



## 11790 - HST/FGS Astrometric Search for Young Planets Around Beta Pic and AU Mic

Cycle: 17, Proposal Category: GO  
(Availability Mode: SUPPORTED)

### INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
<b>Dr. John Wisniewski (PI)</b>	<b>NASA Goddard Space Flight Center</b>	<b>jwisnie@milkyway.gsfc.nasa.gov</b>
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### VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
11	(2) AU-MIC (3) AUMIC-REF1 (4) AUMIC-REF2 (5) AUMIC-REF3 (6) AUMIC-REF4 (7) AUMIC-REF5 (8) AUMIC-REF6 (9) AUMIC-REF7	FGS	1	14-Nov-2008 21:26:46.0	yes

Proposal 11790 (STScI Edit Number: 3, Created: Friday, November 14, 2008 9:27:41 PM EST) - Overview

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
12	(2) AU-MIC (3) AUMIC-REF1 (4) AUMIC-REF2 (5) AUMIC-REF3 (6) AUMIC-REF4 (7) AUMIC-REF5 (8) AUMIC-REF6 (9) AUMIC-REF7	FGS	1	14-Nov-2008 21:26:58.0	yes
13	(2) AU-MIC (3) AUMIC-REF1 (4) AUMIC-REF2 (5) AUMIC-REF3 (6) AUMIC-REF4 (7) AUMIC-REF5 (8) AUMIC-REF6 (9) AUMIC-REF7	FGS	1	14-Nov-2008 21:27:08.0	yes
21	(2) AU-MIC (3) AUMIC-REF1 (4) AUMIC-REF2 (5) AUMIC-REF3 (6) AUMIC-REF4 (7) AUMIC-REF5 (8) AUMIC-REF6 (9) AUMIC-REF7	FGS	1	14-Nov-2008 21:27:20.0	yes

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
22	(2) AU-MIC (3) AUMIC-REF1 (4) AUMIC-REF2 (5) AUMIC-REF3 (6) AUMIC-REF4 (7) AUMIC-REF5 (8) AUMIC-REF6 (9) AUMIC-REF7	FGS	1	14-Nov-2008 21:27:29.0	yes
23	(2) AU-MIC (3) AUMIC-REF1 (4) AUMIC-REF2 (5) AUMIC-REF3 (6) AUMIC-REF4 (7) AUMIC-REF5 (8) AUMIC-REF6 (9) AUMIC-REF7	FGS	1	14-Nov-2008 21:27:37.0	yes

6 Total Orbits Used

### **ABSTRACT**

AU Mic is a nearby Vega-type debris disk star. Its disk system has been spatially resolved in exquisite detail, predominantly via the ACS coronagraph and WFPC-2 cameras onboard HST. These images exhibit a wealth of morphological features which provide compelling indirect evidence that AU Mic likely harbors short-period planetary body(ies). We propose to use the superlative astrometric capabilities of HST/FGS to directly detect these planets, hence provide the first direct planet detection in a Vega-type system whose disk has been imaged at high spatial resolution.

**OBSERVING DESCRIPTION**

We will use FGS1r to monitor the position of AU Mic relative to nearby field stars to investigate the possible presence of Jupiter mass planets in orbit about the star.

Proposal 11790 - Visit 11 - HST/FGS Astrometric Search for Young Planets Around Beta Pic and AU Mic

