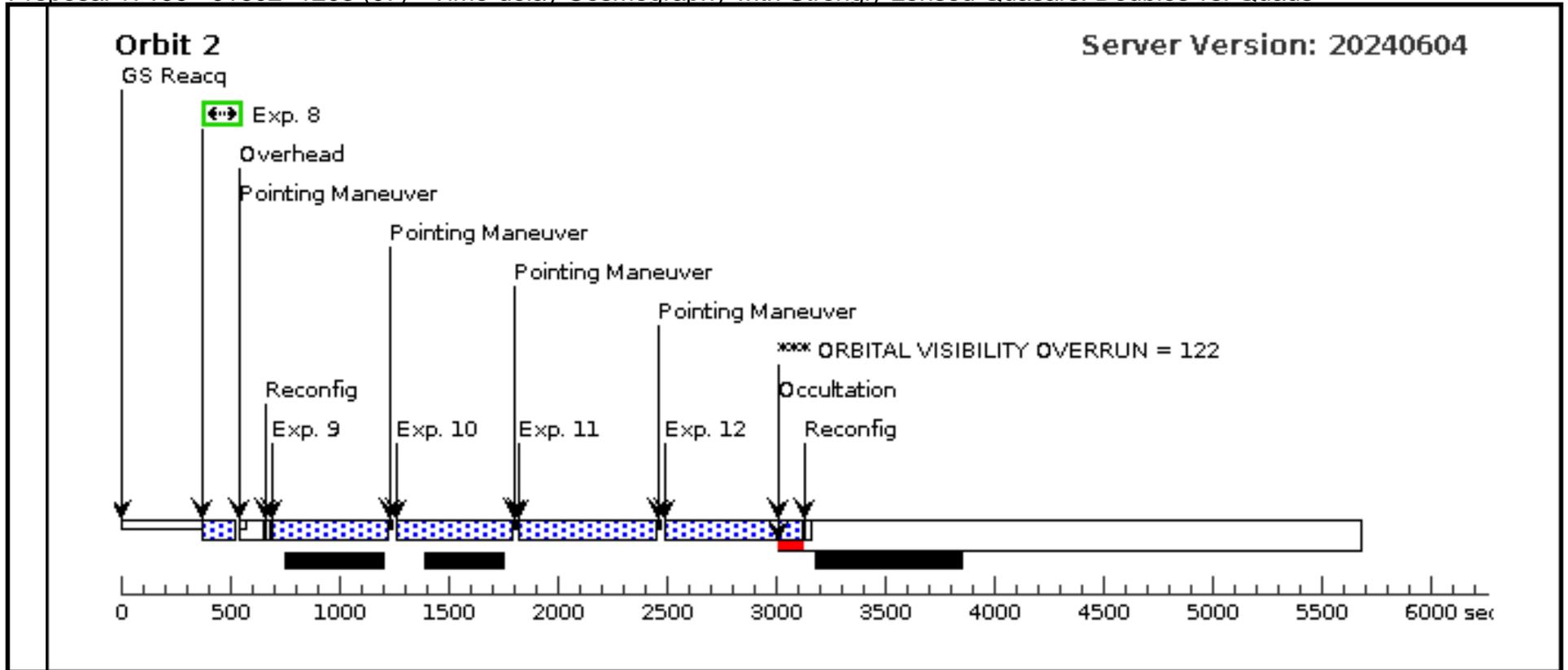
Tue Jul 16 14:02:12 GMT 2024

<b>Visit</b>	Proposal 17199, J1602+1203 (07), completed Diagnostic Status: Warning Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	(J1602+1203 (07)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (J1602+1203 (07)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	J1620+1203 Alt Name1: SDSSJ1620+1203	RA: 16 20 26.2344 (245.1093100d) Dec: +12 03 40.68 (12.06130d) Equinox: J2000		V=18.9	Reference Frame: ICRS				
Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, QSO, QUASAR]										
<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(7) J1620+1203		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	2	(7) J1620+1203		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=5			150 Secs (363 Secs) [==>363.0 Secs ]	[1]
	3	(7) J1620+1203		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	4	(7) J1620+1203		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2			664 Secs (664 Secs) [==>664 Secs ]	[1]
	5	(7) J1620+1203		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0. 106		50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	6	(7) J1620+1203		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2	POS TARG 0.099,0. 106		664 Secs (664 Secs) [==>664.0 Secs ]	[1]
	7	(7) J1620+1203		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0. 106		50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	8	(7) J1620+1203		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=14	POS TARG 0.099,0. 106		300 Secs (152 Secs) [==>152.0 Secs ]	[2]
	9	(7) J1620+1203		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10	(7) J1620+1203		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2. 002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11	(7) J1620+1203		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5. 335		599.232292 Secs (599.232 Secs) [==>]	[2]
12	(7) J1620+1203		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3 .333		599.232292 Secs (599.232 Secs) [==>]	[2]	

