11818 - NICMOS confirmation of an extrasolar planet candidate directly detected with ACS

Cycle: 16, Proposal Category: GO/DD

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
05	(1) NAME-FOMALHAUT	NIC1 NIC2	1	06-Aug-2010 21:01:24.0	yes
06	(1) NAME-FOMALHAUT	NIC1 NIC2	1	06-Aug-2010 21:01:31.0	yes
07	(1) NAME-FOMALHAUT	NIC1 NIC2	1	06-Aug-2010 21:01:37.0	yes
08	(1) NAME-FOMALHAUT	NIC1 NIC2	1	06-Aug-2010 21:01:42.0	yes
09	(1) NAME-FOMALHAUT	WFC3/IR	1	06-Aug-2010 21:01:51.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
10	(1) NAME-FOMALHAUT	WFC3/IR	1	06-Aug-2010 21:01:59.0	yes
11	(1) NAME-FOMALHAUT	WFC3/IR	1	06-Aug-2010 21:02:07.0	yes
12	(1) NAME-FOMALHAUT	WFC3/IR	1	06-Aug-2010 21:02:15.0	yes
13	(1) NAME-FOMALHAUT	STIS/CCD	1	06-Aug-2010 21:02:19.0	yes
14	(1) NAME-FOMALHAUT	STIS/CCD	1	06-Aug-2010 21:02:22.0	yes
15	(1) NAME-FOMALHAUT	STIS/CCD	1	06-Aug-2010 21:02:25.0	yes
16	(1) NAME-FOMALHAUT	STIS/CCD	1	06-Aug-2010 21:02:28.0	yes
17	(1) NAME-FOMALHAUT	STIS/CCD	1	06-Aug-2010 21:02:31.0	yes
18	(1) NAME-FOMALHAUT	STIS/CCD	1	06-Aug-2010 21:02:34.0	yes
19	(2) NAME-FOMALHAUT-COPY	STIS/CCD	1	06-Aug-2010 21:02:42.0	yes
20	(2) NAME-FOMALHAUT-COPY	STIS/CCD	1	06-Aug-2010 21:02:50.0	yes
21	(2) NAME-FOMALHAUT-COPY	STIS/CCD	1	06-Aug-2010 21:02:58.0	yes
22	(2) NAME-FOMALHAUT-COPY	STIS/CCD	1	06-Aug-2010 21:03:07.0	yes

18 Total Orbits Used

ABSTRACT

With ACS/HRC coronagraphy, we have achieved the direct detection of a planet candidate in F606W and F814W around a bright nearby star with a debris belt. The planet candidate, Fomalhaut b, lies 18 astronomical units interior to the dust belt and we detect counterclockwise orbital motion in observations separated by 1.75 years. The candidate has mass no greater than three Jupiter masses based on an analysis of its luminosity and the dynamical argument that a significantly more massive object would disrupt the dust belt. Using recent model predictions for 100-300 Myr old planetary atmospheres, the planet candidate has a temperature of ~400 K and a mass 1.6 - 3.4 M_J. Variability at optical wavelengths suggests additional

sources of luminosity such as H-alpha emission or the episodic accretion of cometary material. Here we propose follow-up observations with HST/STIS coronagraphy. We employ an observing strategy that is identical to the one used for the detection using ACS/HRC coronagraphy. The key goal is recovery of Fomalhaut b in a third epoch that will also provide crucial astrometric information to determine its orbit. From the new orbit estimate and models of dynamical interactions with the surrounding debris belt, we aim to further constrain the mass of Fomalhaut b and the evolutionary history of the system.

OBSERVING DESCRIPTION

The purpose of Program DD 11818 is to detect the planet candidate Fomalhaut b first discovered with the ACS/HRC. DD 11818 was initially awarded time with NICMOS, and then with WFC3/IR. The NICMOS observations suffered from an error in pointing, whereas the WFC3/IR data were shown to have sever scattering and diffraction artifacts at the radius and location where we expected to image Fomalhaut b. In January 2010, we proposed to attempt the program with STIS/Coronagraphy, since Fomalhaut b was originally detected at optical wavelengths and does not appear to be as luminous at infrared wavelengths as planet atmosphere models predict. With STIS we will use the strategy that succeeded with ACS. We will use three ORIENTS with the star Fomalhaut behind one occulting mask position, and then repeat the three ORIENTS at a different mask position. Here we have selected BAR10 and WEDGEB2.5 as the two positions. The total program comprises six orbits, with three orbits at each occulting position. The observations should be executed close in time to minimize PSF breathing residuals. The three orbits for each occulting position should be consecutive orbits, as specified in a GROUP WITHIN constraint.

ADDITIONAL COMMENTS

We filed a PCR for Visits 09-12 to use WFC3. The WFC3 observations were successfully executed, but the data revealed that the F110W filter has significant ghosting artifacts at ~13 arcsec radius in an azimuthal orientation that were essentially impossible to completely remove using roll deconvolution. Fomalhaut b was not detected behind these significant ghosts. We decided that even though we could change the roll orientation in future observations to avoid the ghosting artifacts in WFC3/IR, we could also repeat the experiment with STIS coronagraphy, which is better characterized by existing observations of Beta Pictoris. In Visits 13-18 we employ the dither and roll strategy with STIS that previously yielded the ACS/HRC detection. We acquire Fomalhaut behind WEDGEB2.5 and BAR10, and roll to three angles at each of these two occulted positions. Absolute ORIENTs are specified to safely avoid the saturation columns and diffraction spikes. No PSF reference star is observed since Fomalhaut will act as PSF reference for itself using roll deconvolution (angular differential imaging).

Visits 19,20,21,22 are four orbits awarded again for STIS observations from a HOPR filed concerning a problem with Visits 13-18 with STIS.

Visit

Proposal 11818, Visit 05, completed Sat Aug 07 01:03:13 GMT 2010

Diagnostic Status: Warning

Scientific Instruments: NIC2, NIC1

Special Requirements: ORIENT 12.0D TO 12.56 D; GROUP 05,06,07,08 WITHIN 3.5 Orbits

Diagnostics

(Visit 05) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE

(Visit 05) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE

(Visit 05) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE

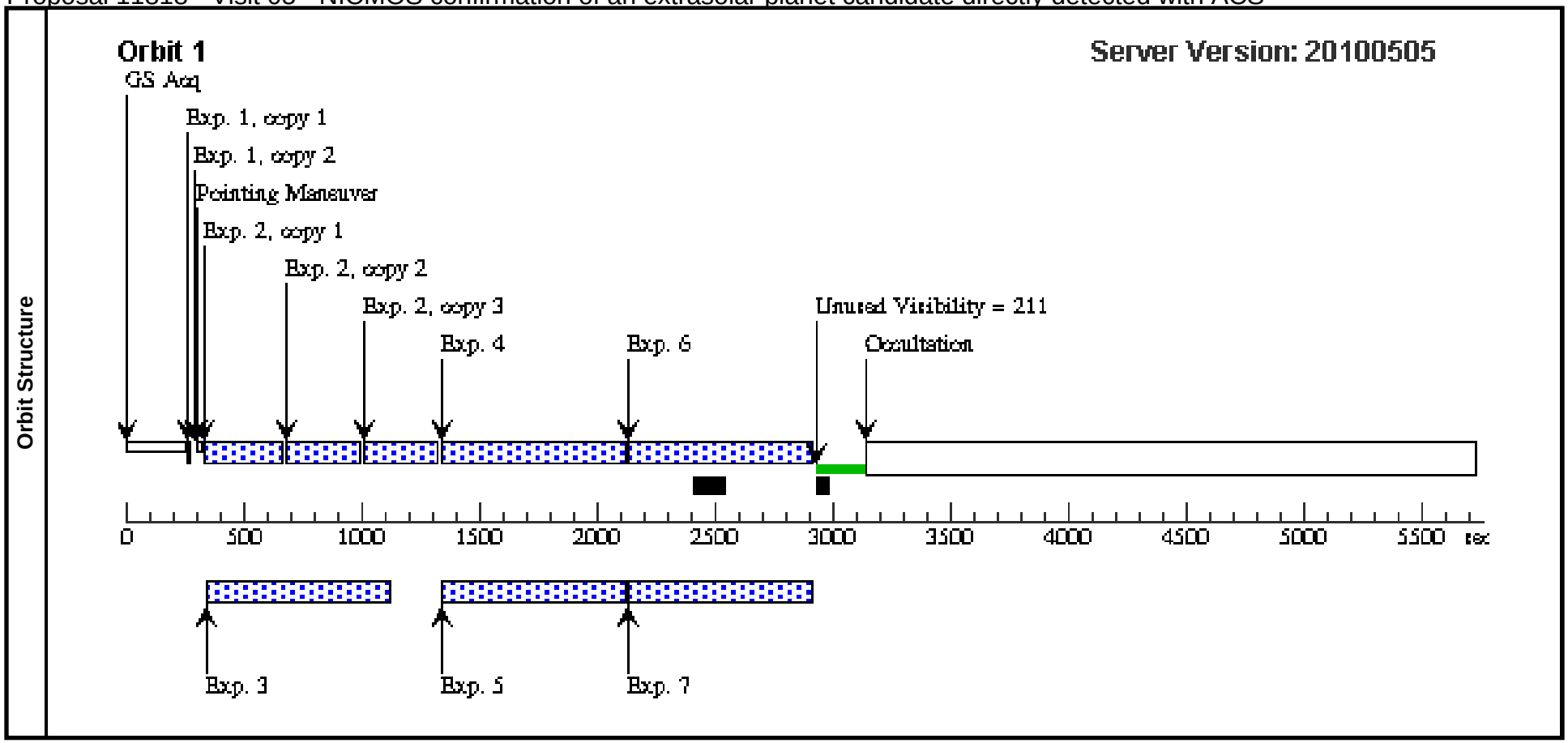
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NAME-FOMALHAUT	RA: 22 57 39.0465 (344.4126938d) Dec: -29 37 20.05 (-29.62224d) Equinox: J2000	Proper Motion RA: 0.0255s/yr Proper Motion Dec: -0.165"/yr Parallax: 0.13008" Epoch of Position: 2000.0	V=1.16	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) NAME-FOMALHAUT	NIC1, MULTIACCUM, NIC1	F190N	SAMP-SEQ=SCAMRR; NSAMP=1	GS ACQ SCENARIO SINGLE		*[==>(Copy 1)]* *[==>(Copy 2)]*	***[1]***
2		(1) NAME-FOMALHAUT	NIC1, MULTIACCUM, NIC1	F110W	SAMP-SEQ=SPARS64; NSAMP=7	POS TARG 0.00,-15.400	Prime + Parallel Group 2-3	*[==>(Copy 1)]* *[==>(Copy 2)]* *[==>(Copy 3)]*	***[1]***
3		(1) NAME-FOMALHAUT	NIC2, MULTIACCUM, NIC2	F110W	SAMP-SEQ=SPARS64; NSAMP=14		Prime + Parallel Group 2-3	*[==>]*	***[1]***
4		(1) NAME-FOMALHAUT	NIC1, MULTIACCUM, NIC1	F108N	SAMP-SEQ=SPARS64; NSAMP=14	SAME POS AS 2	Prime + Parallel Group 4-5	*[==>]*	***[1]***
5		(1) NAME-FOMALHAUT	NIC2, MULTIACCUM, NIC2	F110W	SAMP-SEQ=SPARS64; NSAMP=14		Prime + Parallel Group 4-5	*[==>]*	***[1]***
6		(1) NAME-FOMALHAUT	NIC1, MULTIACCUM, NIC1	F113N	SAMP-SEQ=SPARS64; NSAMP=14	SAME POS AS 2	Prime + Parallel Group 6-7	*[==>]*	***[1]***
7		(1) NAME-FOMALHAUT	NIC2, MULTIACCUM, NIC2	F110W	SAMP-SEQ=SPARS64; NSAMP=14		Prime + Parallel Group 6-7	*[==>]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20100505
GS Acq
Exp. 1, copy 1
Exp. 1, copy 2
Pointing Maneuver
Exp. 2, copy 1
Exp. 2, copy 2
Exp. 2, copy 3
Exp. 4
Exp. 6
Unused Visibility = 211
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 3
Exp. 5
Exp. 7