Sat Nov 15 02:27:42 GMT 2008

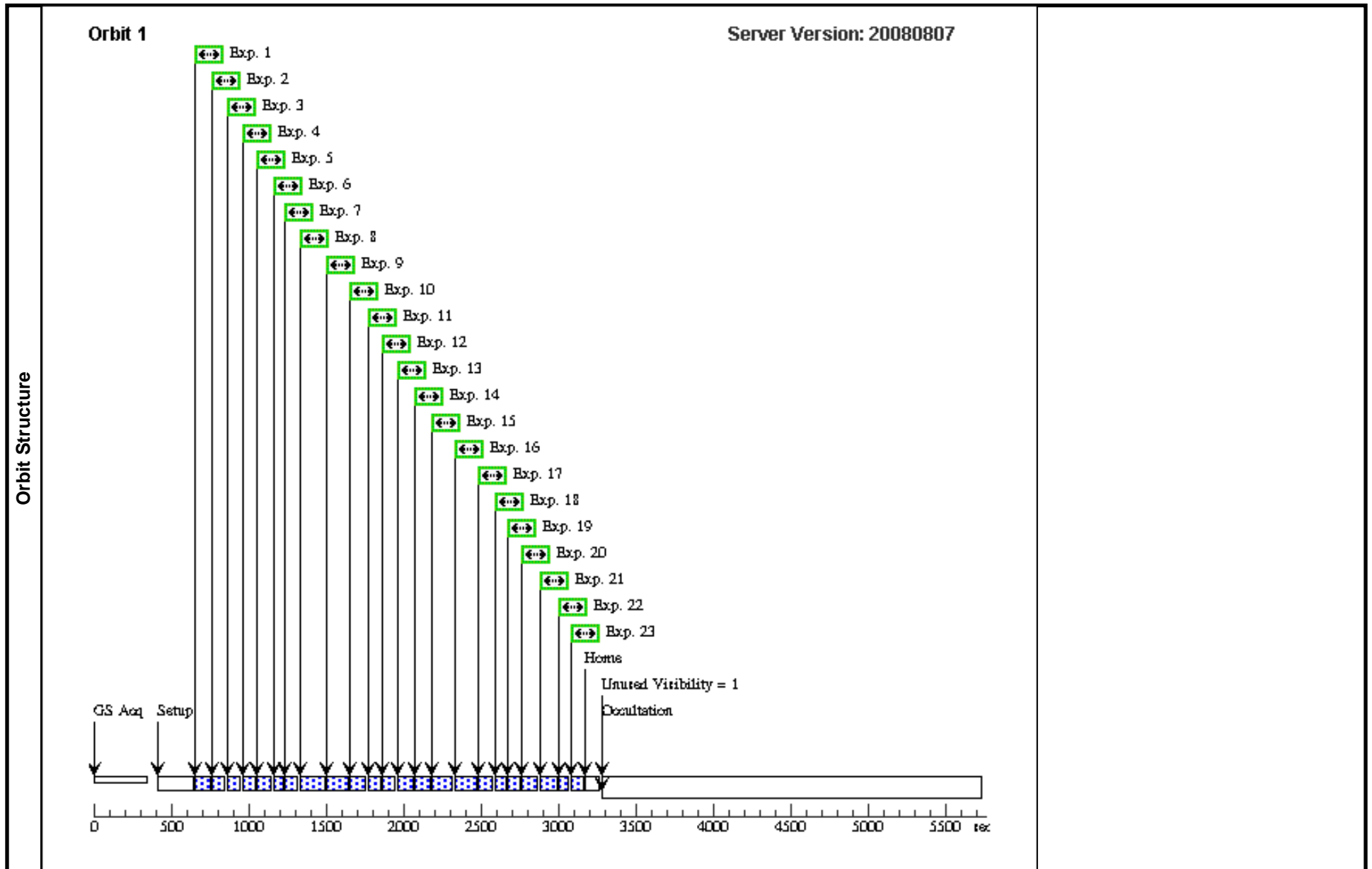
Visit	<b>Proposal 11790, Visit 11, implementation</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: FGS Special Requirements: GYRO MODE 2G; ORIENT 248.0D TO 248.0 D; BETWEEN 19-AUG-2008:16:57:59 AND 30-MAR-2009:00:00:00						
Diagnostics	(Visit 11) Warning (Form): Gyro Mode overrides default value of 3GOBAD.						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	
	(2)	AU-MIC	RA: 20 45 9.5318 (311.2897158d) Dec: -31 20 27.24 (-31.34090d) Equinox: J2000	Proper Motion RA: 0.021883s/yr Proper Motion Dec: -0.36009"/yr Parallax: 0.1006" Epoch of Position: 2000.0	V=8.61+/-0.1 B = 10.05	Reference Frame: ICRS	
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>						
	(3)	AUMIC-REF1 Alt Name1: S333311099	RA: 20 45 25.3990 (311.3558292d) Dec: -31 20 34.19 (-31.34283d) Equinox: J2000		V=13.43+/-0.1 B=14.14, R=12.94	Reference Frame: ICRS	
	(4)	AUMIC-REF2 Alt Name1: S333311079	RA: 20 45 14.0350 (311.3084792d) Dec: -31 18 21.50 (-31.30597d) Equinox: J2000		V=13.76+/-0.1	Reference Frame: ICRS	
	(5)	AUMIC-REF3 Alt Name1: S333311078	RA: 20 45 10.2070 (311.2925292d) Dec: -31 18 12.82 (-31.30356d) Equinox: J2000		V=14.23+/-0.1 B=14.59, R=13.60	Reference Frame: ICRS	
	(6)	AUMIC-REF4 Alt Name1: S333311095	RA: 20 45 10.5350 (311.2938958d) Dec: -31 19 52.65 (-31.33129d) Equinox: J2000		V=14.82+/-0.1 B=14.91, R=14.19	Reference Frame: ICRS	
	(7)	AUMIC-REF5 Alt Name1: S333311024350	RA: 20 44 55.0020 (311.2291750d) Dec: -31 19 51.63 (-31.33101d) Equinox: J2000		V=15.19+/-0.1	Reference Frame: ICRS	
	(8)	AUMIC-REF6 Alt Name1: S33311024296	RA: 20 44 51.4090 (311.2142042d) Dec: -31 20 21.43 (-31.33929d) Equinox: J2000		V=15.71+/-0.1	Reference Frame: ICRS	
	(9)	AUMIC-REF7 Alt Name1: SCLW024481	RA: 20 44 56.6300 (311.2359583d) Dec: -31 18 24.50 (-31.30681d) Equinox: J2000		V=14.86+/-0.1	Reference Frame: ICRS	

Proposal 11790 - Visit 11 - HST/FGS Astrometric Search for Young Planets Around Beta Pic and AU Mic

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(2) AU-MIC	FGS, POS, 1	F583W	POS TARG -280.0,-10.00; GS ACQ SCENARIO BASE1T3	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]		
	2	(3) AUMIC-REF1	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]		
	3	(4) AUMIC-REF2	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]		
	4	(5) AUMIC-REF3	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]		
	5	(6) AUMIC-REF4	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]		
	6	(2) AU-MIC	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]		
	7	(3) AUMIC-REF1	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]		
	8	(8) AUMIC-REF6	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]		
	9	(7) AUMIC-REF5	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]		
	10	(9) AUMIC-REF7	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]		
	11	(2) AU-MIC	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]		
	12	(3) AUMIC-REF1	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]		
	13	(5) AUMIC-REF3	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]		
	14	(9) AUMIC-REF7	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]		
	15	(7) AUMIC-REF5	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]		
	16	(8) AUMIC-REF6	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]		
	17	(2) AU-MIC	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]		
18	(4) AUMIC-REF2	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]			

Proposal 11790 - Visit 11 - HST/FGS Astrometric Search for Young Planets Around Beta Pic and AU Mic

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
		19		(5) AUMIC-REF3	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]
	20		(9) AUMIC-REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	21		(6) AUMIC-REF4	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	22		(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	23		(3) AUMIC-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]



Proposal 11790 - Visit 12 - HST/FGS Astrometric Search for Young Planets Around Beta Pic and AU Mic

