



12583 - Spectro-LARS: ISM Kinematics of the Lyman-alpha Reference Sample

Cycle: 19, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
Dr. Matthew Hayes (PI) (ESA Member) (Contact)	Observatoire Midi-Pyrenees	matthew.hayes@irap.omp.eu
Prof. Goeran Oestlin (CoI) (ESA Member)	Stockholm University	ostlin@astro.su.se
Dr. Daniel Kunth (CoI) (ESA Member)	CNRS, Institut d'Astrophysique de Paris	kunth@iap.fr
Dr. Miguel Mas-Hesse (CoI) (ESA Member)	Centro de Astrobiologia (CSIC/INTA) Inst. Nac. de T ec. Aero.	miguel.mas-hesse@cab.inta-csic.es
Prof. Daniel Schaerer (CoI) (ESA Member)	Observatoire de Geneve	daniel.schaerer@unige.ch
Dr. Hakim Atek (CoI) (ESA Member) (AdminUSPI)	Ecole Polytechnique Federale de Lausanne	atek@ipac.caltech.edu
Dr. Anne Verhamme (CoI) (ESA Member)	Centre de Recherche Astronomique de Lyon	anne.verhamme@univ-lyon1.fr
Mr. Florent Duval (CoI) (ESA Member)	Stockholm University	florent.duval@astro.su.se
Mr. Thomas Marquart (CoI) (ESA Member)	Uppsala Astronomical Observatory	thomas.marquart@astro.uu.se
Dr. Elisabet Leitet (CoI) (ESA Member)	Stockholm University	elisabet.leitet@astro.su.se
Dr. Lucia Guaita (CoI) (ESA Member)	Stockholm University	lguai@astro.su.se
Dr. Angela Adamo (CoI) (ESA Member)	Max-Planck-Institut fur Astronomie, Heidelberg	adamo@mpia-hd.mpg.de
Prof. Nils Bergvall (CoI) (ESA Member)	Uppsala Astronomical Observatory	nils.bergvall@astro.uu.se
Dr. Robert Cumming (CoI) (ESA Member)	Stockholm University	robert@astro.su.se
Dr. Peter Laursen (CoI) (ESA Member)	University of Copenhagen, Niels Bohr Institute	pela@dark-cosmology.dk
Dr. Stephane Charlot (CoI) (ESA Member)	CNRS, Institut d'Astrophysique de Paris	charlot@iap.fr
Dr. John M. Cannon (CoI)	Macalester College	jcannon@macalester.edu
Mr. Andreas Sandberg (CoI) (ESA Member)	Stockholm University	sandberg@astro.su.se

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>
02	(2) SDSS-J090704.88+532656.6	COS/FUV COS/NUV	1	27-Feb-2013 02:33:54.0	yes
03	(3) SDSS-J131535.06+620728.6	COS/FUV COS/NUV	1	27-Feb-2013 02:34:03.0	yes
04	(4) SDSS-J130728.45+542652.3	COS/FUV COS/NUV	1	27-Feb-2013 02:34:10.0	yes
05	(5) MRK1486	COS/FUV COS/NUV	1	27-Feb-2013 02:34:17.0	yes
08	(8) SDSS-J125013.50+073441.5	COS/FUV COS/NUV	1	27-Feb-2013 02:34:23.0	yes
09	(9) SDSS-J082354.96+280621.6	COS/FUV COS/NUV	1	27-Feb-2013 02:34:29.0	yes
11	(11) SDSS-J140347.22+062812.1	COS/FUV COS/NUV	1	27-Feb-2013 02:34:35.0	yes

7 Total Orbits Used

ABSTRACT

The Lyman-alpha emission line is the pivotal spectral feature in both the identification of high-redshift galaxies and the confirmation of candidates. In this respect Ly-alpha promises to realize many of the fundamental goals of galaxy evolution astrophysical cosmology. Unfortunately the line is a resonance one, and suffers a radiation transport that is intricate and complicated -- despite thousands of high-z galaxies having been found through Ly-alpha, it is still not known which physical properties of galaxies fundamentally determine the line visibility and how they intertwine. Galaxies at high-z are typically too faint to study at the necessary levels of detail, and spectral features for benchmark and calibration are redshifted to wavelengths where they are undetectable.

To resolve these issues we began a Ly-alpha imaging program, targeting 14 nearby galaxies in HST cycle 18: LARS -- the Lyman-alpha Reference Sample. LARS will consist of a public access data release and will address many aspects of Ly-alpha transport, such as dust-content and characteristics of the stellar population. Without ultraviolet spectroscopy, however, the LARS data-set will have no measurements of the neutral gas

kinematics - something that is qualitatively known to be of great significance to Ly-alpha escape. Quantitatively, however, the case is far from resolved. We will finally obtain this information by completing our HST data-set with far-ultraviolet spectroscopy from the Cosmic Origins Spectrograph. With 49 primary orbits dedicated to LARS, and further reliance on 31 orbits of archival data, the award of just 7 more orbits in cycle 19 will allow us to resolve this point.

