14073 - Assessing the Impact of Metallicity on Stellar Dust Production

Cycle: 23, Proposal Category: GO

(Availability Mode: SUPPORTED)

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(3) IC10-A	WFC3/IR	1	03-Sep-2015 21:01:10.0	yes
02	(2) IC10-B	WFC3/IR	1	03-Sep-2015 21:01:13.0	yes
03	(1) IC10-C	WFC3/IR	1	03-Sep-2015 21:01:17.0	yes
04	(4) PEGASUS-A	WFC3/IR	1	03-Sep-2015 21:01:20.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
05	(5) PEGASUS-B	WFC3/IR	1	03-Sep-2015 21:01:23.0	yes
06	(6) SEXTANSB-A	WFC3/IR	1	03-Sep-2015 21:01:26.0	yes
07	(7) SEXTANSB-B	WFC3/IR	1	03-Sep-2015 21:01:29.0	yes
08	(9) N147-A	WFC3/IR	1	03-Sep-2015 21:01:32.0	yes
09	(8) N147-B	WFC3/IR	1	03-Sep-2015 21:01:34.0	yes
10	(10) N147-C	WFC3/IR	1	03-Sep-2015 21:01:38.0	yes
11	(11) SEXTANSA-A	WFC3/IR	1	03-Sep-2015 21:01:41.0	yes
12	(12) SEXTANSA-B	WFC3/IR	1	03-Sep-2015 21:01:44.0	yes
13	(13) SAGDIG-A	WFC3/IR	1	03-Sep-2015 21:01:46.0	yes
14	(14) SAGDIG-B	WFC3/IR	1	03-Sep-2015 21:01:49.0	yes

14 Total Orbits Used

ABSTRACT

Asymptotic Giant Branch (AGB) stars may be a dominant source of dust in the Universe, but it is unknown how low metal abundances affect the efficiency of AGB dust production. The role of AGB dust at early times is therefore unclear (e.g., in high-redshift quasars). Stellar evolution and dust models for AGB stars are highly uncertain primarily because they are calibrated only at a few metallicities. As a result, models conflict about the strength of dust production in metal-poor stars even when the stars are capable of producing their own condensable material. Using infrared imaging of dwarf galaxies with Spitzer, we have recently detected the first examples of dusty (optically obscured) AGB stars at metallicities more than an order of magnitude lower than previously observed. However, we cannot characterize the spectral types (and thus the dust species) or the total rate of dust production without additional data in the near-infrared. We propose to image these galaxies using the medium-band WFC3/IR filters, which can efficiently separate carbon- and oxygen-rich AGB stars. In addition, cycle 23 observations will be contemporaneous with new Spitzer observations, providing near-simultaneous spectral coverage from 1-5 microns of these large-amplitude stars. Armed with the spectral types and complete spectral coverage from the proposed observations, we will obtain accurate dust-production rates for >100 stars spanning 0.7%-8% solar metallicity. These will be the first measurements of their kind at such low metallicities, and they will calibrate models of AGB evolution and of galaxy dust evolution in metal-poor environments that are representative of high-redshift galaxies.

OBSERVING DESCRIPTION

Targets:

We will target 14 fields that maximize the number of AGB candidates and that overlap with Spitzer cycle-11 coverage and existing HST optical coverage.

Filters:

To take full advantage of the CN+C2 and water features near 1.4 microns, we require observations with F127M, F139M, and F153M. All three filters are necessary, since combinations with the broad-band optical, near-IR, and IR filters do not successfully isolate the carbon stars.

Required exposure times and photometric depth:

In order to detect all AGB stars, we must achieve full photometric completeness at the tip of the red giant branch (TRGB). The orbit times for our targets are 54-58 min, so we can achieve the necessary photometric depth within a single orbit (as demonstrated by Boyer et al. 2013). This allows for total exposure times of 800-900s in each filter, resulting in S/N > 7 in F139M for mF160W = 23 mag, using a Bruzual template for an M6III star. The S/N is even better in the F127M and F153M filters, owing to a higher throughput. For reference, the TRGB in the F160W filter corresponds to mF160W ~19 mag at the typical distance of our targets.

Dithering Strategy:

Dithering diminishes errors associated with where a source is placed on a pixel, undersampling of the WFC3/IR channel, and image artifacts such as cosmic rays. We choose a 4-point dithering strategy to acheive Nyquist sampling of the PSF & that simultaneously allows us to fit the three selected filters into a single orbit. We have entered the dither offsets manually into the target offset entries following the WFC3 handbook WFC3-IR-DITHER-BOX-MIN values from table C.3

Avoiding Saturation:

The brightest AGB stars in our sample may reach mF160W ~ 16.5 mag (or MF160W = -8 mag). Stars brighter than mF160W ~ 16.7 mag are in danger of saturating in 460 s exposures in the medium-band filters. Our longest exposures are only 300s, so saturation of our targets will not be an issue. Other bright stars in the field will be recovered by the WFC3/IR sampling.

Parallels:

There are no parallel observations for this program.

Scheduling Constraints:

We require observations to be concurrent with Spitzer cycle 11 observations (PI Boyer, GO-11041) to avoid uncertainties that arise in non-contemporaneous observations of large-amplitude variable stars. Spitzer observations are not yet scheduled, but we do know that they will occur specific known windows. We've designed constraints here to ensure that HST observations will occur within 20 days of Spitzer (we'd prefer <15 days). However, the timing constraints entered here are flexible depending on exactly when the Spitzer observations are finally scheduled. For example, if Spitzer observes at the the beginning of its window, then the HST observations could occur earlier than what is entered here. The Spitzer windows are entered under "Comments" for each target.

Visit

Proposal 14073, IC10-A (01), implementation Fri Sep 04 01:01:52 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: BETWEEN 16-OCT-2015 AND 31-OCT-2015; BETWEEN 06-DEC-2015 AND 22-DEC-2015; BETWEEN 13-MAR-2016 AND 28-MAR-2016; BETWEEN 02-MAY-2016 AND 16-MAY-2016

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	IC10-A	RA: 00 20 8.2242 (5.0342675d)		V=20+/-0.5	Reference Frame: ICRS
	Alt Name1: IC10	Dec: +59 20 25.68 (59.34047d)			
		Equinox: J2000			

Comments: This is a star field, with a wide range of V-mags. The brightest star in an adjacent HST optical field is about V=20 mag. The stars of interest to this program range from approximately V=23-28 mag.

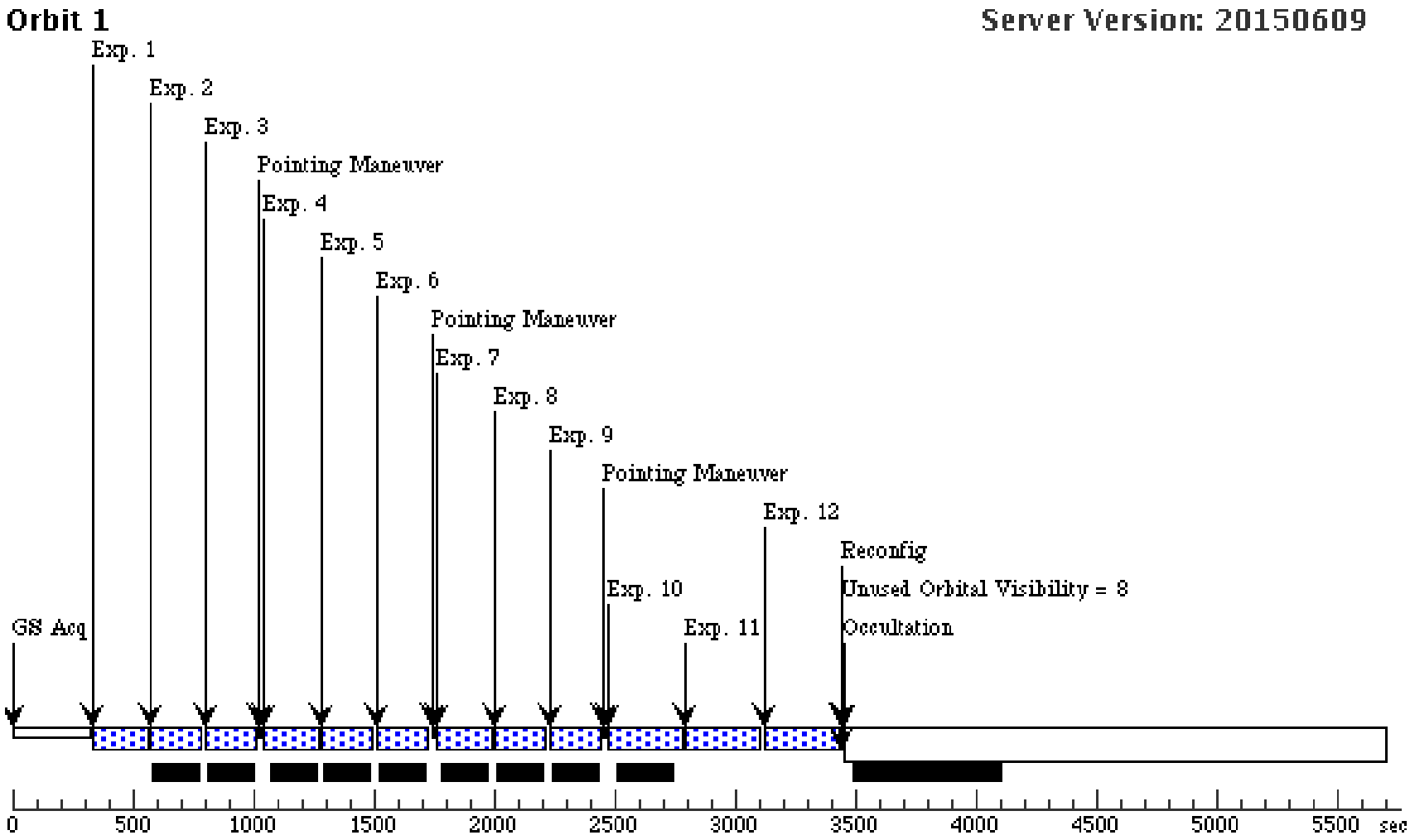
Constraints ensure HST observations of this target within 20 days (preferably 15 days) of Spitzer
Spitzer timing constraint windows for IC 10:
16-Oct-2015 to 31-Oct-2015
06-Dec-2015 to 22-Dec-2015
13-Mar-2016 to 28-Mar-2016
02-May-2016 to 16-May-2016

