



10103 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Cycle: 13, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

Proposal 10103 - Overview

<i>Visit</i>	<i>Targets</i>	<i>Configurations</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(104) REF3A (108) VTT1A (103) REF2A (102) REF1A (113) VTT2A (111) VTT4A (106) REF5A (7) REF6 (1) UPS-AND	FGS	1	06-Sep-2005 21:46:06.0	yes
02	(104) REF3A (108) VTT1A (103) REF2A (102) REF1A (113) VTT2A (111) VTT4A (106) REF5A (7) REF6 (1) UPS-AND	FGS	1	06-Sep-2005 21:46:17.0	yes
03	(104) REF3A (108) VTT1A (103) REF2A (102) REF1A (113) VTT2A (111) VTT4A (106) REF5A (7) REF6 (1) UPS-AND	FGS	1	06-Sep-2005 21:46:27.0	yes

Proposal 10103 - Overview

<i>Visit</i>	<i>Targets</i>	<i>Configurations</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
04	(104) REF3A (108) VTT1A (103) REF2A (112) REF7 (102) REF1A (113) VTT2A (105) REF4A (111) VTT4A (7) REF6 (1) UPS-AND	FGS	1	06-Sep-2005 21:46:39.0	yes
05	(104) REF3A (108) VTT1A (103) REF2A (112) REF7 (102) REF1A (113) VTT2A (105) REF4A (111) VTT4A (7) REF6 (1) UPS-AND	FGS	1	06-Sep-2005 21:46:48.0	yes

Proposal 10103 - Overview

<i>Visit</i>	<i>Targets</i>	<i>Configurations</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
06	(104) REF3A (108) VTT1A (103) REF2A (112) REF7 (102) REF1A (113) VTT2A (105) REF4A (111) VTT4A (7) REF6 (1) UPS-AND	FGS	1	06-Sep-2005 21:46:59.0	yes
07	(104) REF3A (108) VTT1A (103) REF2A (102) REF1A (105) REF4A (111) VTT4A (106) REF5A (7) REF6 (1) UPS-AND	FGS	1	06-Sep-2005 21:47:09.0	yes

Proposal 10103 - Overview

<i>Visit</i>	<i>Targets</i>	<i>Configurations</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
08	(104) REF3A (108) VTT1A (103) REF2A (102) REF1A (105) REF4A (111) VTT4A (106) REF5A (7) REF6 (1) UPS-AND	FGS	1	06-Sep-2005 21:47:20.0	yes
09	(104) REF3A (108) VTT1A (103) REF2A (102) REF1A (105) REF4A (111) VTT4A (106) REF5A (7) REF6 (1) UPS-AND	FGS	1	06-Sep-2005 21:47:31.0	yes
10	(104) REF3A (108) VTT1A (103) REF2A (102) REF1A (113) VTT2A (111) VTT4A (106) REF5A (7) REF6 (1) UPS-AND	FGS	1	06-Sep-2005 21:47:42.0	yes

Proposal 10103 - Overview

<i>Visit</i>	<i>Targets</i>	<i>Configurations</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
11	(104) REF3A (108) VTT1A (103) REF2A (102) REF1A (113) VTT2A (111) VTT4A (106) REF5A (7) REF6 (1) UPS-AND	FGS	1	06-Sep-2005 21:47:56.0	yes
12	(104) REF3A (108) VTT1A (103) REF2A (102) REF1A (113) VTT2A (111) VTT4A (106) REF5A (7) REF6 (1) UPS-AND	FGS	1	06-Sep-2005 21:48:08.0	yes
13	(104) REF3A (108) VTT1A (103) REF2A (102) REF1A (105) REF4A (111) VTT4A (106) REF5A (7) REF6 (1) UPS-AND	FGS	1	06-Sep-2005 21:48:21.0	yes

Proposal 10103 - Overview

<i>Visit</i>	<i>Targets</i>	<i>Configurations</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
14	(104) REF3A (108) VTT1A (103) REF2A (102) REF1A (105) REF4A (111) VTT4A (106) REF5A (7) REF6 (1) UPS-AND	FGS	1	06-Sep-2005 21:48:33.0	yes
15	(104) REF3A (108) VTT1A (103) REF2A (102) REF1A (105) REF4A (111) VTT4A (106) REF5A (7) REF6 (1) UPS-AND	FGS	1	06-Sep-2005 21:48:45.0	yes
16	(104) REF3A (108) VTT1A (103) REF2A (102) REF1A (113) VTT2A (111) VTT4A (106) REF5A (7) REF6 (1) UPS-AND	FGS	1	06-Sep-2005 21:48:58.0	yes

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<i>Visit</i>	<i>Targets</i>	<i>Configurations</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
17	(104) REF3A (108) VTT1A (103) REF2A (102) REF1A (113) VTT2A (111) VTT4A (106) REF5A (7) REF6 (1) UPS-AND	FGS	1	06-Sep-2005 21:49:11.0	yes
18	(104) REF3A (108) VTT1A (103) REF2A (102) REF1A (113) VTT2A (111) VTT4A (106) REF5A (7) REF6 (1) UPS-AND	FGS	1	06-Sep-2005 21:49:27.0	yes

18 Total Orbits Used

ABSTRACT

We propose observations with HST/FGS to determine the astrometric elements (perturbation orbit semimajor axis and inclination) produced by the outermost extra-solar planet orbiting the F8V star Upsilon Andromedae. These observations will permit us to determine the actual mass of the planet by

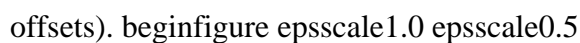
Proposal 10103 - Overview

providing the presently unknown $\sin i$ factor intrinsic to the radial velocity method which discovered this object. An inclination, $i = 30^\circ$, within the range of one very low precision determination using reanalyzed HIPPARCOS intermediate data products, would produce the observed radial velocity amplitude, $K = 66 \text{ m/s}$ with a companion mass of $\sim 8 M_{\text{Jupiter}}$. Such a mass would induce in Upsilon Andromedae a perturbation semi-major axis, $\Delta\alpha = 0.0012 \text{ arcsec}$, easily within the reach of HST/FGS fringe tracking astrometry. The proposed observations will yield a planetary mass, rather than, as previous investigations have done, only suggest a planetary mass companion.

OBSERVING DESCRIPTION

We propose to obtain a group of observations (a group is three orbits) at each maximum parallax factor, for the next 2 years. Each group will be secured over a six day interval as this will facilitate an accurate measurement of the star's proper motion at each epoch. This sequence and volume of observation will permit parallax to be determined to better than 0.3 mas level (Benedict Etal 1999, McArthur Etal 2001). When modeling a perturbation we must determine parallax and relative proper motion with the highest possible precision. Simply adopting the HIPPARCOS value, $\pi_{\text{abs}} = 74.3 \pm 0.7 \text{ mas}$, would introduce a significant uncertainty. The observations intermediate to those at maximum parallax factor will permit a cleaner determination of relative proper

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motion. They also serve to separate any residual systematic errors in our cross-filter calibration from parallax effects. The cross filter calibration removes the systematic position shift introduced by the FND5 filter. This shift is due to filter wedge. The calibration is required to relate the bright target Upsilon And to the much fainter surrounding astrometric reference stars. Data characterized by 0.4 mas errors or better are required to measure the perturbation of Upsilon And. Multiple data sets provide this level of precision. We demonstrate this by considering the data from a similar program, an attempt to detect the astrometric perturbation due to the planetary companion of Gl 876 (GO 8102/8775/9233, T. Forveille, P.I.). The planetary companion to Gl 876 has a period, $P = 61^d$ (Delfosse et al 1998, Marcy et al 1998). To detect the perturbation, we obtained 6 orbits at predicted perihelion, 12 orbits at the following aphelion (two groups of six, each), and 6 at the next perihelion. Each group of six orbits were secured with an identical HST roll. Figure refhisto shows histograms of X and Y residuals obtained from applying a simple astrometric model to all groups, solving for 24 sets of coefficients (an x and y scale, a radial term along each axis, a rotation, and offsets).  `beginfigure epsscale1.0 epsscale0.5 plotonehisto.eps captionGl 876 and reference stars - histograms of residuals from applying an eight parameter model to all of the four groups of six data sets. These data`

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were acquired with FGS 3. A preliminary calibration of FGS 1r suggests that it is capable of producing residuals characterized by a $30\sqrt{\text{labelhisto endfigure}}$ Because the residuals have a 'normal' (or gaussian) distribution, we can average a group of six data sets, increasing the positional precision at each epoch. The resulting 'catalog' for each group is characterized by positional errors on order $0.72/\sqrt{20} \sim 0.2$ mas, where 20 is the average number of observations of each star per group. Thus, each of the four groups of six sets of observations becomes a higher precision 'plate'. The 'plate' generated from each group benefits from a $(\text{square})\sqrt{n}$ reduction in positional error. Our observing strategy will generate three higher precision plates per year for Upsilon And. We will use FGS 1r for Upsilon And. FGS 1r has proven to be a more stable astrometer than FGS 3. Unlike FGS 3, it offers fringes with excellent morphology on both axes (Nelán & Makidon 2001). A preliminary Optical Field Angle Distortion calibration of FGS 1r (AR 9190, G. F. Benedict, P.I.) is characterized by fringe tracking residual histograms with gaussian widths $\sim 30\sqrt{\text{obtained with FGS 3}}$. We anticipate better precision fringe tracking measures at each epoch than could have been obtained with FGS 3. If this proposal is granted time, we will submit a special request to obtain a first epoch observation group as soon after notification as possible.

REAL TIME JUSTIFICATION

None. None.

Proposal 10103 - Visit 01 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Wed Sep 07 01:49:30 GMT 2005

Visit	Proposal 10103, Visit 01 Diagnostic Status: Warning Scientific Instruments: FGS Special Requirements: SCHED 100%; ORIENT 244.0D TO 244.0 D; BETWEEN 24-JUL-2004:00:00:00 AND 30-JUL-2004:00:00:00					
	Diagnostics	(Visit 01) Warning: GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE				
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(1)	UPS-AND Alt Name1: GSC2822.02210 Alt Name2: HD9826	RA: 01 36 47.8000 (24.1991667d) Dec: +41 24 19.91 (41.40553d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: -0.0156s/yr Proper Motion Dec: -0.381"/yr Parallax: 0.0" Epoch of Position: 2000.0	V=4.09+/-0.1	Coordinate Source: Other_Source: GSC plate 056
	(7)	REF6 Alt Name1: GSC2822.02136	RA: 01 36 41.8700 (24.1744583d) Dec: +41 20 53.52 (41.34820d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.95+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(102)	REF1A Alt Name1: GSC2822.01991	RA: 01 36 57.1200 (24.2380000d) Dec: +41 23 42.14 (41.39504d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.09+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(103)	REF2A Alt Name1: GSC2822.00726	RA: 01 36 50.5700 (24.2107083d) Dec: +41 22 37.56 (41.37710d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.74+/-0.0	Coordinate Source: GUIDE_STAR_CATALOG
	(104)	REF3A Alt Name1: GSC2822.01184	RA: 01 36 39.7700 (24.1657083d) Dec: +41 22 16.86 (41.37135d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.48+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(106)	REF5A Alt Name1: GSC2822.01104	RA: 01 37 12.9800 (24.3040833d) Dec: +41 24 43.06 (41.41196d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=11.4+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(108)	VTT1A	RA: 01 36 41.3500 (24.1722917d) Dec: +41 24 6.70 (41.40186d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=14.62+/-0.0	Coordinate Source: Other_Source: DSS2

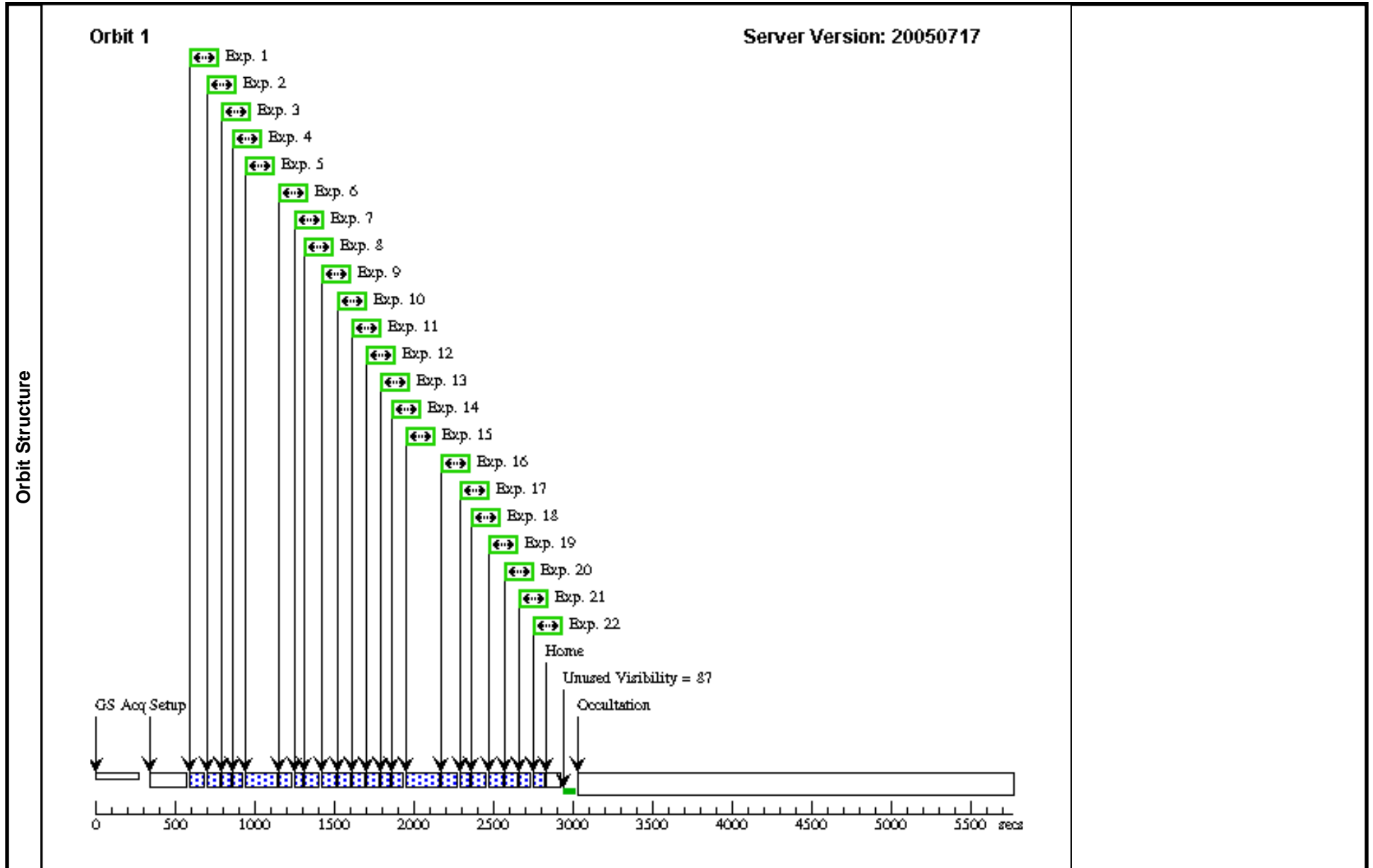
Proposal 10103 - Visit 01 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Fixed Targets (continued)	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(111)	VTT4A	RA: 01 36 59.3700 (24.2473750d) Dec: +41 26 16.41 (41.43789d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=15.78+/-0.1	Coordinate Source: Other_Source: DSS2
(113)	VTT2A	RA: 01 36 50.4100 (24.2100417d) Dec: +41 23 32.56 (41.39238d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: 0.0s/yr Proper Motion Dec: 0.0"/yr Parallax: 0.0" Epoch of Position:	V=14.0+/-0.1	Coordinate Source: Other_Source: DSS2	

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	10	(1) UPS-AND	FGS, POS, 1	F5ND		POS TARG 42,-75; GS ACQ SCENARI O SINGLE	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
2	20	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
3	30	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
4	40	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
5	50	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]	
6	60	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
7	70	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
8	80	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
9	90	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
10	100	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
11	110	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
12	120	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
13	130	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	

Proposal 10103 - Visit 01 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	14	140	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	15	150	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]
	16	160	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	17	170	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	18	180	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	19	190	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	20	200	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	21	210	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	22	220	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]



Proposal 10103 - Visit 02 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Wed Sep 07 01:49:31 GMT 2005