Visit

Proposal 11818, Visit 06, completed Sat Aug 07 01:03:14 GMT 2010

Diagnostic Status: Warning

Scientific Instruments: NIC2, NIC1

Special Requirements: ORIENT 4.0D TO 4.1D FROM 05

Diagnostics

(Visit 06) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE

(Visit 06) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE

(Visit 06) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE

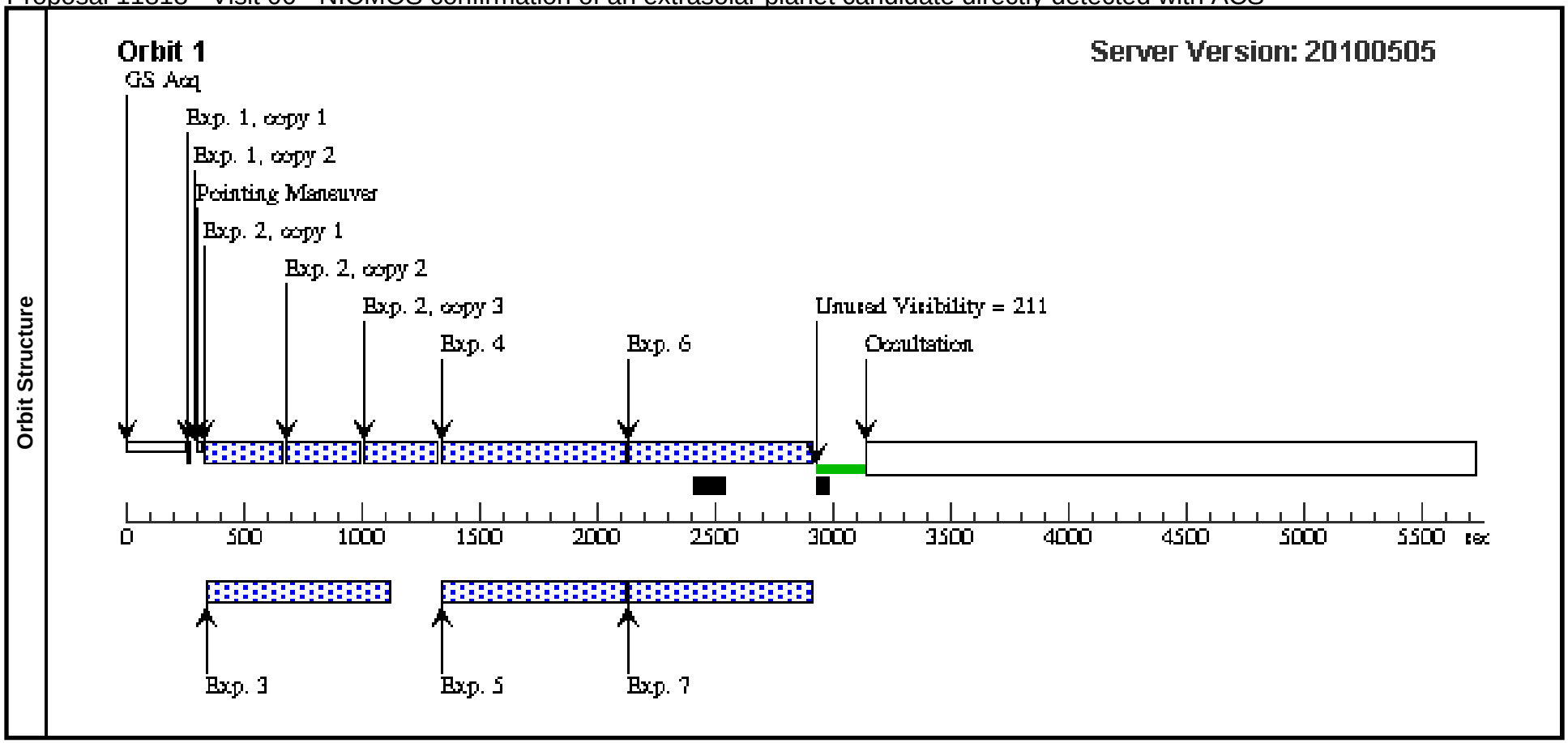
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NAME-FOMALHAUT	RA: 22 57 39.0465 (344.4126938d) Dec: -29 37 20.05 (-29.62224d) Equinox: J2000	Proper Motion RA: 0.0255s/yr Proper Motion Dec: -0.165"/yr Parallax: 0.13008" Epoch of Position: 2000.0	V=1.16	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) NAME-FOMALHAUT	NIC1, MULTIACCUM, NIC1	F190N	SAMP-SEQ=SCAMRR; NSAMP=1	GS ACQ SCENARIO SINGLE		*[==>(Copy 1)]* *[==>(Copy 2)]*	***[1]***
2		(1) NAME-FOMALHAUT	NIC1, MULTIACCUM, NIC1	F110W	SAMP-SEQ=SPARS64; NSAMP=7	POS TARG 0.000,-15.400	Prime + Parallel Group 2-3	*[==>(Copy 1)]* *[==>(Copy 2)]* *[==>(Copy 3)]*	***[1]***
3		(1) NAME-FOMALHAUT	NIC2, MULTIACCUM, NIC2	F110W	SAMP-SEQ=SPARS64; NSAMP=14		Prime + Parallel Group 2-3	*[==>]*	***[1]***
4		(1) NAME-FOMALHAUT	NIC1, MULTIACCUM, NIC1	F108N	SAMP-SEQ=SPARS64; NSAMP=14	SAME POS AS 2	Prime + Parallel Group 4-5	*[==>]*	***[1]***
5		(1) NAME-FOMALHAUT	NIC2, MULTIACCUM, NIC2	F110W	SAMP-SEQ=SPARS64; NSAMP=14		Prime + Parallel Group 4-5	*[==>]*	***[1]***
6		(1) NAME-FOMALHAUT	NIC1, MULTIACCUM, NIC1	F113N	SAMP-SEQ=SPARS64; NSAMP=14	SAME POS AS 2	Prime + Parallel Group 6-7	*[==>]*	***[1]***
7		(1) NAME-FOMALHAUT	NIC2, MULTIACCUM, NIC2	F110W	SAMP-SEQ=SPARS64; NSAMP=14		Prime + Parallel Group 6-7	*[==>]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20100505
GS Acq
Exp. 1, copy 1
Exp. 1, copy 2
Pointing Maneuver
Exp. 2, copy 1
Exp. 2, copy 2
Exp. 2, copy 3
Exp. 4
Exp. 6
Unused Visibility = 211
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 3
Exp. 5
Exp. 7

Visit

Proposal 11818, Visit 07, completed Sat Aug 07 01:03:15 GMT 2010

Diagnostic Status: Warning

Scientific Instruments: NIC2, NIC1

Special Requirements: ORIENT 8.0D TO 8.1D FROM 05

Diagnostics

(Visit 07) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE

(Visit 07) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE

(Visit 07) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE

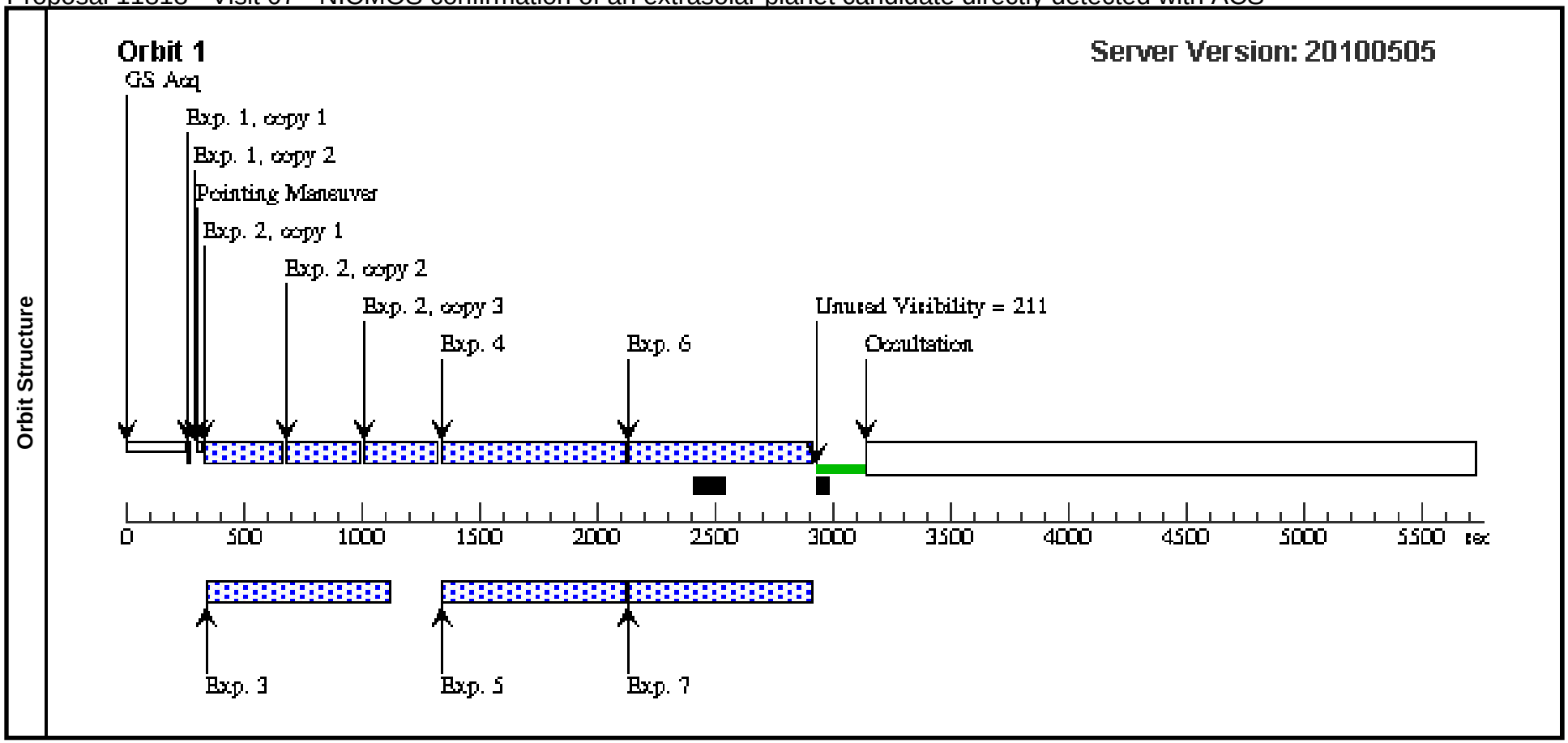
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NAME-FOMALHAUT	RA: 22 57 39.0465 (344.4126938d) Dec: -29 37 20.05 (-29.62224d) Equinox: J2000	Proper Motion RA: 0.0255s/yr Proper Motion Dec: -0.165"/yr Parallax: 0.13008" Epoch of Position: 2000.0	V=1.16	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) NAME-FOMALHAUT	NIC1, MULTIACCUM, NIC1	F190N	SAMP-SEQ=SCAMRR; NSAMP=1	GS ACQ SCENARIO SINGLE		*[==>(Copy 1)]* *[==>(Copy 2)]*	***[1]***
2		(1) NAME-FOMALHAUT	NIC1, MULTIACCUM, NIC1	F110W	SAMP-SEQ=SPARS64; NSAMP=7	POS TARG 0.000,-15.400	Prime + Parallel Group 2-3	*[==>(Copy 1)]* *[==>(Copy 2)]* *[==>(Copy 3)]*	***[1]***
3		(1) NAME-FOMALHAUT	NIC2, MULTIACCUM, NIC2	F110W	SAMP-SEQ=SPARS64; NSAMP=14		Prime + Parallel Group 2-3	*[==>]*	***[1]***
4		(1) NAME-FOMALHAUT	NIC1, MULTIACCUM, NIC1	F108N	SAMP-SEQ=SPARS64; NSAMP=14	SAME POS AS 2	Prime + Parallel Group 4-5	*[==>]*	***[1]***
5		(1) NAME-FOMALHAUT	NIC2, MULTIACCUM, NIC2	F110W	SAMP-SEQ=SPARS64; NSAMP=14		Prime + Parallel Group 4-5	*[==>]*	***[1]***
6		(1) NAME-FOMALHAUT	NIC1, MULTIACCUM, NIC1	F113N	SAMP-SEQ=SPARS64; NSAMP=14	SAME POS AS 2	Prime + Parallel Group 6-7	*[==>]*	***[1]***
7		(1) NAME-FOMALHAUT	NIC2, MULTIACCUM, NIC2	F110W	SAMP-SEQ=SPARS64; NSAMP=14		Prime + Parallel Group 6-7	*[==>]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20100505
GS Acq
Exp. 1, copy 1
Exp. 1, copy 2
Pointing Maneuver
Exp. 2, copy 1
Exp. 2, copy 2
Exp. 2, copy 3
Exp. 4
Exp. 6
Unused Visibility = 211
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
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5500
sec
Exp. 3
Exp. 5
Exp. 7