OBSERVING DESCRIPTION

This program will obtain far ultraviolet spectra of 7 starburst galaxies in the nearby Universe with COS. There are two primary goals:

1. to obtain absorption spectra around the low ionization stage metal lines that form in the neutral ISM: SiII 1260 AA; OI 1302; SiII 1304; CII 1334.
2. to obtain emission/absorption spectra of the HI Lyman-alpha at 1216 AA.

We were awarded 7 orbits. 1 orbit for each target.

We will use the same grating for every galaxy: G130M, although various CENWAVE/FP-POS combinations are adopted.

The coordinates given are based upon WFC3/UVIS/F336W imaging, which has been astrometrically corrected against 2MASS, giving an estimated maximum r.m.s. error on our requested pointing of 0.25 arcsec. In one case WFC3 imaging has not yet been obtained, although is scheduled in cycle 18 -- this galaxy is rather compact and we currently enter the 2MASS coordinates for the acquisition. We may tweak this when the WFC3 imaging has been obtained.

With these accuracies we rely upon NUV target acquisition with ACQ/IMAGE.

Being selected from GALEX catalogs, we have 1500 and 2200 AA magnitudes for all targets. The objects are unresolved by GALEX, and assumed to be stars, but all galaxies are well-resolved in the UV by HST. They all consist of multiple star-forming condensations, knots, etc. Thus the warning offered by the GALEX mode of the Bright Object Tool are extremely conservative and not applicable to our galaxies. The individual knots are, however, spatially compact, sufficiently so for ACQ/IMAGE without much loss of time spectroscopy.

Notes on photometry and ETC runs:

The definition of conservative means fainter than expected for target acquisition but brighter than expected for bright object safety. For bright object

Proposal 12583 (STScI Edit Number: 2, Created: Tuesday, February 26, 2013 9:34:42 PM EST) - Overview

safety we do aperture photometry in 0.5 arcsec (radius) annuli, centring is on, and background subtraction is off -- given the resolved nature of our targets, this is double conservative. For target acquisition our photometry is done in 0.25 arcsec (radius) annuli. For all ETC runs in spectroscopic mode, we assume exposure times of 800 s; fluxes are either measured in ACS/SBC/F140LP or extrapolated from WFC3/UVIS/F336W using the beta slope measured by GALEX.

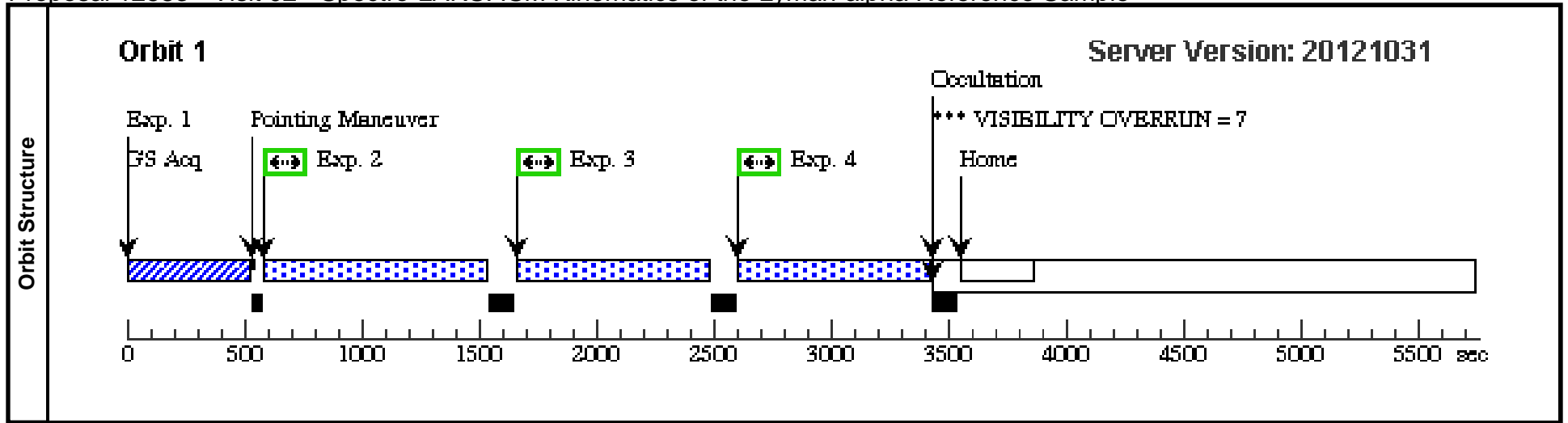
The shortest FUV spectroscopic buffer time is over 5000 seconds. We therefore set the buffer time to the exposure time in every case.

In 6 of the 7 cases we have orient constraints that are designed to place multiple star forming knots along the dispersion axis.