Visit	Proposal 10103, Visit 02 Diagnostic Status: Warning Scientific Instruments: FGS Special Requirements: SCHED 100%; ORIENT 244.0D TO 244.0 D; AFTER 01 BY 2 D TO 3 D					
	Diagnostics	(Visit 02) Warning: GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE				
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(1)	UPS-AND Alt Name1: GSC2822.02210 Alt Name2: HD9826	RA: 01 36 47.8000 (24.1991667d) Dec: +41 24 19.91 (41.40553d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: -0.0156s/yr Proper Motion Dec: -0.381"/yr Parallax: 0.0" Epoch of Position: 2000.0	V=4.09+/-0.1	Coordinate Source: Other_Source: GSC plate 056
	(7)	REF6 Alt Name1: GSC2822.02136	RA: 01 36 41.8700 (24.1744583d) Dec: +41 20 53.52 (41.34820d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.95+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(102)	REF1A Alt Name1: GSC2822.01991	RA: 01 36 57.1200 (24.2380000d) Dec: +41 23 42.14 (41.39504d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.09+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(103)	REF2A Alt Name1: GSC2822.00726	RA: 01 36 50.5700 (24.2107083d) Dec: +41 22 37.56 (41.37710d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.74+/-0.0	Coordinate Source: GUIDE_STAR_CATALOG
	(104)	REF3A Alt Name1: GSC2822.01184	RA: 01 36 39.7700 (24.1657083d) Dec: +41 22 16.86 (41.37135d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.48+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(106)	REF5A Alt Name1: GSC2822.01104	RA: 01 37 12.9800 (24.3040833d) Dec: +41 24 43.06 (41.41196d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=11.4+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(108)	VTT1A	RA: 01 36 41.3500 (24.1722917d) Dec: +41 24 6.70 (41.40186d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=14.62+/-0.0	Coordinate Source: Other_Source: DSS2

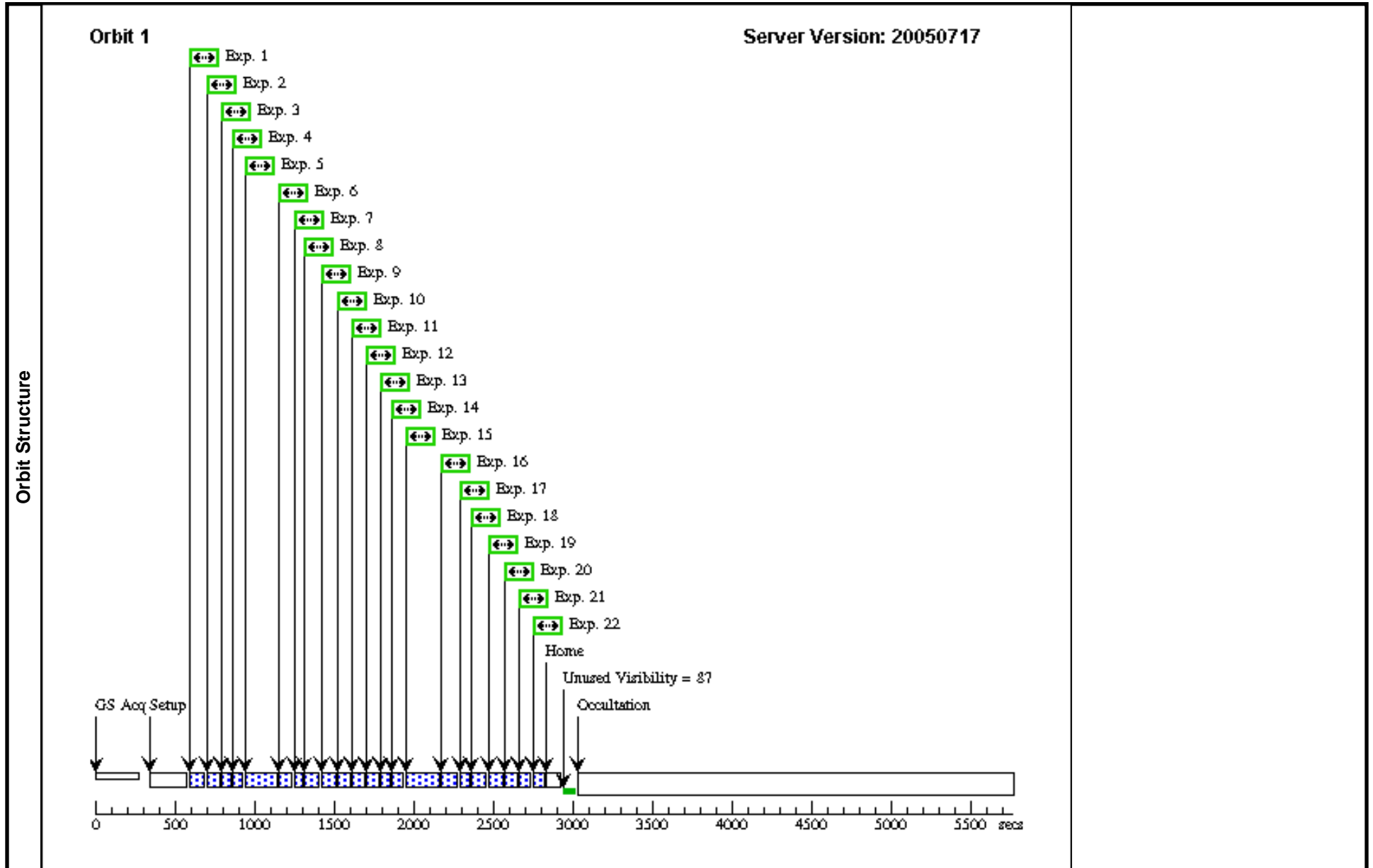
Proposal 10103 - Visit 02 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Fixed Targets (continued)	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(111)	VTT4A	RA: 01 36 59.3700 (24.2473750d) Dec: +41 26 16.41 (41.43789d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=15.78+/-0.1	Coordinate Source: Other_Source: DSS2
(113)	VTT2A	RA: 01 36 50.4100 (24.2100417d) Dec: +41 23 32.56 (41.39238d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: 0.0s/yr Proper Motion Dec: 0.0"/yr Parallax: 0.0" Epoch of Position:	V=14.0+/-0.1	Coordinate Source: Other_Source: DSS2	

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	10	(1) UPS-AND	FGS, POS, 1	F5ND			POS TARG 42,-75; GS ACQ SCENARI O SINGLE	Sequence 1-22 Non-Int	10.0 Secs [==>]
2	20	(113) VTT2A	FGS, POS, 1	F583W			SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
3	30	(102) REF1A	FGS, POS, 1	F583W			SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
4	40	(106) REF5A	FGS, POS, 1	F583W			SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
5	50	(111) VTT4A	FGS, POS, 1	F583W			SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]
6	60	(102) REF1A	FGS, POS, 1	F583W			SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
7	70	(1) UPS-AND	FGS, POS, 1	F5ND			SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
8	80	(108) VTT1A	FGS, POS, 1	F583W			SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
9	90	(104) REF3A	FGS, POS, 1	F583W			SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
10	100	(7) REF6	FGS, POS, 1	F583W			SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
11	110	(103) REF2A	FGS, POS, 1	F583W			SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
12	120	(113) VTT2A	FGS, POS, 1	F583W			SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
13	130	(1) UPS-AND	FGS, POS, 1	F5ND			SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]

Proposal 10103 - Visit 02 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	14	140	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	
									[==>]	[1]
	15	150	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs	
									[==>]	[1]
	16	160	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	
									[==>]	[1]
	17	170	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	
									[==>]	[1]
	18	180	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	
								[==>]	[1]	
19	190	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs		
								[==>]	[1]	
20	200	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs		
								[==>]	[1]	
21	210	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs		
								[==>]	[1]	
22	220	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs		
								[==>]	[1]	



Proposal 10103 - Visit 03 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Wed Sep 07 01:49:33 GMT 2005

Visit	Proposal 10103, Visit 03 Diagnostic Status: Warning Scientific Instruments: FGS Special Requirements: SCHED 100%; ORIENT 244.0D TO 244.0 D; AFTER 02 BY 2 D TO 3 D					
	Diagnostics	(Visit 03) Warning: GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE				
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(1)	UPS-AND Alt Name1: GSC2822.02210 Alt Name2: HD9826	RA: 01 36 47.8000 (24.1991667d) Dec: +41 24 19.91 (41.40553d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: -0.0156s/yr Proper Motion Dec: -0.381"/yr Parallax: 0.0" Epoch of Position: 2000.0	V=4.09+/-0.1	Coordinate Source: Other_Source: GSC plate 056
	(7)	REF6 Alt Name1: GSC2822.02136	RA: 01 36 41.8700 (24.1744583d) Dec: +41 20 53.52 (41.34820d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.95+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(102)	REF1A Alt Name1: GSC2822.01991	RA: 01 36 57.1200 (24.2380000d) Dec: +41 23 42.14 (41.39504d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.09+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(103)	REF2A Alt Name1: GSC2822.00726	RA: 01 36 50.5700 (24.2107083d) Dec: +41 22 37.56 (41.37710d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.74+/-0.0	Coordinate Source: GUIDE_STAR_CATALOG
	(104)	REF3A Alt Name1: GSC2822.01184	RA: 01 36 39.7700 (24.1657083d) Dec: +41 22 16.86 (41.37135d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.48+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(106)	REF5A Alt Name1: GSC2822.01104	RA: 01 37 12.9800 (24.3040833d) Dec: +41 24 43.06 (41.41196d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=11.4+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(108)	VTT1A	RA: 01 36 41.3500 (24.1722917d) Dec: +41 24 6.70 (41.40186d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=14.62+/-0.0	Coordinate Source: Other_Source: DSS2

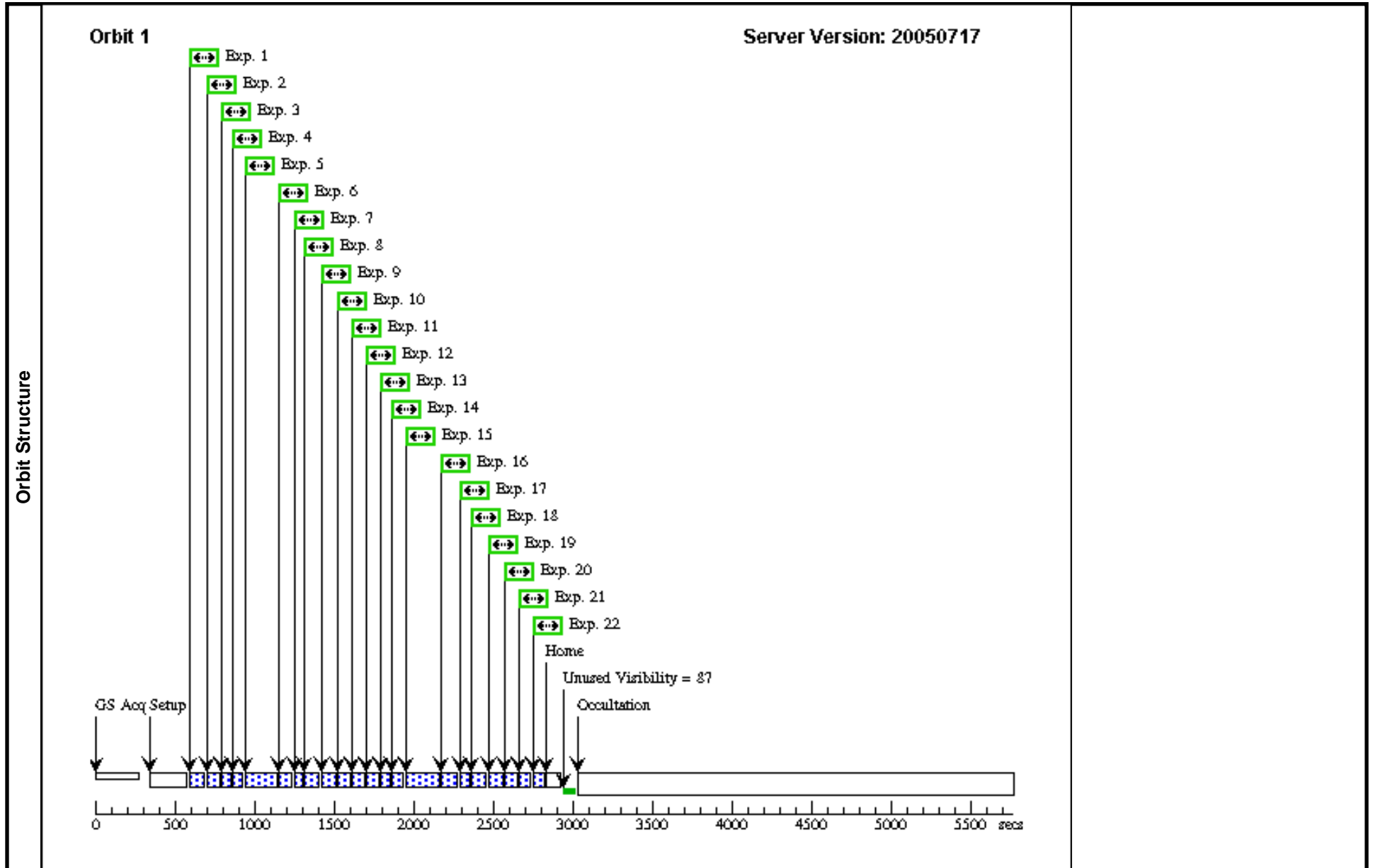
Proposal 10103 - Visit 03 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Fixed Targets (continued)	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(111)	VTT4A	RA: 01 36 59.3700 (24.2473750d) Dec: +41 26 16.41 (41.43789d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=15.78+/-0.1	Coordinate Source: Other_Source: DSS2
(113)	VTT2A	RA: 01 36 50.4100 (24.2100417d) Dec: +41 23 32.56 (41.39238d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: 0.0s/yr Proper Motion Dec: 0.0"/yr Parallax: 0.0" Epoch of Position:	V=14.0+/-0.1	Coordinate Source: Other_Source: DSS2	

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	10	(1) UPS-AND	FGS, POS, 1	F5ND		POS TARG 42,-75; GS ACQ SCENARI O SINGLE	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
2	20	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
3	30	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
4	40	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
5	50	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]	
6	60	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
7	70	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
8	80	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
9	90	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
10	100	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
11	110	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
12	120	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
13	130	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	

Proposal 10103 - Visit 03 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	14	140	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	15	150	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]
	16	160	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	17	170	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	18	180	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	19	190	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	20	200	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	21	210	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	22	220	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]



Proposal 10103 - Visit 04 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Wed Sep 07 01:49:34 GMT 2005

Visit	Proposal 10103, Visit 04 Diagnostic Status: Warning Scientific Instruments: FGS Special Requirements: SCHED 100%; ORIENT 200.0D TO 200.0 D; BETWEEN 24-SEP-2004:00:00:00 AND 28-SEP-2004:00:00:00					
	Diagnostics	(Visit 04) Warning: GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE				
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(1)	UPS-AND Alt Name1: GSC2822.02210 Alt Name2: HD9826	RA: 01 36 47.8000 (24.1991667d) Dec: +41 24 19.91 (41.40553d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: -0.0156s/yr Proper Motion Dec: -0.381"/yr Parallax: 0.0" Epoch of Position: 2000.0	V=4.09+/-0.1	Coordinate Source: Other_Source: GSC plate 056
	(7)	REF6 Alt Name1: GSC2822.02136	RA: 01 36 41.8700 (24.1744583d) Dec: +41 20 53.52 (41.34820d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.95+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(102)	REF1A Alt Name1: GSC2822.01991	RA: 01 36 57.1200 (24.2380000d) Dec: +41 23 42.14 (41.39504d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.09+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(103)	REF2A Alt Name1: GSC2822.00726	RA: 01 36 50.5700 (24.2107083d) Dec: +41 22 37.56 (41.37710d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.74+/-0.0	Coordinate Source: GUIDE_STAR_CATALOG
	(104)	REF3A Alt Name1: GSC2822.01184	RA: 01 36 39.7700 (24.1657083d) Dec: +41 22 16.86 (41.37135d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.48+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(105)	REF4A Alt Name1: GSC2822.02075	RA: 01 36 39.9800 (24.1665833d) Dec: +41 23 48.34 (41.39676d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.8+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(108)	VTT1A	RA: 01 36 41.3500 (24.1722917d) Dec: +41 24 6.70 (41.40186d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=14.62+/-0.0	Coordinate Source: Other_Source: DSS2