Visit

Proposal 11818, Visit 08, completed Sat Aug 07 01:03:16 GMT 2010

Diagnostic Status: Warning

Scientific Instruments: NIC2, NIC1

Special Requirements: ORIENT 12.0D TO 12.1D FROM 05

Diagnostics

(Visit 08) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE

(Visit 08) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE

(Visit 08) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE

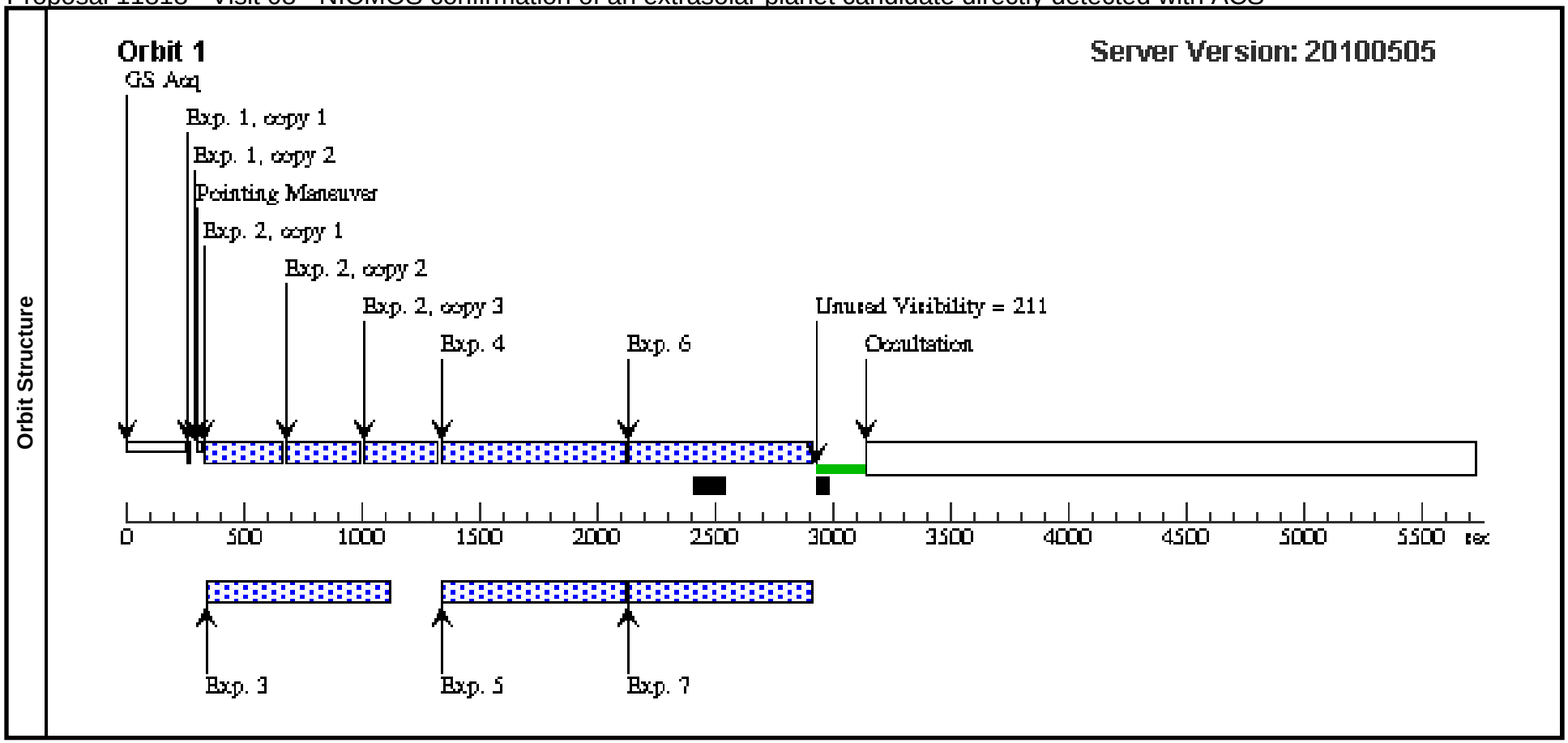
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NAME-FOMALHAUT	RA: 22 57 39.0465 (344.4126938d) Dec: -29 37 20.05 (-29.62224d) Equinox: J2000	Proper Motion RA: 0.0255s/yr Proper Motion Dec: -0.165"/yr Parallax: 0.13008" Epoch of Position: 2000.0	V=1.16	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) NAME-FOMALHAUT	NIC1, MULTIACCUM, NIC1	F190N	SAMP-SEQ=SCAMRR; NSAMP=1	GS ACQ SCENARIO SINGLE		*[==>(Copy 1)]* *[==>(Copy 2)]*	***[1]***
2		(1) NAME-FOMALHAUT	NIC1, MULTIACCUM, NIC1	F110W	SAMP-SEQ=SPARS64; NSAMP=7	POS TARG 0.00,-15.400	Prime + Parallel Group 2-3	*[==>(Copy 1)]* *[==>(Copy 2)]* *[==>(Copy 3)]*	***[1]***
3		(1) NAME-FOMALHAUT	NIC2, MULTIACCUM, NIC2	F110W	SAMP-SEQ=SPARS64; NSAMP=14		Prime + Parallel Group 2-3	*[==>]*	***[1]***
4		(1) NAME-FOMALHAUT	NIC1, MULTIACCUM, NIC1	F108N	SAMP-SEQ=SPARS64; NSAMP=14	SAME POS AS 2	Prime + Parallel Group 4-5	*[==>]*	***[1]***
5		(1) NAME-FOMALHAUT	NIC2, MULTIACCUM, NIC2	F110W	SAMP-SEQ=SPARS64; NSAMP=14		Prime + Parallel Group 4-5	*[==>]*	***[1]***
6		(1) NAME-FOMALHAUT	NIC1, MULTIACCUM, NIC1	F113N	SAMP-SEQ=SPARS64; NSAMP=14	SAME POS AS 2	Prime + Parallel Group 6-7	*[==>]*	***[1]***
7		(1) NAME-FOMALHAUT	NIC2, MULTIACCUM, NIC2	F110W	SAMP-SEQ=SPARS64; NSAMP=14		Prime + Parallel Group 6-7	*[==>]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20100505
GS Acq
Exp. 1, copy 1
Exp. 1, copy 2
Pointing Maneuver
Exp. 2, copy 1
Exp. 2, copy 2
Exp. 2, copy 3
Exp. 4
Exp. 6
Unused Visibility = 211
Occultation
0
500
1000
1500
2000
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3500
4000
4500
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5500
sec
Exp. 3
Exp. 5
Exp. 7

Visit

Proposal 11818, Visit 09, completed Sat Aug 07 01:03:16 GMT 2010

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR

Special Requirements: GYRO MODE 3GOBAD; ORIENT 55D TO 95 D; ORIENT 235D TO 275 D; ORIENT 325D TO 359.9 D; ORIENT 0.1D TO 10.0 D; GROUP 09,10,11,12 WITHIN 3.5 Orbits

Diagnostics

(Visit 09) Warning (Form): Gyro Mode overrides default value of 2G.

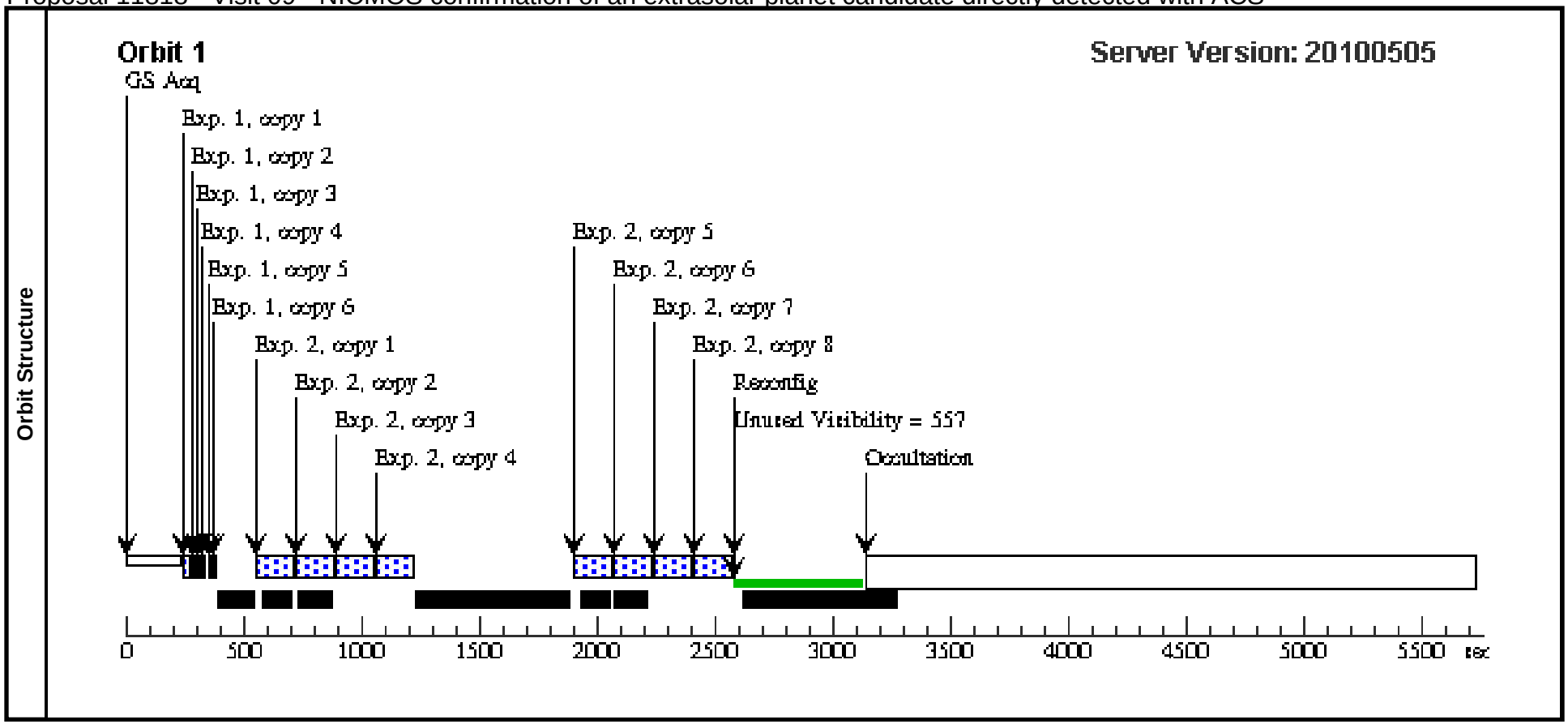
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NAME-FOMALHAUT	RA: 22 57 39.0465 (344.4126938d) Dec: -29 37 20.05 (-29.62224d) Equinox: J2000	Proper Motion RA: 0.0255s/yr Proper Motion Dec: -0.165"/yr Parallax: 0.13008" Epoch of Position: 2000.0	V=1.16	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) NAME-FOMALHAUT	WFC3/IR, MULTIACCUM, IRSUB256-FIX	F110W	NSAMP=15; SAMP-SEQ=RAPID	GS ACQ SCENARIO SINGLE		*[==>(Copy 1)]* *[==>(Copy 2)]* *[==>(Copy 3)]* *[==>(Copy 4)]* *[==>(Copy 5)]* *[==>(Copy 6)]*	***[1]***
2		(1) NAME-FOMALHAUT	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP25			*[==>(Copy 1)]* *[==>(Copy 2)]* *[==>(Copy 3)]* *[==>(Copy 4)]* *[==>(Copy 5)]* *[==>(Copy 6)]* *[==>(Copy 7)]* *[==>(Copy 8)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20100505
GS Acq
Exp. 1, copy 1
Exp. 1, copy 2
Exp. 1, copy 3
Exp. 1, copy 4
Exp. 1, copy 5
Exp. 1, copy 6
Exp. 2, copy 1
Exp. 2, copy 2
Exp. 2, copy 3
Exp. 2, copy 4
Exp. 2, copy 5
Exp. 2, copy 6
Exp. 2, copy 7
Exp. 2, copy 8
Reconfig
Unused Visibility = 557
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11818, Visit 10, completed Sat Aug 07 01:03:17 GMT 2010

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR

Special Requirements: GYRO MODE 3GOBAD; ORIENT 5.0D TO 5.1D FROM 09

Diagnostics

(Visit 10) Warning (Form): Gyro Mode overrides default value of 2G.