Sat Nov 15 02:27:46 GMT 2008

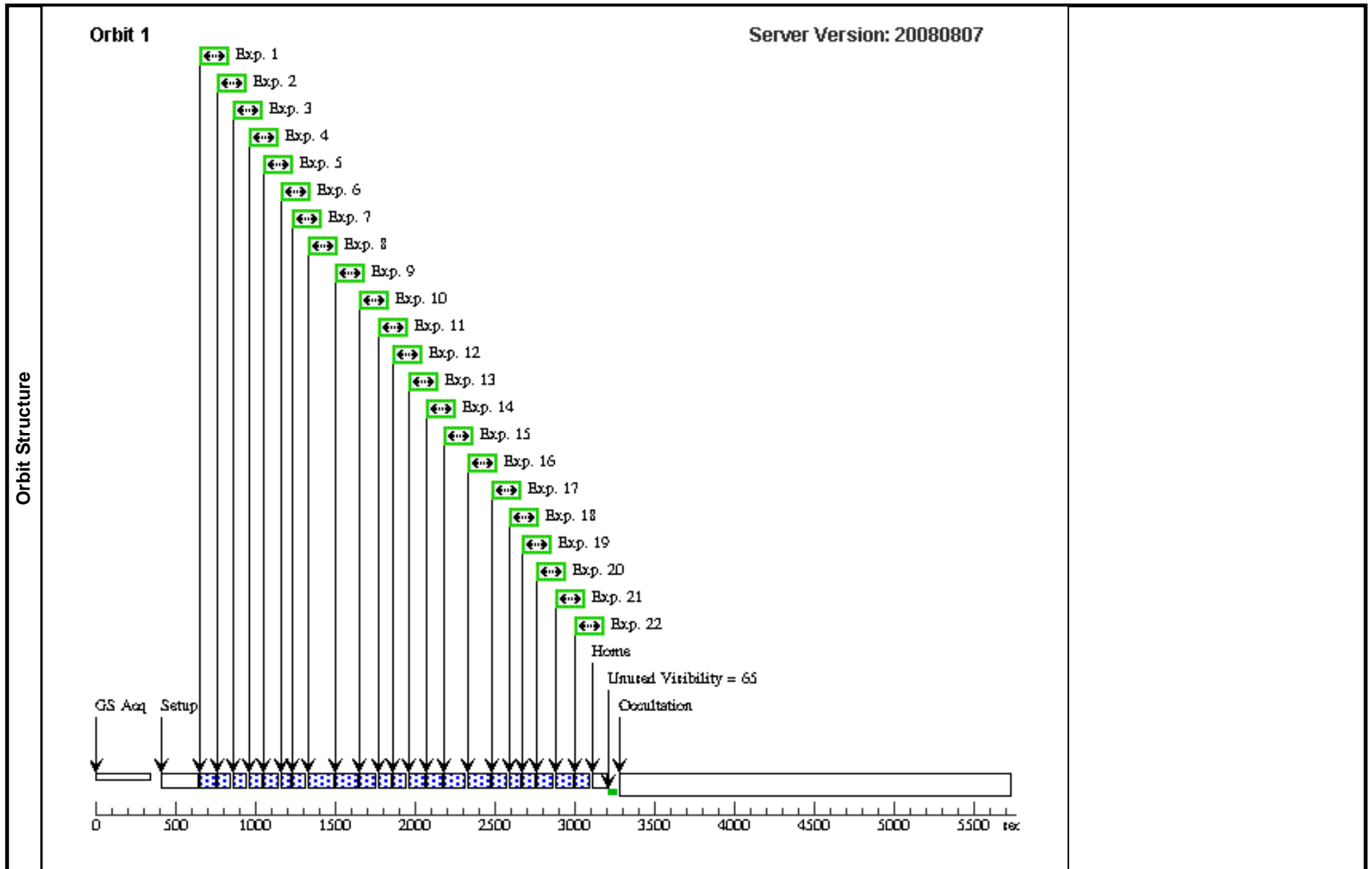
Visit	<b>Proposal 11790, Visit 12, implementation</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: FGS Special Requirements: GYRO MODE 2G; ORIENT 265.0D TO 265.0 D; BETWEEN 25-APR-2009:00:00:00 AND 30-APR-2009:00:00:00						
Diagnostics	(Visit 12) Warning (Form): Gyro Mode overrides default value of 3GOBAD.						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	
	(2)	AU-MIC	RA: 20 45 9.5318 (311.2897158d) Dec: -31 20 27.24 (-31.34090d) Equinox: J2000	Proper Motion RA: 0.021883s/yr Proper Motion Dec: -0.36009"/yr Parallax: 0.1006" Epoch of Position: 2000.0	V=8.61+/-0.1 B = 10.05	Reference Frame: ICRS	
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>						
	(3)	AUMIC-REF1 Alt Name1: S333311099	RA: 20 45 25.3990 (311.3558292d) Dec: -31 20 34.19 (-31.34283d) Equinox: J2000		V=13.43+/-0.1 B=14.14, R=12.94	Reference Frame: ICRS	
	(4)	AUMIC-REF2 Alt Name1: S333311079	RA: 20 45 14.0350 (311.3084792d) Dec: -31 18 21.50 (-31.30597d) Equinox: J2000		V=13.76+/-0.1	Reference Frame: ICRS	
	(5)	AUMIC-REF3 Alt Name1: S333311078	RA: 20 45 10.2070 (311.2925292d) Dec: -31 18 12.82 (-31.30356d) Equinox: J2000		V=14.23+/-0.1 B=14.59, R=13.60	Reference Frame: ICRS	
	(6)	AUMIC-REF4 Alt Name1: S333311095	RA: 20 45 10.5350 (311.2938958d) Dec: -31 19 52.65 (-31.33129d) Equinox: J2000		V=14.82+/-0.1 B=14.91, R=14.19	Reference Frame: ICRS	
	(7)	AUMIC-REF5 Alt Name1: S333311024350	RA: 20 44 55.0020 (311.2291750d) Dec: -31 19 51.63 (-31.33101d) Equinox: J2000		V=15.19+/-0.1	Reference Frame: ICRS	
	(8)	AUMIC-REF6 Alt Name1: S33311024296	RA: 20 44 51.4090 (311.2142042d) Dec: -31 20 21.43 (-31.33929d) Equinox: J2000		V=15.71+/-0.1	Reference Frame: ICRS	
	(9)	AUMIC-REF7 Alt Name1: SCLW024481	RA: 20 44 56.6300 (311.2359583d) Dec: -31 18 24.50 (-31.30681d) Equinox: J2000		V=14.86+/-0.1	Reference Frame: ICRS	