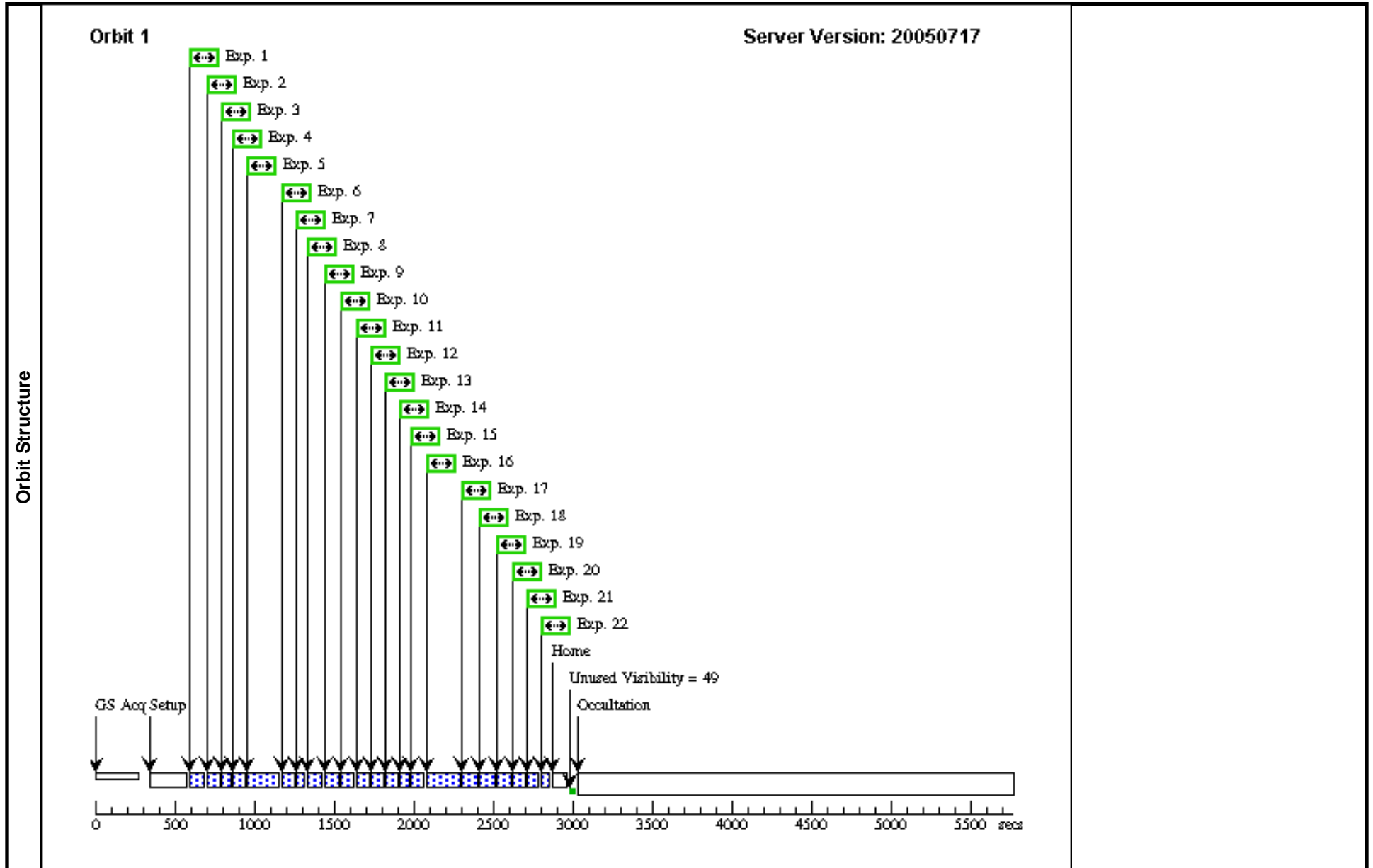
Proposal 10103 - Visit 04 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Fixed Targets (continued)	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(111)	VTT4A	RA: 01 36 59.3700 (24.2473750d) Dec: +41 26 16.41 (41.43789d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=15.78+/-0.1	Coordinate Source: Other_Source: DSS2
	(112)	REF7 Alt Name1: GSC2822.00478	RA: 01 36 59.2300 (24.2467917d) Dec: +41 29 28.68 (41.49130d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=11.49+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(113)	VTT2A	RA: 01 36 50.4100 (24.2100417d) Dec: +41 23 32.56 (41.39238d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: 0.0s/yr Proper Motion Dec: 0.0"/yr Parallax: 0.0" Epoch of Position:	V=14.0+/-0.1	Coordinate Source: Other_Source: DSS2

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	10	(1) UPS-AND	FGS, POS, 1	F5ND		POS TARG -57,-26; GS ACQ SCENARI O SINGLE	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	2	20	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	3	30	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	4	40	(112) REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	5	50	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	30.0 Secs [==>]	[1]
	6	60	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	7	70	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	8	80	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	9	90	(105) REF4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	10	100	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	11	110	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	12	120	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]

Proposal 10103 - Visit 04 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	13	130	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	14	140	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	15	150	(112) REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	16	160	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]
	17	170	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	18	190	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	19	200	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	20	210	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	21	220	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
22	230	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	



Proposal 10103 - Visit 05 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Wed Sep 07 01:49:34 GMT 2005

Visit	Proposal 10103, Visit 05 Diagnostic Status: Warning Scientific Instruments: FGS Special Requirements: SCHED 100%; ORIENT 200.0D TO 200.0 D; AFTER 04 BY 2 D TO 3 D					
	Diagnostics	(Visit 05) Warning: GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE				
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(1)	UPS-AND Alt Name1: GSC2822.02210 Alt Name2: HD9826	RA: 01 36 47.8000 (24.1991667d) Dec: +41 24 19.91 (41.40553d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: -0.0156s/yr Proper Motion Dec: -0.381"/yr Parallax: 0.0" Epoch of Position: 2000.0	V=4.09+/-0.1	Coordinate Source: Other_Source: GSC plate 056
	(7)	REF6 Alt Name1: GSC2822.02136	RA: 01 36 41.8700 (24.1744583d) Dec: +41 20 53.52 (41.34820d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.95+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(102)	REF1A Alt Name1: GSC2822.01991	RA: 01 36 57.1200 (24.2380000d) Dec: +41 23 42.14 (41.39504d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.09+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(103)	REF2A Alt Name1: GSC2822.00726	RA: 01 36 50.5700 (24.2107083d) Dec: +41 22 37.56 (41.37710d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.74+/-0.0	Coordinate Source: GUIDE_STAR_CATALOG
	(104)	REF3A Alt Name1: GSC2822.01184	RA: 01 36 39.7700 (24.1657083d) Dec: +41 22 16.86 (41.37135d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.48+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(105)	REF4A Alt Name1: GSC2822.02075	RA: 01 36 39.9800 (24.1665833d) Dec: +41 23 48.34 (41.39676d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.8+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(108)	VTT1A	RA: 01 36 41.3500 (24.1722917d) Dec: +41 24 6.70 (41.40186d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=14.62+/-0.0	Coordinate Source: Other_Source: DSS2

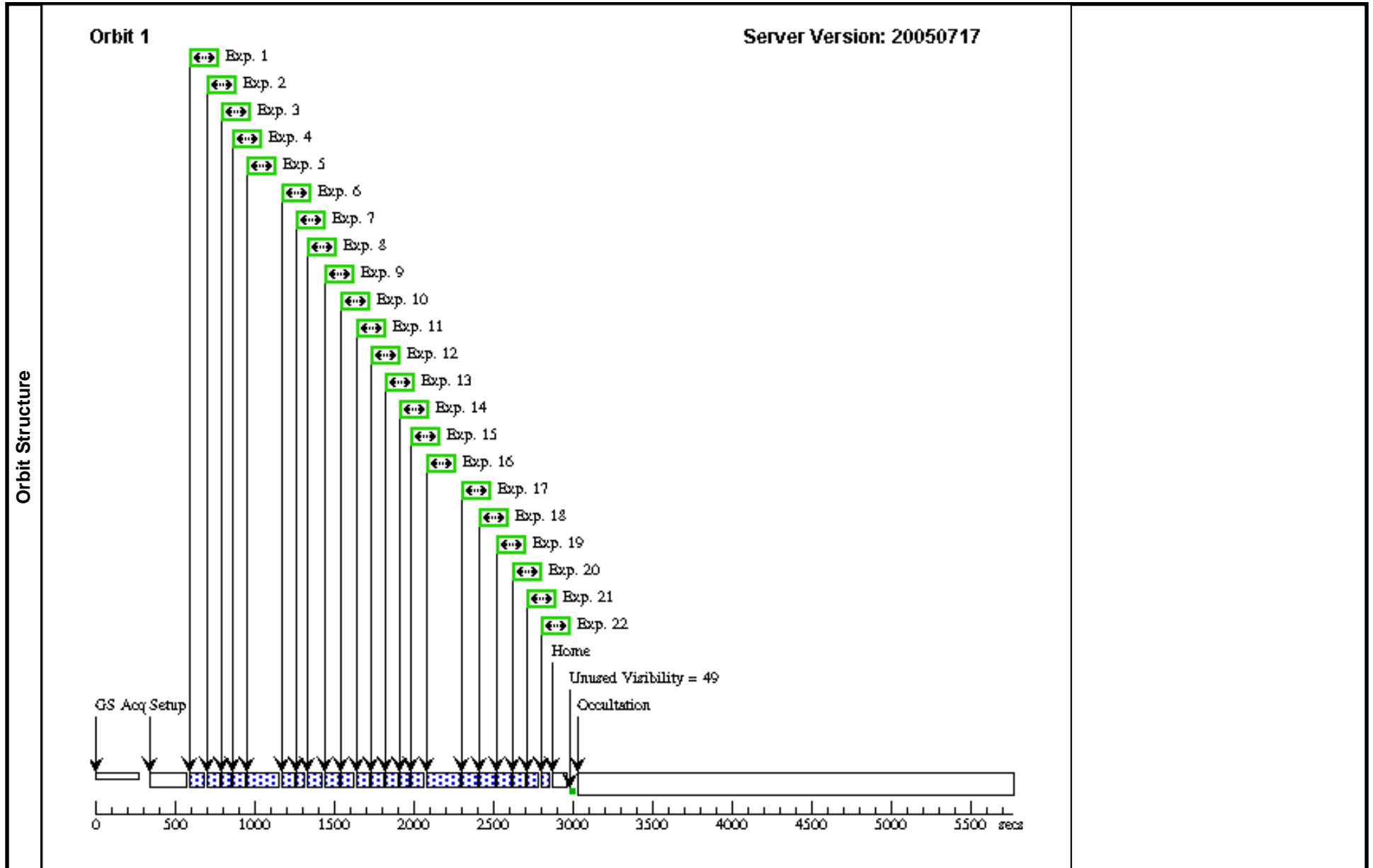
Proposal 10103 - Visit 05 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Fixed Targets (continued)	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(111)	VTT4A	RA: 01 36 59.3700 (24.2473750d) Dec: +41 26 16.41 (41.43789d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=15.78+/-0.1	Coordinate Source: Other_Source: DSS2
	(112)	REF7 Alt Name1: GSC2822.00478	RA: 01 36 59.2300 (24.2467917d) Dec: +41 29 28.68 (41.49130d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=11.49+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(113)	VTT2A	RA: 01 36 50.4100 (24.2100417d) Dec: +41 23 32.56 (41.39238d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: 0.0s/yr Proper Motion Dec: 0.0"/yr Parallax: 0.0" Epoch of Position:	V=14.0+/-0.1	Coordinate Source: Other_Source: DSS2

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	10	(1) UPS-AND	FGS, POS, 1	F5ND		POS TARG -57,-26; GS ACQ SCENARI O SINGLE	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	2	20	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	3	30	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	4	40	(112) REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	5	50	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	30.0 Secs [==>]	[1]
	6	60	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	7	70	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	8	80	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	9	90	(105) REF4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	10	100	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	11	110	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	12	120	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]

Proposal 10103 - Visit 05 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures (continued)	13	130	(113) VTT2A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	14	140	(1) UPS-AND	FGS, POS, 1	F5ND	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	15	150	(112) REF7	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	16	160	(111) VTT4A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]
	17	170	(103) REF2A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	18	190	(108) VTT1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	19	200	(104) REF3A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	20	210	(7) REF6	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	21	220	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	22	230	(1) UPS-AND	FGS, POS, 1	F5ND	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]



Proposal 10103 - Visit 06 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Wed Sep 07 01:49:35 GMT 2005

Visit	Proposal 10103, Visit 06 Diagnostic Status: Warning Scientific Instruments: FGS Special Requirements: SCHED 100%; ORIENT 200.0D TO 200.0 D; AFTER 05 BY 2 D TO 3 D					
	Diagnostics	(Visit 06) Warning: GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE				
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(1)	UPS-AND Alt Name1: GSC2822.02210 Alt Name2: HD9826	RA: 01 36 47.8000 (24.1991667d) Dec: +41 24 19.91 (41.40553d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: -0.0156s/yr Proper Motion Dec: -0.381"/yr Parallax: 0.0" Epoch of Position: 2000.0	V=4.09+/-0.1	Coordinate Source: Other_Source: GSC plate 056
	(7)	REF6 Alt Name1: GSC2822.02136	RA: 01 36 41.8700 (24.1744583d) Dec: +41 20 53.52 (41.34820d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.95+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(102)	REF1A Alt Name1: GSC2822.01991	RA: 01 36 57.1200 (24.2380000d) Dec: +41 23 42.14 (41.39504d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.09+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(103)	REF2A Alt Name1: GSC2822.00726	RA: 01 36 50.5700 (24.2107083d) Dec: +41 22 37.56 (41.37710d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.74+/-0.0	Coordinate Source: GUIDE_STAR_CATALOG
	(104)	REF3A Alt Name1: GSC2822.01184	RA: 01 36 39.7700 (24.1657083d) Dec: +41 22 16.86 (41.37135d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.48+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(105)	REF4A Alt Name1: GSC2822.02075	RA: 01 36 39.9800 (24.1665833d) Dec: +41 23 48.34 (41.39676d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.8+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(108)	VTT1A	RA: 01 36 41.3500 (24.1722917d) Dec: +41 24 6.70 (41.40186d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=14.62+/-0.0	Coordinate Source: Other_Source: DSS2