Proposal 12583 - Visit 02 - Spectro-LARS: ISM Kinematics of the Lyman-alpha Reference Sample

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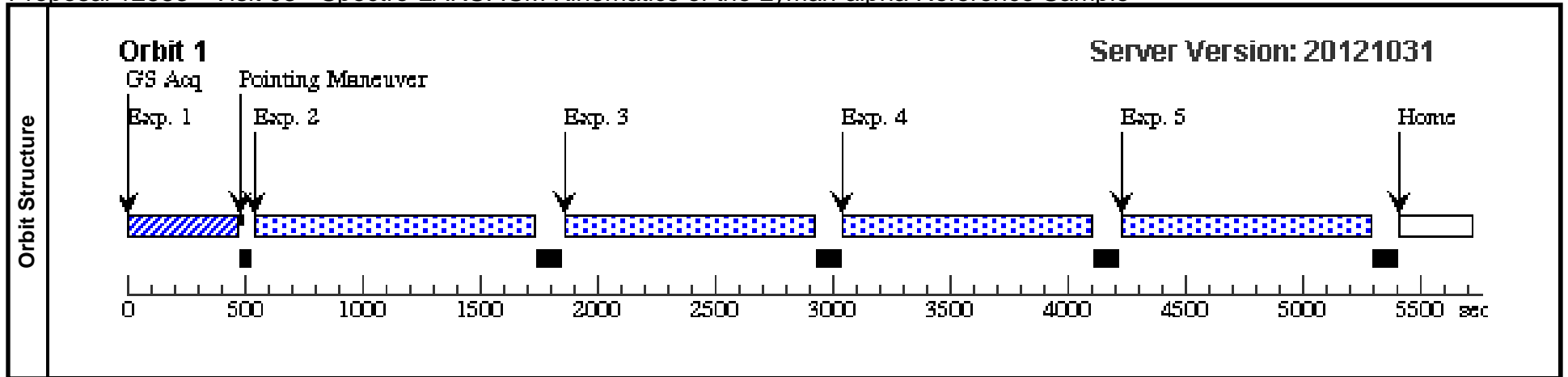
Visit	<p>Proposal 12583, Visit 02, completed</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: COS/NUV, COS/FUV</p> <p>Special Requirements: ORIENT 110D TO 150 D; ORIENT 290D TO 330 D</p> <p><i>Comments: Orientation angles are computed so as to arrange multiple point-like sources along the spatial axis. 2 ranges are defined, separated by 180 degrees, which are computed as the position angle of the desired spatial axis (E of N) + 135 degrees (PII manual section 7.2.2 and table 7.4).</i></p>										
	<p>(Visit 02) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.</p> <p>(Visit 02) Warning (Orbit Planner): VISIBILITY OVERRUN</p>										
Diagnosics											
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(2)	SDSS-J090704.88+532656.6	RA: 09 07 4.8936 (136.7703900d) Dec: +53 26 57.48 (53.44930d) Equinox: J2000	Redshift: 0.029864	V=16.96+/-0.01 F-CONT(3354)=8.8379e-17 ; be ta=-1.18 ; F-CONT(2338)=1.353 4e-16	Reference Frame: ICRS					
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	(COS.ta.185 561)	(2) SDSS-J090704.8 8+532656.6	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				58 Secs [==>]	[1]	
	<i>Comments: Acquisition time estimates based upon point source in WFC3/UVIS/F336W imaging and UV continuum slope measured by GALEX (FUV/NUV). Could be updated as ACS/SBC imaging arrive, allowing us to interpolate to the COS/NUV channel directly.</i>										
	2	(COS.sp.185 579)	(2) SDSS-J090704.8 8+532656.6	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=2; FLASH=YES; BUFFER-TIME=77 2				763 Secs [==>]	[1]
	3	(COS.sp.185 579)	(2) SDSS-J090704.8 8+532656.6	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=3; FLASH=YES; BUFFER-TIME=77 2				763 Secs [==>]	[1]
	4	(COS.sp.185 579)	(2) SDSS-J090704.8 8+532656.6	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=4; FLASH=YES; BUFFER-TIME=77 2				763 Secs [==>]	[1]



Proposal 12583 - Visit 03 - Spectro-LARS: ISM Kinematics of the Lyman-alpha Reference Sample