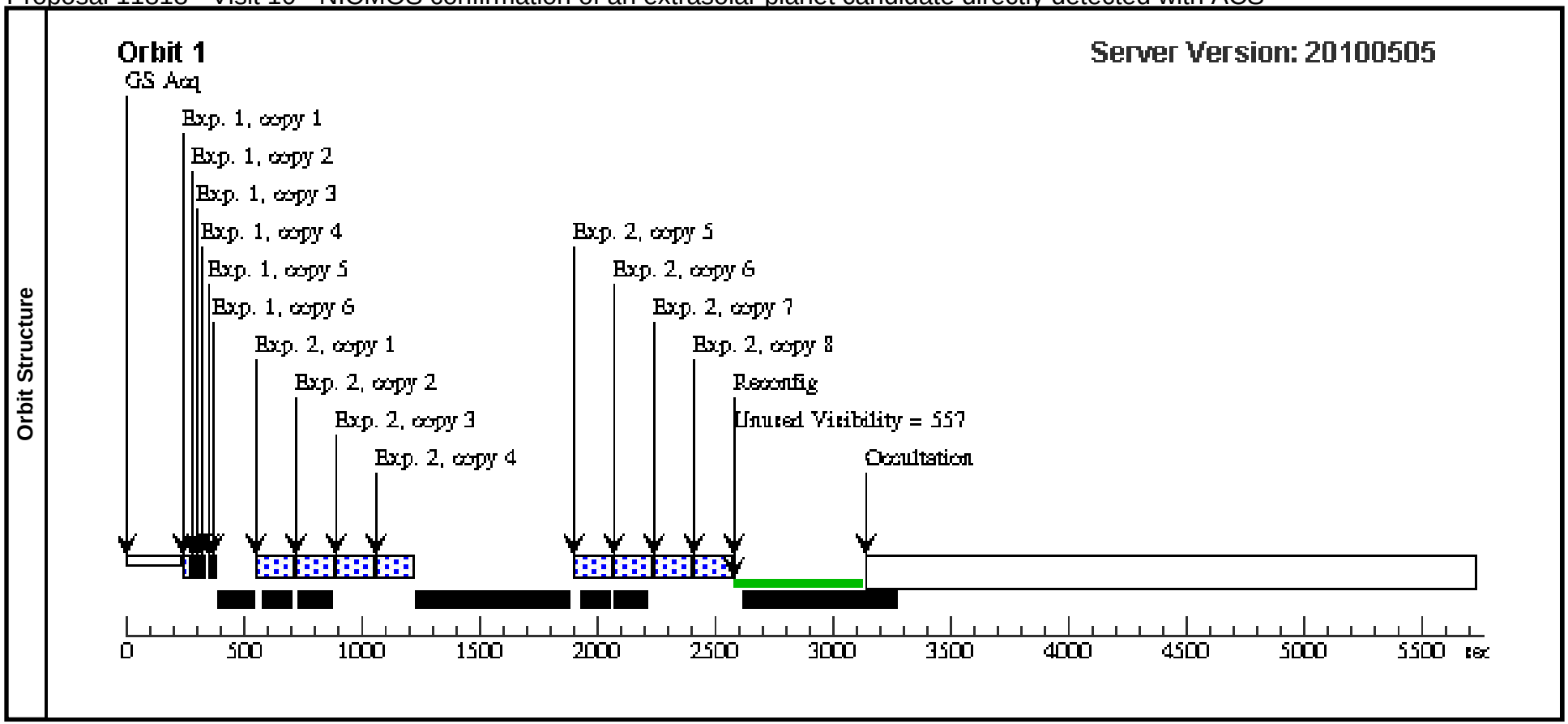
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NAME-FOMALHAUT	RA: 22 57 39.0465 (344.4126938d) Dec: -29 37 20.05 (-29.62224d) Equinox: J2000	Proper Motion RA: 0.0255s/yr Proper Motion Dec: -0.165"/yr Parallax: 0.13008" Epoch of Position: 2000.0	V=1.16	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) NAME-FOMALHAUT	WFC3/IR, MULTIACCUM, IRSUB256-FIX	F110W	NSAMP=15; SAMP-SEQ=RAPID	GS ACQ SCENARIO SINGLE		*[==>(Copy 1)]* *[==>(Copy 2)]* *[==>(Copy 3)]* *[==>(Copy 4)]* *[==>(Copy 5)]* *[==>(Copy 6)]*	***[1]***
2		(1) NAME-FOMALHAUT	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP25			*[==>(Copy 1)]* *[==>(Copy 2)]* *[==>(Copy 3)]* *[==>(Copy 4)]* *[==>(Copy 5)]* *[==>(Copy 6)]* *[==>(Copy 7)]* *[==>(Copy 8)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20100505
GS Acq
Exp. 1, copy 1
Exp. 1, copy 2
Exp. 1, copy 3
Exp. 1, copy 4
Exp. 1, copy 5
Exp. 1, copy 6
Exp. 2, copy 1
Exp. 2, copy 2
Exp. 2, copy 3
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Exp. 2, copy 5
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Exp. 2, copy 7
Exp. 2, copy 8
Reconfig
Unused Visibility = 557
Occultation
0
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3500
4000
4500
5000
5500
sec

Visit

Proposal 11818, Visit 11, completed Sat Aug 07 01:03:17 GMT 2010

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR

Special Requirements: GYRO MODE 3GOBAD; ORIENT 10D TO 10.1D FROM 09

Diagnostics

(Visit 11) Warning (Form): Gyro Mode overrides default value of 2G.

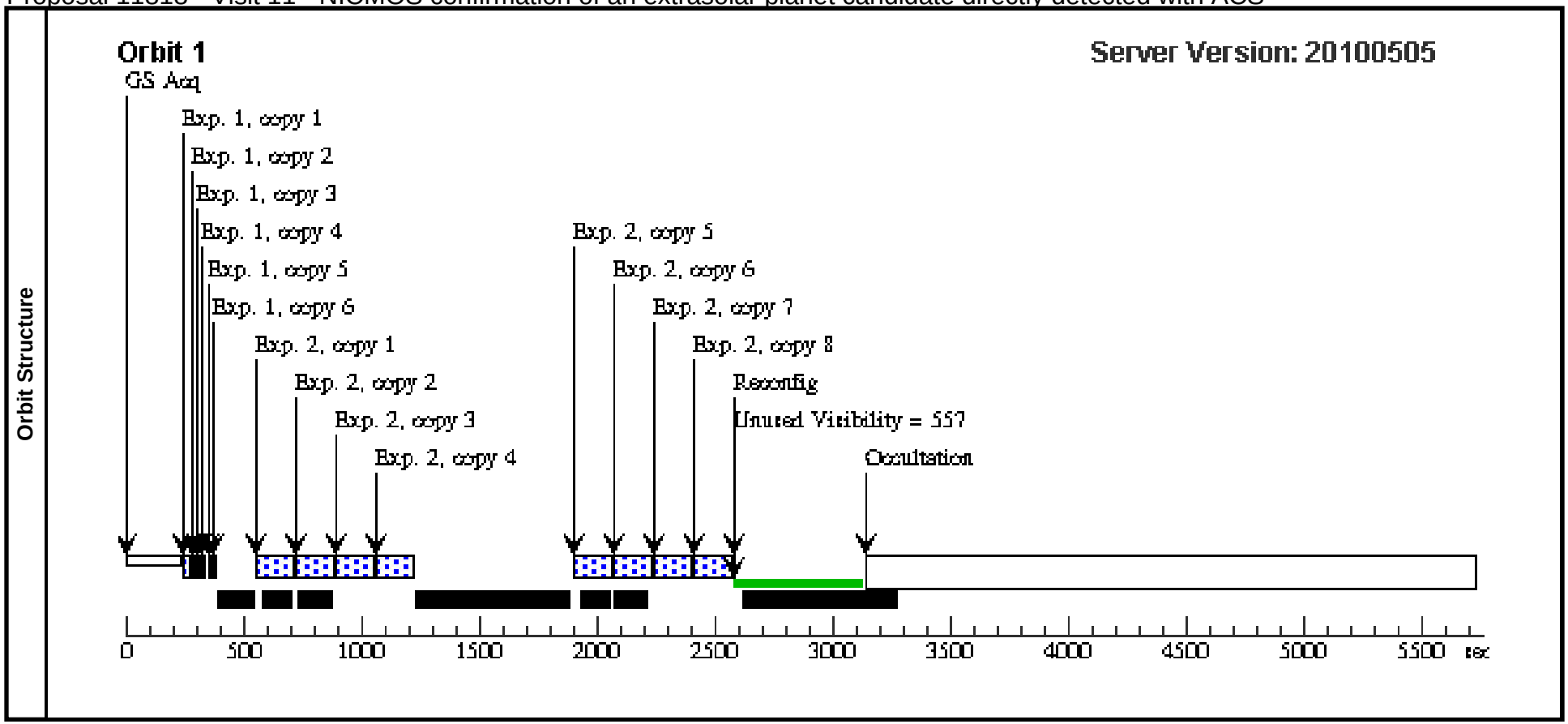
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NAME-FOMALHAUT	RA: 22 57 39.0465 (344.4126938d) Dec: -29 37 20.05 (-29.62224d) Equinox: J2000	Proper Motion RA: 0.0255s/yr Proper Motion Dec: -0.165"/yr Parallax: 0.13008" Epoch of Position: 2000.0	V=1.16	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) NAME-FOMALHAUT	WFC3/IR, MULTIACCUM, IRSUB256-FIX	F110W	NSAMP=15; SAMP-SEQ=RAPID	GS ACQ SCENARIO SINGLE		*[==>(Copy 1)]* *[==>(Copy 2)]* *[==>(Copy 3)]* *[==>(Copy 4)]* *[==>(Copy 5)]* *[==>(Copy 6)]*	***[1]***
2		(1) NAME-FOMALHAUT	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP25			*[==>(Copy 1)]* *[==>(Copy 2)]* *[==>(Copy 3)]* *[==>(Copy 4)]* *[==>(Copy 5)]* *[==>(Copy 6)]* *[==>(Copy 7)]* *[==>(Copy 8)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20100505
GS Acq
Exp. 1, copy 1
Exp. 1, copy 2
Exp. 1, copy 3
Exp. 1, copy 4
Exp. 1, copy 5
Exp. 1, copy 6
Exp. 2, copy 1
Exp. 2, copy 2
Exp. 2, copy 3
Exp. 2, copy 4
Exp. 2, copy 5
Exp. 2, copy 6
Exp. 2, copy 7
Exp. 2, copy 8
Reconfig
Unused Visibility = 557
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11818, Visit 12, completed Sat Aug 07 01:03:17 GMT 2010

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR

Special Requirements: GYRO MODE 3GOBAD; ORIENT 15.0D TO 15.1D FROM 09

Diagnostics

(Visit 12) Warning (Form): Gyro Mode overrides default value of 2G.