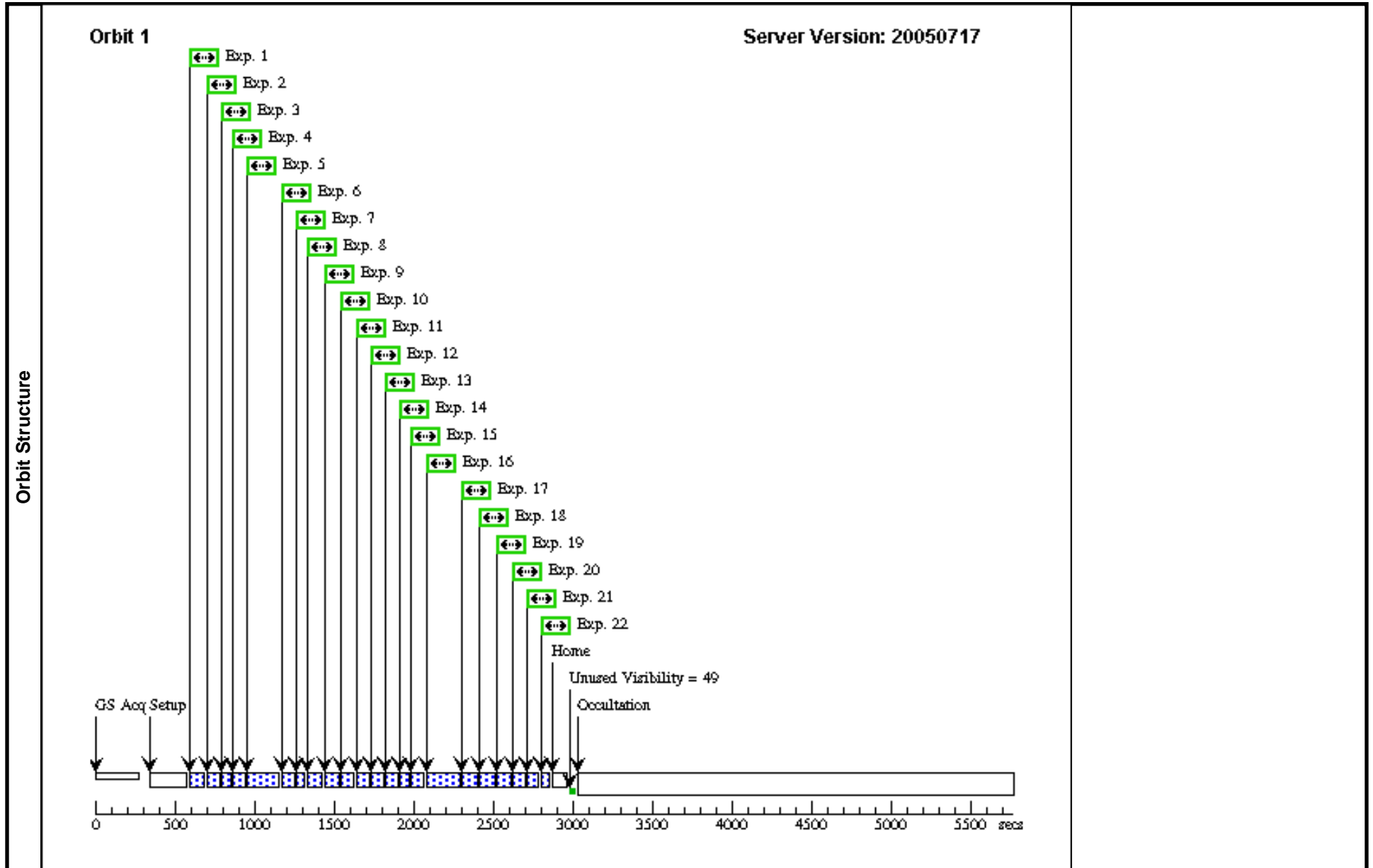
Proposal 10103 - Visit 06 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Fixed Targets (continued)	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(111)	VTT4A	RA: 01 36 59.3700 (24.2473750d) Dec: +41 26 16.41 (41.43789d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=15.78+/-0.1	Coordinate Source: Other_Source: DSS2
	(112)	REF7 Alt Name1: GSC2822.00478	RA: 01 36 59.2300 (24.2467917d) Dec: +41 29 28.68 (41.49130d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=11.49+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(113)	VTT2A	RA: 01 36 50.4100 (24.2100417d) Dec: +41 23 32.56 (41.39238d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: 0.0s/yr Proper Motion Dec: 0.0"/yr Parallax: 0.0" Epoch of Position:	V=14.0+/-0.1	Coordinate Source: Other_Source: DSS2

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	10	(1) UPS-AND	FGS, POS, 1	F5ND		POS TARG -57,-26; GS ACQ SCENARI O SINGLE	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	2	20	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	3	30	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	4	40	(112) REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	5	50	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	30.0 Secs [==>]	[1]
	6	60	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	7	70	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	8	80	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	9	90	(105) REF4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	10	100	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	11	110	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]
	12	120	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	10.0 Secs [==>]	[1]

Proposal 10103 - Visit 06 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures (continued)	13	130	(113) VTT2A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	14	140	(1) UPS-AND	FGS, POS, 1	F5ND	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	15	150	(112) REF7	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	16	160	(111) VTT4A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]
	17	170	(103) REF2A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	18	190	(108) VTT1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	19	200	(104) REF3A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	20	210	(7) REF6	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	21	220	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	22	230	(1) UPS-AND	FGS, POS, 1	F5ND	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]



Proposal 10103 - Visit 07 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Wed Sep 07 01:49:36 GMT 2005

Visit					
Proposal 10103, Visit 07					
Diagnostic Status: No Diagnostics					
Scientific Instruments: FGS					
Special Requirements: SCHED 100%; ORIENT 55.0D TO 55.0 D; BETWEEN 10-FEB-2005:00:00:00 AND 27-FEB-2005:00:00:00					
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	UPS-AND Alt Name1: GSC2822.02210 Alt Name2: HD9826	RA: 01 36 47.8000 (24.1991667d) Dec: +41 24 19.91 (41.40553d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: -0.0156s/yr Proper Motion Dec: -0.381"/yr Parallax: 0.0" Epoch of Position: 2000.0	V=4.09+/-0.1	Coordinate Source: Other_Source: GSC plate 056
(7)	REF6 Alt Name1: GSC2822.02136	RA: 01 36 41.8700 (24.1744583d) Dec: +41 20 53.52 (41.34820d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.95+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(102)	REF1A Alt Name1: GSC2822.01991	RA: 01 36 57.1200 (24.2380000d) Dec: +41 23 42.14 (41.39504d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.09+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(103)	REF2A Alt Name1: GSC2822.00726	RA: 01 36 50.5700 (24.2107083d) Dec: +41 22 37.56 (41.37710d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.74+/-0.0	Coordinate Source: GUIDE_STAR_CATALOG
(104)	REF3A Alt Name1: GSC2822.01184	RA: 01 36 39.7700 (24.1657083d) Dec: +41 22 16.86 (41.37135d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.48+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(105)	REF4A Alt Name1: GSC2822.02075	RA: 01 36 39.9800 (24.1665833d) Dec: +41 23 48.34 (41.39676d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.8+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(106)	REF5A Alt Name1: GSC2822.01104	RA: 01 37 12.9800 (24.3040833d) Dec: +41 24 43.06 (41.41196d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=11.4+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(108)	VTT1A	RA: 01 36 41.3500 (24.1722917d) Dec: +41 24 6.70 (41.40186d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=14.62+/-0.0	Coordinate Source: Other_Source: DSS2

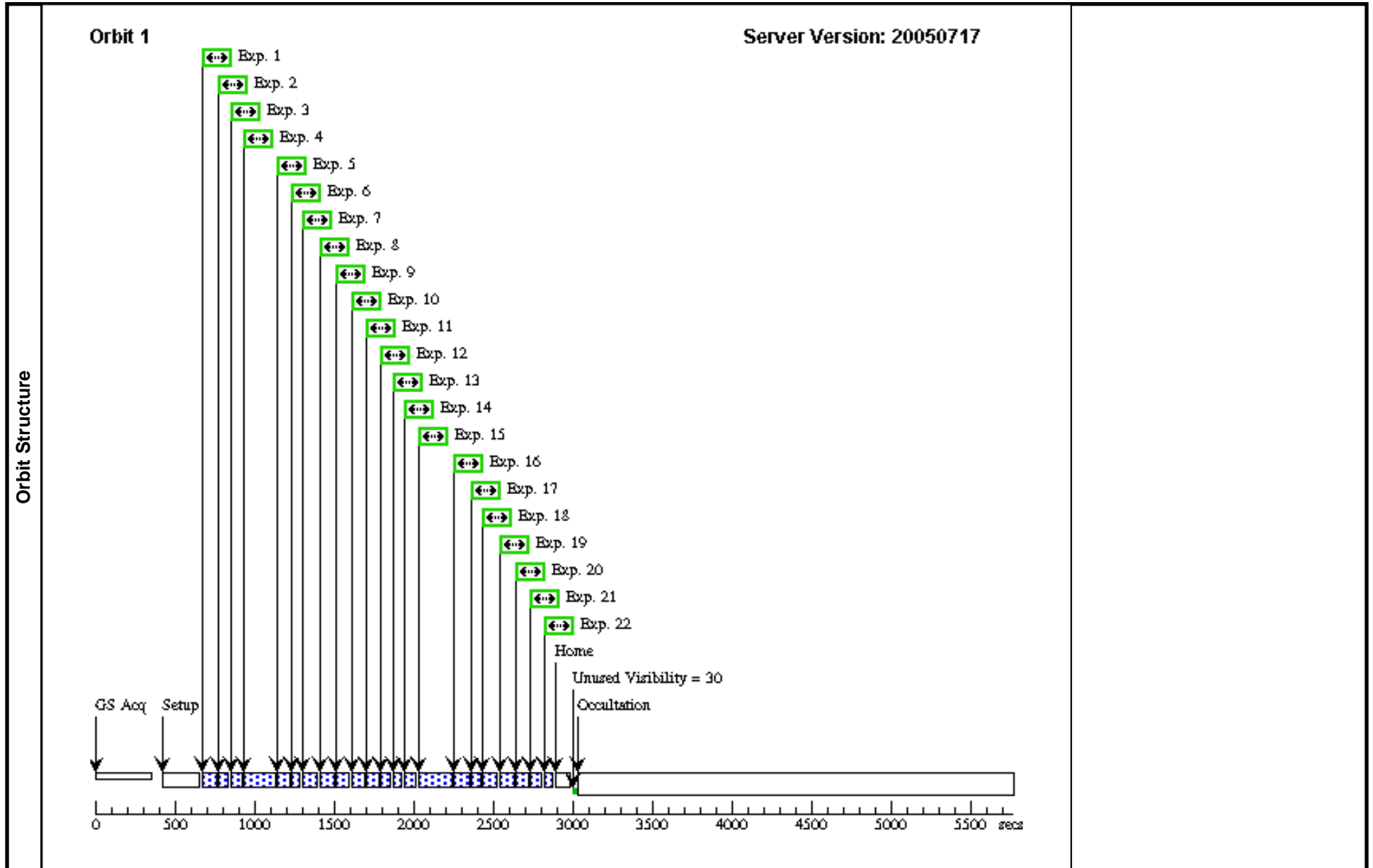
Proposal 10103 - Visit 07 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Fixed Targets (continued)	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(111)	VTT4A	RA: 01 36 59.3700 (24.2473750d) Dec: +41 26 16.41 (41.43789d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=15.78+/-0.1	Coordinate Source: Other_Source: DSS2

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	10	(1) UPS-AND	FGS, POS, 1	F5ND	POS TARG 0,16	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]
2	20	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
3	30	(106) REF5A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
4	40	(111) VTT4A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs	[==>]	[1]	
5	50	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
6	60	(1) UPS-AND	FGS, POS, 1	F5ND	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
7	70	(108) VTT1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
8	80	(105) REF4A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
9	90	(104) REF3A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
10	100	(7) REF6	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
11	110	(103) REF2A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
12	120	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
13	130	(1) UPS-AND	FGS, POS, 1	F5ND	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	

Proposal 10103 - Visit 07 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	14	140	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	15	150	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]
	16	160	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	17	170	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	18	180	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	19	190	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	20	200	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	21	210	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	22	220	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]



Proposal 10103 - Visit 08 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Wed Sep 07 01:49:37 GMT 2005

Visit		Proposal 10103, Visit 08			
		Diagnostic Status: No Diagnostics			
		Scientific Instruments: FGS			
		Special Requirements: SCHED 100%; ORIENT 55.0D TO 55.0 D; AFTER 07 BY 2 D TO 3 D			
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	UPS-AND Alt Name1: GSC2822.02210 Alt Name2: HD9826	RA: 01 36 47.8000 (24.1991667d) Dec: +41 24 19.91 (41.40553d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: -0.0156s/yr Proper Motion Dec: -0.381"/yr Parallax: 0.0" Epoch of Position: 2000.0	V=4.09+/-0.1	Coordinate Source: Other_Source: GSC plate 056
(7)	REF6 Alt Name1: GSC2822.02136	RA: 01 36 41.8700 (24.1744583d) Dec: +41 20 53.52 (41.34820d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.95+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(102)	REF1A Alt Name1: GSC2822.01991	RA: 01 36 57.1200 (24.2380000d) Dec: +41 23 42.14 (41.39504d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.09+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(103)	REF2A Alt Name1: GSC2822.00726	RA: 01 36 50.5700 (24.2107083d) Dec: +41 22 37.56 (41.37710d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.74+/-0.0	Coordinate Source: GUIDE_STAR_CATALOG
(104)	REF3A Alt Name1: GSC2822.01184	RA: 01 36 39.7700 (24.1657083d) Dec: +41 22 16.86 (41.37135d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.48+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(105)	REF4A Alt Name1: GSC2822.02075	RA: 01 36 39.9800 (24.1665833d) Dec: +41 23 48.34 (41.39676d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.8+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(106)	REF5A Alt Name1: GSC2822.01104	RA: 01 37 12.9800 (24.3040833d) Dec: +41 24 43.06 (41.41196d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=11.4+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(108)	VTT1A	RA: 01 36 41.3500 (24.1722917d) Dec: +41 24 6.70 (41.40186d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=14.62+/-0.0	Coordinate Source: Other_Source: DSS2

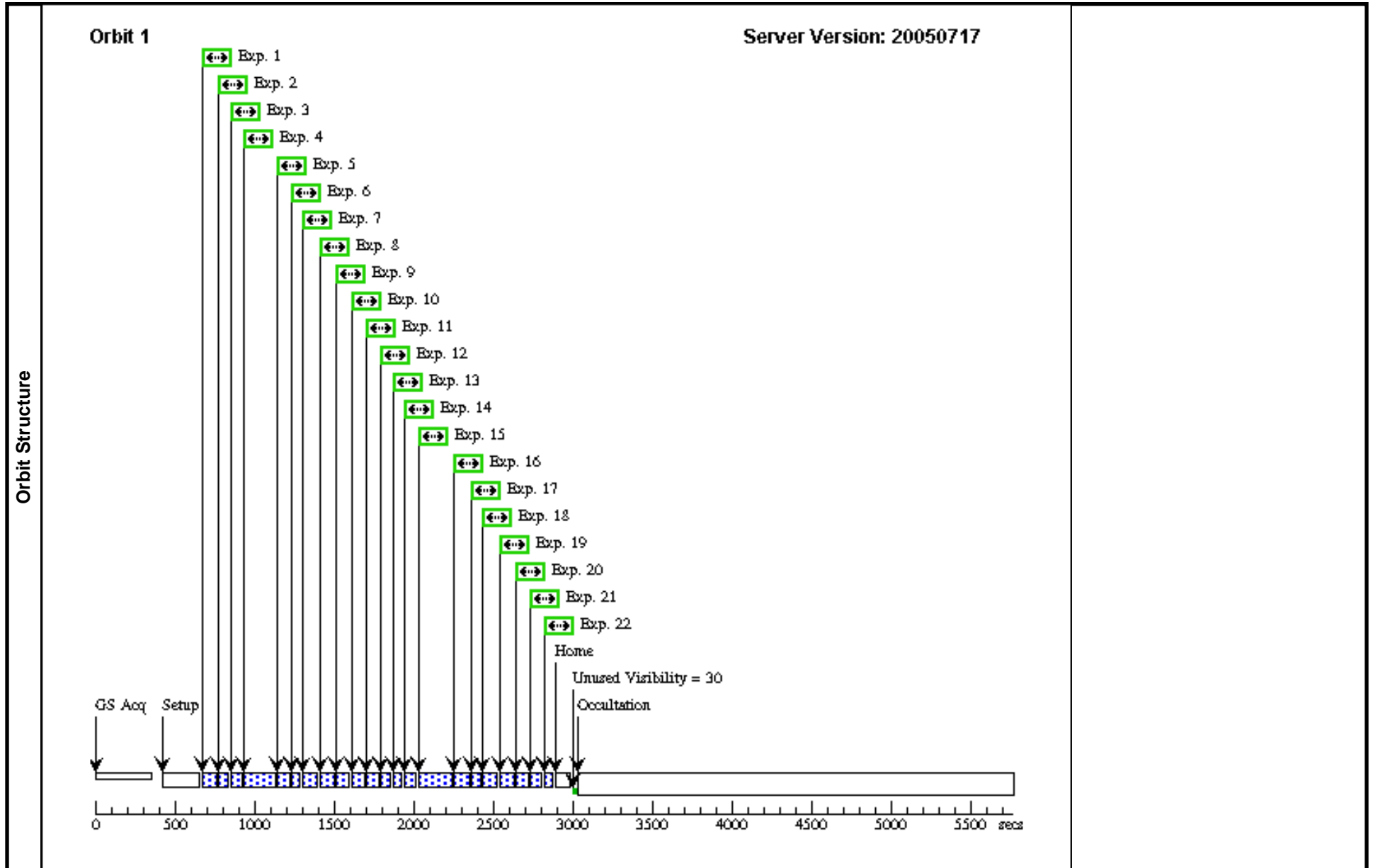
Proposal 10103 - Visit 08 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Fixed Targets (continued)	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(111)	VTT4A	RA: 01 36 59.3700 (24.2473750d) Dec: +41 26 16.41 (41.43789d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=15.78+/-0.1	Coordinate Source: Other_Source: DSS2

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	10	(1) UPS-AND	FGS, POS, 1	F5ND	POS TARG 0,16	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]
2	20	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
3	30	(106) REF5A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
4	40	(111) VTT4A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs	[==>]	[1]	
5	50	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
6	60	(1) UPS-AND	FGS, POS, 1	F5ND	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
7	70	(108) VTT1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
8	80	(105) REF4A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
9	90	(104) REF3A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
10	100	(7) REF6	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
11	110	(103) REF2A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
12	120	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
13	130	(1) UPS-AND	FGS, POS, 1	F5ND	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	