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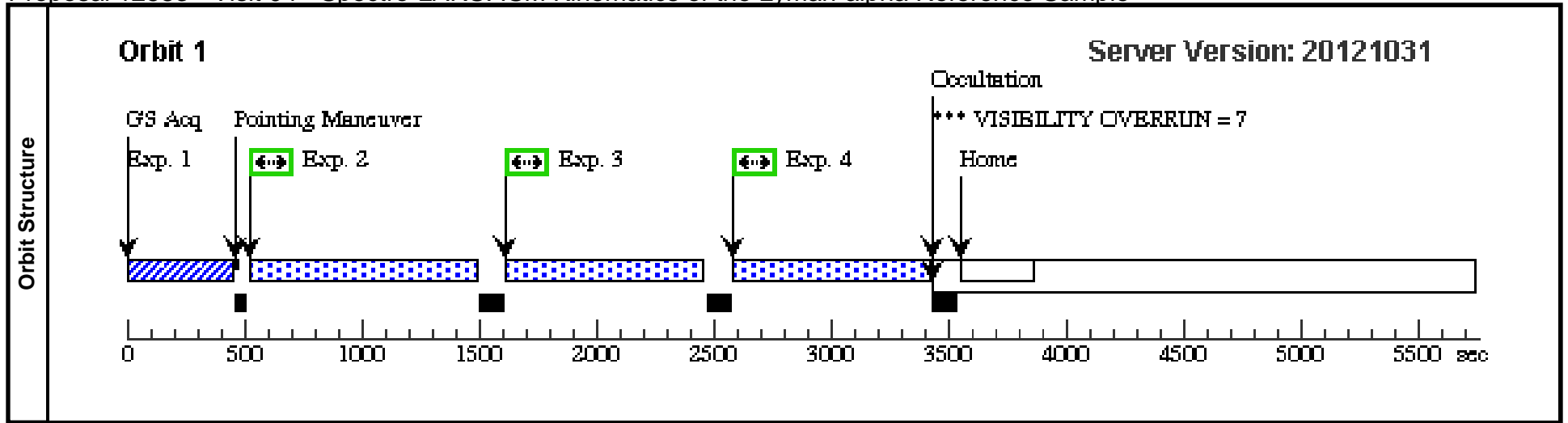
Visit	<p>Proposal 12583, Visit 03, completed</p> <p>Diagnostic Status: No Diagnostics</p> <p>Scientific Instruments: COS/NUV, COS/FUV</p> <p>Special Requirements: CVZ</p> <p><i>Comments: No orient ranges are defined. Given the complex morphology we may as well leave it to chance.</i></p> <p><i>According the beta slope measured by GALEX, this galaxy has the reddest UV continuum in the sample. Combined with the relative faintness of the point-sources in F336W, the FUV continuum of this object is the most likely to be weak. The object is located at +62 degrees, and since it has no orient requirement, CVZ visits can easily be scheuled -- 3 to 7 day windows are available every month in cycle 19. As stated in our Phase I proposal, we request the CVZ for this visit.</i></p>																																																																						
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(3)</td> <td>SDSS-J131535.06+620728.6</td> <td>RA: 13 15 35.1600 (198.8965000d) Dec: +62 07 28.11 (62.12448d) Equinox: J2000</td> <td>Redshift: 0.030754</td> <td>V=15.11+/-0.01 F-CONT(3354)=1.7692e-16 ; be ta=-0.61 ; F-CONT(2338)=2.205 2e-16</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(3)	SDSS-J131535.06+620728.6	RA: 13 15 35.1600 (198.8965000d) Dec: +62 07 28.11 (62.12448d) Equinox: J2000	Redshift: 0.030754	V=15.11+/-0.01 F-CONT(3354)=1.7692e-16 ; be ta=-0.61 ; F-CONT(2338)=2.205 2e-16	Reference Frame: ICRS																																																									
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Exposures	<table border="1"> <thead> <tr> <th>#</th> <th>Label (ETC Run)</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/[Actual Dur.]</th> <th>Orbit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>(COS.ta.185 562)</td> <td>(3) SDSS-J131535.0 6+620728.6</td> <td>COS/NUV, ACQ/IMAGE, PSA</td> <td>MIRRORA</td> <td></td> <td></td> <td></td> <td>36 Secs [==>]</td> <td>[1]</td> </tr> <tr> <td colspan="10"><i>Comments: Acquisition time estimates based upon point source in WFC3/UVIS/F336W imaging and UV continuum slope measured by GALEX (FUV/NUV). Could be updated as ACS/SBC imaging arrive, allowing us to interpolate to the COS/NUV channel directly.</i></td> </tr> <tr> <td>2</td> <td>(COS.sp.185 580)</td> <td>(3) SDSS-J131535.0 6+620728.6</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G130M 1327 A</td> <td>FP-POS=1; FLASH=YES; BUFFER-TIME=10 10</td> <td></td> <td></td> <td>1005 Secs [==>]</td> <td>[1]</td> </tr> <tr> <td>3</td> <td>(COS.sp.185 580)</td> <td>(3) SDSS-J131535.0 6+620728.6</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G130M 1327 A</td> <td>FP-POS=2; FLASH=YES; BUFFER-TIME=10 10</td> <td></td> <td></td> <td>1005 Secs [==>]</td> <td>[1]</td> </tr> <tr> <td>4</td> <td>(COS.sp.185 580)</td> <td>(3) SDSS-J131535.0 6+620728.6</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G130M 1327 A</td> <td>FP-POS=3; FLASH=YES; BUFFER-TIME=10 10</td> <td></td> <td></td> <td>1005 Secs [==>]</td> <td>[1]</td> </tr> <tr> <td>5</td> <td>(COS.sp.185 580)</td> <td>(3) SDSS-J131535.0 6+620728.6</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G130M 1327 A</td> <td>FP-POS=4; FLASH=YES; BUFFER-TIME=10 10</td> <td></td> <td></td> <td>1005 Secs [==>]</td> <td>[1]</td> </tr> </tbody> </table>	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	1	(COS.ta.185 562)	(3) SDSS-J131535.0 6+620728.6	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				36 Secs [==>]	[1]	<i>Comments: Acquisition time estimates based upon point source in WFC3/UVIS/F336W imaging and UV continuum slope measured by GALEX (FUV/NUV). Could be updated as ACS/SBC imaging arrive, allowing us to interpolate to the COS/NUV channel directly.</i>										2	(COS.sp.185 580)	(3) SDSS-J131535.0 6+620728.6	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=1; FLASH=YES; BUFFER-TIME=10 10			1005 Secs [==>]	[1]	3	(COS.sp.185 580)	(3) SDSS-J131535.0 6+620728.6	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=2; FLASH=YES; BUFFER-TIME=10 10			1005 Secs [==>]	[1]	4	(COS.sp.185 580)	(3) SDSS-J131535.0 6+620728.6	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=3; FLASH=YES; BUFFER-TIME=10 10			1005 Secs [==>]	[1]	5	(COS.sp.185 580)	(3) SDSS-J131535.0 6+620728.6	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=4; FLASH=YES; BUFFER-TIME=10 10			1005 Secs [==>]	[1]
	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit																																																													
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	3	(COS.sp.185 580)	(3) SDSS-J131535.0 6+620728.6	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=2; FLASH=YES; BUFFER-TIME=10 10			1005 Secs [==>]	[1]																																																													
4	(COS.sp.185 580)	(3) SDSS-J131535.0 6+620728.6	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=3; FLASH=YES; BUFFER-TIME=10 10			1005 Secs [==>]	[1]																																																														
5	(COS.sp.185 580)	(3) SDSS-J131535.0 6+620728.6	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=4; FLASH=YES; BUFFER-TIME=10 10			1005 Secs [==>]	[1]																																																														