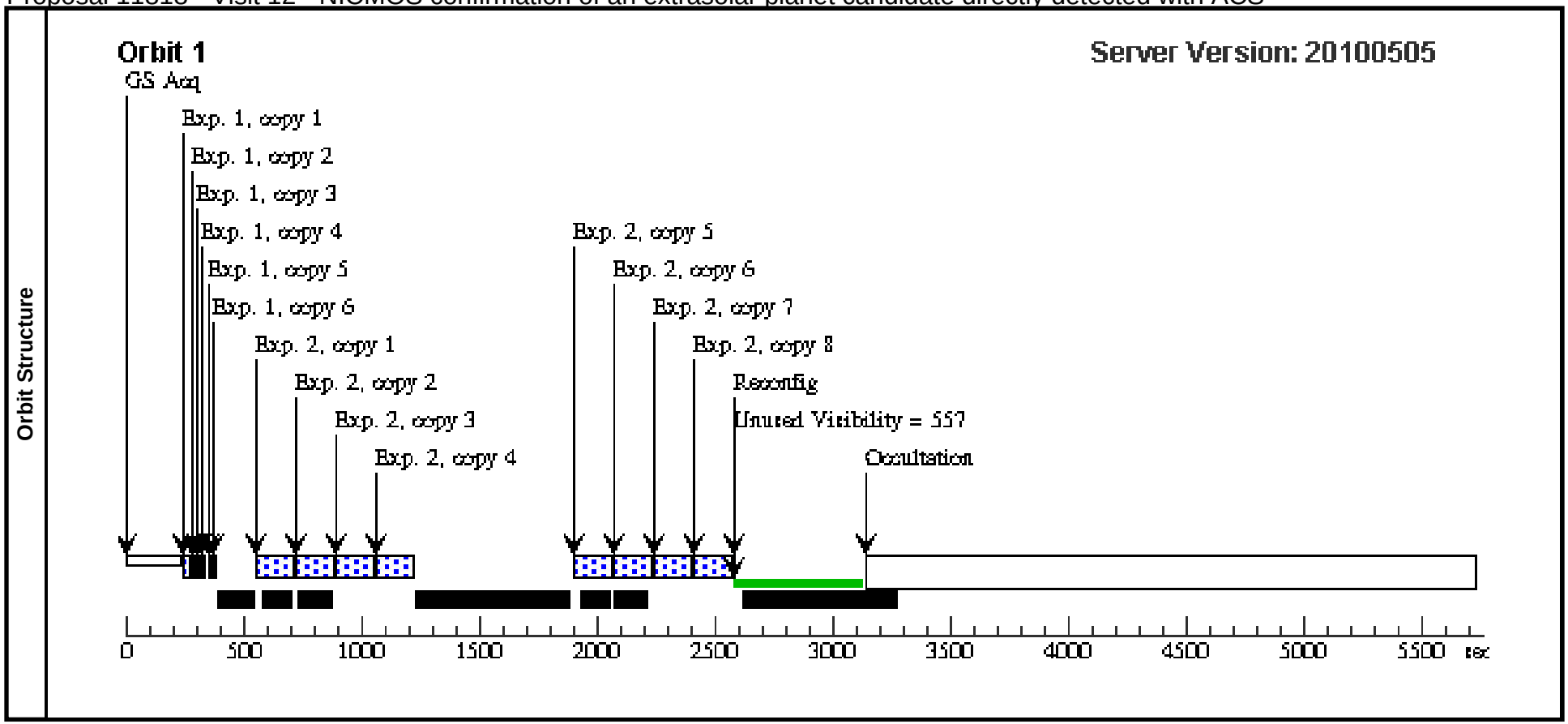
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NAME-FOMALHAUT	RA: 22 57 39.0465 (344.4126938d) Dec: -29 37 20.05 (-29.62224d) Equinox: J2000	Proper Motion RA: 0.0255s/yr Proper Motion Dec: -0.165"/yr Parallax: 0.13008" Epoch of Position: 2000.0	V=1.16	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) NAME-FOMALHAUT	WFC3/IR, MULTIACCUM, IRSUB256-FIX	F110W	NSAMP=15; SAMP-SEQ=RAPID	GS ACQ SCENARIO SINGLE		*[==>(Copy 1)]* *[==>(Copy 2)]* *[==>(Copy 3)]* *[==>(Copy 4)]* *[==>(Copy 5)]* *[==>(Copy 6)]*	***[1]***
2		(1) NAME-FOMALHAUT	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=10; SAMP-SEQ=STEP25			*[==>(Copy 1)]* *[==>(Copy 2)]* *[==>(Copy 3)]* *[==>(Copy 4)]* *[==>(Copy 5)]* *[==>(Copy 6)]* *[==>(Copy 7)]* *[==>(Copy 8)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20100505
GS Acq
Exp. 1, copy 1
Exp. 1, copy 2
Exp. 1, copy 3
Exp. 1, copy 4
Exp. 1, copy 5
Exp. 1, copy 6
Exp. 2, copy 1
Exp. 2, copy 2
Exp. 2, copy 3
Exp. 2, copy 4
Exp. 2, copy 5
Exp. 2, copy 6
Exp. 2, copy 7
Exp. 2, copy 8
Reconfig
Unused Visibility = 557
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11818, Visit 13, completed Sat Aug 07 01:03:18 GMT 2010

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: GYRO MODE 3GOBAD; SCHED 70%; ORIENT 240.0D TO 240.1 D; GROUP 13,14,15 WITHIN 2.6 Orbits; VISIBILITY INTERVAL CORON

Diagnostics

(Visit 13) Warning (Form): Gyro Mode overrides default value of 2G.

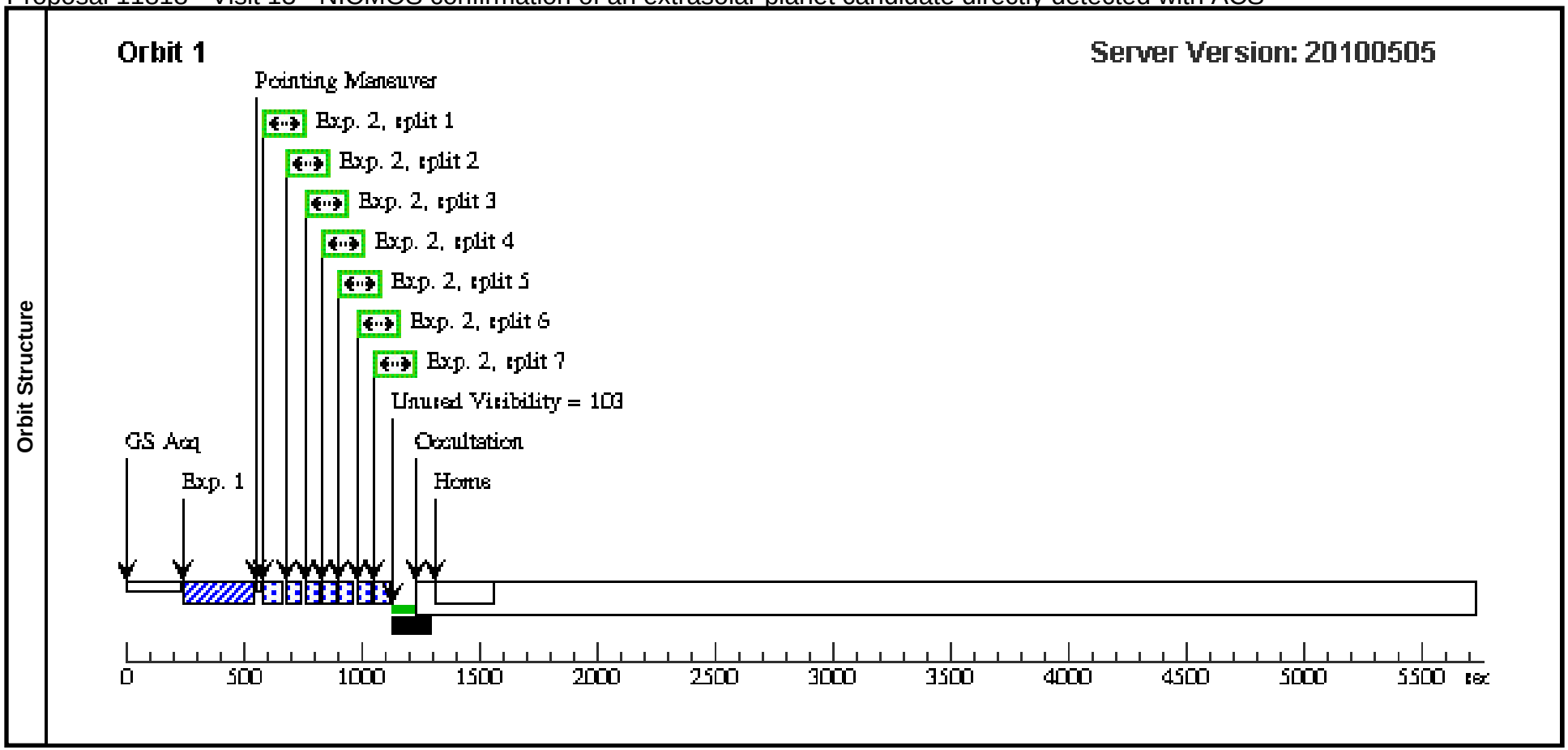
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NAME-FOMALHAUT	RA: 22 57 39.0465 (344.4126938d) Dec: -29 37 20.05 (-29.62224d) Equinox: J2000	Proper Motion RA: 0.0255s/yr Proper Motion Dec: -0.165"/yr Parallax: 0.13008" Epoch of Position: 2000.0	V=1.16	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) NAME-FOMALHAUT	STIS/CCD, ACQ, F25ND5	MIRROR		GS ACQ SCENARIO ONEB1B3		2 Secs	
								[==>]	***[1]***
2		(1) NAME-FOMALHAUT	STIS/CCD, ACCUM, BAR10	MIRROR	CR-SPLIT=7; GAIN=4			210 Secs	
								[==>(Split 1)]	
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	***[1]***
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Unused Visibility = 103
GS Acq
Occultation
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11818, Visit 14, completed Sat Aug 07 01:03:18 GMT 2010

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: GYRO MODE 3GOBAD; SCHED 70%; ORIENT 253.0D TO 253.1 D; VISIBILITY INTERVAL CORON

Diagnostics

(Visit 14) Warning (Form): Gyro Mode overrides default value of 2G.

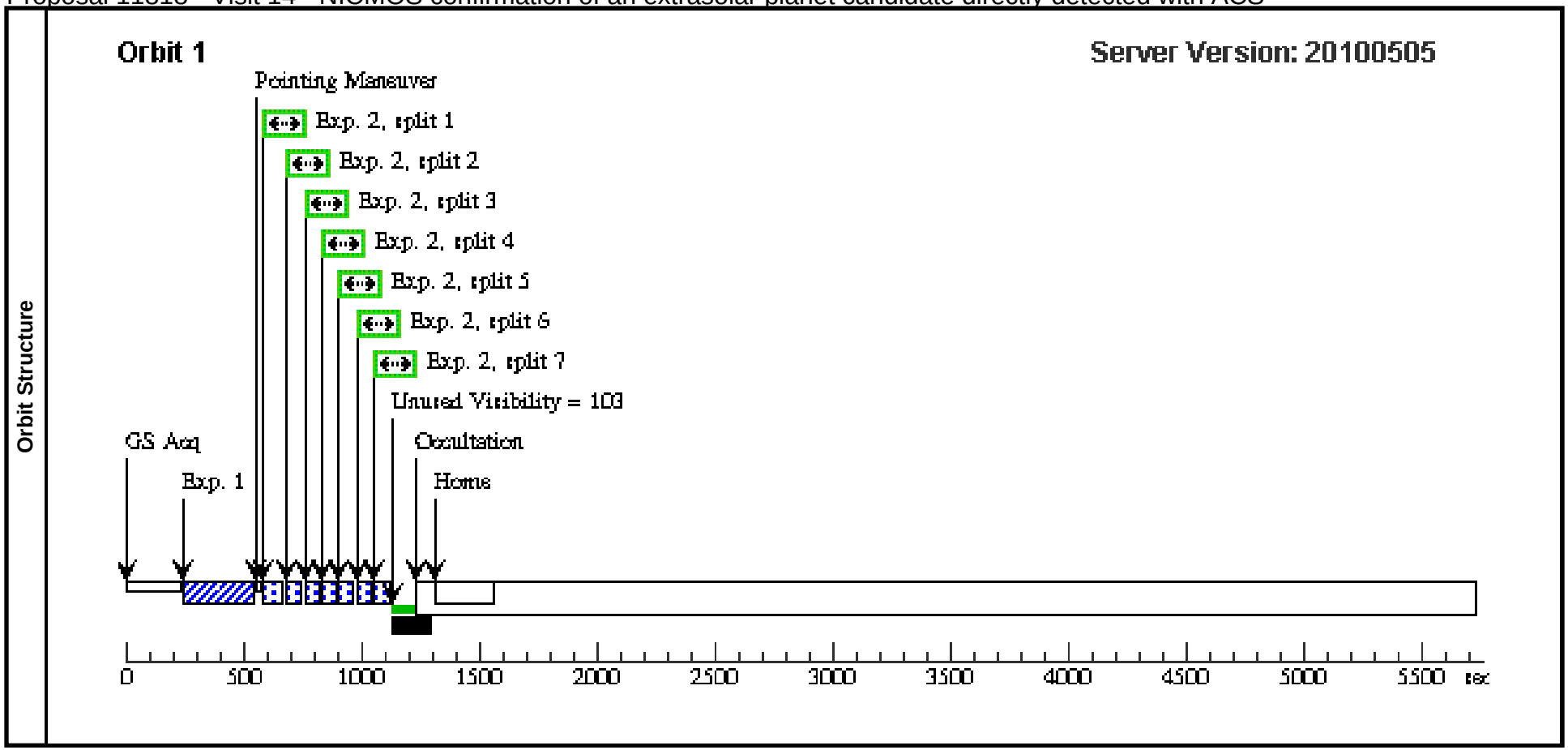
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NAME-FOMALHAUT	RA: 22 57 39.0465 (344.4126938d) Dec: -29 37 20.05 (-29.62224d) Equinox: J2000	Proper Motion RA: 0.0255s/yr Proper Motion Dec: -0.165"/yr Parallax: 0.13008" Epoch of Position: 2000.0	V=1.16	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) NAME-FOMALHAUT	STIS/CCD, ACQ, F25ND5	MIRROR		GS ACQ SCENARIO ONEB1B3		2 Secs	
								[==>]	***[1]***
2		(1) NAME-FOMALHAUT	STIS/CCD, ACCUM, BAR10	MIRROR	CR-SPLIT=7; GAIN=4			210 Secs	
								[==>(Split 1)]	
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	***[1]***
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Unused Visibility = 103
GS Acq
Occultation
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11818, Visit 15, completed Sat Aug 07 01:03:19 GMT 2010

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: GYRO MODE 3GOBAD; SCHED 70%; ORIENT 266.0D TO 266.1 D; VISIBILITY INTERVAL CORON

Diagnostics

(Visit 15) Warning (Form): Gyro Mode overrides default value of 2G.