Proposal 10103 - Visit 08 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	14	140	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	15	150	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]
	16	160	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	17	170	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	18	180	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	19	190	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	20	200	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	21	210	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	22	220	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]



Proposal 10103 - Visit 09 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Wed Sep 07 01:49:40 GMT 2005

Visit		Proposal 10103, Visit 09			
		Diagnostic Status: No Diagnostics			
		Scientific Instruments: FGS			
		Special Requirements: SCHED 100%; ORIENT 55.0D TO 55.0 D; AFTER 08 BY 2 D TO 3 D			
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	UPS-AND Alt Name1: GSC2822.02210 Alt Name2: HD9826	RA: 01 36 47.8000 (24.1991667d) Dec: +41 24 19.91 (41.40553d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: -0.0156s/yr Proper Motion Dec: -0.381"/yr Parallax: 0.0" Epoch of Position: 2000.0	V=4.09+/-0.1	Coordinate Source: Other_Source: GSC plate 056
(7)	REF6 Alt Name1: GSC2822.02136	RA: 01 36 41.8700 (24.1744583d) Dec: +41 20 53.52 (41.34820d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.95+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(102)	REF1A Alt Name1: GSC2822.01991	RA: 01 36 57.1200 (24.2380000d) Dec: +41 23 42.14 (41.39504d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.09+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(103)	REF2A Alt Name1: GSC2822.00726	RA: 01 36 50.5700 (24.2107083d) Dec: +41 22 37.56 (41.37710d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.74+/-0.0	Coordinate Source: GUIDE_STAR_CATALOG
(104)	REF3A Alt Name1: GSC2822.01184	RA: 01 36 39.7700 (24.1657083d) Dec: +41 22 16.86 (41.37135d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.48+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(105)	REF4A Alt Name1: GSC2822.02075	RA: 01 36 39.9800 (24.1665833d) Dec: +41 23 48.34 (41.39676d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.8+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(106)	REF5A Alt Name1: GSC2822.01104	RA: 01 37 12.9800 (24.3040833d) Dec: +41 24 43.06 (41.41196d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=11.4+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(108)	VTT1A	RA: 01 36 41.3500 (24.1722917d) Dec: +41 24 6.70 (41.40186d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=14.62+/-0.0	Coordinate Source: Other_Source: DSS2

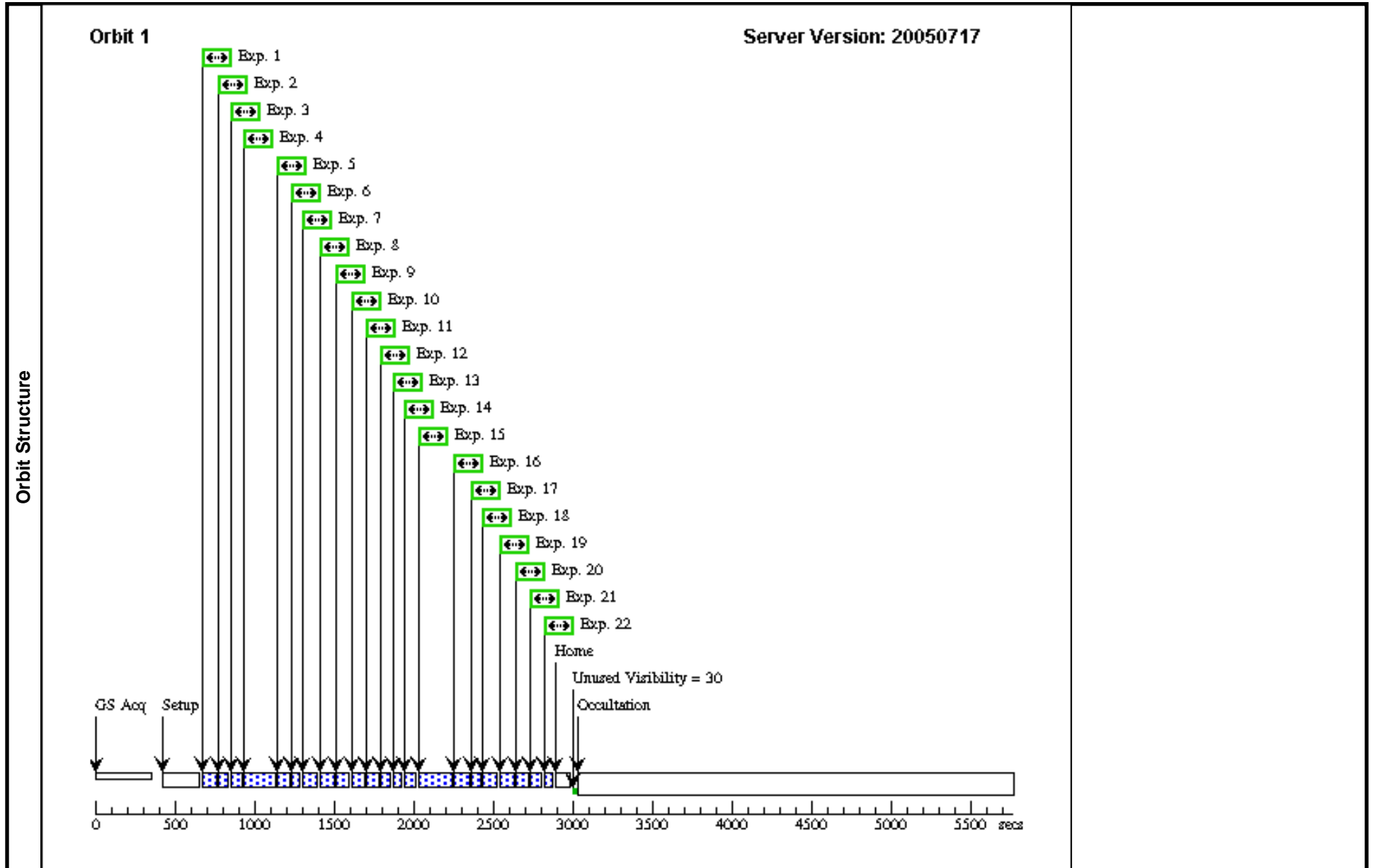
Proposal 10103 - Visit 09 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Fixed Targets (continued)	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(111)	VTT4A	RA: 01 36 59.3700 (24.2473750d) Dec: +41 26 16.41 (41.43789d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=15.78+/-0.1	Coordinate Source: Other_Source: DSS2

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	10	(1) UPS-AND	FGS, POS, 1	F5ND	POS TARG 0,16	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]
2	20	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
3	30	(106) REF5A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
4	40	(111) VTT4A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs	[==>]	[1]	
5	50	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
6	60	(1) UPS-AND	FGS, POS, 1	F5ND	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
7	70	(108) VTT1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
8	80	(105) REF4A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
9	90	(104) REF3A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
10	100	(7) REF6	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
11	110	(103) REF2A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
12	120	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
13	130	(1) UPS-AND	FGS, POS, 1	F5ND	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	

Proposal 10103 - Visit 09 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	14	140	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	15	150	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]
	16	160	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	17	170	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	18	180	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	19	190	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	20	200	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	21	210	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	22	220	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]



Proposal 10103 - Visit 10 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Wed Sep 07 01:49:41 GMT 2005

Visit	Proposal 10103, Visit 10 Diagnostic Status: Warning Scientific Instruments: FGS Special Requirements: SCHED 100%; ORIENT 244.0D TO 244.0 D; BETWEEN 24-JUL-2005:00:00:00 AND 30-JUL-2005:00:00:00					
	Diagnostics	(Visit 10) Warning: GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE				
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(1)	UPS-AND Alt Name1: GSC2822.02210 Alt Name2: HD9826	RA: 01 36 47.8000 (24.1991667d) Dec: +41 24 19.91 (41.40553d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: -0.0156s/yr Proper Motion Dec: -0.381"/yr Parallax: 0.0" Epoch of Position: 2000.0	V=4.09+/-0.1	Coordinate Source: Other_Source: GSC plate 056
	(7)	REF6 Alt Name1: GSC2822.02136	RA: 01 36 41.8700 (24.1744583d) Dec: +41 20 53.52 (41.34820d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.95+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(102)	REF1A Alt Name1: GSC2822.01991	RA: 01 36 57.1200 (24.2380000d) Dec: +41 23 42.14 (41.39504d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.09+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(103)	REF2A Alt Name1: GSC2822.00726	RA: 01 36 50.5700 (24.2107083d) Dec: +41 22 37.56 (41.37710d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.74+/-0.0	Coordinate Source: GUIDE_STAR_CATALOG
	(104)	REF3A Alt Name1: GSC2822.01184	RA: 01 36 39.7700 (24.1657083d) Dec: +41 22 16.86 (41.37135d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.48+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(106)	REF5A Alt Name1: GSC2822.01104	RA: 01 37 12.9800 (24.3040833d) Dec: +41 24 43.06 (41.41196d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=11.4+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(108)	VTT1A	RA: 01 36 41.3500 (24.1722917d) Dec: +41 24 6.70 (41.40186d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=14.62+/-0.0	Coordinate Source: Other_Source: DSS2

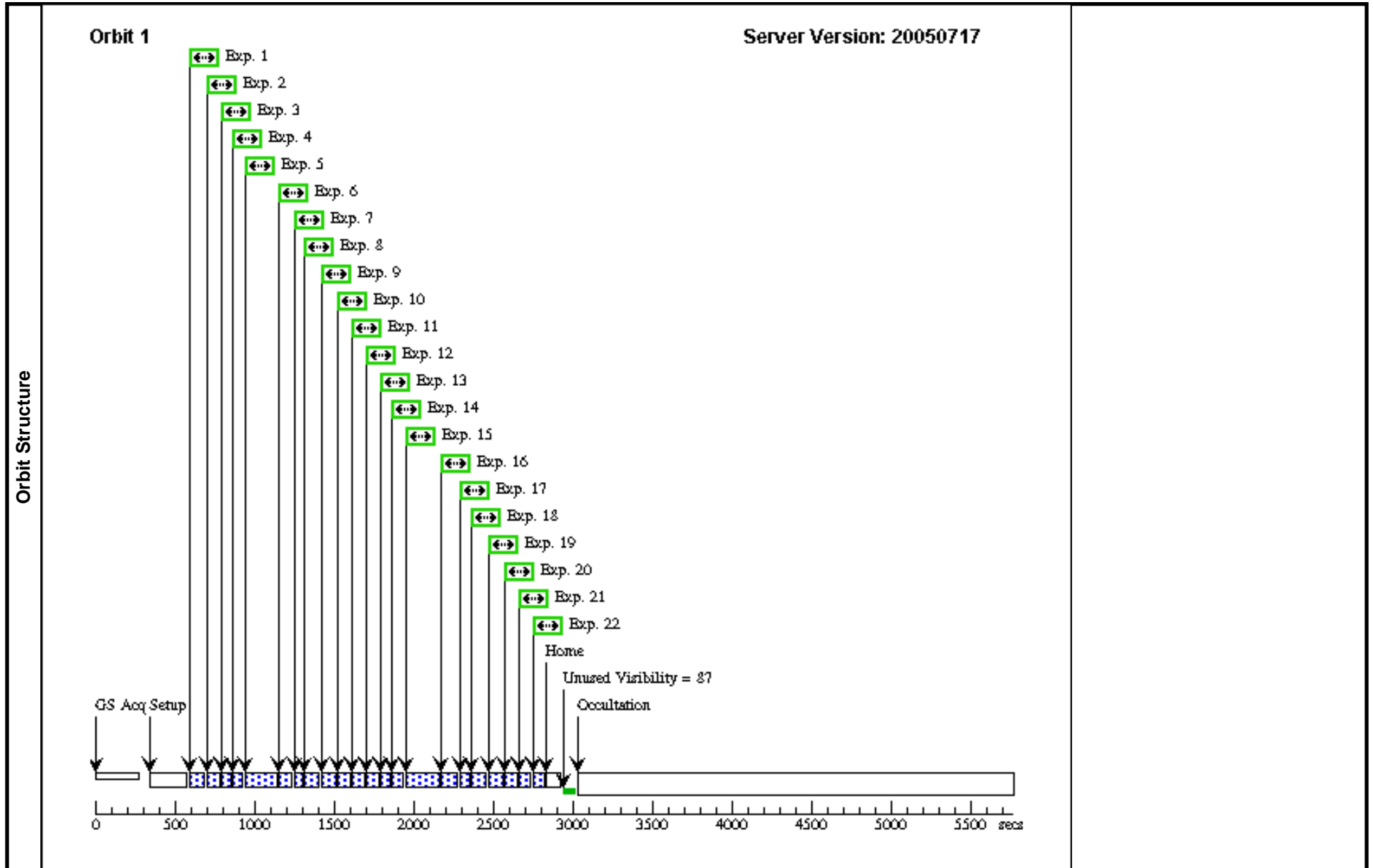
Proposal 10103 - Visit 10 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Fixed Targets (continued)	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(111)	VTT4A	RA: 01 36 59.3700 (24.2473750d) Dec: +41 26 16.41 (41.43789d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=15.78+/-0.1	Coordinate Source: Other_Source: DSS2
(113)	VTT2A	RA: 01 36 50.4100 (24.2100417d) Dec: +41 23 32.56 (41.39238d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: 0.0s/yr Proper Motion Dec: 0.0"/yr Parallax: 0.0" Epoch of Position:	V=14.0+/-0.1	Coordinate Source: Other_Source: DSS2	

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	10	(1) UPS-AND	FGS, POS, 1	F5ND		POS TARG 42,-75; GS ACQ SCENARI O SINGLE	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
2	20	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
3	30	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
4	40	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
5	50	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]	
6	60	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
7	70	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
8	80	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
9	90	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
10	100	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
11	110	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
12	120	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
13	130	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	

Proposal 10103 - Visit 10 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	14	140	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	15	150	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]
	16	160	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	17	170	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	18	180	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	19	190	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	20	200	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	21	210	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	22	220	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]



Proposal 10103 - Visit 11 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Wed Sep 07 01:49:41 GMT 2005

Visit	Proposal 10103, Visit 11 Diagnostic Status: Warning Scientific Instruments: FGS Special Requirements: SCHED 100%; ORIENT 244.0D TO 244.0 D; AFTER 10 BY 2 D TO 3 D					
	Diagnostics	(Visit 11) Warning: GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE				
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(1)	UPS-AND Alt Name1: GSC2822.02210 Alt Name2: HD9826	RA: 01 36 47.8000 (24.1991667d) Dec: +41 24 19.91 (41.40553d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: -0.0156s/yr Proper Motion Dec: -0.381"/yr Parallax: 0.0" Epoch of Position: 2000.0	V=4.09+/-0.1	Coordinate Source: Other_Source: GSC plate 056
	(7)	REF6 Alt Name1: GSC2822.02136	RA: 01 36 41.8700 (24.1744583d) Dec: +41 20 53.52 (41.34820d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.95+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(102)	REF1A Alt Name1: GSC2822.01991	RA: 01 36 57.1200 (24.2380000d) Dec: +41 23 42.14 (41.39504d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.09+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(103)	REF2A Alt Name1: GSC2822.00726	RA: 01 36 50.5700 (24.2107083d) Dec: +41 22 37.56 (41.37710d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.74+/-0.0	Coordinate Source: GUIDE_STAR_CATALOG
	(104)	REF3A Alt Name1: GSC2822.01184	RA: 01 36 39.7700 (24.1657083d) Dec: +41 22 16.86 (41.37135d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.48+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(106)	REF5A Alt Name1: GSC2822.01104	RA: 01 37 12.9800 (24.3040833d) Dec: +41 24 43.06 (41.41196d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=11.4+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(108)	VTT1A	RA: 01 36 41.3500 (24.1722917d) Dec: +41 24 6.70 (41.40186d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=14.62+/-0.0	Coordinate Source: Other_Source: DSS2