The corresponding Spitzer field is also called IC10-A in that program.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M	(3) IC10-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs)	
								[==>]	***[1]***
2	F139M	(3) IC10-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs)	
								[==>]	***[1]***
3	F153M	(3) IC10-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs)	
								[==>]	***[1]***
4	F139M - offset1	(3) IC10-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs)	
								[==>]	***[1]***
5	F153M - offset1	(3) IC10-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs)	
								[==>]	***[1]***
6	F127M - offset1	(3) IC10-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs)	
								[==>]	***[1]***
7	F153M - offset2	(3) IC10-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs)	
								[==>]	***[1]***
8	F127M - offset2	(3) IC10-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs)	
								[==>]	***[1]***
9	F139M - offset2	(3) IC10-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs)	
								[==>]	***[1]***
10	F127M - offset3	(3) IC10-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=SPARS25; NSAMP=12	POS TARG -0.203,0.303		277.937956 Secs (277.938 Secs)	
								[==>]	***[1]***
11	F139M - offset3	(3) IC10-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=9	POS TARG -0.203,0.303		299.231323 Secs (299.231 Secs)	
								[==>]	***[1]***
12	F153M - offset3	(3) IC10-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=9	POS TARG -0.203,0.303		299.231323 Secs (299.231 Secs)	
								[==>]	***[1]***

Orbit Structure



Visit

Proposal 14073, IC10-B (02), implementation Fri Sep 04 01:01:53 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: BETWEEN 16-OCT-2015 AND 31-OCT-2015; BETWEEN 06-DEC-2015 AND 22-DEC-2015; BETWEEN 13-MAR-2016 AND 28-MAR-2016; BETWEEN 02-MAY-2016 AND 16-MAY-2016

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	IC10-B	RA: 00 20 8.8362 (5.0368175d)		V=20+/-0.5	Reference Frame: ICRS
	Alt Name1: IC10	Dec: +59 16 37.24 (59.27701d)			
		Equinox: J2000			

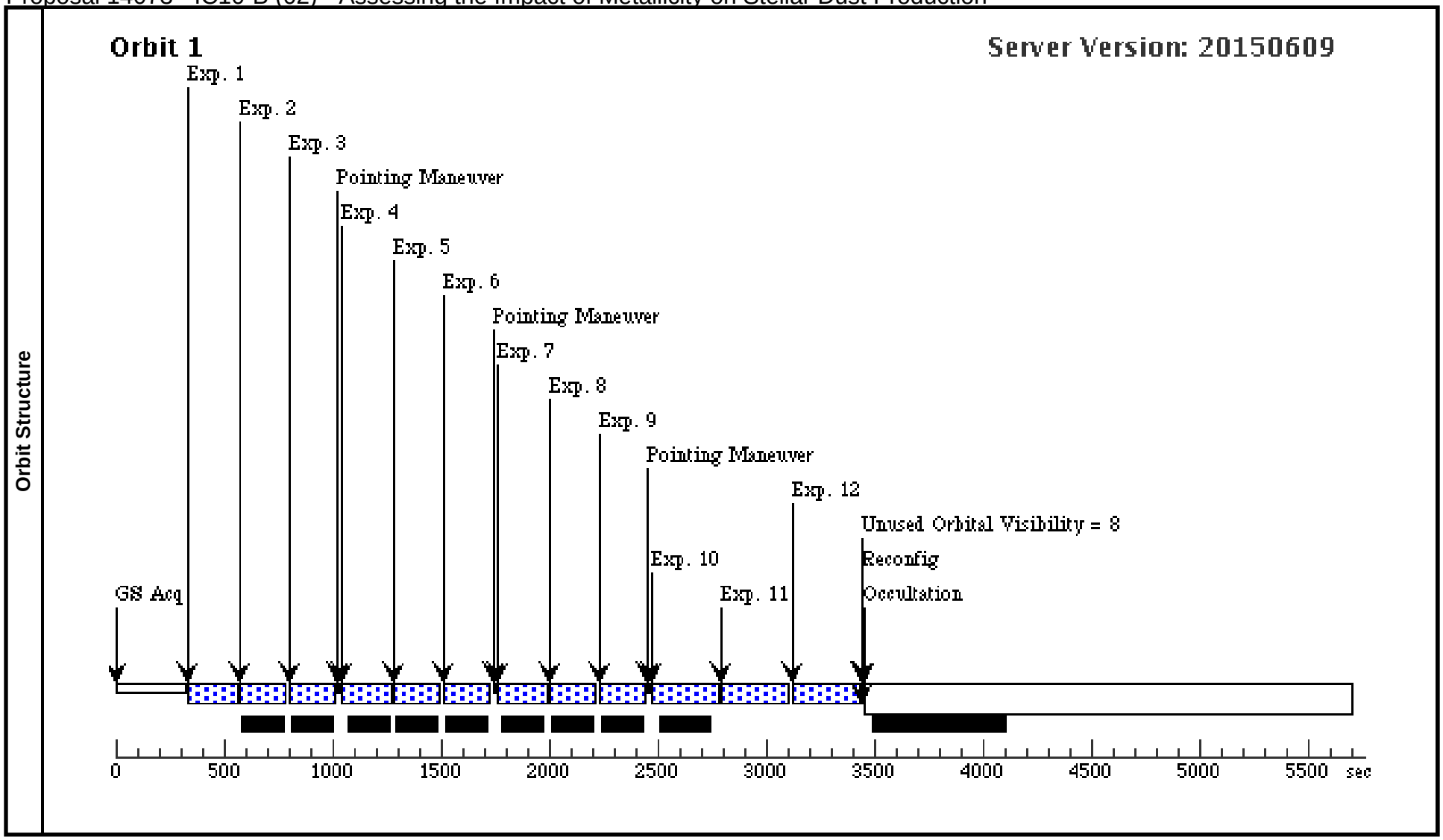
Comments: This is a star field, with a wide range of V-mags. The brightest star in an adjacent HST optical field is about V=20 mag. The stars of interest to this program range from approximately V=23-28 mag.

Constraints ensure HST observations of this target within 20 days (preferably 15 days) of Spitzer
Spitzer timing constraint windows for IC 10:
16-Oct-2015 to 31-Oct-2015
06-Dec-2015 to 22-Dec-2015
13-Mar-2016 to 28-Mar-2016
02-May-2016 to 16-May-2016

The corresponding Spitzer field is also called IC10-B in that program.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M	(2) IC10-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	GS ACQ SCENARIO BASE1B3		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
2	F139M	(2) IC10-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	*[1]*
3	F153M	(2) IC10-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	*[1]*
4	F139M - offset1	(2) IC10-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
5	F153M - offset1	(2) IC10-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
6	F127M - offset1	(2) IC10-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
7	F153M - offset2	(2) IC10-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
8	F127M - offset2	(2) IC10-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
9	F139M - offset2	(2) IC10-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
10	F127M - offset3	(2) IC10-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=SPARS25; NSAMP=12	POS TARG -0.203,0.303		277.937956 Secs (277.938 Secs) *[==>]*	*[1]*
11	F139M - offset3	(2) IC10-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=9	POS TARG -0.203,0.303		299.231323 Secs (299.231 Secs) *[==>]*	*[1]*
12	F153M - offset3	(2) IC10-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=9	POS TARG -0.203,0.303		299.231323 Secs (299.231 Secs) *[==>]*	*[1]*


Orbit Structure
Orbit 1
Server Version: 20150609
Exp. 1
Exp. 2
Exp. 3
Pointing Maneuver
Exp. 4
Exp. 5
Exp. 6
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Exp. 7
Exp. 8
Exp. 9
Pointing Maneuver
Exp. 12
Unused Orbital Visibility = 8
Exp. 10
Reconfig
GS Acq
Exp. 11
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14073, IC10-C (03), implementation Fri Sep 04 01:01:53 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: BETWEEN 16-OCT-2015 AND 31-OCT-2015; BETWEEN 06-DEC-2015 AND 22-DEC-2015; BETWEEN 13-MAR-2016 AND 28-MAR-2016; BETWEEN 02-MAY-2016 AND 16-MAY-2016

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	IC10-C	RA: 00 20 36.9519 (5.1539662d)		V=20+/-0.5	Reference Frame: ICRS
	Alt Name1: IC10	Dec: +59 16 48.82 (59.28023d)			
		Equinox: J2000			

Comments: This is a star field, with a wide range of V-mags. The brightest star in an adjacent HST optical field is about V=20 mag. The stars of interest to this program range from approximately V=23-28 mag.