Proposal 12583 - Visit 04 - Spectro-LARS: ISM Kinematics of the Lyman-alpha Reference Sample

Wed Feb 27 02:34:47 GMT 2013

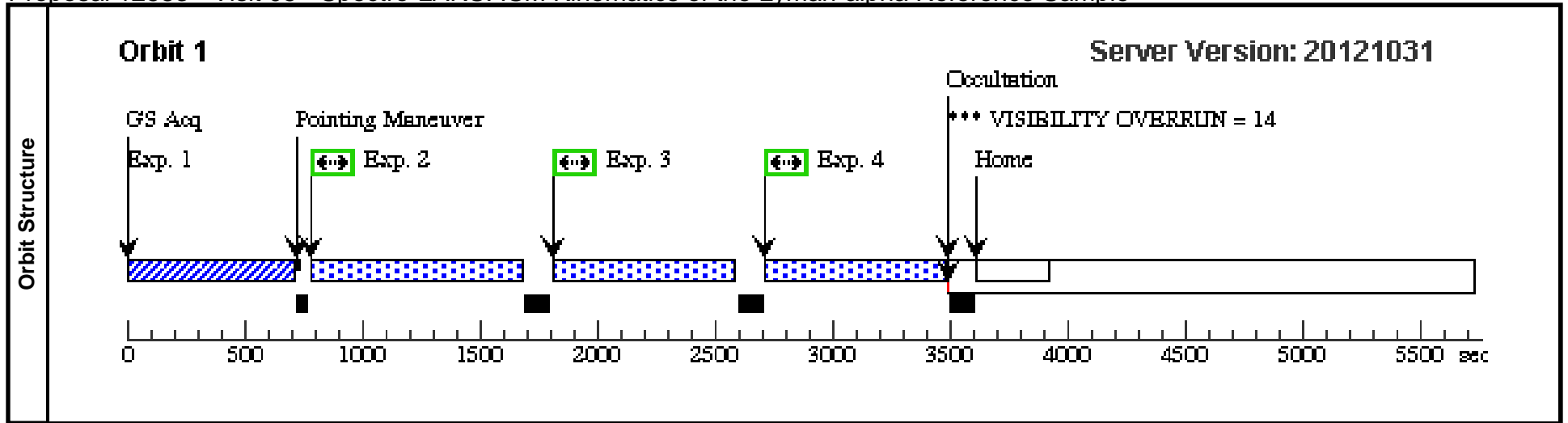
Visit	<p>Proposal 12583, Visit 04, completed</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: COS/NUV, COS/FUV</p> <p>Special Requirements: ORIENT 115D TO 155 D; ORIENT 295D TO 335 D</p> <p><i>Comments: Orientation angles are computed so as to arrange multiple point-like sources along the spatial axis. 2 ranges are defined, separated by 180 degrees, which are computed as the position angle of the desired spatial axis (E of N) + 135 degrees (PII manual section 7.2.2 and table 7.4).</i></p>										
	<p>(Visit 04) Warning (Orbit Planner): VISIBILITY OVERRUN</p> <p>(Visit 04) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.</p>										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(4)	SDSS-J130728.45+542652.3	RA: 13 07 28.6752 (196.8694800d) Dec: +54 26 49.48 (54.44708d) Equinox: J2000	Redshift: 0.032607	V=16.11+/-0.01 F-CONT(1528)=5.3137e-16 ; be ta=-1.12 ; F-CONT(2338)=3.300 0e-16	Reference Frame: ICRS					
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	(COS.ta.185 563)	(4) SDSS-J130728.4 5+542652.3	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				25 Secs [==>]	[1]	
	<i>Comments: Acquisition time estimates based upon point source in both ACS/SBC/F140LP and WFC3/UVIS/F336W imaging. Flux is logarithmically interpolated to 2330 AA.</i>										
	2	(COS.sp.185 581)	(4) SDSS-J130728.4 5+542652.3	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=1; FLASH=YES; BUFFER-TIME=78 7				785 Secs [==>]	[1]
	3	(COS.sp.185 581)	(4) SDSS-J130728.4 5+542652.3	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=2; FLASH=YES; BUFFER-TIME=78 7				785 Secs [==>]	[1]
4	(COS.sp.185 581)	(4) SDSS-J130728.4 5+542652.3	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=3; FLASH=YES; BUFFER-TIME=78 7				785 Secs [==>]	[1]	