Proposal 11790 - Visit 12 - HST/FGS Astrometric Search for Young Planets Around Beta Pic and AU Mic

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	(2) AU-MIC	FGS, POS, 1	F583W		POS TARG 0.0,40.0; GS ACQ SCENARI O BASE1T3	Sequence 1-22 Non-I nt	12.0 Secs [==>]	[1]
	2	(3) AUMIC-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	12.0 Secs [==>]	[1]
	3	(4) AUMIC-REF2	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	12.0 Secs [==>]	[1]
	4	(5) AUMIC-REF3	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	12.0 Secs [==>]	[1]
	5	(6) AUMIC-REF4	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	12.0 Secs [==>]	[1]
	6	(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	12.0 Secs [==>]	[1]
	7	(3) AUMIC-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	12.0 Secs [==>]	[1]
	8	(8) AUMIC-REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	12.0 Secs [==>]	[1]
	9	(7) AUMIC-REF5	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	12.0 Secs [==>]	[1]
	10	(9) AUMIC-REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	12.0 Secs [==>]	[1]
	11	(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	12.0 Secs [==>]	[1]
	12	(3) AUMIC-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	12.0 Secs [==>]	[1]
	13	(5) AUMIC-REF3	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	12.0 Secs [==>]	[1]
	14	(9) AUMIC-REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	12.0 Secs [==>]	[1]
	15	(7) AUMIC-REF5	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	12.0 Secs [==>]	[1]
	16	(8) AUMIC-REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	12.0 Secs [==>]	[1]
	17	(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	12.0 Secs [==>]	[1]
	18	(4) AUMIC-REF2	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt	12.0 Secs [==>]	[1]

Proposal 11790 - Visit 12 - HST/FGS Astrometric Search for Young Planets Around Beta Pic and AU Mic

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
		19		(5) AUMIC-REF3	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]
	20		(9) AUMIC-REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	21		(6) AUMIC-REF4	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	22		(3) AUMIC-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]



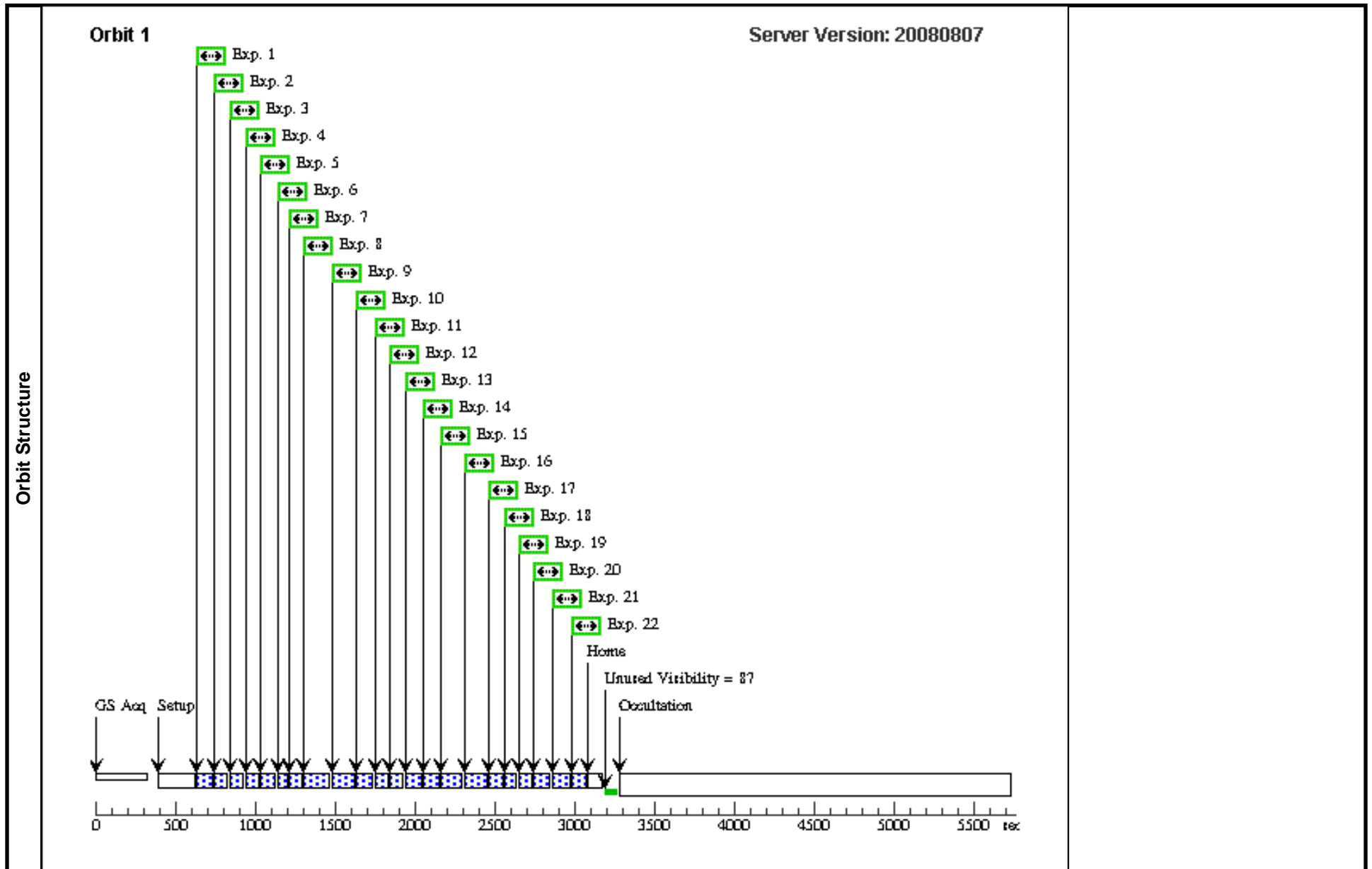
Proposal 11790 - Visit 13 - HST/FGS Astrometric Search for Young Planets Around Beta Pic and AU Mic