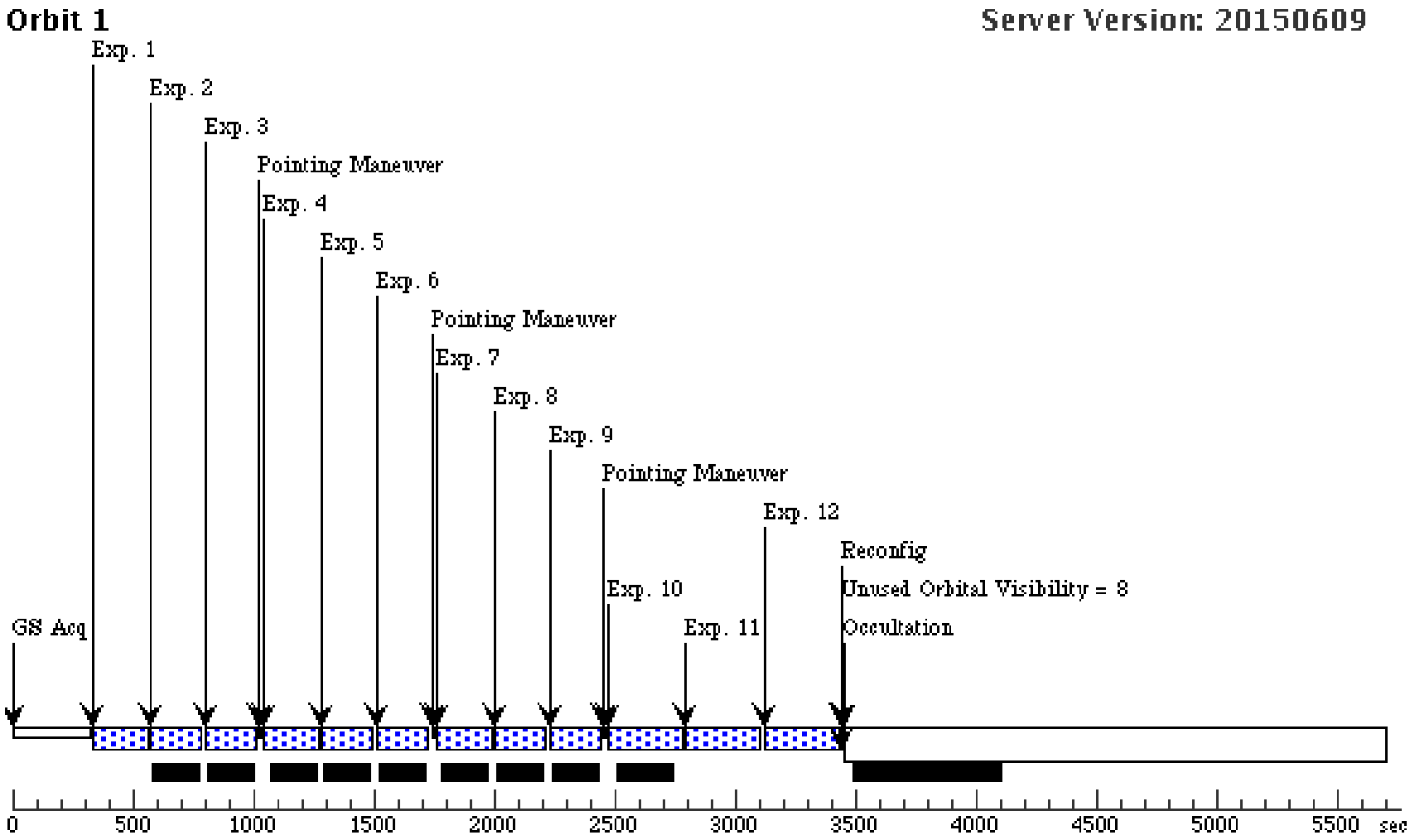
Constraints ensure HST observations of this target within 20 days (preferably 15 days) of Spitzer
Spitzer timing constraint windows for IC 10:
16-Oct-2015 to 31-Oct-2015
06-Dec-2015 to 22-Dec-2015
13-Mar-2016 to 28-Mar-2016
02-May-2016 to 16-May-2016

The corresponding Spitzer field is also called IC10-C in that program.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M	(1) IC10-C	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
2	F139M	(1) IC10-C	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
3	F153M	(1) IC10-C	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
4	F139M - offset1	(1) IC10-C	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
5	F153M - offset1	(1) IC10-C	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
6	F127M - offset1	(1) IC10-C	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
7	F153M - offset2	(1) IC10-C	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
8	F127M - offset2	(1) IC10-C	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
9	F139M - offset2	(1) IC10-C	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
10	F127M - offset3	(1) IC10-C	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=SPARS25; NSAMP=12	POS TARG -0.203,0.303		277.937956 Secs (277.938 Secs) *[==>]*	 ***[1]***
11	F139M - offset3	(1) IC10-C	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=9	POS TARG -0.203,0.303		299.231323 Secs (299.231 Secs) *[==>]*	 ***[1]***
12	F153M - offset3	(1) IC10-C	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=9	POS TARG -0.203,0.303		299.231323 Secs (299.231 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 14073, Pegasus-A (04), implementation Fri Sep 04 01:01:53 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: ORIENT 328D TO 20 D; ORIENT 40D TO 215 D; ORIENT 230D TO 300 D; BETWEEN 01-OCT-2015 AND 30-OCT-2015; BETWEEN 22-FEB-2016 AND 29-FEB-2016; BETWEEN 26-MAR-2016 AND 03-APR-2016; BETWEEN 10-SEP-2015 AND 18-SEP-2015

Comments: Orient ranges set to avoid a bright infrared source.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	PEGASUS-A	RA: 23 28 33.1550 (352.1381458d) Dec: +14 43 54.62 (14.73184d) Equinox: J2000		V=20+/-0.5	Reference Frame: ICRS

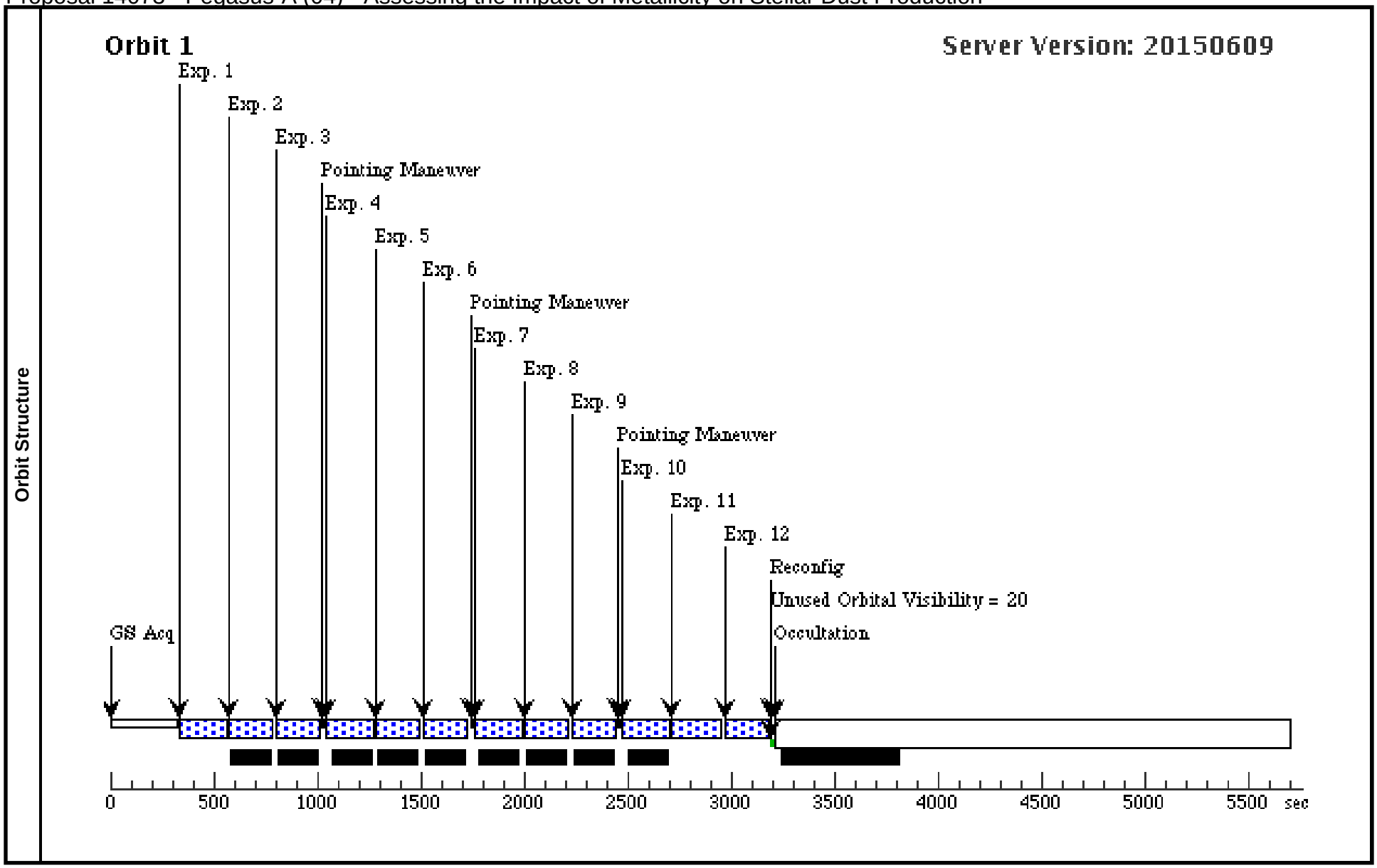
Comments: This is a star field, with a wide range of V-mags. The brightest star in an adjacent HST optical field is about V=20 mag. The stars of interest to this program range from approximately V=21-26 mag.