Proposal 12583 - Visit 05 - Spectro-LARS: ISM Kinematics of the Lyman-alpha Reference Sample

Wed Feb 27 02:34:48 GMT 2013

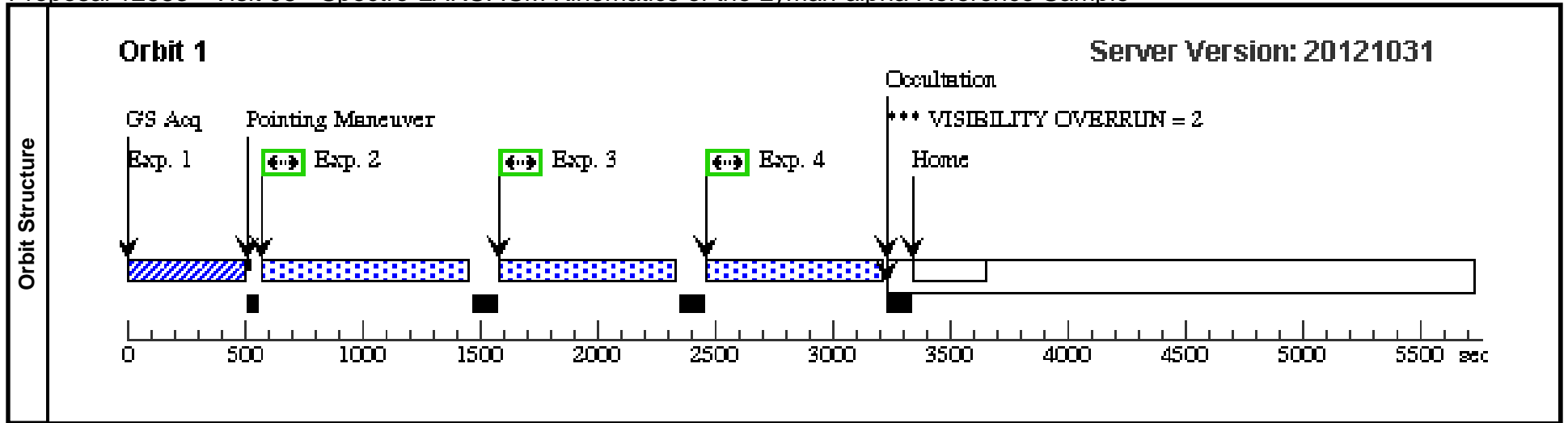
Visit	<p>Proposal 12583, Visit 05, completed</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: COS/NUV, COS/FUV</p> <p>Special Requirements: ORIENT 170D TO 200 D; ORIENT 350D TO 20 D</p> <p><i>Comments: Orientation angles are computed so as to arrange multiple point-like sources along the spatial axis. 2 ranges are defined, separated by 180 degrees, which are computed as the position angle of the desired spatial axis (E of N) + 135 degrees (PII manual section 7.2.2 and table 7.4).</i></p>										
	<p>(Visit 05) Warning (Orbit Planner): VISIBILITY OVERRUN</p> <p>(Visit 05) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.</p>										
Diagnosics											
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(5)	MRK1486	RA: 13 59 50.9184 (209.9621600d) Dec: +57 26 22.76 (57.43966d) Equinox: J2000	Redshift: 0.033856	V=16.33+/-0.01 F-CONT(1528)=2.3066e-15 ; be ta=-2.13 ; F-CONT(2338)=9.322 2e-16	Reference Frame: ICRS					
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	(COS.ta.185 565)	(5) MRK1486	COS/NUV, ACQ/IMAGE, PSA	MIRRORB		GS ACQ SCENARI O BASE1B3		139 Secs [==>]	[1]	
	<i>Comments: Acquisition time estimates based upon point source in ACS/SBC/F140LP imaging and UV continuum slope measured by GALEX (FUV/NUV). Could be updated as WFC3/UVIS/F336W imaging arrive, allow us to interpolated to the COS/NUV channel directly. We have adopted mirror B for the acquisition because photometry in larger apertures gives warnings with mirror A.</i>										
	2	(COS.sp.185 582)	(5) MRK1486	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=1; FLASH=YES; BUFFER-TIME=72 4				722 Secs [==>]	[1]
	3	(COS.sp.185 582)	(5) MRK1486	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=2; FLASH=YES; BUFFER-TIME=72 4				722 Secs [==>]	[1]
4	(COS.sp.185 582)	(5) MRK1486	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=3; FLASH=YES; BUFFER-TIME=72 4				722 Secs [==>]	[1]	