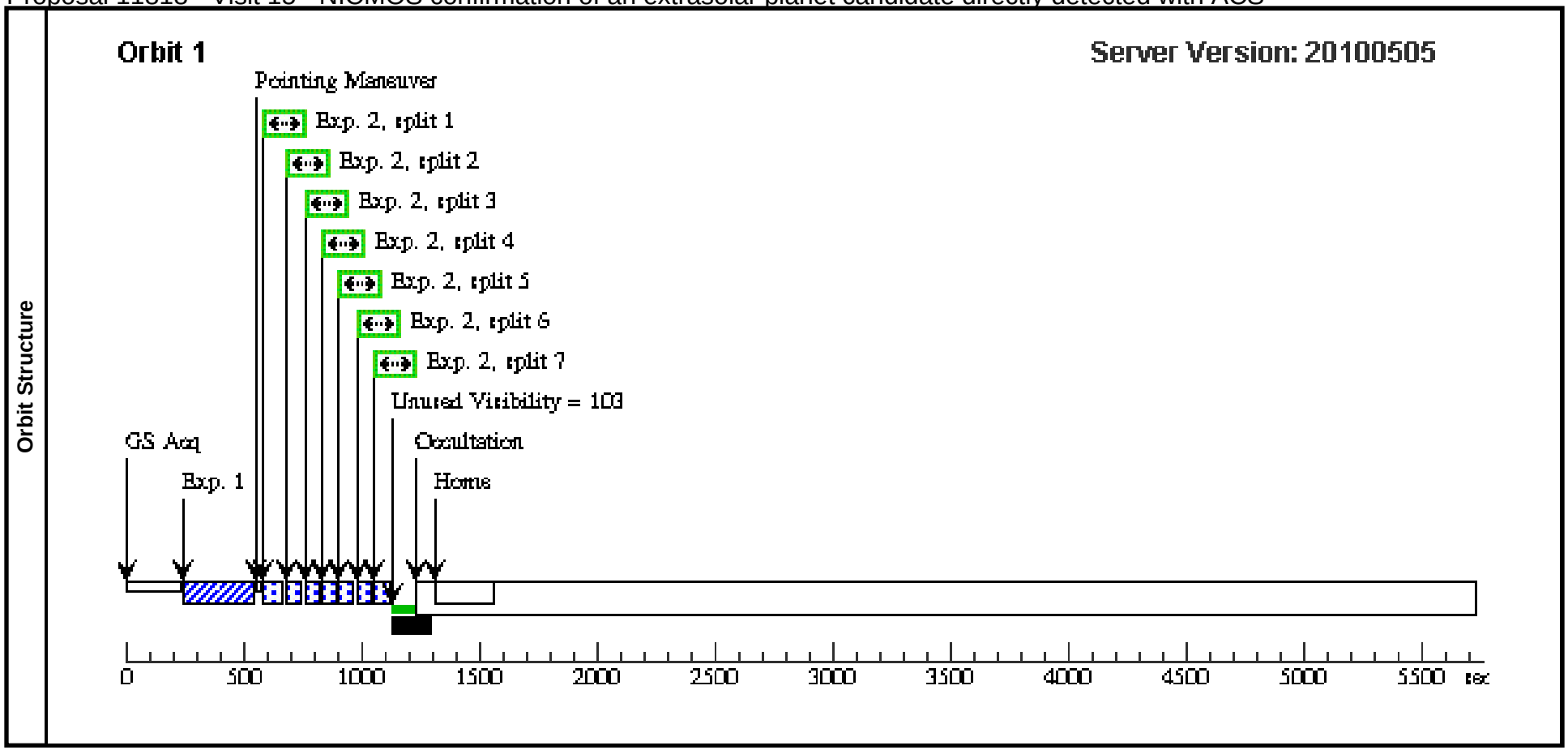
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NAME-FOMALHAUT	RA: 22 57 39.0465 (344.4126938d) Dec: -29 37 20.05 (-29.62224d) Equinox: J2000	Proper Motion RA: 0.0255s/yr Proper Motion Dec: -0.165"/yr Parallax: 0.13008" Epoch of Position: 2000.0	V=1.16	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) NAME-FOMALHAUT	STIS/CCD, ACQ, F25ND5	MIRROR		GS ACQ SCENARIO ONEB1B3		2 Secs	
								[==>]	***[1]***
2		(1) NAME-FOMALHAUT	STIS/CCD, ACCUM, BAR10	MIRROR	CR-SPLIT=7; GAIN=4			210 Secs	
								[==>(Split 1)]	
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	***[1]***
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Unused Visibility = 103
GS Acq
Occultation
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11818, Visit 16, completed Sat Aug 07 01:03:19 GMT 2010

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: GYRO MODE 3GOBAD; SCHED 70%; ORIENT 240.0D TO 240.1 D; GROUP 16,17,18 WITHIN 2.6 Orbits; VISIBILITY INTERVAL CORON

Diagnostics

(Visit 16) Warning (Form): Gyro Mode overrides default value of 2G.

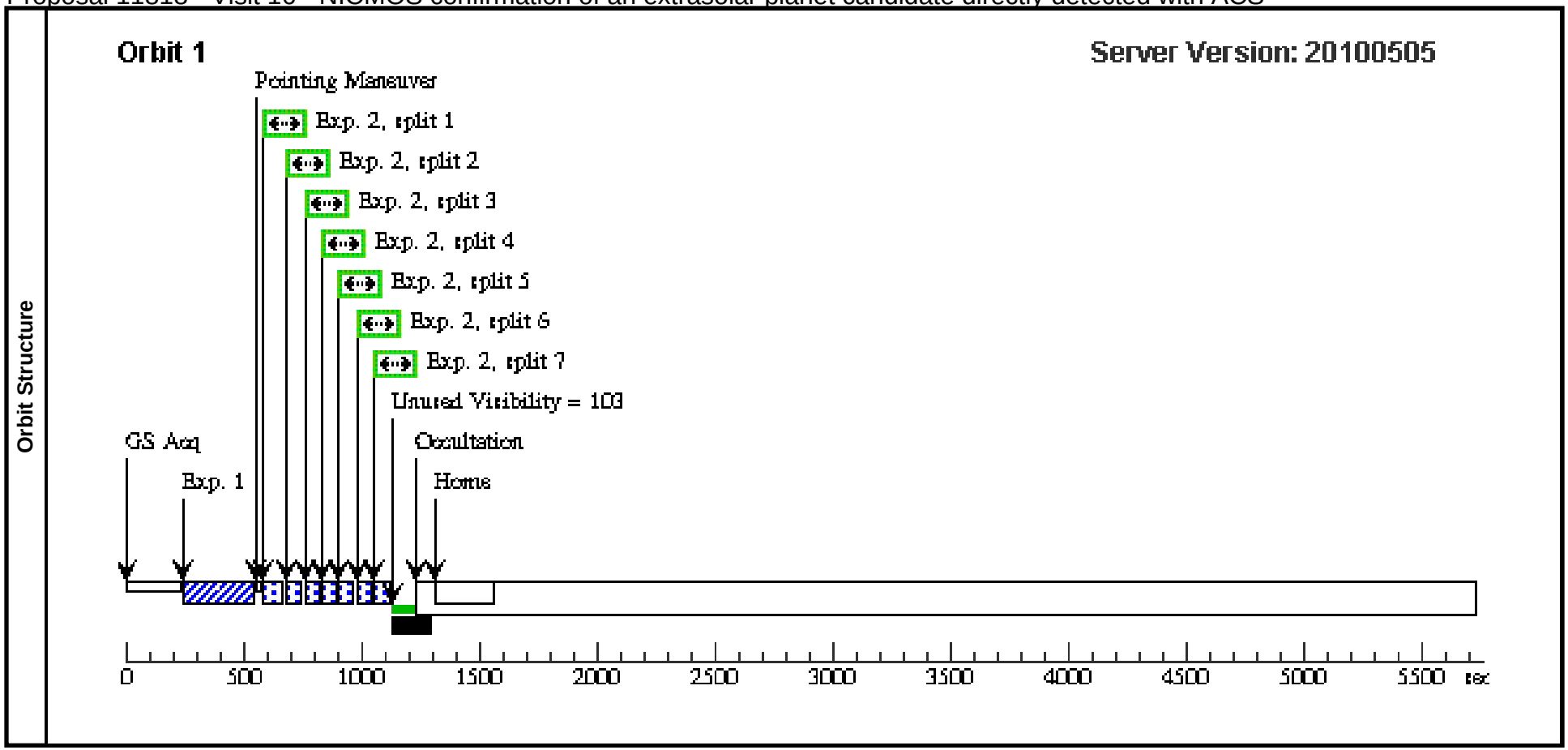
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NAME-FOMALHAUT	RA: 22 57 39.0465 (344.4126938d) Dec: -29 37 20.05 (-29.62224d) Equinox: J2000	Proper Motion RA: 0.0255s/yr Proper Motion Dec: -0.165"/yr Parallax: 0.13008" Epoch of Position: 2000.0	V=1.16	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) NAME-FOMALHAUT	STIS/CCD, ACQ, F25ND5	MIRROR		GS ACQ SCENARIO ONEB1B3		2 Secs	
								[==>]	***[1]***
2		(1) NAME-FOMALHAUT	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=7; GAIN=4			210 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Unused Visibility = 103
GS Acq
Occultation
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11818, Visit 17, completed Sat Aug 07 01:03:19 GMT 2010

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: GYRO MODE 3GOBAD; SCHED 70%; ORIENT 253.0D TO 253.1 D; VISIBILITY INTERVAL CORON

Diagnostics

(Visit 17) Warning (Form): Gyro Mode overrides default value of 2G.