Constraints ensure HST observations of this target within 20 days (preferably 15 days) of Spitzer
Spitzer timing constraint windows for Pegasus:
10-Sep-2015 to 18-Sep-2015
13-Oct-2015 to 22-Oct-2015
22-Feb-2016 to 29-Feb-2016
26-Mar-2016 to 03-Apr-2016

There is only one corresponding Spitzer field for both PEGASUS-A and PEGASUS-B, it's referred to as DDO216 in the Spitzer Program.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M	(4) PEGASUS-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	GS ACQ SCENARIO BASE1B3		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
2	F139M	(4) PEGASUS-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	*[1]*
3	F153M	(4) PEGASUS-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	*[1]*
4	F139M - offset1	(4) PEGASUS-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
5	F153M - offset1	(4) PEGASUS-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
6	F127M - offset1	(4) PEGASUS-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
7	F153M - offset2	(4) PEGASUS-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
8	F127M - offset2	(4) PEGASUS-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
9	F139M - offset2	(4) PEGASUS-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
10	F127M - offset3	(4) PEGASUS-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG -0.203,0.303		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
11	F139M - offset3	(4) PEGASUS-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=SPARS25; NSAMP=10	POS TARG -0.203,0.303		227.936926 Secs (227.937 Secs) *[==>]*	*[1]*
12	F153M - offset3	(4) PEGASUS-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG -0.203,0.303		199.231 Secs (199.231 Secs) *[==>]*	*[1]*


Orbit 1
Server Version: 20150609
Orbit Structure
Exp. 1
Exp. 2
Exp. 3
Pointing Maneuver
Exp. 4
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 7
Exp. 8
Exp. 9
Pointing Maneuver
Exp. 10
Exp. 11
Exp. 12
Reconfig
Unused Orbital Visibility = 20
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14073, Pegasus-B (05), implementation Fri Sep 04 01:01:53 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: BETWEEN 01-OCT-2015 AND 30-OCT-2015; BETWEEN 22-FEB-2016 AND 29-FEB-2016; BETWEEN 26-MAR-2016 AND 03-APR-2016; BETWEEN 10-SEP-2015 AND 18-SEP-2015

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	PEGASUS-B	RA: 23 28 41.4270 (352.1726125d) Dec: +14 44 41.16 (14.74477d) Equinox: J2000		V=20+/-0.5	Reference Frame: ICRS

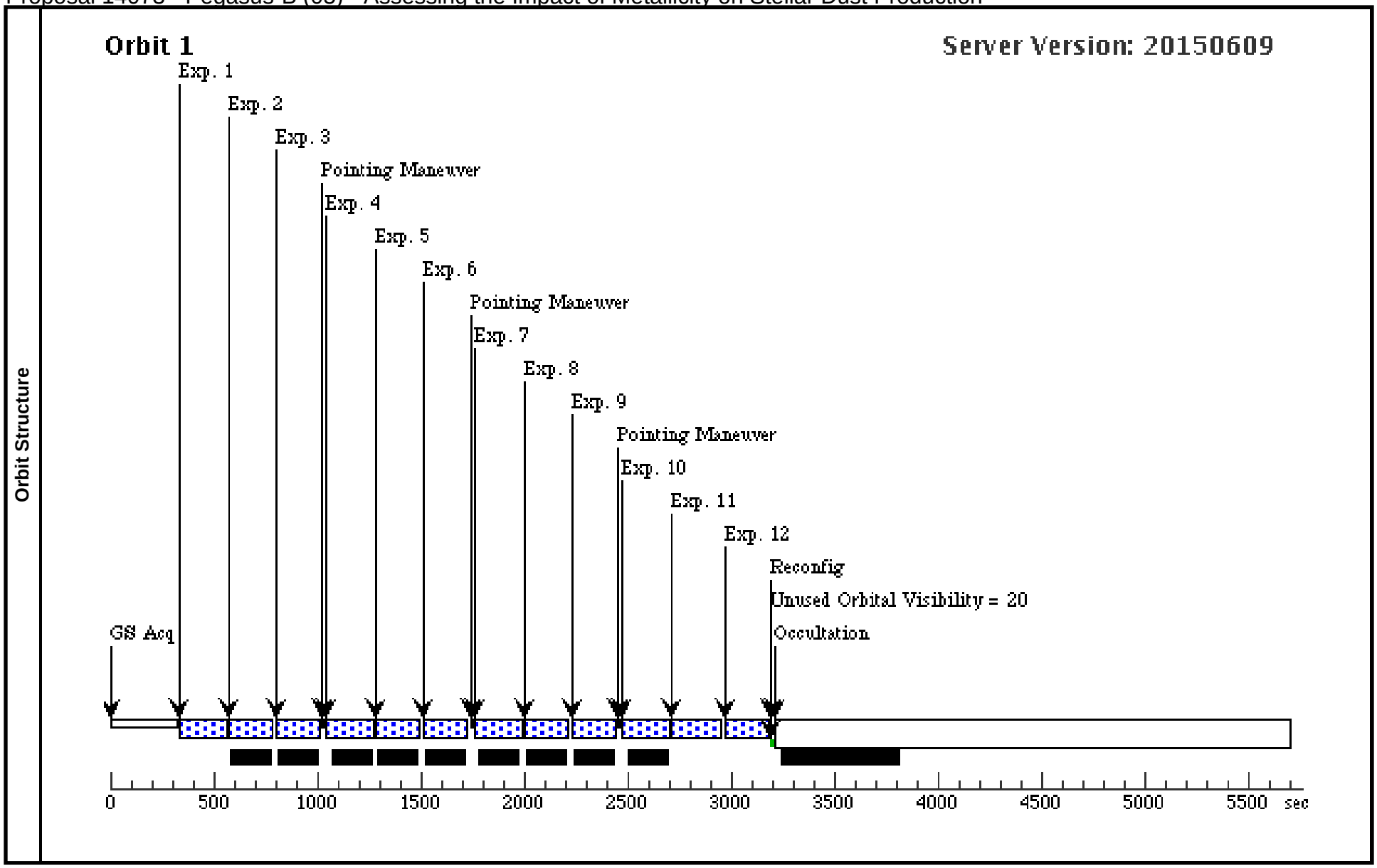
Comments: This is a star field, with a wide range of V-mags. The brightest star in an adjacent HST optical field is about V=20 mag. The stars of interest to this program range from approximately V=21-26 mag.

Constraints ensure HST observations of this target within 20 days (preferably 15 days) of Spitzer
Spitzer timing constraint windows for Pegasus:
10-Sep-2015 to 18-Sep-2015
13-Oct-2015 to 22-Oct-2015
22-Feb-2016 to 29-Feb-2016
26-Mar-2016 to 03-Apr-2016

There is only one corresponding Spitzer field for both PEGASUS-A and PEGASUS-B, it's referred to as DDO216 in the Spitzer Program.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M	(5) PEGASUS-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	GS ACQ SCENARIO BASE1B3		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
2	F139M	(5) PEGASUS-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	*[1]*
3	F153M	(5) PEGASUS-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	*[1]*
4	F139M - offset1	(5) PEGASUS-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
5	F153M - offset1	(5) PEGASUS-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
6	F127M - offset1	(5) PEGASUS-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
7	F153M - offset2	(5) PEGASUS-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
8	F127M - offset2	(5) PEGASUS-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
9	F139M - offset2	(5) PEGASUS-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
10	F127M - offset3	(5) PEGASUS-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG -0.203,0.303		199.231 Secs (199.231 Secs) *[==>]*	*[1]*
11	F139M - offset3	(5) PEGASUS-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=SPARS25; NSAMP=10	POS TARG -0.203,0.303		227.936926 Secs (227.937 Secs) *[==>]*	*[1]*
12	F153M - offset3	(5) PEGASUS-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG -0.203,0.303		199.231 Secs (199.231 Secs) *[==>]*	*[1]*


Orbit 1
Server Version: 20150609
Orbit Structure
Exp. 1
Exp. 2
Exp. 3
Pointing Maneuver
Exp. 4
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 7
Exp. 8
Exp. 9
Pointing Maneuver
Exp. 10
Exp. 11
Exp. 12
Reconfig
Unused Orbital Visibility = 20
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14073, SexB-A (06), implementation Fri Sep 04 01:01:53 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: BETWEEN 06-FEB-2016 AND 27-FEB-2016; BETWEEN 14-MAR-2016 AND 09-APR-2016