**Orbit 1**



Orbit Structure

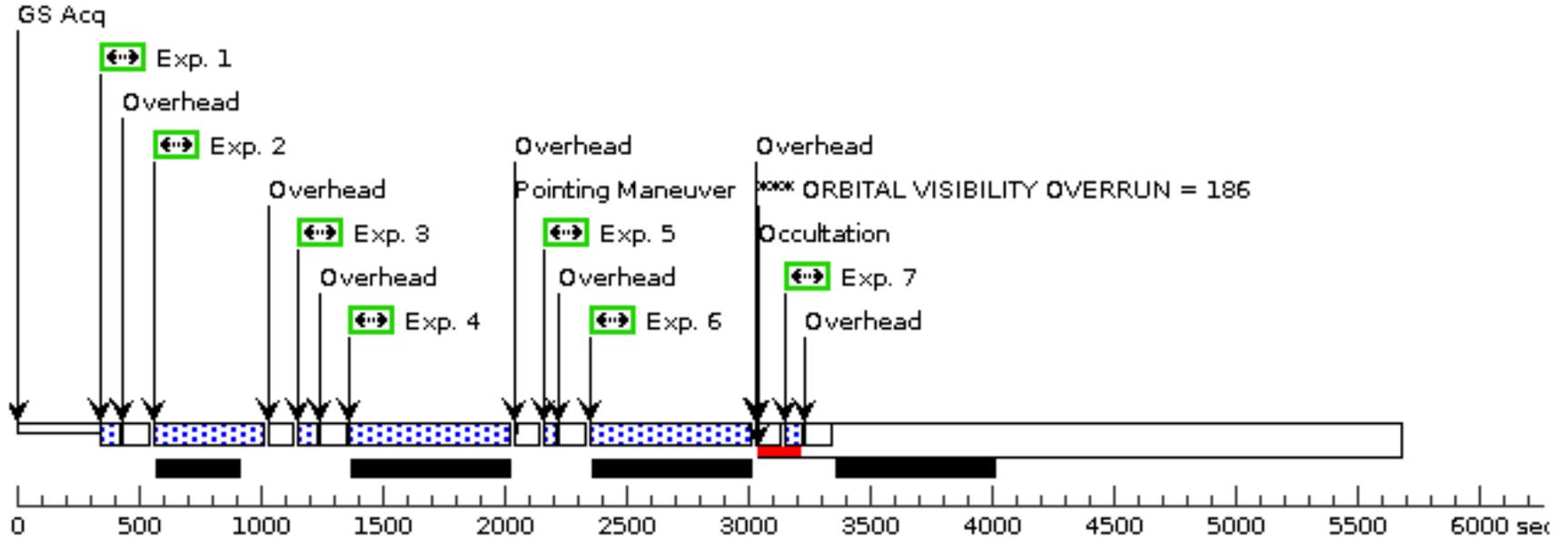


Proposal 17199 - J0602-4335 (08) - Time-delay Cosmography with Strongly Lensed Quasars: Doubles vs. Quads