Sat Nov 15 02:27:47 GMT 2008

Visit	Proposal 11790, Visit 13, implementation									
	Diagnostic Status: No Diagnostics									
Scientific Instruments: FGS										
Special Requirements: ORIENT 265.0D TO 265.0 D; BETWEEN 04-JUL-2009:00:00:00 AND 14-JUL-2009:00:00:00										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	AU-MIC	RA: 20 45 9.5318 (311.2897158d) Dec: -31 20 27.24 (-31.34090d) Equinox: J2000	Proper Motion RA: 0.021883s/yr Proper Motion Dec: -0.36009"/yr Parallax: 0.1006" Epoch of Position: 2000.0	V=8.61+/-0.1 B = 10.05	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
	(3)	AUMIC-REF1 Alt Name1: S333311099	RA: 20 45 25.3990 (311.3558292d) Dec: -31 20 34.19 (-31.34283d) Equinox: J2000		V=13.43+/-0.1 B=14.14, R=12.94	Reference Frame: ICRS				
	(4)	AUMIC-REF2 Alt Name1: S333311079	RA: 20 45 14.0350 (311.3084792d) Dec: -31 18 21.50 (-31.30597d) Equinox: J2000		V=13.76+/-0.1	Reference Frame: ICRS				
	(5)	AUMIC-REF3 Alt Name1: S333311078	RA: 20 45 10.2070 (311.2925292d) Dec: -31 18 12.82 (-31.30356d) Equinox: J2000		V=14.23+/-0.1 B=14.59, R=13.60	Reference Frame: ICRS				
	(6)	AUMIC-REF4 Alt Name1: S333311095	RA: 20 45 10.5350 (311.2938958d) Dec: -31 19 52.65 (-31.33129d) Equinox: J2000		V=14.82+/-0.1 B=14.91, R=14.19	Reference Frame: ICRS				
	(7)	AUMIC-REF5 Alt Name1: S333311024350	RA: 20 44 55.0020 (311.2291750d) Dec: -31 19 51.63 (-31.33101d) Equinox: J2000		V=15.19+/-0.1	Reference Frame: ICRS				
	(8)	AUMIC-REF6 Alt Name1: S33311024296	RA: 20 44 51.4090 (311.2142042d) Dec: -31 20 21.43 (-31.33929d) Equinox: J2000		V=15.71+/-0.1	Reference Frame: ICRS				
	(9)	AUMIC-REF7 Alt Name1: SCLW024481	RA: 20 44 56.6300 (311.2359583d) Dec: -31 18 24.50 (-31.30681d) Equinox: J2000		V=14.86+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(2) AU-MIC	FGS, POS, 1	F583W		POS TARG 0.0,40.0; GS ACQ SCENARI O BASE1B3	Sequence 1-22 Non-I nt		12.00 Secs [==>]	[1]
	2	(3) AUMIC-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt		12.0 Secs [==>]	[1]
	3	(4) AUMIC-REF2	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-I nt		12.0 Secs [==>]	[1]

Proposal 11790 - Visit 13 - HST/FGS Astrometric Search for Young Planets Around Beta Pic and AU Mic

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures (continued)	4	(5) AUMIC-REF3	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	5	(6) AUMIC-REF4	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	6	(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	7	(3) AUMIC-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	8	(8) AUMIC-REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	9	(7) AUMIC-REF5	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	10	(9) AUMIC-REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	11	(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	12	(3) AUMIC-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	13	(5) AUMIC-REF3	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	14	(9) AUMIC-REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	15	(7) AUMIC-REF5	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	16	(8) AUMIC-REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	17	(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	18	(4) AUMIC-REF2	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	19	(5) AUMIC-REF3	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	20	(9) AUMIC-REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	21	(6) AUMIC-REF4	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]
	22	(3) AUMIC-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-22 Non-Int	12.0 Secs [==>]	[1]



Proposal 11790 - Visit 21 - HST/FGS Astrometric Search for Young Planets Around Beta Pic and AU Mic