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	SEXTANSB-A	RA: 10 00 2.4927 (150.0103862d) Dec: +05 19 38.36 (5.32732d) Equinox: J2000		V=20+/-0.5	Reference Frame: ICRS

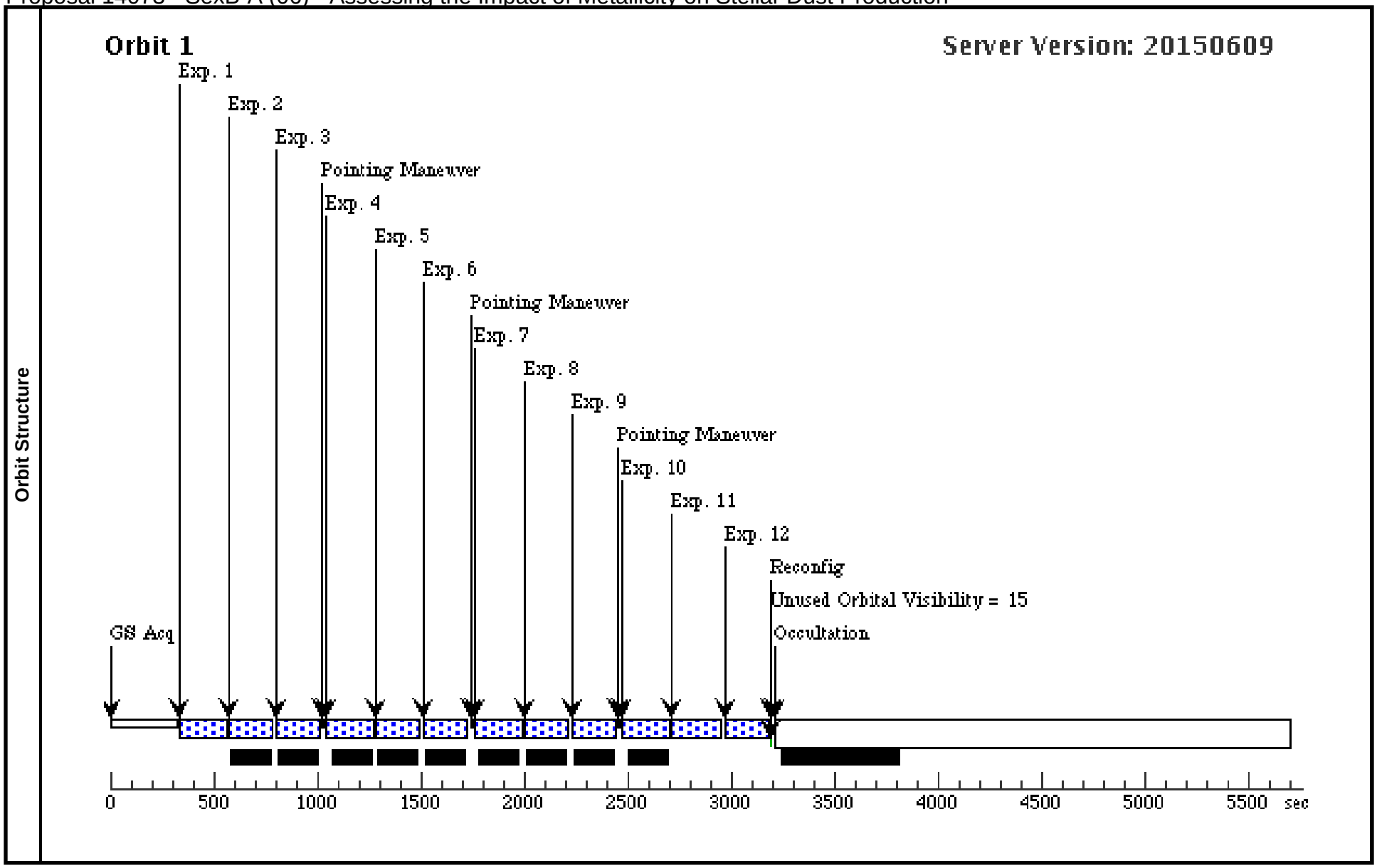
Comments: This is a star field, with a wide range of V-mags. The brightest star in an adjacent HST optical field is about B=20 mag (F606W). The stars of interest to this program range from approximately V=21-26 mag.

Constraints ensure HST observations of this target within 20 days (preferably 15 days) of Spitzer
Spitzer timing constraint windows for Sextans B:
17-Feb-2016 to 23-Feb-2016
22-Mar-2016 to 28-Mar-2016

There is only one corresponding Spitzer field for both SEXTANSB-A and SEXTANSB-B, it's referred to as SextansB in the Spitzer Program.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M	(6) SEXTANSB-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
2	F139M	(6) SEXTANSB-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
3	F153M	(6) SEXTANSB-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
4	F139M - offset1	(6) SEXTANSB-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
5	F153M - offset1	(6) SEXTANSB-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
6	F127M - offset1	(6) SEXTANSB-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
7	F153M - offset2	(6) SEXTANSB-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
8	F127M - offset2	(6) SEXTANSB-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
9	F139M - offset2	(6) SEXTANSB-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
10	F127M - offset3	(6) SEXTANSB-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG -0.203,0.303		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
11	F139M - offset3	(6) SEXTANSB-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=SPARS25; NSAMP=10	POS TARG -0.203,0.303		227.936926 Secs (227.937 Secs) *[==>]*	 ***[1]***
12	F153M - offset3	(6) SEXTANSB-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG -0.203,0.303		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20150609
Exp. 1
Exp. 2
Exp. 3
Pointing Maneuver
Exp. 4
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 7
Exp. 8
Exp. 9
Pointing Maneuver
Exp. 10
Exp. 11
Exp. 12
Reconfig
Unused Orbital Visibility = 15
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14073, SexB-B (07), implementation Fri Sep 04 01:01:54 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: BETWEEN 06-FEB-2016 AND 27-FEB-2016; BETWEEN 14-MAR-2016 AND 09-APR-2016

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	SEXTANSB-B	RA: 09 59 53.0020 (149.9708417d) Dec: +05 20 0.84 (5.33357d) Equinox: J2000		V=20+/-0.5	Reference Frame: ICRS

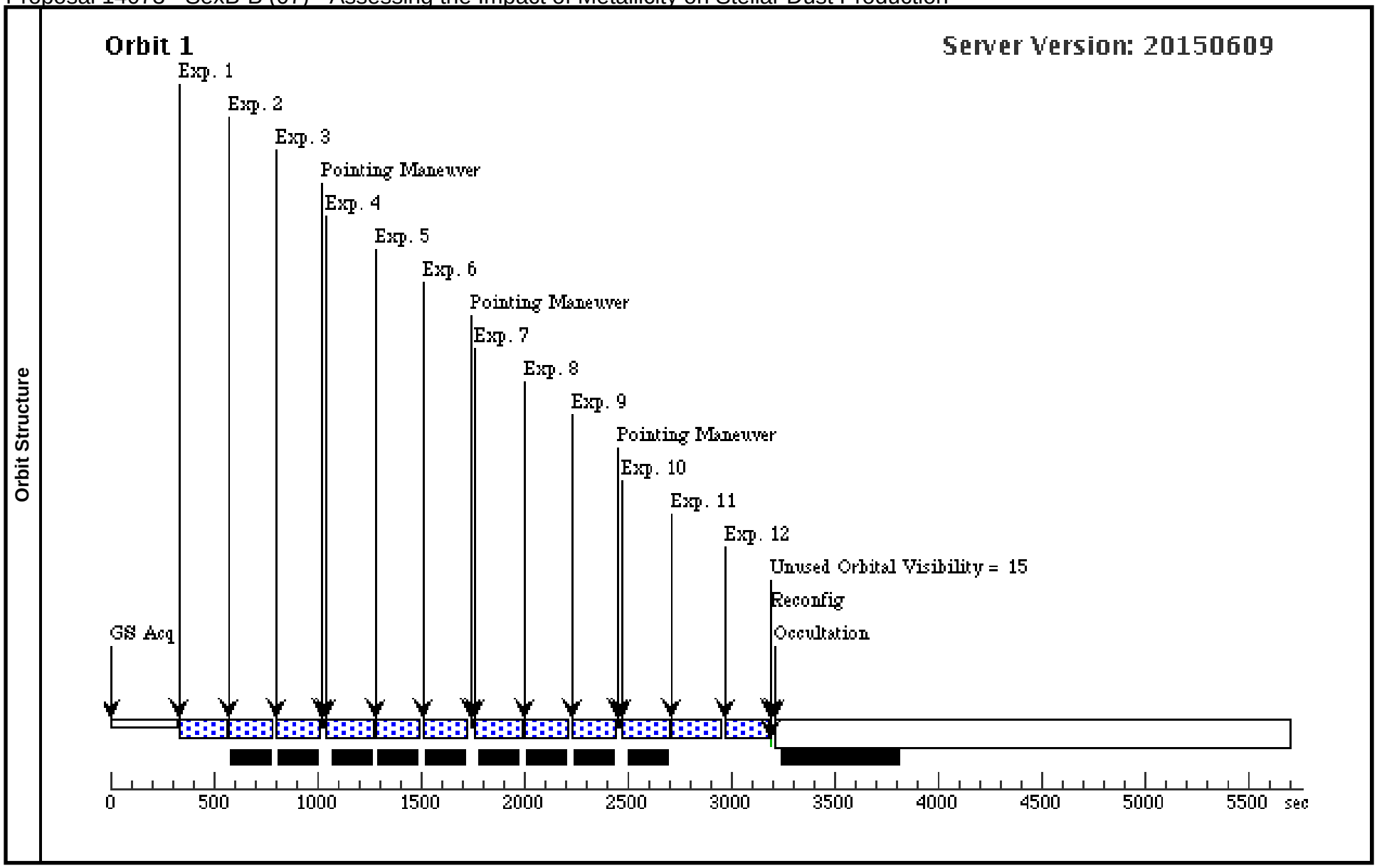
Comments: This is a star field, with a wide range of V-mags. The brightest star in an adjacent HST optical field is about B=20 mag (F606W). The stars of interest to this program range from approximately V=21-26 mag.