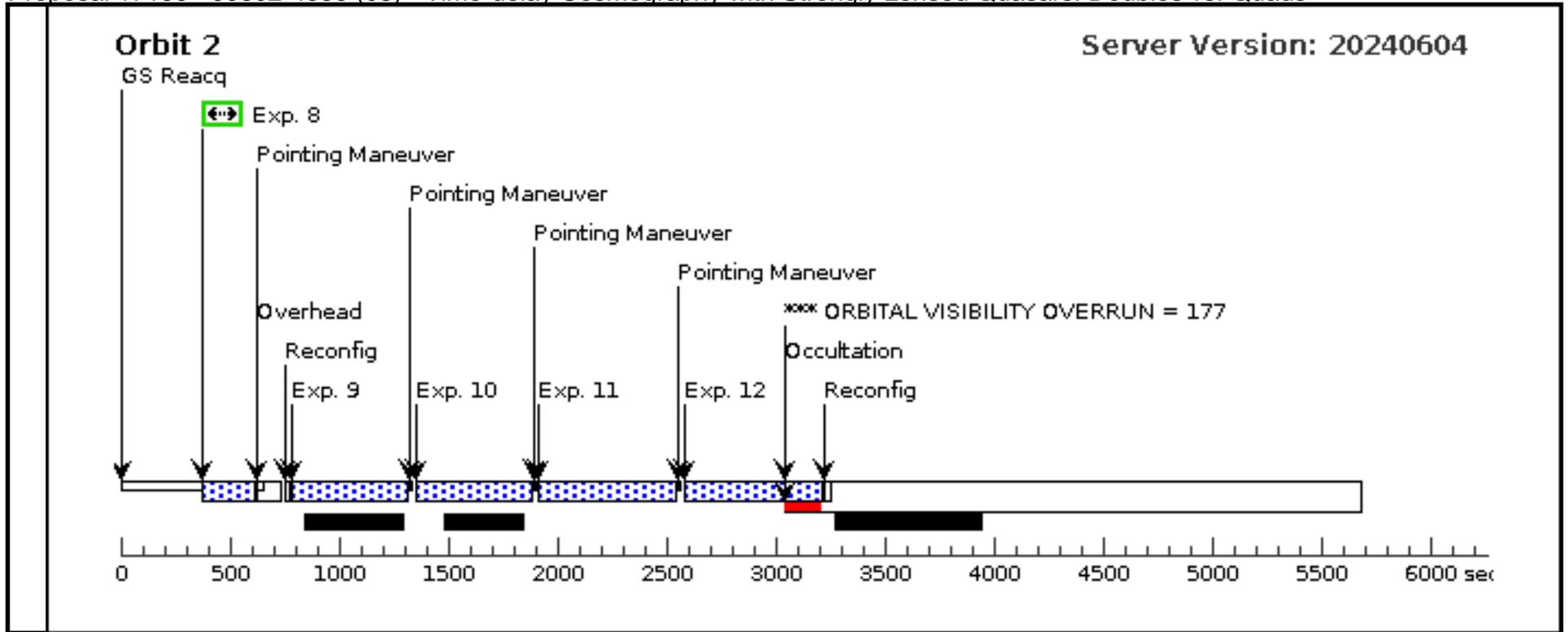
Tue Jul 16 14:02:12 GMT 2024

<b>Visit</b>	Proposal 17199, J0602-4335 (08), completed Diagnostic Status: Warning Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	(J0602-4335 (08)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (J0602-4335 (08)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(8)	J0602-4335 Alt Name1: DESJ0602-4335	RA: 06 02 16.1000 (90.5670833d) Dec: -43 35 40.20 (-43.59450d) Equinox: J2000		V=19.5	Reference Frame: ICRS				
Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, QSO, QUASAR]										
<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(8) J0602-4335		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	2	(8) J0602-4335		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=2			150 Secs (454 Secs) [==>454.0 Secs ]	[1]
	3	(8) J0602-4335		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	4	(8) J0602-4335		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2			664 Secs (664 Secs) [==>664 Secs ]	[1]
	5	(8) J0602-4335		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	6	(8) J0602-4335		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>664.0 Secs ]	[1]
	7	(8) J0602-4335		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>50.0 Secs ]	[1]
	8	(8) J0602-4335		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=10	POS TARG 0.099,0.106		300 Secs (239 Secs) [==>239.0 Secs ]	[2]
	9	(8) J0602-4335		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP50	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10	(8) J0602-4335		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP50	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11	(8) J0602-4335		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP100	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]
12	(8) J0602-4335		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP100	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]	

**Orbit 1**



Orbit Structure



Proposal 17199 - J0806+2006 UVIS repeat (09) - Time-delay Cosmography with Strongly Lensed Quasars: Doubles vs. Quads

Tue Jul 16 14:02:12 GMT 2024

<b>Visit</b>	Proposal 17199, J0806+2006_UVIS_repeat (09), completed <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	(J0806+2006_UVIS_repeat (09)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(4)	J0806+2006 Alt Name1: SDSSJ0806+2006	RA: 08 06 23.6800 (121.5986667d) Dec: +20 06 31.46 (20.10874d) Equinox: J2000		V=19.3	Reference Frame: ICRS				
Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, QSO, QUASAR]										
<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(4) J0806+2006	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [==>]	[1]
	2		(4) J0806+2006	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=5			354 Secs (354 Secs) [==>]	[1]
	3		(4) J0806+2006	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18			50 Secs (50 Secs) [==>]	[1]
	4		(4) J0806+2006	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2			664 Secs (664 Secs) [==>]	[1]
	5		(4) J0806+2006	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=18	POS TARG 0.099,0. 106		50 Secs (50 Secs) [==>]	[1]
	6		(4) J0806+2006	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=2	POS TARG 0.099,0. 106		664 Secs (664 Secs) [==>]	[1]
	7		(4) J0806+2006	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=14	POS TARG 0.099,0. 106		67 Secs (67 Secs) [==>]	[1]