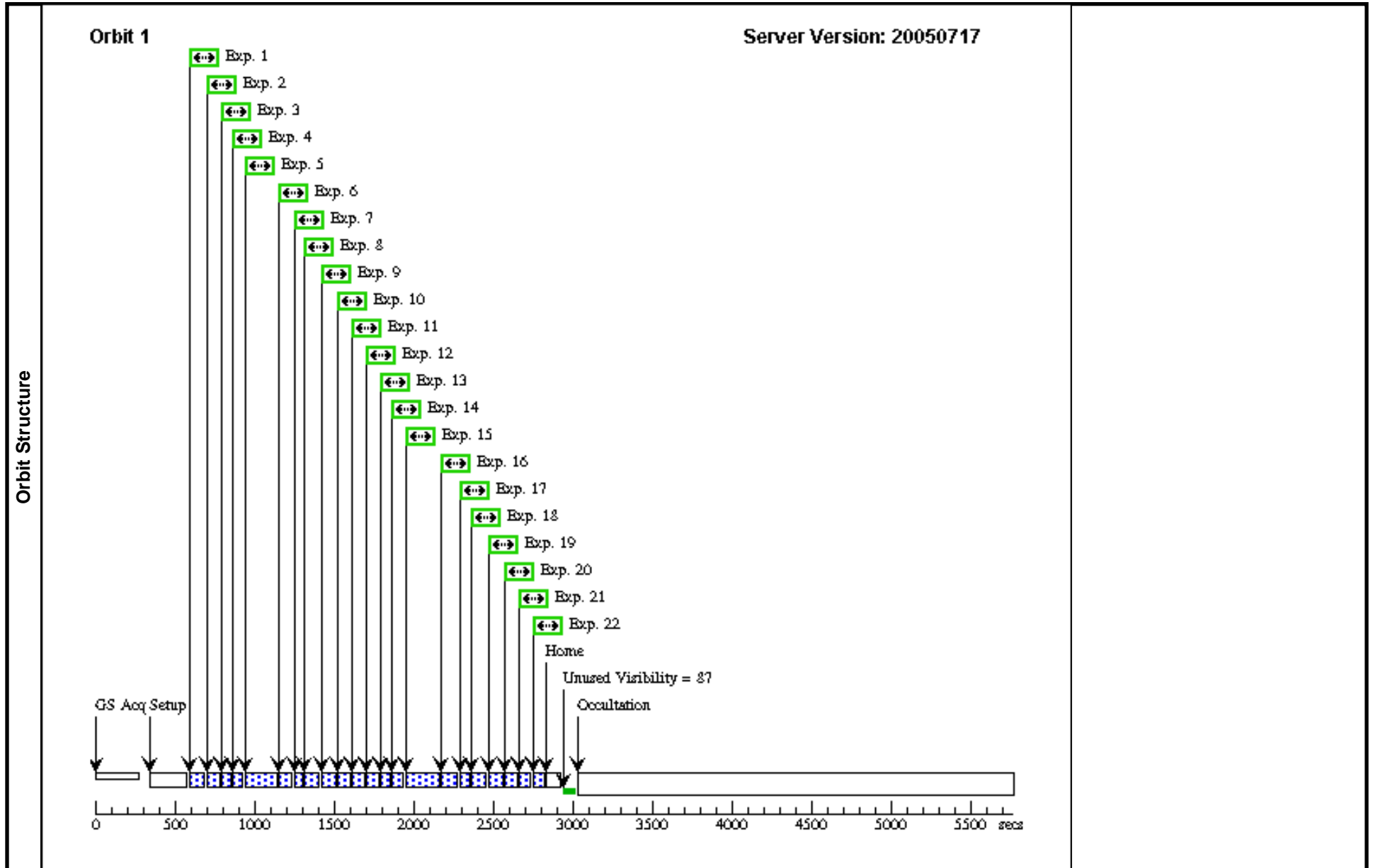
Proposal 10103 - Visit 11 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Fixed Targets (continued)	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(111)	VTT4A	RA: 01 36 59.3700 (24.2473750d) Dec: +41 26 16.41 (41.43789d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=15.78+/-0.1	Coordinate Source: Other_Source: DSS2
(113)	VTT2A	RA: 01 36 50.4100 (24.2100417d) Dec: +41 23 32.56 (41.39238d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: 0.0s/yr Proper Motion Dec: 0.0"/yr Parallax: 0.0" Epoch of Position:	V=14.0+/-0.1	Coordinate Source: Other_Source: DSS2	

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	10	(1) UPS-AND	FGS, POS, 1	F5ND		POS TARG 42,-75; GS ACQ SCENARI O SINGLE	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
2	20	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
3	30	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
4	40	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
5	50	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]	
6	60	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
7	70	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
8	80	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
9	90	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
10	100	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
11	110	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
12	120	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
13	130	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	

Proposal 10103 - Visit 11 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	14	140	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	15	150	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]
	16	160	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	17	170	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	18	180	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	19	190	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	20	200	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	21	210	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	22	220	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]



Proposal 10103 - Visit 12 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Wed Sep 07 01:49:42 GMT 2005

Visit	Proposal 10103, Visit 12 Diagnostic Status: Warning Scientific Instruments: FGS Special Requirements: SCHED 100%; ORIENT 244.0D TO 244.0 D; AFTER 11 BY 2 D TO 3 D					
	Diagnostics	(Visit 12) Warning: GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE				
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(1)	UPS-AND Alt Name1: GSC2822.02210 Alt Name2: HD9826	RA: 01 36 47.8000 (24.1991667d) Dec: +41 24 19.91 (41.40553d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: -0.0156s/yr Proper Motion Dec: -0.381"/yr Parallax: 0.0" Epoch of Position: 2000.0	V=4.09+/-0.1	Coordinate Source: Other_Source: GSC plate 056
	(7)	REF6 Alt Name1: GSC2822.02136	RA: 01 36 41.8700 (24.1744583d) Dec: +41 20 53.52 (41.34820d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.95+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(102)	REF1A Alt Name1: GSC2822.01991	RA: 01 36 57.1200 (24.2380000d) Dec: +41 23 42.14 (41.39504d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.09+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(103)	REF2A Alt Name1: GSC2822.00726	RA: 01 36 50.5700 (24.2107083d) Dec: +41 22 37.56 (41.37710d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.74+/-0.0	Coordinate Source: GUIDE_STAR_CATALOG
	(104)	REF3A Alt Name1: GSC2822.01184	RA: 01 36 39.7700 (24.1657083d) Dec: +41 22 16.86 (41.37135d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.48+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(106)	REF5A Alt Name1: GSC2822.01104	RA: 01 37 12.9800 (24.3040833d) Dec: +41 24 43.06 (41.41196d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=11.4+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(108)	VTT1A	RA: 01 36 41.3500 (24.1722917d) Dec: +41 24 6.70 (41.40186d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=14.62+/-0.0	Coordinate Source: Other_Source: DSS2

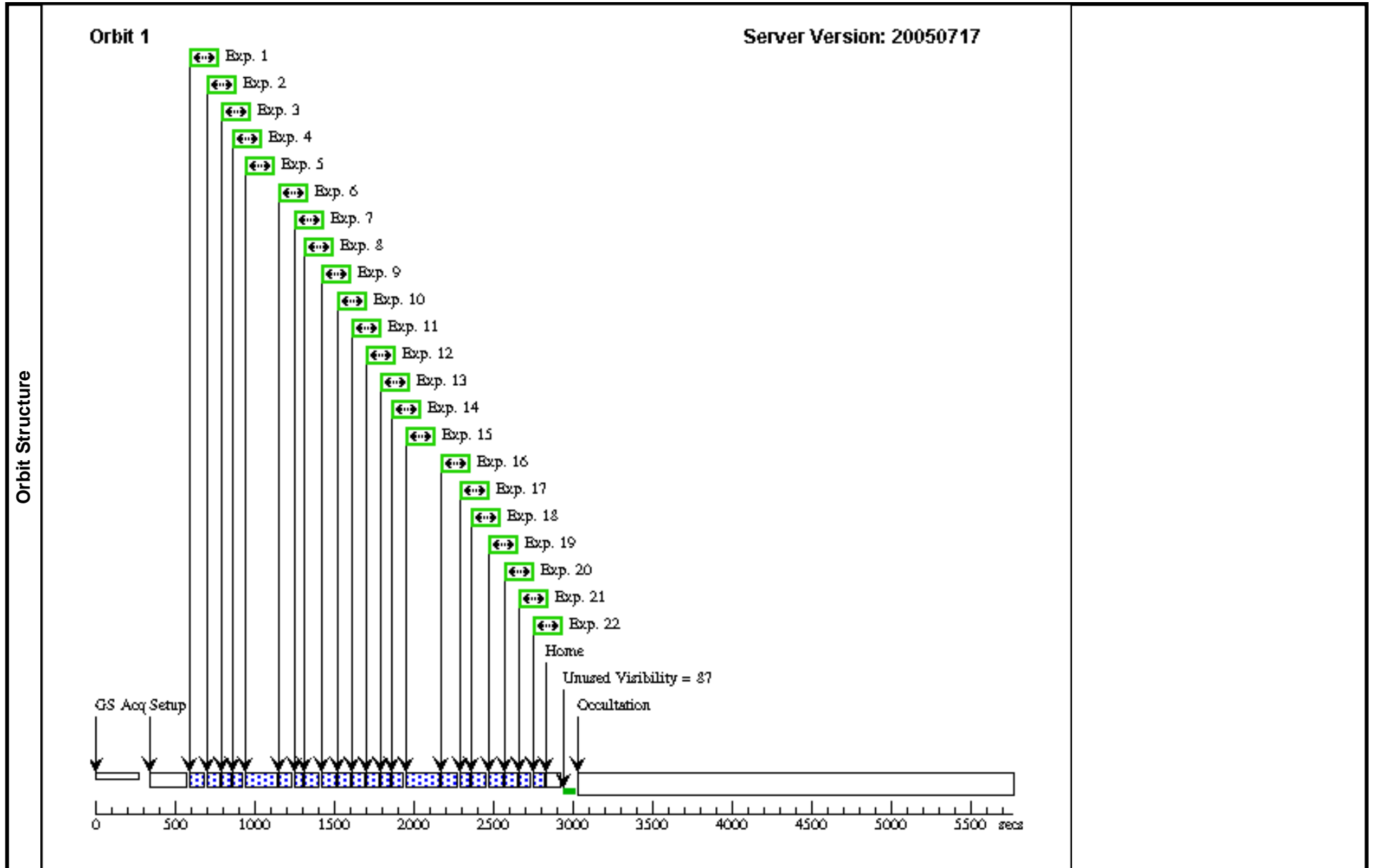
Proposal 10103 - Visit 12 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Fixed Targets (continued)	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(111)	VTT4A	RA: 01 36 59.3700 (24.2473750d) Dec: +41 26 16.41 (41.43789d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=15.78+/-0.1	Coordinate Source: Other_Source: DSS2
(113)	VTT2A	RA: 01 36 50.4100 (24.2100417d) Dec: +41 23 32.56 (41.39238d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: 0.0s/yr Proper Motion Dec: 0.0"/yr Parallax: 0.0" Epoch of Position:	V=14.0+/-0.1	Coordinate Source: Other_Source: DSS2	

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	10	(1) UPS-AND	FGS, POS, 1	F5ND		POS TARG 42,-75; GS ACQ SCENARI O SINGLE	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
2	20	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
3	30	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
4	40	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
5	50	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]	
6	60	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
7	70	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
8	80	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
9	90	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
10	100	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
11	110	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
12	120	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
13	130	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	

Proposal 10103 - Visit 12 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	14	140	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	15	150	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]
	16	160	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	17	170	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	18	180	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	19	190	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	20	200	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	21	210	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	22	220	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]



Proposal 10103 - Visit 13 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Wed Sep 07 01:49:43 GMT 2005

Visit						
Proposal 10103, Visit 13						
Diagnostic Status: No Diagnostics						
Scientific Instruments: FGS						
Special Requirements: SCHED 100%; ORIENT 56.0D TO 56.0 D; BETWEEN 07-FEB-2006:00:00:00 AND 27-FEB-2006:00:00:00						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	UPS-AND Alt Name1: GSC2822.02210 Alt Name2: HD9826	RA: 01 36 47.8000 (24.1991667d) Dec: +41 24 19.91 (41.40553d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: -0.0156s/yr Proper Motion Dec: -0.381"/yr Parallax: 0.0" Epoch of Position: 2000.0	V=4.09+/-0.1	Coordinate Source: Other_Source: GSC plate 056
	(7)	REF6 Alt Name1: GSC2822.02136	RA: 01 36 41.8700 (24.1744583d) Dec: +41 20 53.52 (41.34820d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.95+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(102)	REF1A Alt Name1: GSC2822.01991	RA: 01 36 57.1200 (24.2380000d) Dec: +41 23 42.14 (41.39504d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.09+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(103)	REF2A Alt Name1: GSC2822.00726	RA: 01 36 50.5700 (24.2107083d) Dec: +41 22 37.56 (41.37710d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.74+/-0.0	Coordinate Source: GUIDE_STAR_CATALOG
	(104)	REF3A Alt Name1: GSC2822.01184	RA: 01 36 39.7700 (24.1657083d) Dec: +41 22 16.86 (41.37135d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.48+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(105)	REF4A Alt Name1: GSC2822.02075	RA: 01 36 39.9800 (24.1665833d) Dec: +41 23 48.34 (41.39676d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.8+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(106)	REF5A Alt Name1: GSC2822.01104	RA: 01 37 12.9800 (24.3040833d) Dec: +41 24 43.06 (41.41196d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=11.4+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(108)	VTT1A	RA: 01 36 41.3500 (24.1722917d) Dec: +41 24 6.70 (41.40186d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=14.62+/-0.0	Coordinate Source: Other_Source: DSS2

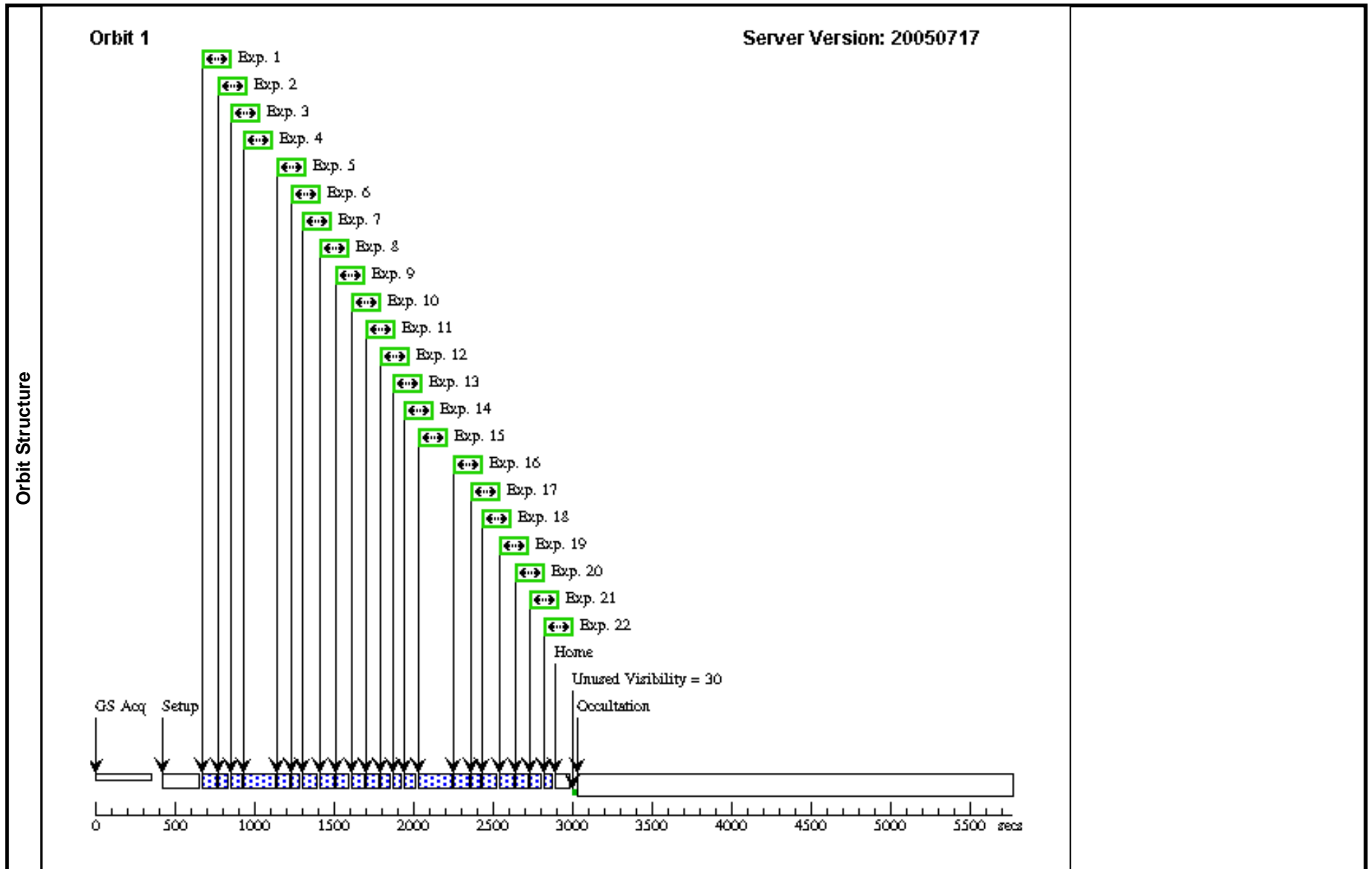
Proposal 10103 - Visit 13 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Fixed Targets (continued)	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(111)	VTT4A	RA: 01 36 59.3700 (24.2473750d) Dec: +41 26 16.41 (41.43789d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=15.78+/-0.1	Coordinate Source: Other_Source: DSS2