Sat Nov 15 02:27:49 GMT 2008

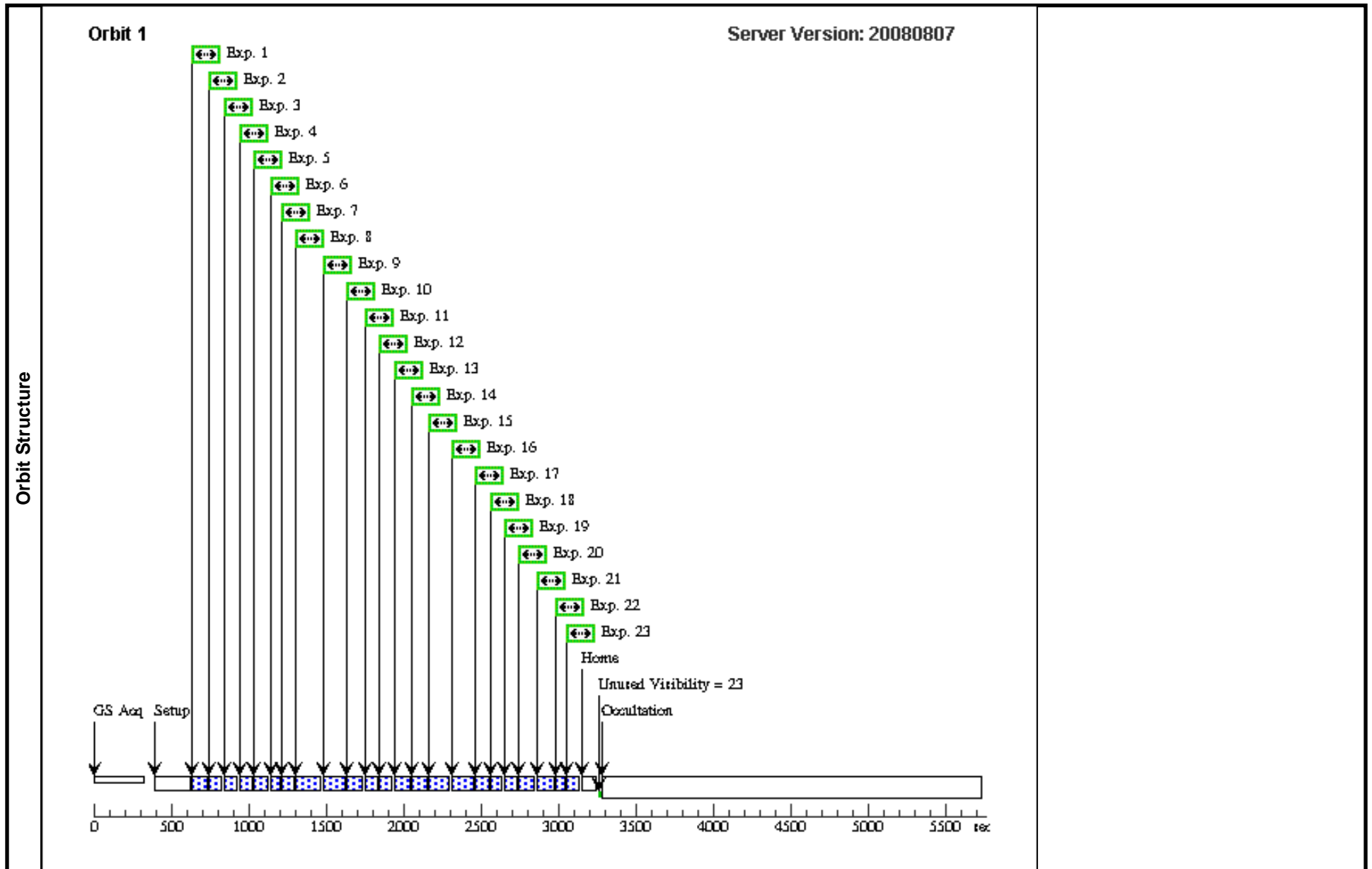
Visit		<b>Proposal 11790, Visit 21, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: FGS Special Requirements: ORIENT 80.0D TO 80.0 D; BETWEEN 10-SEP-2009:00:00:00 AND 15-SEP-2009:00:00:00								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	AU-MIC	RA: 20 45 9.5318 (311.2897158d) Dec: -31 20 27.24 (-31.34090d) Equinox: J2000	Proper Motion RA: 0.021883s/yr Proper Motion Dec: -0.36009"/yr Parallax: 0.1006" Epoch of Position: 2000.0	V=8.61+/-0.1 B = 10.05	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
	(3)	AUMIC-REF1 Alt Name1: S333311099	RA: 20 45 25.3990 (311.3558292d) Dec: -31 20 34.19 (-31.34283d) Equinox: J2000		V=13.43+/-0.1 B=14.14, R=12.94	Reference Frame: ICRS				
	(4)	AUMIC-REF2 Alt Name1: S333311079	RA: 20 45 14.0350 (311.3084792d) Dec: -31 18 21.50 (-31.30597d) Equinox: J2000		V=13.76+/-0.1	Reference Frame: ICRS				
	(5)	AUMIC-REF3 Alt Name1: S333311078	RA: 20 45 10.2070 (311.2925292d) Dec: -31 18 12.82 (-31.30356d) Equinox: J2000		V=14.23+/-0.1 B=14.59, R=13.60	Reference Frame: ICRS				
	(6)	AUMIC-REF4 Alt Name1: S333311095	RA: 20 45 10.5350 (311.2938958d) Dec: -31 19 52.65 (-31.33129d) Equinox: J2000		V=14.82+/-0.1 B=14.91, R=14.19	Reference Frame: ICRS				
	(7)	AUMIC-REF5 Alt Name1: S333311024350	RA: 20 44 55.0020 (311.2291750d) Dec: -31 19 51.63 (-31.33101d) Equinox: J2000		V=15.19+/-0.1	Reference Frame: ICRS				
	(8)	AUMIC-REF6 Alt Name1: S33311024296	RA: 20 44 51.4090 (311.2142042d) Dec: -31 20 21.43 (-31.33929d) Equinox: J2000		V=15.71+/-0.1	Reference Frame: ICRS				
	(9)	AUMIC-REF7 Alt Name1: SCLW024481	RA: 20 44 56.6300 (311.2359583d) Dec: -31 18 24.50 (-31.30681d) Equinox: J2000		V=14.86+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(2) AU-MIC		FGS, POS, 1	F583W		POS TARG 0.0,-75.0; GS ACQ SCENARIO BASE1B3	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
2	(3) AUMIC-REF1		FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]	

Proposal 11790 - Visit 21 - HST/FGS Astrometric Search for Young Planets Around Beta Pic and AU Mic

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures (continued)	3	(4) AUMIC-REF2	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	4	(5) AUMIC-REF3	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	5	(6) AUMIC-REF4	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	6	(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	7	(3) AUMIC-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	8	(8) AUMIC-REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	9	(7) AUMIC-REF5	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	10	(9) AUMIC-REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	11	(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	12	(3) AUMIC-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	13	(5) AUMIC-REF3	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	14	(9) AUMIC-REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	15	(7) AUMIC-REF5	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	16	(8) AUMIC-REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	17	(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	18	(4) AUMIC-REF2	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	19	(5) AUMIC-REF3	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	20	(9) AUMIC-REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	21	(6) AUMIC-REF4	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]