Constraints ensure HST observations of this target within 20 days (preferably 15 days) of Spitzer
Spitzer timing constraint windows for Sextans B:
17-Feb-2016 to 23-Feb-2016
22-Mar-2016 to 28-Mar-2016

There is only one corresponding Spitzer field for both SEXTANSB-A and SEXTANSB-B, it's referred to as SextansB in the Spitzer Program.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M	(7) SEXTANSB-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
2	F139M	(7) SEXTANSB-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
3	F153M	(7) SEXTANSB-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
4	F139M - offset1	(7) SEXTANSB-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
5	F153M - offset1	(7) SEXTANSB-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
6	F127M - offset1	(7) SEXTANSB-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
7	F153M - offset2	(7) SEXTANSB-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
8	F127M - offset2	(7) SEXTANSB-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
9	F139M - offset2	(7) SEXTANSB-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
10	F127M - offset3	(7) SEXTANSB-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG -0.203,0.303		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
11	F139M - offset3	(7) SEXTANSB-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=SPARS25; NSAMP=10	POS TARG -0.203,0.303		227.936926 Secs (227.937 Secs) *[==>]*	 ***[1]***
12	F153M - offset3	(7) SEXTANSB-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG -0.203,0.303		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***


Orbit 1
Server Version: 20150609
Orbit Structure
Exp. 1
Exp. 2
Exp. 3
Pointing Maneuver
Exp. 4
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 7
Exp. 8
Exp. 9
Pointing Maneuver
Exp. 10
Exp. 11
Exp. 12
Unused Orbital Visibility = 15
Reconfig
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14073, NGC147-A (08), implementation Fri Sep 04 01:01:54 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: BETWEEN 06-OCT-2015 AND 30-OCT-2015; BETWEEN 18-NOV-2015 AND 10-DEC-2015; BETWEEN 14-MAR-2016 AND 30-MAR-2016; BETWEEN 26-APR-2016 AND 08-MAY-2016

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(9)	N147-A	RA: 00 32 41.8946 (8.1745608d) Dec: +48 32 44.21 (48.54561d) Equinox: J2000		V=20+/-0.5	Reference Frame: ICRS

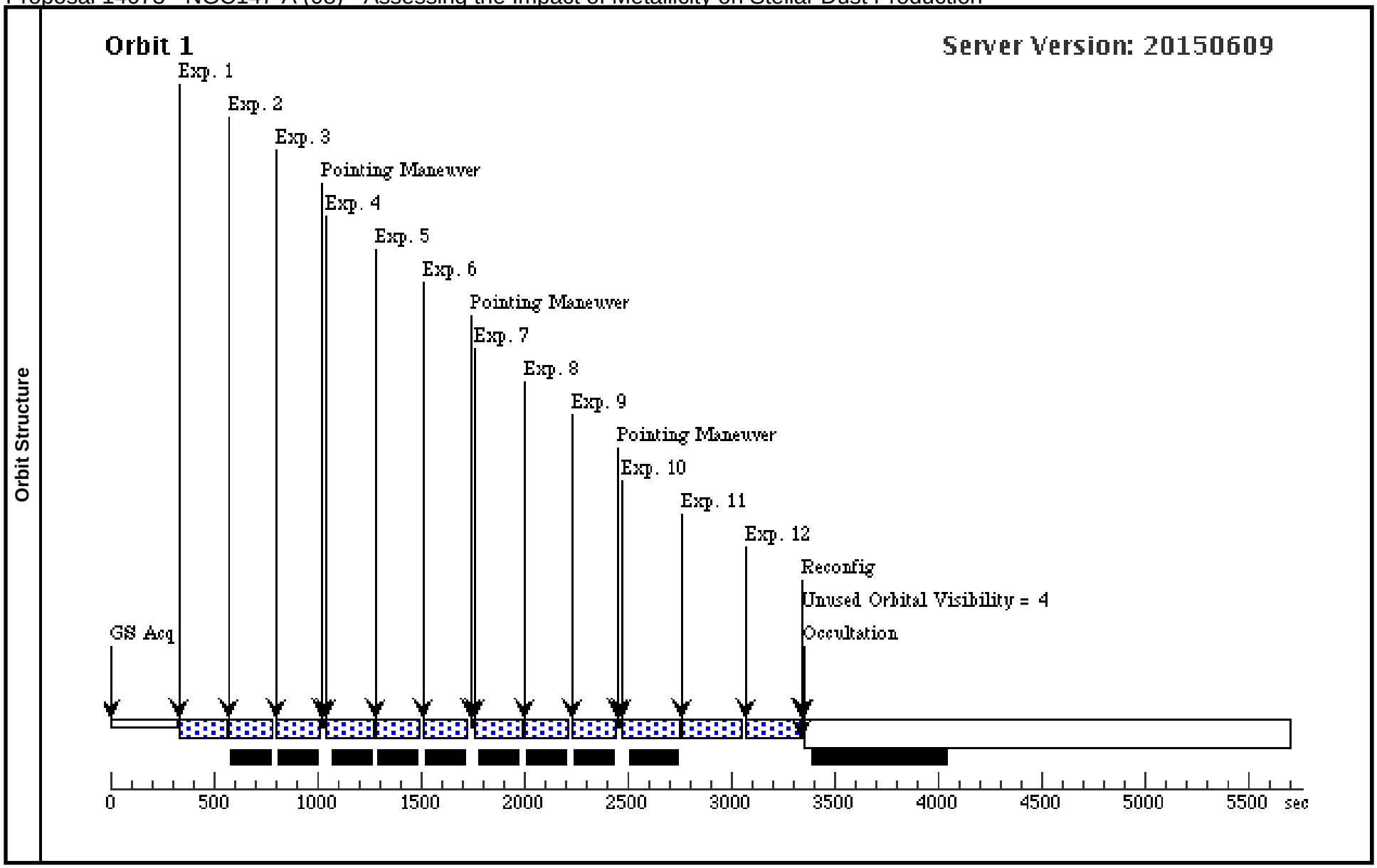
Comments: This is a star field, with a wide range of V-mags. The brightest star in an adjacent HST optical field is about V=20 mag. The stars of interest to this program range from approximately V=21-26 mag.

Constraints ensure HST observations of this target within 20 days (preferably 15 days) of Spitzer
Spitzer timing constraint windows for NGC 147:
11-Oct-2015 to 24-Oct-2015
22-Nov-2015 to 04-Dec-2015
17-Mar-2016 to 30-Mar-2016
26-Apr-2016 to 08-May-2016

The corresponding Spitzer field is called NGC147-A in that program.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M	(9) N147-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
2	F139M	(9) N147-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
3	F153M	(9) N147-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
4	F139M - offset1	(9) N147-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
5	F153M - offset1	(9) N147-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
6	F127M - offset1	(9) N147-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
7	F153M - offset2	(9) N147-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
8	F127M - offset2	(9) N147-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
9	F139M - offset2	(9) N147-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
10	F127M - offset3	(9) N147-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP50; NSAMP=10	POS TARG -0.203,0.303		249.23203 Secs (249.232 Secs) *[==>]*	 ***[1]***
11	F139M - offset3	(9) N147-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=SPARS25; NSAMP=12	POS TARG -0.203,0.303		277.937956 Secs (277.938 Secs) *[==>]*	 ***[1]***
12	F153M - offset3	(9) N147-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP50; NSAMP=10	POS TARG -0.203,0.303		249.23203 Secs (249.232 Secs) *[==>]*	 ***[1]***


Orbit 1
Server Version: 20150609
Orbit Structure
Exp. 1
Exp. 2
Exp. 3
Pointing Maneuver
Exp. 4
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 7
Exp. 8
Exp. 9
Pointing Maneuver
Exp. 10
Exp. 11
Exp. 12
Reconfig
Unused Orbital Visibility = 4
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14073, NGC147-B (09), implementation Fri Sep 04 01:01:54 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: BETWEEN 06-OCT-2015 AND 30-OCT-2015; BETWEEN 18-NOV-2015 AND 10-DEC-2015; BETWEEN 14-MAR-2016 AND 30-MAR-2016; BETWEEN 26-APR-2016 AND 08-MAY-2016

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	N147-B	RA: 00 33 24.9290 (8.3538708d) Dec: +48 32 40.26 (48.54452d) Equinox: J2000		V=20+/-0.5	Reference Frame: ICRS