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	10	(1) UPS-AND	FGS, POS, 1	F5ND	POS TARG 0,16	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]
2	20	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
3	30	(106) REF5A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
4	40	(111) VTT4A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs	[==>]	[1]	
5	50	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
6	60	(1) UPS-AND	FGS, POS, 1	F5ND	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
7	70	(108) VTT1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
8	80	(105) REF4A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
9	90	(104) REF3A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
10	100	(7) REF6	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
11	110	(103) REF2A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
12	120	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
13	130	(1) UPS-AND	FGS, POS, 1	F5ND	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	

Proposal 10103 - Visit 13 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	14	140	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	15	150	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]
	16	160	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	17	170	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	18	180	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	19	190	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	20	200	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	21	210	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	22	220	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]



Proposal 10103 - Visit 14 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Wed Sep 07 01:49:44 GMT 2005

Visit	Proposal 10103, Visit 14					
	Diagnostic Status: No Diagnostics					
Scientific Instruments: FGS						
Special Requirements: SCHED 100%; ORIENT 56.0D TO 56.0 D; AFTER 13 BY 1.5 D TO 3 D						
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
Fixed Targets	(1)	UPS-AND Alt Name1: GSC2822.02210 Alt Name2: HD9826	RA: 01 36 47.8000 (24.1991667d) Dec: +41 24 19.91 (41.40553d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: -0.0156s/yr Proper Motion Dec: -0.381"/yr Parallax: 0.0" Epoch of Position: 2000.0	V=4.09+/-0.1	Coordinate Source: Other_Source: GSC plate 056
	(7)	REF6 Alt Name1: GSC2822.02136	RA: 01 36 41.8700 (24.1744583d) Dec: +41 20 53.52 (41.34820d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.95+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(102)	REF1A Alt Name1: GSC2822.01991	RA: 01 36 57.1200 (24.2380000d) Dec: +41 23 42.14 (41.39504d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.09+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(103)	REF2A Alt Name1: GSC2822.00726	RA: 01 36 50.5700 (24.2107083d) Dec: +41 22 37.56 (41.37710d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.74+/-0.0	Coordinate Source: GUIDE_STAR_CATALOG
	(104)	REF3A Alt Name1: GSC2822.01184	RA: 01 36 39.7700 (24.1657083d) Dec: +41 22 16.86 (41.37135d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.48+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(105)	REF4A Alt Name1: GSC2822.02075	RA: 01 36 39.9800 (24.1665833d) Dec: +41 23 48.34 (41.39676d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.8+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(106)	REF5A Alt Name1: GSC2822.01104	RA: 01 37 12.9800 (24.3040833d) Dec: +41 24 43.06 (41.41196d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=11.4+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(108)	VTT1A	RA: 01 36 41.3500 (24.1722917d) Dec: +41 24 6.70 (41.40186d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=14.62+/-0.0	Coordinate Source: Other_Source: DSS2

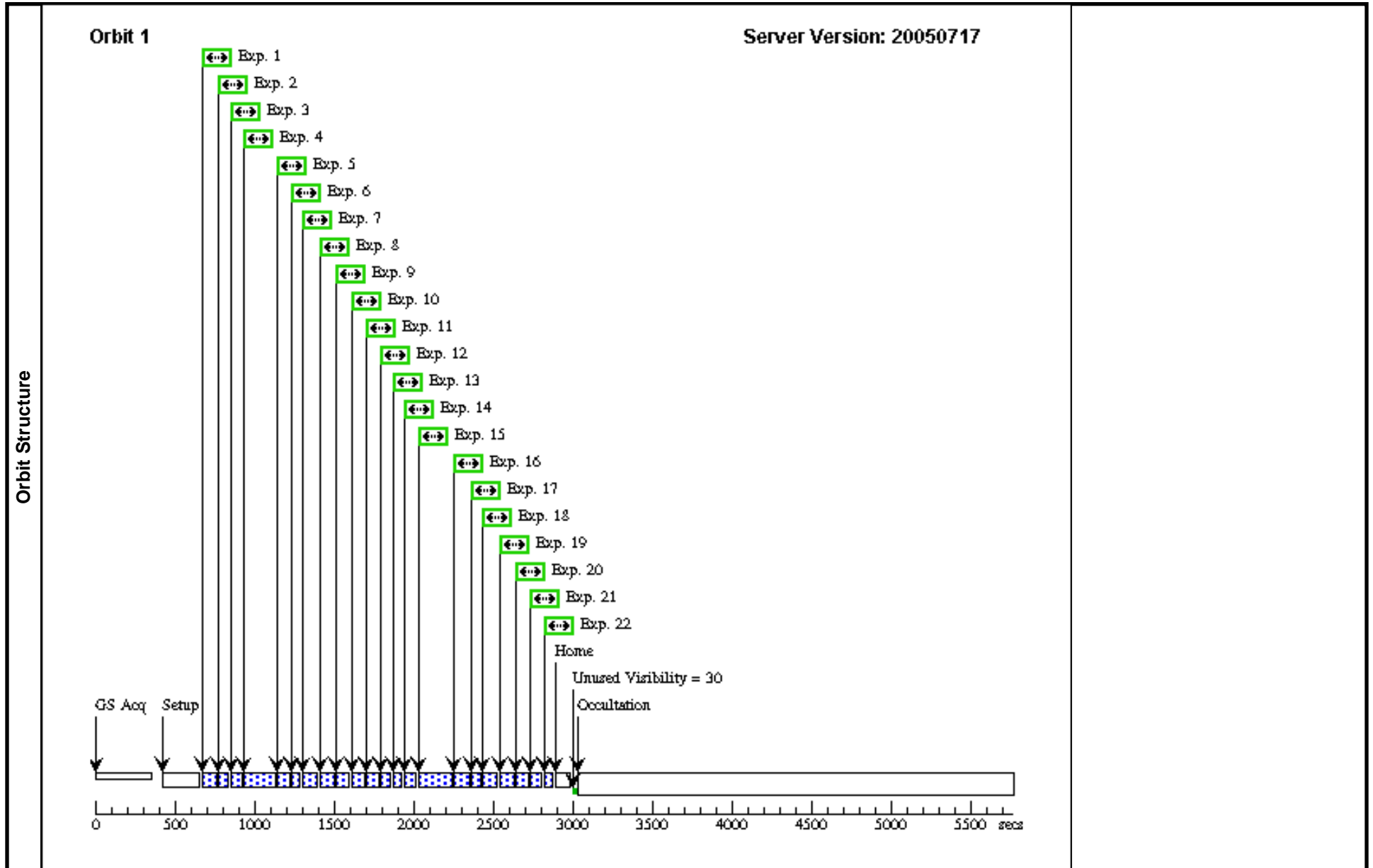
Proposal 10103 - Visit 14 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Fixed Targets (continued)	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(111)	VTT4A	RA: 01 36 59.3700 (24.2473750d) Dec: +41 26 16.41 (41.43789d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=15.78+/-0.1	Coordinate Source: Other_Source: DSS2

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	10	(1) UPS-AND	FGS, POS, 1	F5ND	POS TARG 0,16	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]
2	20	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
3	30	(106) REF5A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
4	40	(111) VTT4A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs	[==>]	[1]	
5	50	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
6	60	(1) UPS-AND	FGS, POS, 1	F5ND	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
7	70	(108) VTT1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
8	80	(105) REF4A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
9	90	(104) REF3A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
10	100	(7) REF6	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
11	110	(103) REF2A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
12	120	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
13	130	(1) UPS-AND	FGS, POS, 1	F5ND	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	

Proposal 10103 - Visit 14 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	14	140	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	15	150	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]
	16	160	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	17	170	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	18	180	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	19	190	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	20	200	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	21	210	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	22	220	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]



Proposal 10103 - Visit 15 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Wed Sep 07 01:49:45 GMT 2005

Visit		Proposal 10103, Visit 15			
		Diagnostic Status: No Diagnostics			
		Scientific Instruments: FGS			
		Special Requirements: SCHED 100%; ORIENT 56.0D TO 56.0 D; AFTER 14 BY 1.5 D TO 3 D			
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	UPS-AND Alt Name1: GSC2822.02210 Alt Name2: HD9826	RA: 01 36 47.8000 (24.1991667d) Dec: +41 24 19.91 (41.40553d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: -0.0156s/yr Proper Motion Dec: -0.381"/yr Parallax: 0.0" Epoch of Position: 2000.0	V=4.09+/-0.1	Coordinate Source: Other_Source: GSC plate 056
(7)	REF6 Alt Name1: GSC2822.02136	RA: 01 36 41.8700 (24.1744583d) Dec: +41 20 53.52 (41.34820d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.95+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(102)	REF1A Alt Name1: GSC2822.01991	RA: 01 36 57.1200 (24.2380000d) Dec: +41 23 42.14 (41.39504d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.09+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(103)	REF2A Alt Name1: GSC2822.00726	RA: 01 36 50.5700 (24.2107083d) Dec: +41 22 37.56 (41.37710d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.74+/-0.0	Coordinate Source: GUIDE_STAR_CATALOG
(104)	REF3A Alt Name1: GSC2822.01184	RA: 01 36 39.7700 (24.1657083d) Dec: +41 22 16.86 (41.37135d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.48+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(105)	REF4A Alt Name1: GSC2822.02075	RA: 01 36 39.9800 (24.1665833d) Dec: +41 23 48.34 (41.39676d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.8+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(106)	REF5A Alt Name1: GSC2822.01104	RA: 01 37 12.9800 (24.3040833d) Dec: +41 24 43.06 (41.41196d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=11.4+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(108)	VTT1A	RA: 01 36 41.3500 (24.1722917d) Dec: +41 24 6.70 (41.40186d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=14.62+/-0.0	Coordinate Source: Other_Source: DSS2

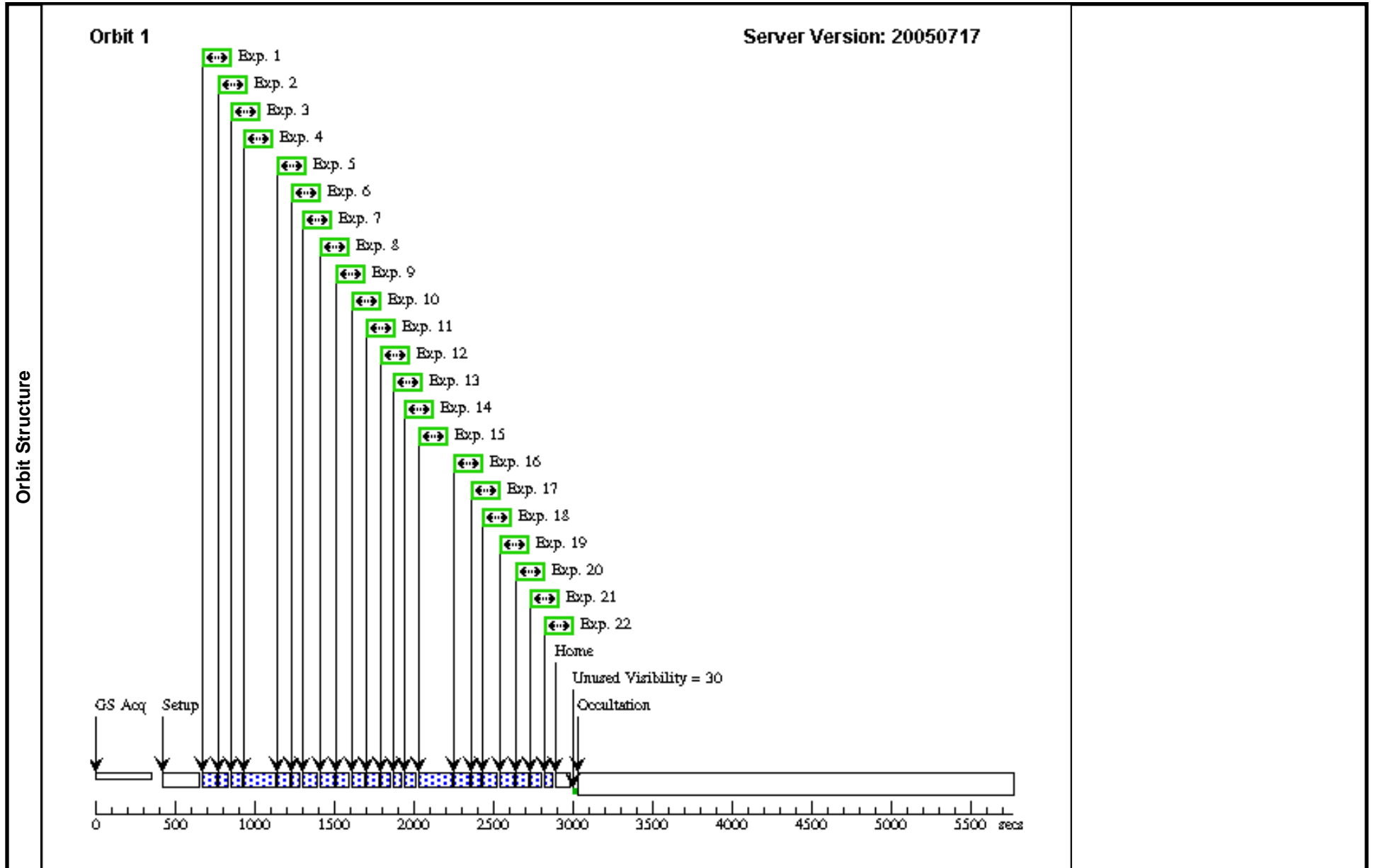
Proposal 10103 - Visit 15 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Fixed Targets (continued)	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(111)	VTT4A	RA: 01 36 59.3700 (24.2473750d) Dec: +41 26 16.41 (41.43789d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=15.78+/-0.1	Coordinate Source: Other_Source: DSS2

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	10	(1) UPS-AND	FGS, POS, 1	F5ND	POS TARG 0,16	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]
2	20	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
3	30	(106) REF5A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
4	40	(111) VTT4A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs	[==>]	[1]	
5	50	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
6	60	(1) UPS-AND	FGS, POS, 1	F5ND	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
7	70	(108) VTT1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
8	80	(105) REF4A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
9	90	(104) REF3A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
10	100	(7) REF6	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
11	110	(103) REF2A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
12	120	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
13	130	(1) UPS-AND	FGS, POS, 1	F5ND	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	

Proposal 10103 - Visit 15 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures (continued)	14	140	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	15	150	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]
	16	160	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	17	170	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	18	180	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	19	190	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	20	200	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	21	210	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	22	220	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]



Proposal 10103 - Visit 16 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Wed Sep 07 01:49:46 GMT 2005

Visit					
Proposal 10103, Visit 16					
Diagnostic Status: No Diagnostics					
Scientific Instruments: FGS					
Special Requirements: SCHED 100%; ORIENT 244.0D TO 244.0 D; BETWEEN 24-JUL-2006:00:00:00 AND 01-AUG-2006:00:00:00					
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	UPS-AND Alt Name1: GSC2822.02210 Alt Name2: HD9826	RA: 01 36 47.8000 (24.1991667d) Dec: +41 24 19.91 (41.40553d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: -0.0156s/yr Proper Motion Dec: -0.381"/yr Parallax: 0.0" Epoch of Position: 2000.0	V=4.09+/-0.1	Coordinate Source: Other_Source: GSC plate 056
(7)	REF6 Alt Name1: GSC2822.02136	RA: 01 36 41.8700 (24.1744583d) Dec: +41 20 53.52 (41.34820d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.95+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(102)	REF1A Alt Name1: GSC2822.01991	RA: 01 36 57.1200 (24.2380000d) Dec: +41 23 42.14 (41.39504d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.09+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(103)	REF2A Alt Name1: GSC2822.00726	RA: 01 36 50.5700 (24.2107083d) Dec: +41 22 37.56 (41.37710d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.74+/-0.0	Coordinate Source: GUIDE_STAR_CATALOG
(104)	REF3A Alt Name1: GSC2822.01184	RA: 01 36 39.7700 (24.1657083d) Dec: +41 22 16.86 (41.37135d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.48+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(106)	REF5A Alt Name1: GSC2822.01104	RA: 01 37 12.9800 (24.3040833d) Dec: +41 24 43.06 (41.41196d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=11.4+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(108)	VTT1A	RA: 01 36 41.3500 (24.1722917d) Dec: +41 24 6.70 (41.40186d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=14.62+/-0.0	Coordinate Source: Other_Source: DSS2
(111)	VTT4A	RA: 01 36 59.3700 (24.2473750d) Dec: +41 26 16.41 (41.43789d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=15.78+/-0.1	Coordinate Source: Other_Source: DSS2