Proposal 11790 - Visit 21 - HST/FGS Astrometric Search for Young Planets Around Beta Pic and AU Mic

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
		22		(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]
	23		(3) AUMIC-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]



Proposal 11790 - Visit 22 - HST/FGS Astrometric Search for Young Planets Around Beta Pic and AU Mic

Sat Nov 15 02:27:51 GMT 2008

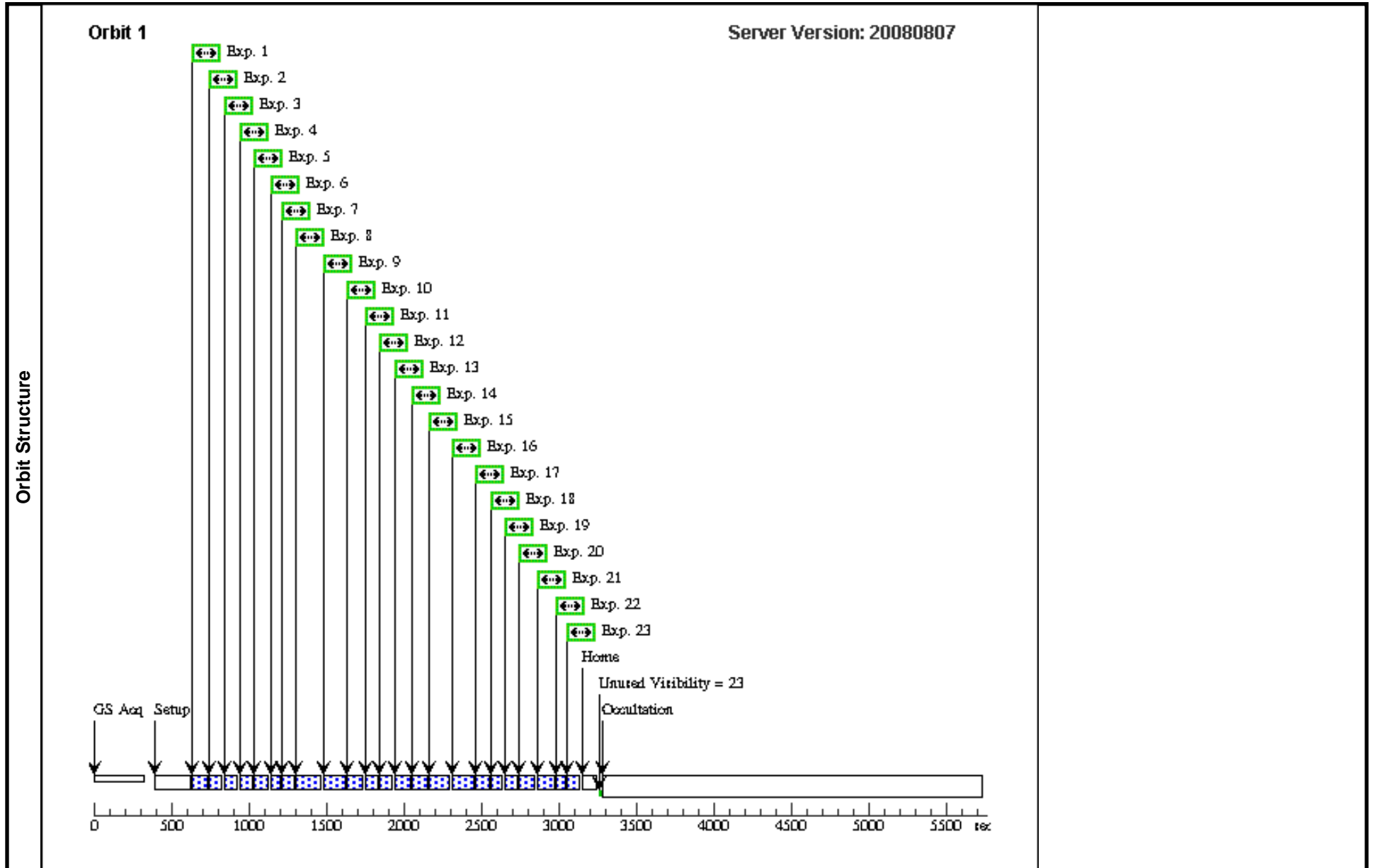
Visit		<b>Proposal 11790, Visit 22, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: FGS Special Requirements: ORIENT 80.0D TO 80.0 D; BETWEEN 27-OCT-2009:00:00:00 AND 01-NOV-2009:00:00:00								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	AU-MIC	RA: 20 45 9.5318 (311.2897158d) Dec: -31 20 27.24 (-31.34090d) Equinox: J2000	Proper Motion RA: 0.021883s/yr Proper Motion Dec: -0.36009"/yr Parallax: 0.1006" Epoch of Position: 2000.0	V=8.61+/-0.1 B = 10.05	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
	(3)	AUMIC-REF1 Alt Name1: S333311099	RA: 20 45 25.3990 (311.3558292d) Dec: -31 20 34.19 (-31.34283d) Equinox: J2000		V=13.43+/-0.1 B=14.14, R=12.94	Reference Frame: ICRS				
	(4)	AUMIC-REF2 Alt Name1: S333311079	RA: 20 45 14.0350 (311.3084792d) Dec: -31 18 21.50 (-31.30597d) Equinox: J2000		V=13.76+/-0.1	Reference Frame: ICRS				
	(5)	AUMIC-REF3 Alt Name1: S333311078	RA: 20 45 10.2070 (311.2925292d) Dec: -31 18 12.82 (-31.30356d) Equinox: J2000		V=14.23+/-0.1 B=14.59, R=13.60	Reference Frame: ICRS				
	(6)	AUMIC-REF4 Alt Name1: S333311095	RA: 20 45 10.5350 (311.2938958d) Dec: -31 19 52.65 (-31.33129d) Equinox: J2000		V=14.82+/-0.1 B=14.91, R=14.19	Reference Frame: ICRS				
	(7)	AUMIC-REF5 Alt Name1: S333311024350	RA: 20 44 55.0020 (311.2291750d) Dec: -31 19 51.63 (-31.33101d) Equinox: J2000		V=15.19+/-0.1	Reference Frame: ICRS				
	(8)	AUMIC-REF6 Alt Name1: S33311024296	RA: 20 44 51.4090 (311.2142042d) Dec: -31 20 21.43 (-31.33929d) Equinox: J2000		V=15.71+/-0.1	Reference Frame: ICRS				
	(9)	AUMIC-REF7 Alt Name1: SCLW024481	RA: 20 44 56.6300 (311.2359583d) Dec: -31 18 24.50 (-31.30681d) Equinox: J2000		V=14.86+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(2) AU-MIC		FGS, POS, 1	F583W		POS TARG 0.0,-75.0; GS ACQ SCENARIO BASE1B3	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
2	(3) AUMIC-REF1		FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]	