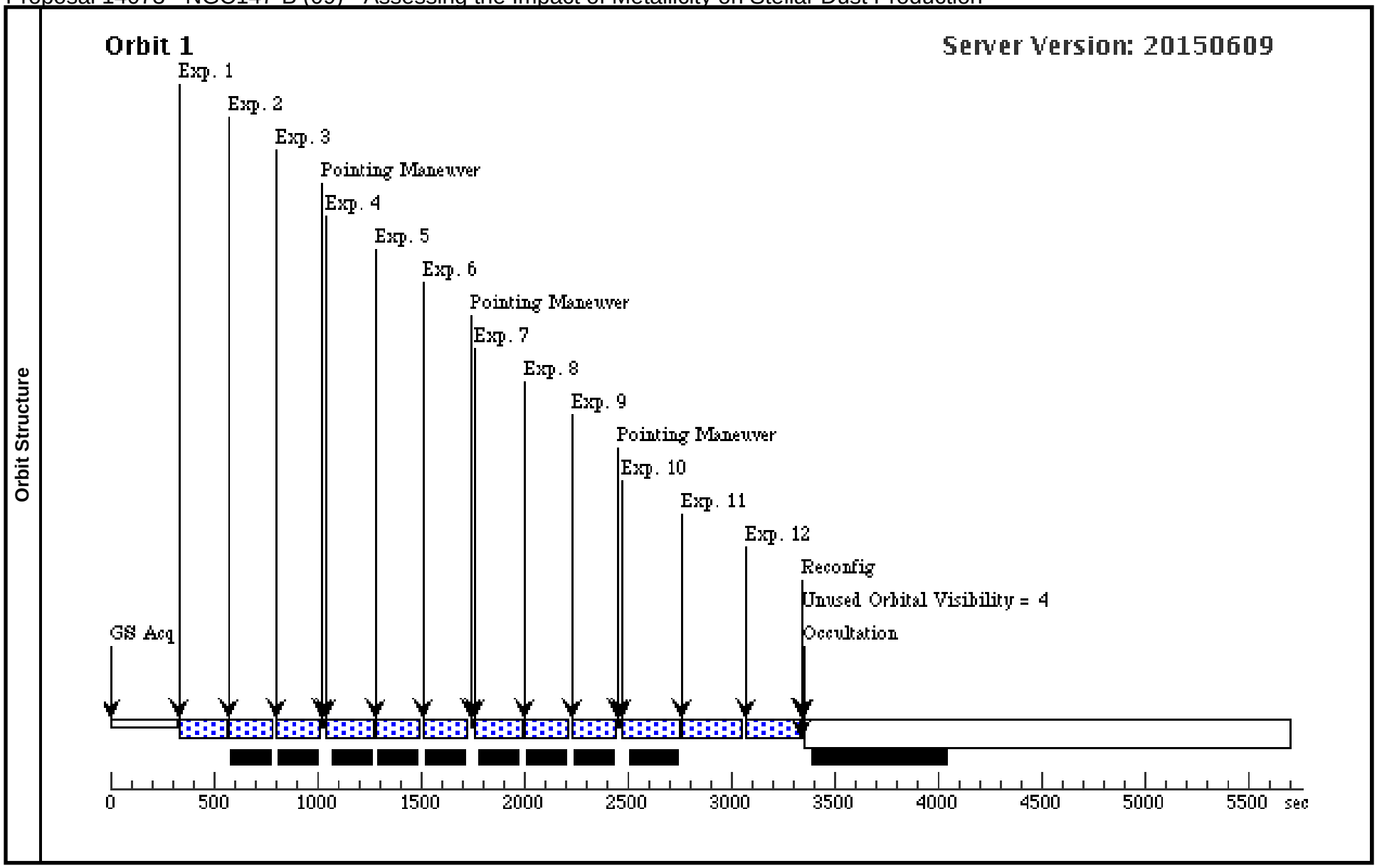
Comments: This is a star field, with a wide range of V-mags. The brightest star in an adjacent HST optical field is about V=20 mag. The stars of interest to this program range from approximately V=21-26 mag.

Constraints ensure HST observations of this target within 20 days (preferably 15 days) of Spitzer
Spitzer timing constraint windows for NGC 147:
11-Oct-2015 to 24-Oct-2015
22-Nov-2015 to 04-Dec-2015
17-Mar-2016 to 30-Mar-2016
26-Apr-2016 to 08-May-2016

The corresponding Spitzer field is called NGC147-B in that program.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M	(8) N147-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs)	
								[==>]	***[1]***
2	F139M	(8) N147-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs)	
								[==>]	***[1]***
3	F153M	(8) N147-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs)	
								[==>]	***[1]***
4	F139M - offset1	(8) N147-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs)	
								[==>]	***[1]***
5	F153M - offset1	(8) N147-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs)	
								[==>]	***[1]***
6	F127M - offset1	(8) N147-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs)	
								[==>]	***[1]***
7	F153M - offset2	(8) N147-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs)	
								[==>]	***[1]***
8	F127M - offset2	(8) N147-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs)	
								[==>]	***[1]***
9	F139M - offset2	(8) N147-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs)	
								[==>]	***[1]***
10	F127M - offset3	(8) N147-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP50; NSAMP=10	POS TARG -0.203,0.303		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***
11	F139M - offset3	(8) N147-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=SPARS25; NSAMP=12	POS TARG -0.203,0.303		277.937956 Secs (277.938 Secs)	
								[==>]	***[1]***
12	F153M - offset3	(8) N147-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP50; NSAMP=10	POS TARG -0.203,0.303		249.23203 Secs (249.232 Secs)	
								[==>]	***[1]***


Orbit 1
Server Version: 20150609
Orbit Structure
Exp. 1
Exp. 2
Exp. 3
Pointing Maneuver
Exp. 4
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 7
Exp. 8
Exp. 9
Pointing Maneuver
Exp. 10
Exp. 11
Exp. 12
Reconfig
Unused Orbital Visibility = 4
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14073, NGC147-C (10), implementation Fri Sep 04 01:01:54 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: BETWEEN 06-OCT-2015 AND 30-OCT-2015; BETWEEN 18-NOV-2015 AND 10-DEC-2015; BETWEEN 14-MAR-2016 AND 30-MAR-2016; BETWEEN 26-APR-2016 AND 08-MAY-2016

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(10)	N147-C	RA: 00 33 8.1437 (8.2839321d) Dec: +48 29 12.66 (48.48685d) Equinox: J2000		V=20+/-0.5	Reference Frame: ICRS

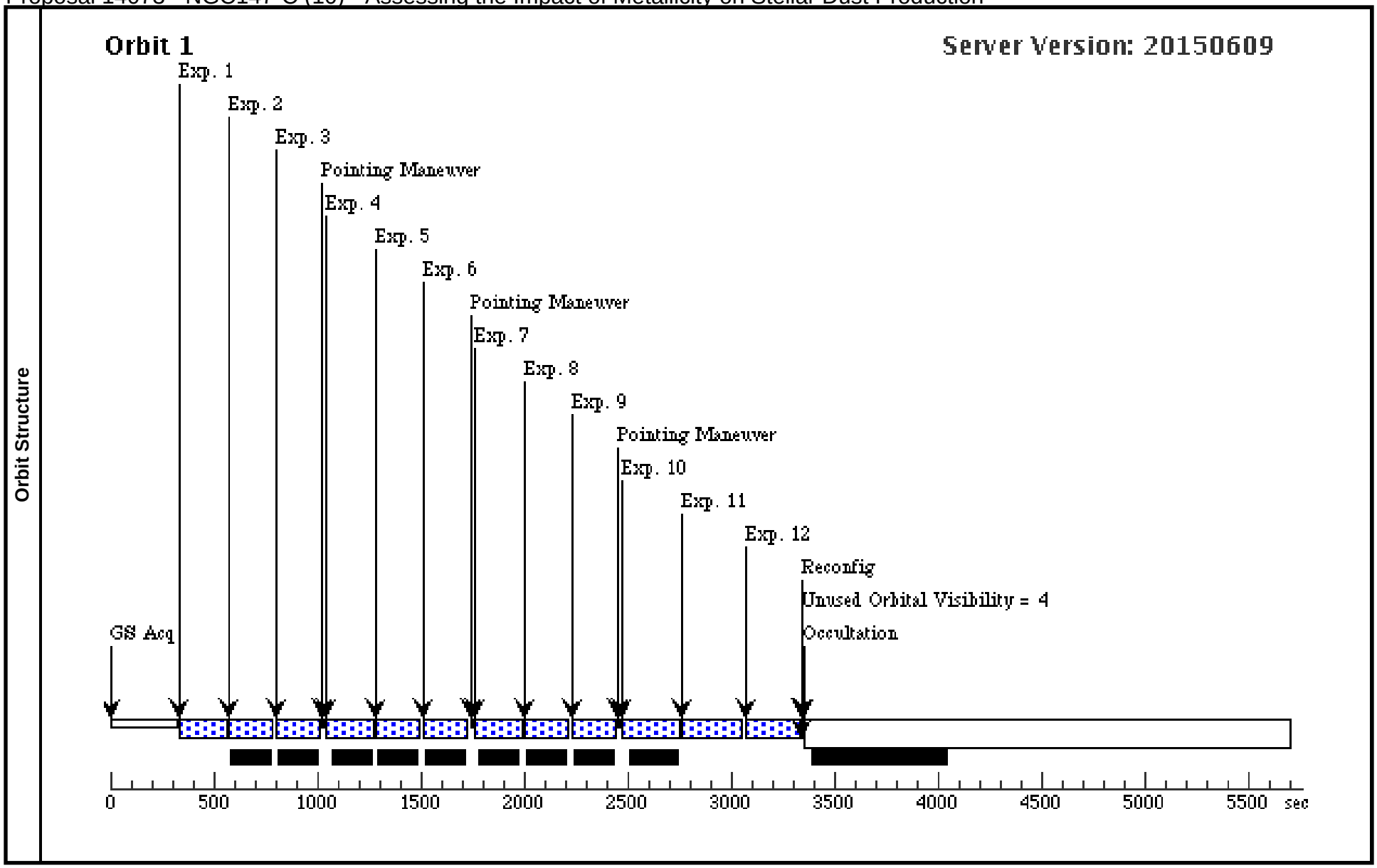
Comments: This is a star field, with a wide range of V-mags. The brightest star in an adjacent HST optical field is about V=20 mag. The stars of interest to this program range from approximately V=21-26 mag.