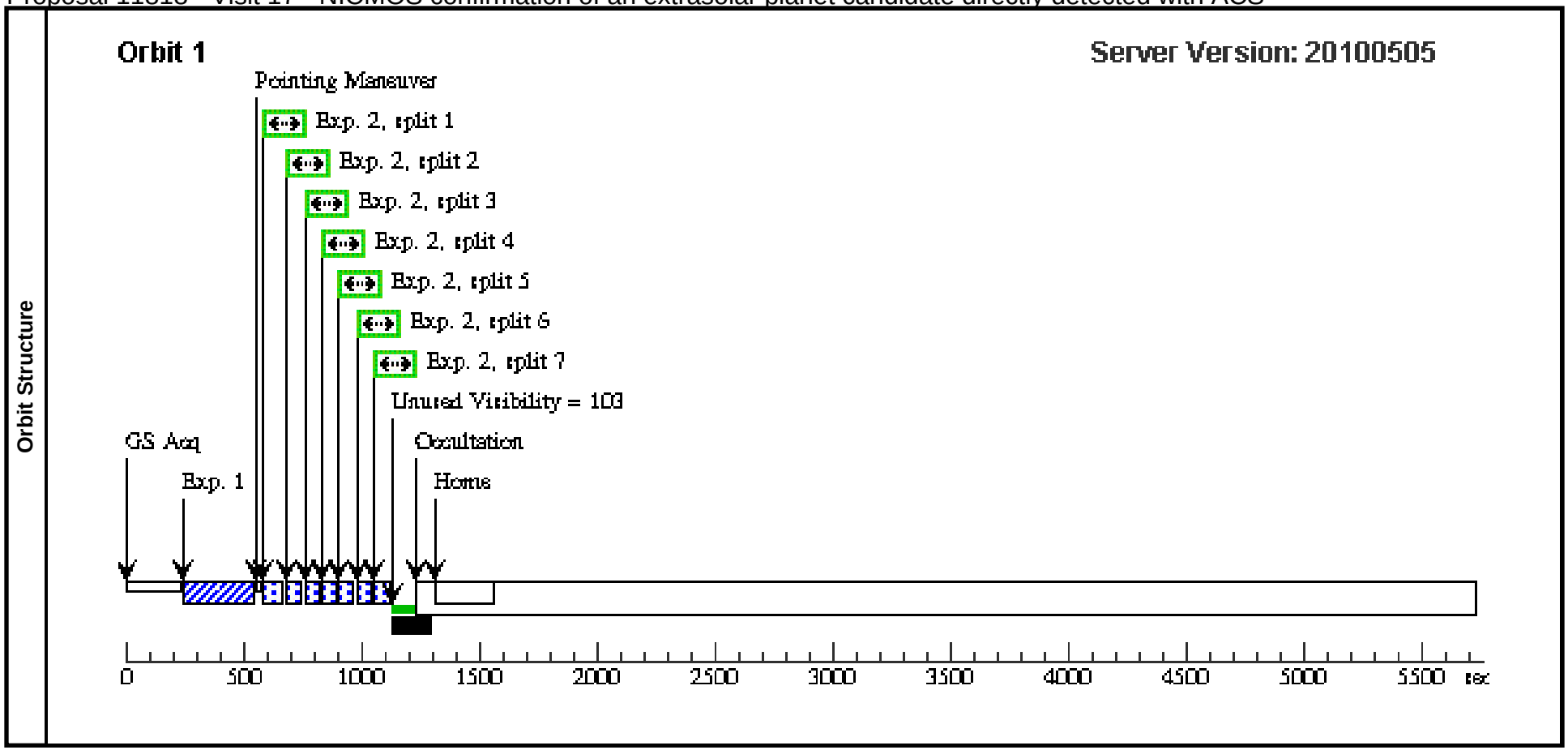
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NAME-FOMALHAUT	RA: 22 57 39.0465 (344.4126938d) Dec: -29 37 20.05 (-29.62224d) Equinox: J2000	Proper Motion RA: 0.0255s/yr Proper Motion Dec: -0.165"/yr Parallax: 0.13008" Epoch of Position: 2000.0	V=1.16	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) NAME-FOMALHAUT	STIS/CCD, ACQ, F25ND5	MIRROR		GS ACQ SCENARIO ONEB1B3		2 Secs	
								[==>]	***[1]***
2		(1) NAME-FOMALHAUT	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=7; GAIN=4			210 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Unused Visibility = 103
GS Acq
Occultation
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11818, Visit 18, completed Sat Aug 07 01:03:20 GMT 2010

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: GYRO MODE 3GOBAD; SCHED 70%; ORIENT 266.0D TO 266.1 D; VISIBILITY INTERVAL CORON

Diagnostics

(Visit 18) Warning (Form): Gyro Mode overrides default value of 2G.

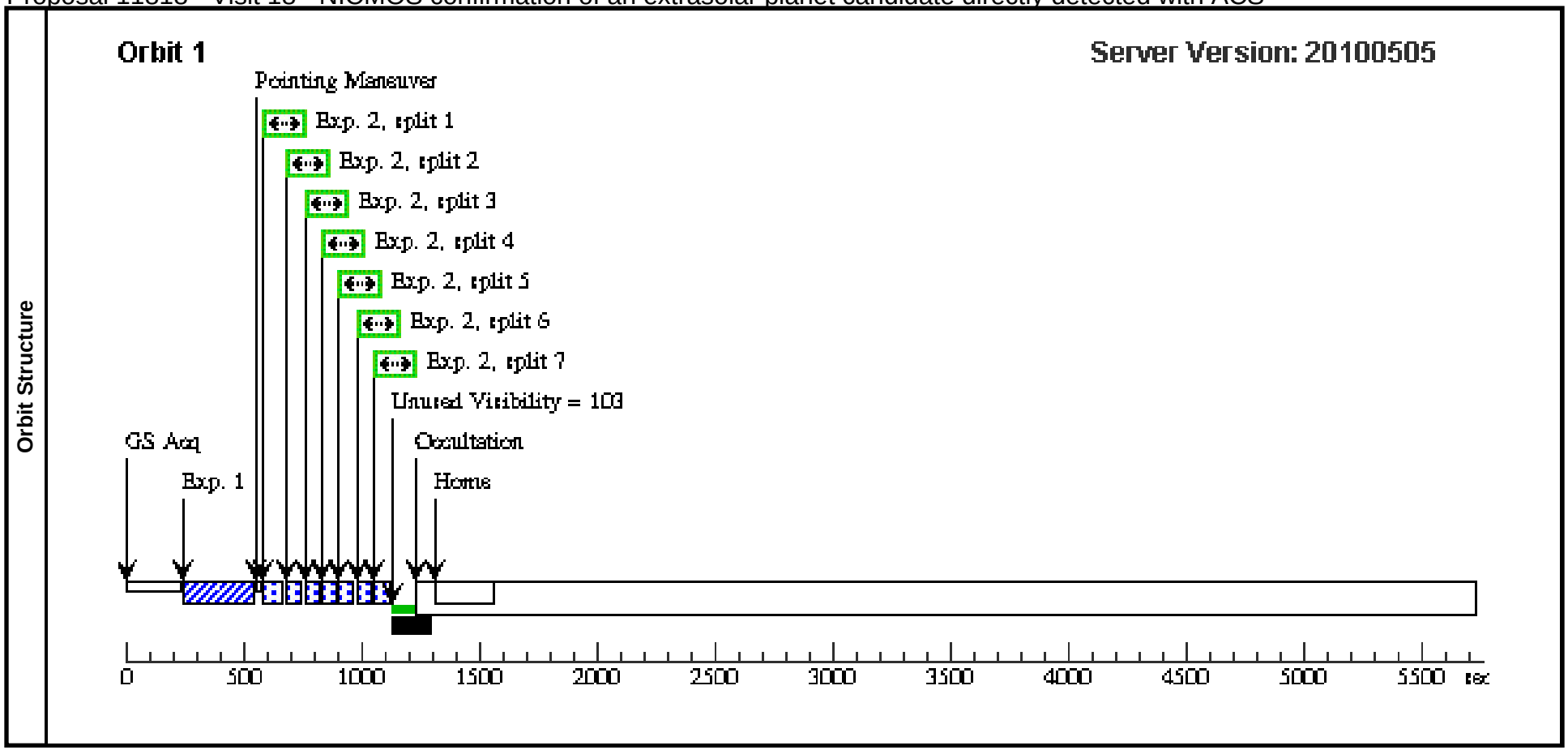
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NAME-FOMALHAUT	RA: 22 57 39.0465 (344.4126938d) Dec: -29 37 20.05 (-29.62224d) Equinox: J2000	Proper Motion RA: 0.0255s/yr Proper Motion Dec: -0.165"/yr Parallax: 0.13008" Epoch of Position: 2000.0	V=1.16	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) NAME-FOMALHAUT	STIS/CCD, ACQ, F25ND5	MIRROR		GS ACQ SCENARIO ONEB1B3		2 Secs	
								[==>]	***[1]***
2		(1) NAME-FOMALHAUT	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=7; GAIN=4			210 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	


Orbit Structure
Orbit 1
Server Version: 20100505
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Exp. 2, split 5
Exp. 2, split 6
Exp. 2, split 7
Unused Visibility = 103
GS Acq
Occultation
Exp. 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11818, Visit 19, implementation Sat Aug 07 01:03:20 GMT 2010

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: GYRO MODE 3GOBAD; ORIENT 13.0D TO 14.1 D; GROUP 19,20,21,22 WITHIN 3.6 Orbits

Comments: Visits 19-22 are STIS orbits for coronagraphy on Fomalhaut awarded by HOPR.

Diagnostics

(Visit 19) Warning (Form): Gyro Mode overrides default value of 2G.

Fixed Targets

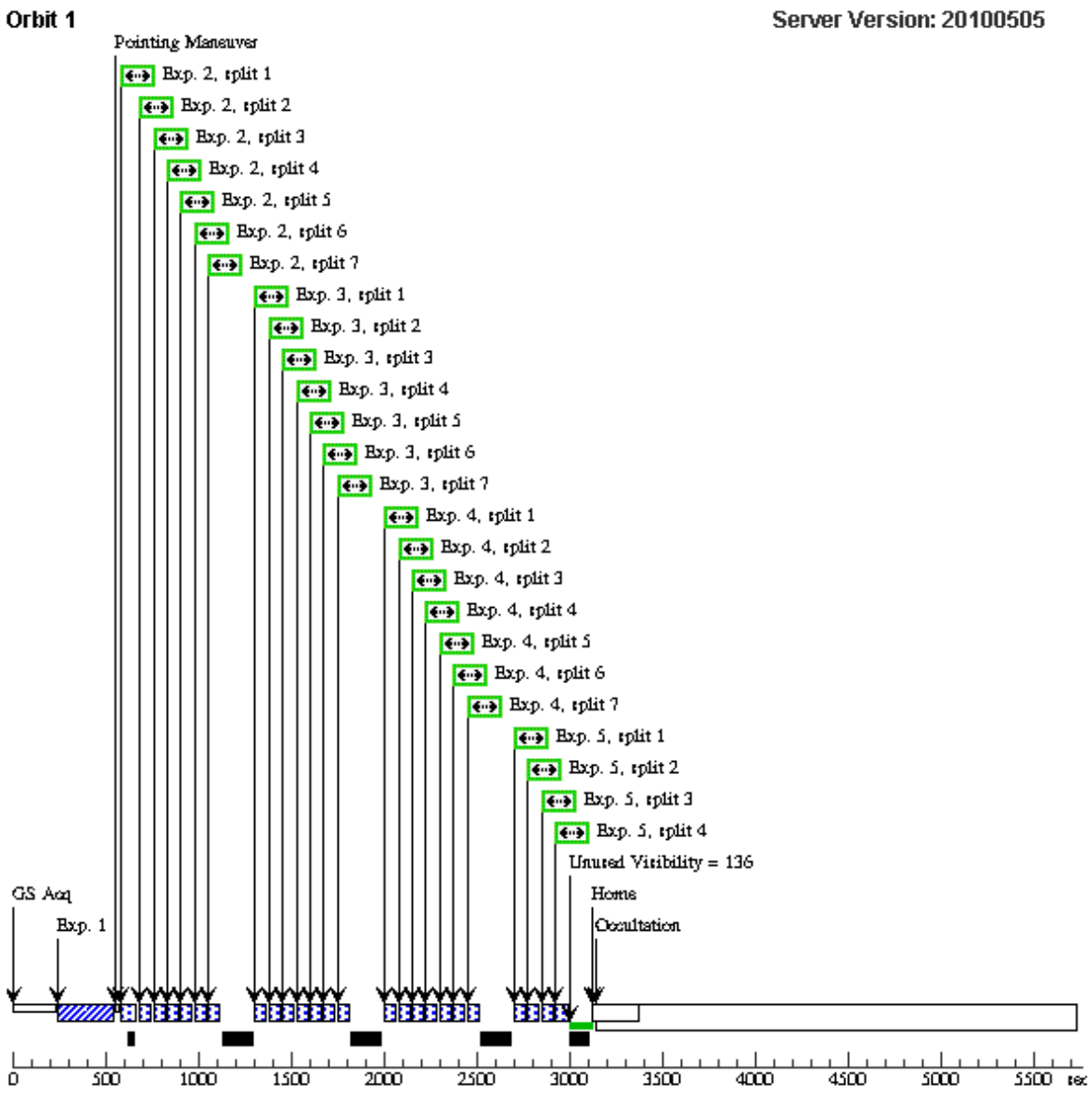
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	NAME-FOMALHAUT-COPY	RA: 22 57 39.0465 (344.4126938d)	Proper Motion RA: 0.0255s/yr	V=1.16	Reference Frame: GSC1
		Dec: -29 37 20.05 (-29.62224d)	Proper Motion Dec: -0.165"/yr		
		Equinox: J2000	Parallax: 0.13008"		
		Plate Id: 06EI	Epoch of Position: 2000.0		

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACQ, F25ND5	MIRROR		GS ACQ SCENARIO ONEB1B3		2 Secs	
								[==>]	***[1]***
2		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=7; GAIN=4			210 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
3		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=7; GAIN=4			210 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
4		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=7; GAIN=4			210 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
5		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=4; GAIN=4			120 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	

Orbit Structure



Visit

Proposal 11818, Visit 20, implementation Sat Aug 07 01:03:20 GMT 2010

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: GYRO MODE 3GOBAD; ORIENT 8.0D TO 8.1D FROM 19

Comments: Visits 19-22 are STIS orbits for coronagraphy on Fomalhaut awarded by HOPR.