Proposal 11790 - Visit 22 - HST/FGS Astrometric Search for Young Planets Around Beta Pic and AU Mic

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures (continued)	3	(4) AUMIC-REF2	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	4	(5) AUMIC-REF3	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	5	(6) AUMIC-REF4	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	6	(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	7	(3) AUMIC-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	8	(8) AUMIC-REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	9	(7) AUMIC-REF5	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	10	(9) AUMIC-REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	11	(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	12	(3) AUMIC-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	13	(5) AUMIC-REF3	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	14	(9) AUMIC-REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	15	(7) AUMIC-REF5	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	16	(8) AUMIC-REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	17	(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	18	(4) AUMIC-REF2	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	19	(5) AUMIC-REF3	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	20	(9) AUMIC-REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	21	(6) AUMIC-REF4	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]

Proposal 11790 - Visit 22 - HST/FGS Astrometric Search for Young Planets Around Beta Pic and AU Mic

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
		22		(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]
	23		(3) AUMIC-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]



Proposal 11790 - Visit 23 - HST/FGS Astrometric Search for Young Planets Around Beta Pic and AU Mic

Sat Nov 15 02:27:52 GMT 2008

Visit		<b>Proposal 11790, Visit 23, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: FGS Special Requirements: ORIENT 80.0D TO 80.0 D; BETWEEN 01-DEC-2009:00:00:00 AND 07-DEC-2009:00:00:00								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	AU-MIC	RA: 20 45 9.5318 (311.2897158d) Dec: -31 20 27.24 (-31.34090d) Equinox: J2000	Proper Motion RA: 0.021883s/yr Proper Motion Dec: -0.36009"/yr Parallax: 0.1006" Epoch of Position: 2000.0	V=8.61+/-0.1 B = 10.05	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
	(3)	AUMIC-REF1 Alt Name1: S333311099	RA: 20 45 25.3990 (311.3558292d) Dec: -31 20 34.19 (-31.34283d) Equinox: J2000		V=13.43+/-0.1 B=14.14, R=12.94	Reference Frame: ICRS				
	(4)	AUMIC-REF2 Alt Name1: S333311079	RA: 20 45 14.0350 (311.3084792d) Dec: -31 18 21.50 (-31.30597d) Equinox: J2000		V=13.76+/-0.1	Reference Frame: ICRS				
	(5)	AUMIC-REF3 Alt Name1: S333311078	RA: 20 45 10.2070 (311.2925292d) Dec: -31 18 12.82 (-31.30356d) Equinox: J2000		V=14.23+/-0.1 B=14.59, R=13.60	Reference Frame: ICRS				
	(6)	AUMIC-REF4 Alt Name1: S333311095	RA: 20 45 10.5350 (311.2938958d) Dec: -31 19 52.65 (-31.33129d) Equinox: J2000		V=14.82+/-0.1 B=14.91, R=14.19	Reference Frame: ICRS				
	(7)	AUMIC-REF5 Alt Name1: S333311024350	RA: 20 44 55.0020 (311.2291750d) Dec: -31 19 51.63 (-31.33101d) Equinox: J2000		V=15.19+/-0.1	Reference Frame: ICRS				
	(8)	AUMIC-REF6 Alt Name1: S33311024296	RA: 20 44 51.4090 (311.2142042d) Dec: -31 20 21.43 (-31.33929d) Equinox: J2000		V=15.71+/-0.1	Reference Frame: ICRS				
	(9)	AUMIC-REF7 Alt Name1: SCLW024481	RA: 20 44 56.6300 (311.2359583d) Dec: -31 18 24.50 (-31.30681d) Equinox: J2000		V=14.86+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(2) AU-MIC		FGS, POS, 1	F583W		POS TARG 0.0,-75.0; GS ACQ SCENARIO BASE1B3	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
2	(3) AUMIC-REF1		FGS, POS, 1		F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]

Proposal 11790 - Visit 23 - HST/FGS Astrometric Search for Young Planets Around Beta Pic and AU Mic

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures (continued)	3	(4) AUMIC-REF2	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	4	(5) AUMIC-REF3	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	5	(6) AUMIC-REF4	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	6	(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	7	(3) AUMIC-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	8	(8) AUMIC-REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	9	(7) AUMIC-REF5	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	10	(9) AUMIC-REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	11	(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	12	(3) AUMIC-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	13	(5) AUMIC-REF3	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	14	(9) AUMIC-REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	15	(7) AUMIC-REF5	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	16	(8) AUMIC-REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	17	(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	18	(4) AUMIC-REF2	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	19	(5) AUMIC-REF3	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	20	(9) AUMIC-REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]
	21	(6) AUMIC-REF4	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]

Proposal 11790 - Visit 23 - HST/FGS Astrometric Search for Young Planets Around Beta Pic and AU Mic

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
		22		(2) AU-MIC	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]
	23		(3) AUMIC-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-23 Non-Int	12.0 Secs [==>]	[1]