Proposal 12583 - Visit 08 - Spectro-LARS: ISM Kinematics of the Lyman-alpha Reference Sample

Wed Feb 27 02:34:49 GMT 2013

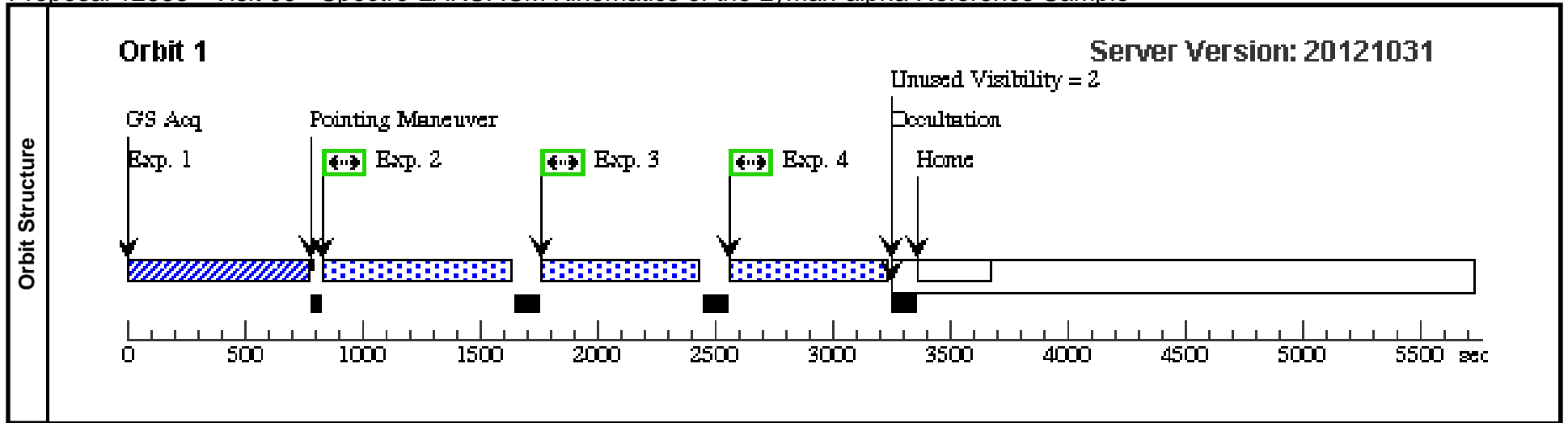
Visit	<p>Proposal 12583, Visit 08, completed</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: COS/NUV, COS/FUV</p> <p>Special Requirements: ORIENT 105D TO 140 D; ORIENT 285D TO 320 D</p> <p><i>Comments: Orientation angles are computed so as to arrange multiple point-like sources along the spatial axis. 2 ranges are defined, separated by 180 degrees, which are computed as the position angle of the desired spatial axis (E of N) + 135 degrees (PII manual section 7.2.2 and table 7.4).</i></p>										
	<p>(Visit 08) Warning (Orbit Planner): VISIBILITY OVERRUN</p> <p>(Visit 08) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.</p>										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(8)	SDSS-J125013.50+073441.5	RA: 12 50 13.6488 (192.5568700d) Dec: +07 34 47.26 (7.57979d) Equinox: J2000	Redshift: 0.038206	V=16.79+/-0.01 F-CONT(1528)=2.6253e-16 ; be ta=-0.67 ; F-CONT(2338)=1.974 3e-16	Reference Frame: ICRS					
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	(COS.ta.185 566)	(8) SDSS-J125013.50+073441.5	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				50 Secs [==>]	[1]	
	<i>Comments: Acquisition time estimates based upon point source in both ACS/SBC/F140LP and WFC3/UVIS/F336W imaging. Flux is logarithmically interpolated to 2330 AA.</i>										
	2	(COS.sp.185 583)	(8) SDSS-J125013.50+073441.5	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=1; FLASH=YES; BUFFER-TIME=70 3				701 Secs [==>]	[1]
	3	(COS.sp.185 583)	(8) SDSS-J125013.50+073441.5	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=2; FLASH=YES; BUFFER-TIME=70 3				701 Secs [==>]	[1]
4	(COS.sp.185 583)	(8) SDSS-J125013.50+073441.5	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=3; FLASH=YES; BUFFER-TIME=70 3				701 Secs [==>]	[1]	