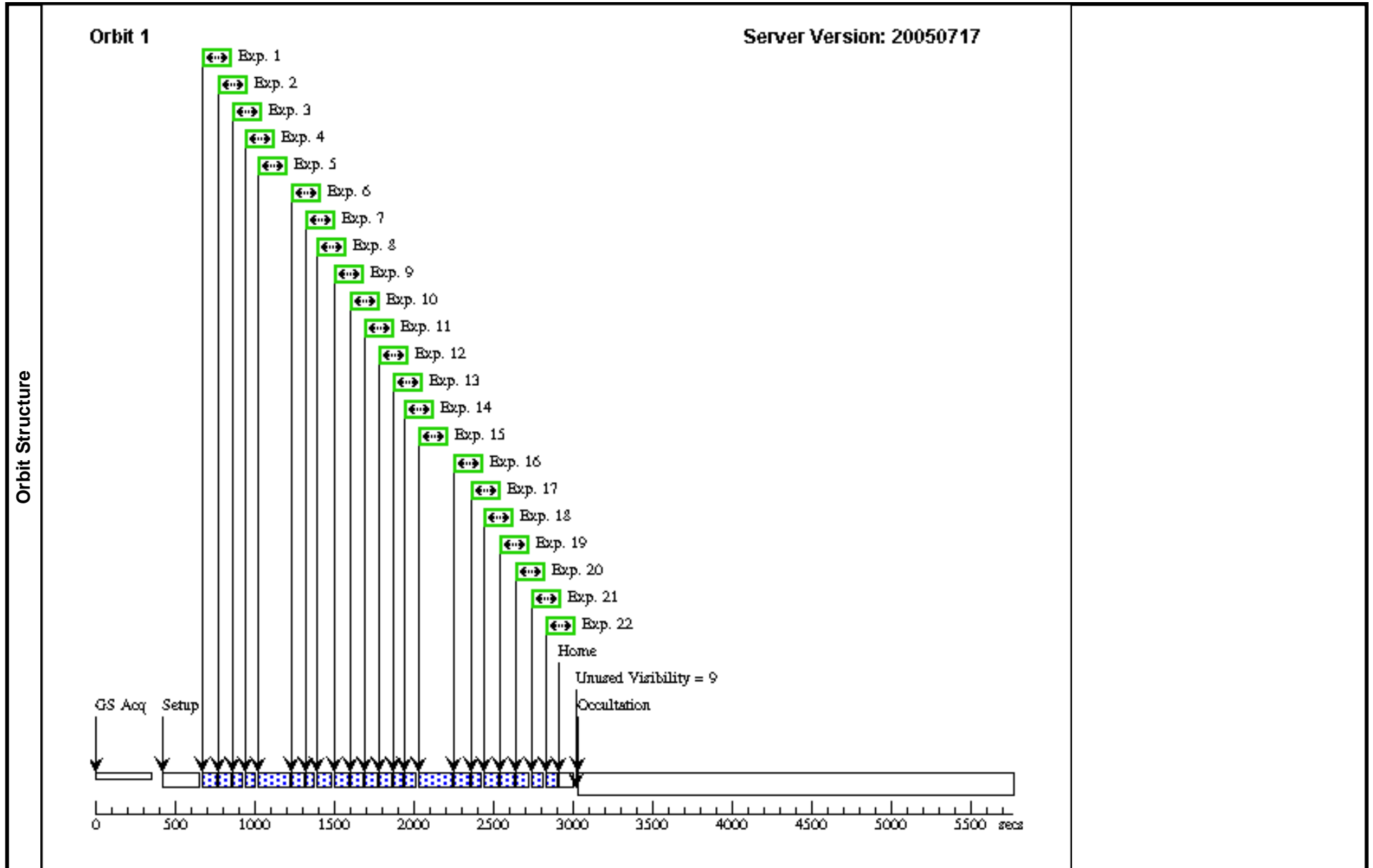
Proposal 10103 - Visit 16 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Fixed Targets (continued)	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(113)	VTT2A	RA: 01 36 50.4100 (24.2100417d) Dec: +41 23 32.56 (41.39238d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: 0.0s/yr Proper Motion Dec: 0.0"/yr Parallax: 0.0" Epoch of Position:	V=14.0+/-0.1	Coordinate Source: Other_Source: DSS2

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	10	(1) UPS-AND	FGS, POS, 1	F5ND	POS TARG 42,-75	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]
2	20	(113) VTT2A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
3	30	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
4	40	(106) REF5A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
5	50	(111) VTT4A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs	[==>]	[1]	
6	60	(102) REF1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
7	70	(1) UPS-AND	FGS, POS, 1	F5ND	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
8	80	(108) VTT1A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
9	90	(104) REF3A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
10	100	(7) REF6	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
11	110	(103) REF2A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
12	120	(113) VTT2A	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	
13	130	(1) UPS-AND	FGS, POS, 1	F5ND	SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	[==>]	[1]	

Proposal 10103 - Visit 16 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	14	140	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	15	150	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]
	16	160	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	17	170	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	18	180	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	19	190	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	20	200	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	21	210	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	22	220	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]



Proposal 10103 - Visit 17 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Wed Sep 07 01:49:47 GMT 2005

Visit						
Proposal 10103, Visit 17						
Diagnostic Status: No Diagnostics						
Scientific Instruments: FGS						
Special Requirements: SCHED 100%; ORIENT 244.0D TO 244.0 D; AFTER 16 BY 1.7 D TO 3 D						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	UPS-AND Alt Name1: GSC2822.02210 Alt Name2: HD9826	RA: 01 36 47.8000 (24.1991667d) Dec: +41 24 19.91 (41.40553d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: -0.0156s/yr Proper Motion Dec: -0.381"/yr Parallax: 0.0" Epoch of Position: 2000.0	V=4.09+/-0.1	Coordinate Source: Other_Source: GSC plate 056
	(7)	REF6 Alt Name1: GSC2822.02136	RA: 01 36 41.8700 (24.1744583d) Dec: +41 20 53.52 (41.34820d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.95+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(102)	REF1A Alt Name1: GSC2822.01991	RA: 01 36 57.1200 (24.2380000d) Dec: +41 23 42.14 (41.39504d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.09+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(103)	REF2A Alt Name1: GSC2822.00726	RA: 01 36 50.5700 (24.2107083d) Dec: +41 22 37.56 (41.37710d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.74+/-0.0	Coordinate Source: GUIDE_STAR_CATALOG
	(104)	REF3A Alt Name1: GSC2822.01184	RA: 01 36 39.7700 (24.1657083d) Dec: +41 22 16.86 (41.37135d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.48+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(106)	REF5A Alt Name1: GSC2822.01104	RA: 01 37 12.9800 (24.3040833d) Dec: +41 24 43.06 (41.41196d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=11.4+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
	(108)	VTT1A	RA: 01 36 41.3500 (24.1722917d) Dec: +41 24 6.70 (41.40186d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=14.62+/-0.0	Coordinate Source: Other_Source: DSS2
	(111)	VTT4A	RA: 01 36 59.3700 (24.2473750d) Dec: +41 26 16.41 (41.43789d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=15.78+/-0.1	Coordinate Source: Other_Source: DSS2

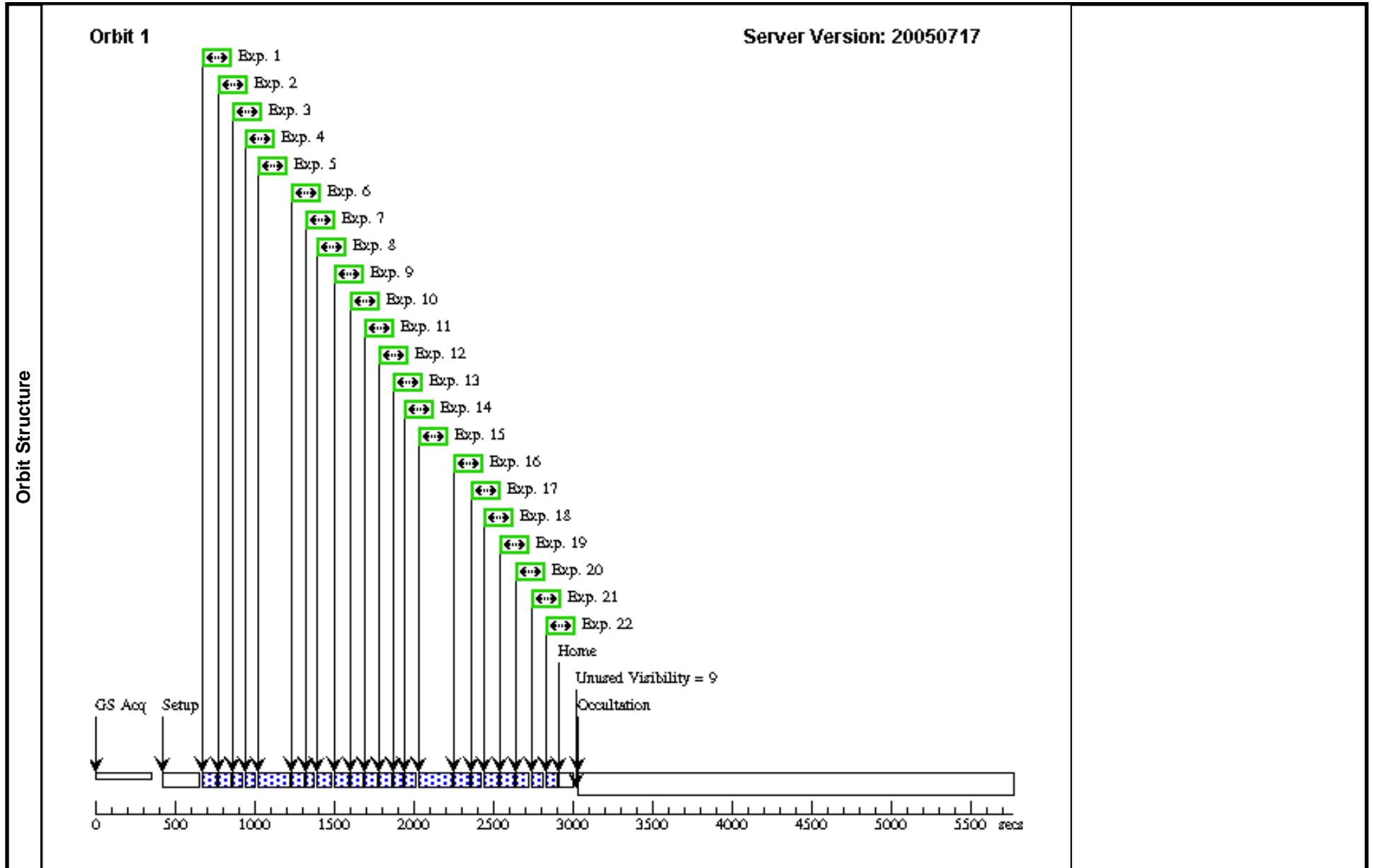
Proposal 10103 - Visit 17 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Fixed Targets (continued)	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(113)	VTT2A	RA: 01 36 50.4100 (24.2100417d) Dec: +41 23 32.56 (41.39238d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: 0.0s/yr Proper Motion Dec: 0.0"/yr Parallax: 0.0" Epoch of Position:	V=14.0+/-0.1	Coordinate Source: Other_Source: DSS2

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	10	(1) UPS-AND	FGS, POS, 1	F5ND		POS TARG 42,-75	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
2	20	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
3	30	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
4	40	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
5	50	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]	
6	60	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
7	70	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
8	80	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
9	90	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
10	100	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
11	110	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
12	120	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
13	130	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	

Proposal 10103 - Visit 17 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	14	140	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	15	150	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]
	16	160	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	17	170	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	18	180	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	19	190	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	20	200	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	21	210	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
	22	220	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]



Proposal 10103 - Visit 18 - FGS Astrometry of a Star Hosting an Extrasolar Planet: The Mass of Upsilon Andromedae d

Wed Sep 07 01:49:48 GMT 2005

Visit					
Proposal 10103, Visit 18					
Diagnostic Status: No Diagnostics					
Scientific Instruments: FGS					
Special Requirements: SCHED 100%; ORIENT 244.0D TO 244.0 D; AFTER 17 BY 1.7 D TO 3 D					
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	UPS-AND Alt Name1: GSC2822.02210 Alt Name2: HD9826	RA: 01 36 47.8000 (24.1991667d) Dec: +41 24 19.91 (41.40553d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: -0.0156s/yr Proper Motion Dec: -0.381"/yr Parallax: 0.0" Epoch of Position: 2000.0	V=4.09+/-0.1	Coordinate Source: Other_Source: GSC plate 056
(7)	REF6 Alt Name1: GSC2822.02136	RA: 01 36 41.8700 (24.1744583d) Dec: +41 20 53.52 (41.34820d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.95+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(102)	REF1A Alt Name1: GSC2822.01991	RA: 01 36 57.1200 (24.2380000d) Dec: +41 23 42.14 (41.39504d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.09+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(103)	REF2A Alt Name1: GSC2822.00726	RA: 01 36 50.5700 (24.2107083d) Dec: +41 22 37.56 (41.37710d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=13.74+/-0.0	Coordinate Source: GUIDE_STAR_CATALOG
(104)	REF3A Alt Name1: GSC2822.01184	RA: 01 36 39.7700 (24.1657083d) Dec: +41 22 16.86 (41.37135d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=14.48+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(106)	REF5A Alt Name1: GSC2822.01104	RA: 01 37 12.9800 (24.3040833d) Dec: +41 24 43.06 (41.41196d) Equinox: J2000 Plate Id: 01JW	Parallax: 0.0" Epoch of Position:	V=11.4+/-0.1	Coordinate Source: GUIDE_STAR_CATALOG
(108)	VTT1A	RA: 01 36 41.3500 (24.1722917d) Dec: +41 24 6.70 (41.40186d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=14.62+/-0.0	Coordinate Source: Other_Source: DSS2
(111)	VTT4A	RA: 01 36 59.3700 (24.2473750d) Dec: +41 26 16.41 (41.43789d) Equinox: J2000 Plate Id: (?)	Parallax: 0.0" Epoch of Position:	V=15.78+/-0.1	Coordinate Source: Other_Source: DSS2

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Fixed Targets (continued)	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(113)	VTT2A	RA: 01 36 50.4100 (24.2100417d) Dec: +41 23 32.56 (41.39238d) Equinox: J2000 Plate Id: (?)	Proper Motion RA: 0.0s/yr Proper Motion Dec: 0.0"/yr Parallax: 0.0" Epoch of Position:	V=14.0+/-0.1	Coordinate Source: Other_Source: DSS2

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	10	(1) UPS-AND	FGS, POS, 1	F5ND		POS TARG 42,-75	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]
2	20	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
3	30	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
4	40	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
5	50	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs [==>]	[1]	
6	60	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
7	70	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
8	80	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
9	90	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
10	100	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
11	110	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
12	120	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	
13	130	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs [==>]	[1]	

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Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	14	140	(106) REF5A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	
									[==>]	[1]
	15	150	(111) VTT4A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	30.0 Secs	
									[==>]	[1]
	16	160	(103) REF2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	
									[==>]	[1]
	17	170	(1) UPS-AND	FGS, POS, 1	F5ND		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	
									[==>]	[1]
	18	180	(108) VTT1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs	
								[==>]	[1]	
19	190	(104) REF3A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs		
								[==>]	[1]	
20	200	(7) REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs		
								[==>]	[1]	
21	210	(102) REF1A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs		
								[==>]	[1]	
22	220	(113) VTT2A	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	10.0 Secs		
								[==>]	[1]	