Diagnostics

(Visit 20) Warning (Form): Gyro Mode overrides default value of 2G.

Fixed Targets

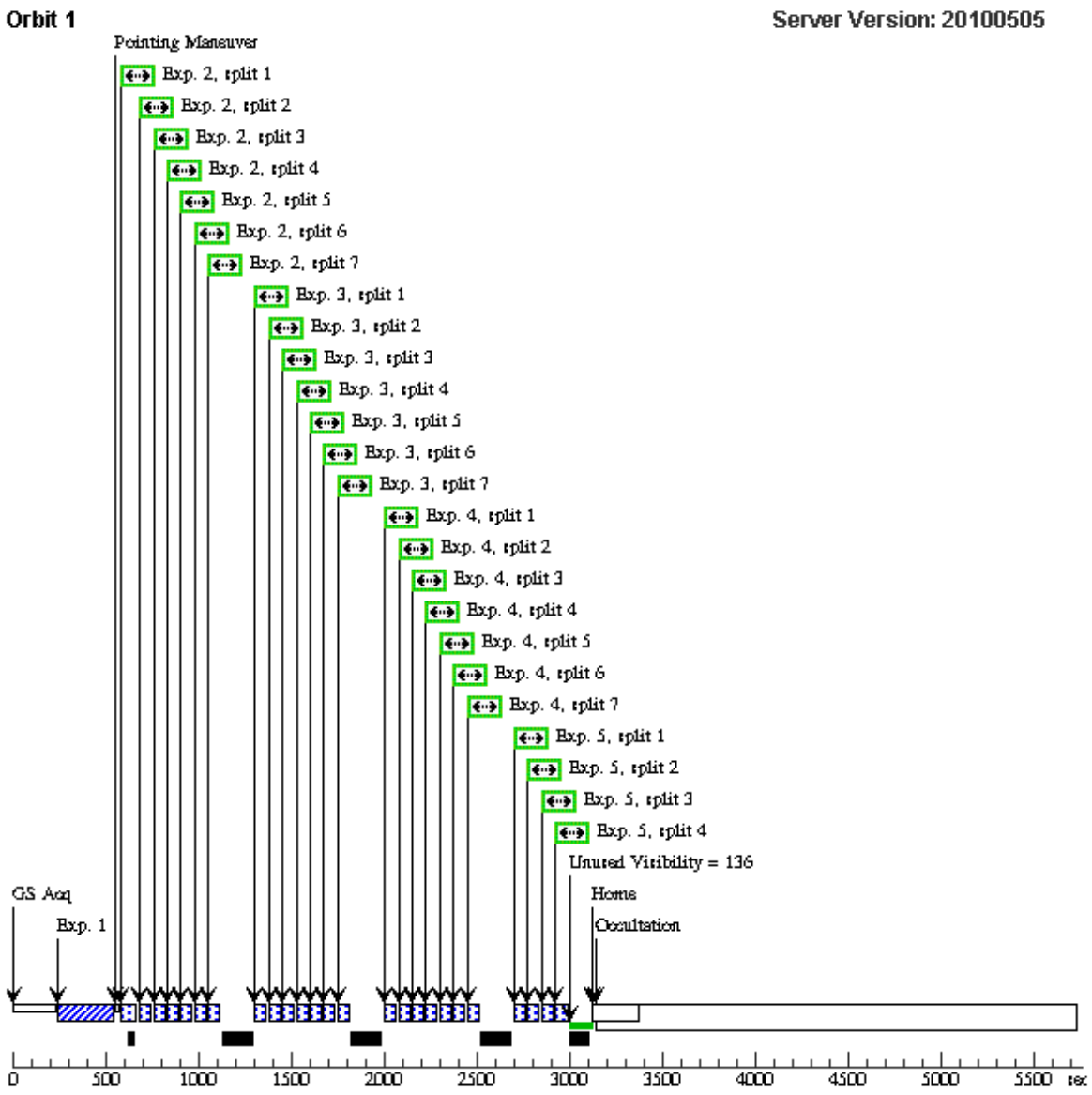
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	NAME-FOMALHAUT-COPY	RA: 22 57 39.0465 (344.4126938d)	Proper Motion RA: 0.0255s/yr	V=1.16	Reference Frame: GSC1
		Dec: -29 37 20.05 (-29.62224d)	Proper Motion Dec: -0.165"/yr		
		Equinox: J2000	Parallax: 0.13008"		
		Plate Id: 06EI	Epoch of Position: 2000.0		

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACQ, F25ND5	MIRROR		GS ACQ SCENARIO ONEB1B3		2 Secs	
								[==>]	***[1]***
2		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=7; GAIN=4			210 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
3		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=7; GAIN=4			210 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
4		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=7; GAIN=4			210 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
5		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=4; GAIN=4			120 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	

Orbit Structure



Visit

Proposal 11818, Visit 21, implementation Sat Aug 07 01:03:21 GMT 2010

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: GYRO MODE 3GOBAD; ORIENT 16.0D TO 16.1D FROM 19

Comments: Visits 19-22 are STIS orbits for coronagraphy on Fomalhaut awarded by HOPR.

Diagnostics

(Visit 21) Warning (Form): Gyro Mode overrides default value of 2G.

Fixed Targets

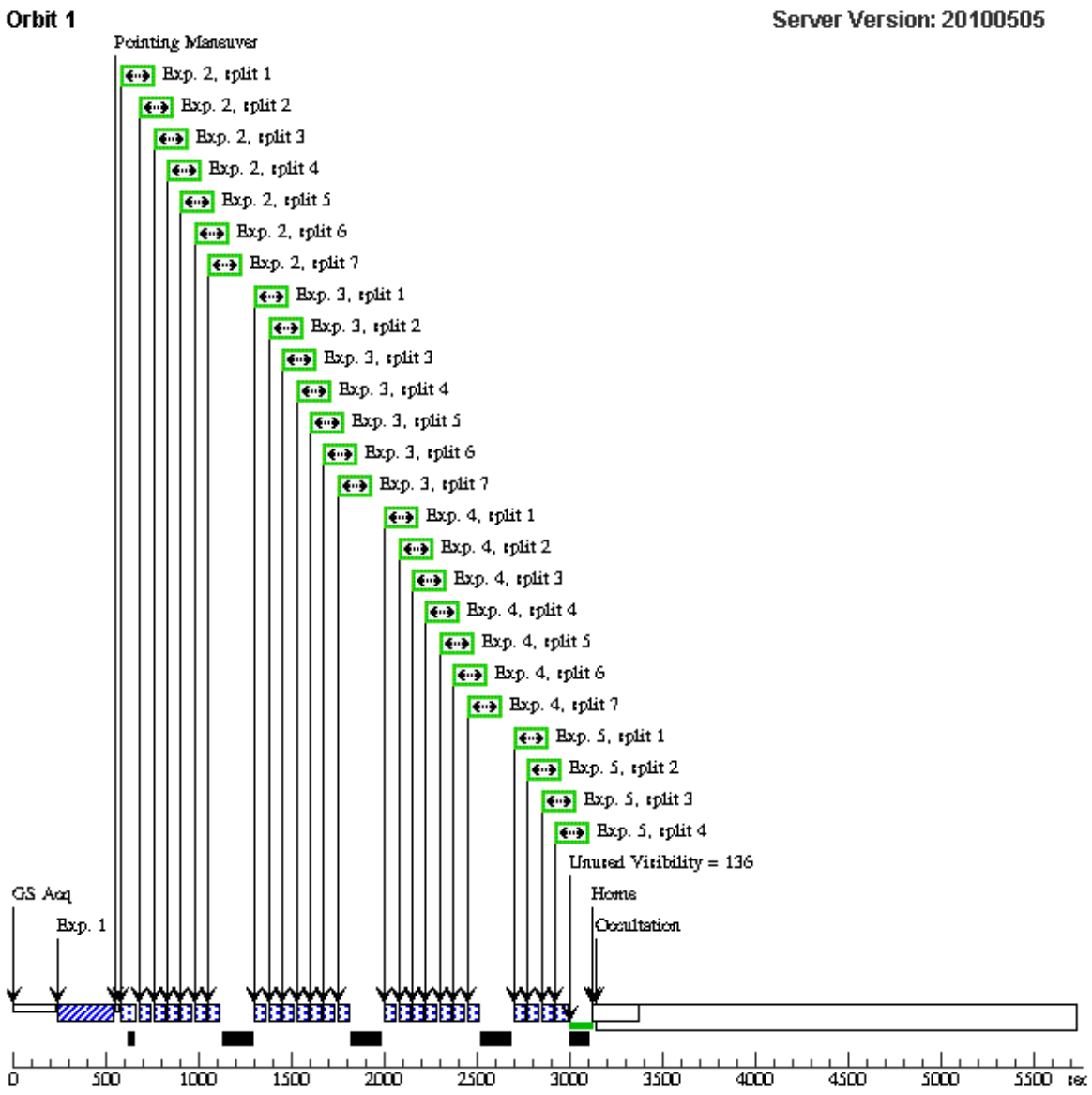
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	NAME-FOMALHAUT-COPY	RA: 22 57 39.0465 (344.4126938d)	Proper Motion RA: 0.0255s/yr	V=1.16	Reference Frame: GSC1
		Dec: -29 37 20.05 (-29.62224d)	Proper Motion Dec: -0.165"/yr		
		Equinox: J2000	Parallax: 0.13008"		
		Plate Id: 06EI	Epoch of Position: 2000.0		

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACQ, F25ND5	MIRROR		GS ACQ SCENARIO ONEB1B3		2 Secs	
								[==>]	***[1]***
2		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=7; GAIN=4			210 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
3		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=7; GAIN=4			210 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
4		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=7; GAIN=4			210 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
5		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=4; GAIN=4			120 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	

Orbit Structure



Visit

Proposal 11818, Visit 22, implementation Sat Aug 07 01:03:21 GMT 2010

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD

Special Requirements: GYRO MODE 3GOBAD; ORIENT 24.0D TO 24.1D FROM 19

Comments: Visits 19-22 are STIS orbits for coronagraphy on Fomalhaut awarded by HOPR.

Diagnostics

(Visit 22) Warning (Form): Gyro Mode overrides default value of 2G.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	NAME-FOMALHAUT-COPY	RA: 22 57 39.0465 (344.4126938d)	Proper Motion RA: 0.0255s/yr	V=1.16	Reference Frame: GSC1
		Dec: -29 37 20.05 (-29.62224d)	Proper Motion Dec: -0.165"/yr		
		Equinox: J2000	Parallax: 0.13008"		
		Plate Id: 06EI	Epoch of Position: 2000.0		

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACQ, F25ND5	MIRROR		GS ACQ SCENARIO ONEB1B3		2 Secs	
								[==>]	***[1]***
2		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=7; GAIN=4			210 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
3		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=7; GAIN=4			210 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
4		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=7; GAIN=4			210 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
								[==>(Split 5)]	
								[==>(Split 6)]	
								[==>(Split 7)]	
5		(2) NAME-FOMAL HAUT-COPY	STIS/CCD, ACCUM, WEDGEB2.5	MIRROR	CR-SPLIT=4; GAIN=4			120 Secs	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	

Orbit Structure