Proposal 12583 - Visit 09 - Spectro-LARS: ISM Kinematics of the Lyman-alpha Reference Sample

Wed Feb 27 02:34:50 GMT 2013

Visit	Proposal 12583, Visit 09, implementation Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none) <i>Comments: Orientation angles are computed so as to arrange multiple point-like sources along the spatial axis. 2 ranges are defined, separated by 180 degrees, which are computed as the position angle of the desired spatial axis (E of N) + 135 degrees (PII manual section 7.2.2 and table 7.4).</i>										
	(Visit 09) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(9)	SDSS-J082354.96+280621.6	RA: 08 23 54.9648 (125.9790200d) Dec: +28 06 21.94 (28.10609d) Equinox: J2000	Redshift: 0.047236	V=16.83+/-0.01 F-CONT(3354)=5.3254e-16 ; be ta=-1.32 ; F-CONT(2338)=8.577 8e-16	Reference Frame: ICRS					
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	(COS.ta.185 568)	(9) SDSS-J082354.9 6+280621.6	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				168 Secs [==>]	[1]	
	<i>Comments: Acquisition time estimates based upon point source in WFC3/UVIS/F336W imaging and UV continuum slope measured by GALEX (FUV/NUV). Could be updated as ACS/SBC imaging arrive, allowing us to interpolate to the COS/NUV channel directly. We have adopted mirror B for the acquisition because photometry in larger apertures gives warnings with mirror A.</i>										
	2	(COS.sp.185 584)	(9) SDSS-J082354.9 6+280621.6	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=2; FLASH=YES; BUFFER-TIME=62 0				618 Secs [==>]	[1]
	3	(COS.sp.185 584)	(9) SDSS-J082354.9 6+280621.6	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; FLASH=YES; BUFFER-TIME=62 0				618 Secs [==>]	[1]
4	(COS.sp.185 584)	(9) SDSS-J082354.9 6+280621.6	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=4; FLASH=YES; BUFFER-TIME=62 0				618 Secs [==>]	[1]	



Proposal 12583 - Visit 11 - Spectro-LARS: ISM Kinematics of the Lyman-alpha Reference Sample

Wed Feb 27 02:34:51 GMT 2013

Visit	Proposal 12583, Visit 11, implementation Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none) <i>Comments: Orientation angles are computed so as to arrange multiple point-like sources along the spatial axis. 2 ranges are defined, separated by 180 degrees, which are computed as the position angle of the desired spatial axis (E of N) + 135 degrees (PII manual section 7.2.2 and table 7.4).</i>										
	(Visit 11) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(11)	SDSS-J140347.22+062812.1	RA: 14 03 47.2368 (210.9468200d) Dec: +06 28 12.39 (6.47011d) Equinox: J2000	Redshift: 0.084325	V=16.22+/-0.01 F-CONT(1528)=2.7748e-16 ; be ta=-1.05 ; F-CONT(2338)=1.775 3e-16	Reference Frame: ICRS					
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	(COS.ta.185 570)	(11) SDSS-J140347.22+062812.1	COS/NUV, ACQ/IMAGE, PSA	MIRRORA		GS ACQ SCENARI O BASE1B3		53 Secs [==>]	[1]	
	<i>Comments: Acquisition time estimates based upon point source in both ACS/SBC/F140LP and WFC3/UVIS/F336W imaging. Flux is logarithmically interpolated to 2330 AA.</i>										
	2	(COS.sp.185 585)	(11) SDSS-J140347.22+062812.1	COS/FUV, TIME-TAG, PSA	G130M 1300 A	FP-POS=2; FLASH=YES; BUFFER-TIME=70 0				698 Secs [==>]	[1]
	3	(COS.sp.185 585)	(11) SDSS-J140347.22+062812.1	COS/FUV, TIME-TAG, PSA	G130M 1300 A	FP-POS=3; FLASH=YES; BUFFER-TIME=70 0				698 Secs [==>]	[1]
4	(COS.sp.185 585)	(11) SDSS-J140347.22+062812.1	COS/FUV, TIME-TAG, PSA	G130M 1300 A	FP-POS=4; FLASH=YES; BUFFER-TIME=70 0				698 Secs [==>]	[1]	