Constraints ensure HST observations of this target within 20 days (preferably 15 days) of Spitzer
Spitzer timing constraint windows for NGC 147:
11-Oct-2015 to 24-Oct-2015
22-Nov-2015 to 04-Dec-2015
17-Mar-2016 to 30-Mar-2016
26-Apr-2016 to 08-May-2016

The corresponding Spitzer field is called NGC147-C in that program.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M	(10) N147-C	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
2	F139M	(10) N147-C	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
3	F153M	(10) N147-C	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
4	F139M - offset1	(10) N147-C	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
5	F153M - offset1	(10) N147-C	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
6	F127M - offset1	(10) N147-C	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
7	F153M - offset2	(10) N147-C	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
8	F127M - offset2	(10) N147-C	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
9	F139M - offset2	(10) N147-C	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
10	F127M - offset3	(10) N147-C	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP50; NSAMP=10	POS TARG -0.203,0.303		249.23203 Secs (249.232 Secs) *[==>]*	 ***[1]***
11	F139M - offset3	(10) N147-C	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=SPARS25; NSAMP=12	POS TARG -0.203,0.303		277.937956 Secs (277.938 Secs) *[==>]*	 ***[1]***
12	F153M - offset3	(10) N147-C	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP50; NSAMP=10	POS TARG -0.203,0.303		249.23203 Secs (249.232 Secs) *[==>]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20150609
Exp. 1
Exp. 2
Exp. 3
Pointing Maneuver
Exp. 4
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 7
Exp. 8
Exp. 9
Pointing Maneuver
Exp. 10
Exp. 11
Exp. 12
Reconfig
Unused Orbital Visibility = 4
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Proposal 14073 - SexA-A (11) - Assessing the Impact of Metallicity on Stellar Dust Production

Visit

Proposal 14073, SexA-A (11), implementation Fri Sep 04 01:01:54 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: BETWEEN 23-FEB-2016 AND 29-FEB-2016; BETWEEN 06-MAR-2016 AND 15-APR-2016

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(11)	SEXTANSA-A	RA: 10 10 55.2016 (152.7300067d) Dec: -04 40 56.64 (-4.68240d) Equinox: J2000		V=19.5+/-0.5	Reference Frame: ICRS

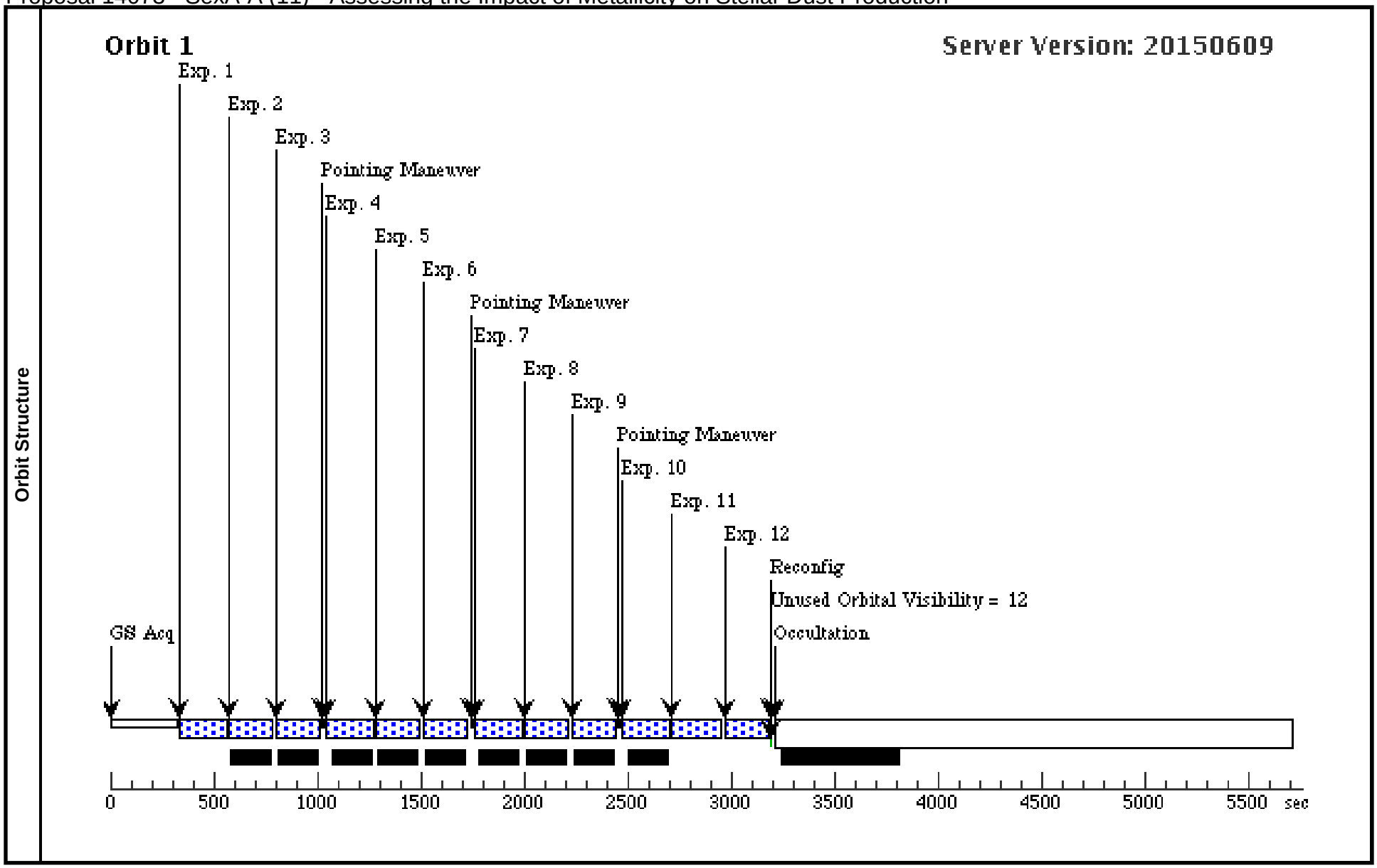
Comments: This is a star field, with a wide range of V-mags. The brightest star in an adjacent HST optical field is about V=20 mag. The stars of interest to this program range from approximately V=21-26 mag.

Constraints ensure HST observations of this target within 20 days (preferably 15 days) of Spitzer
Spitzer timing constraint windows for Sextans A:
23-Feb-2016 to 29-Feb-2016
29-Mar-2016 to 04-Apr-2016

There is only one corresponding Spitzer field for both SEXTANSA-A and SEXTANSA-B, it's referred to as SextansA in the Spitzer Program.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M	(11) SEXTANSA-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	GS ACQ SCENARIO BASE1B3		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
2	F139M	(11) SEXTANSA-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
3	F153M	(11) SEXTANSA-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
4	F139M - offset1	(11) SEXTANSA-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
5	F153M - offset1	(11) SEXTANSA-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
6	F127M - offset1	(11) SEXTANSA-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
7	F153M - offset2	(11) SEXTANSA-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
8	F127M - offset2	(11) SEXTANSA-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
9	F139M - offset2	(11) SEXTANSA-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
10	F127M - offset3	(11) SEXTANSA-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG -0.203,0.303		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
11	F139M - offset3	(11) SEXTANSA-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=SPARS25; NSAMP=10	POS TARG -0.203,0.303		227.936926 Secs (227.937 Secs) *[==>]*	 ***[1]***
12	F153M - offset3	(11) SEXTANSA-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG -0.203,0.303		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20150609
Exp. 1
Exp. 2
Exp. 3
Pointing Maneuver
Exp. 4
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 7
Exp. 8
Exp. 9
Pointing Maneuver
Exp. 10
Exp. 11
Exp. 12
Reconfig
Unused Orbital Visibility = 12
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14073, SexA-B (12), implementation Fri Sep 04 01:01:54 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: BETWEEN 23-FEB-2016 AND 29-FEB-2016; BETWEEN 06-MAR-2016 AND 15-APR-2016

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(12)	SEXTANSA-B	RA: 10 10 58.9128 (152.7454700d) Dec: -04 42 51.65 (-4.71435d) Equinox: J2000		V=19.5+/-0.5	Reference Frame: ICRS

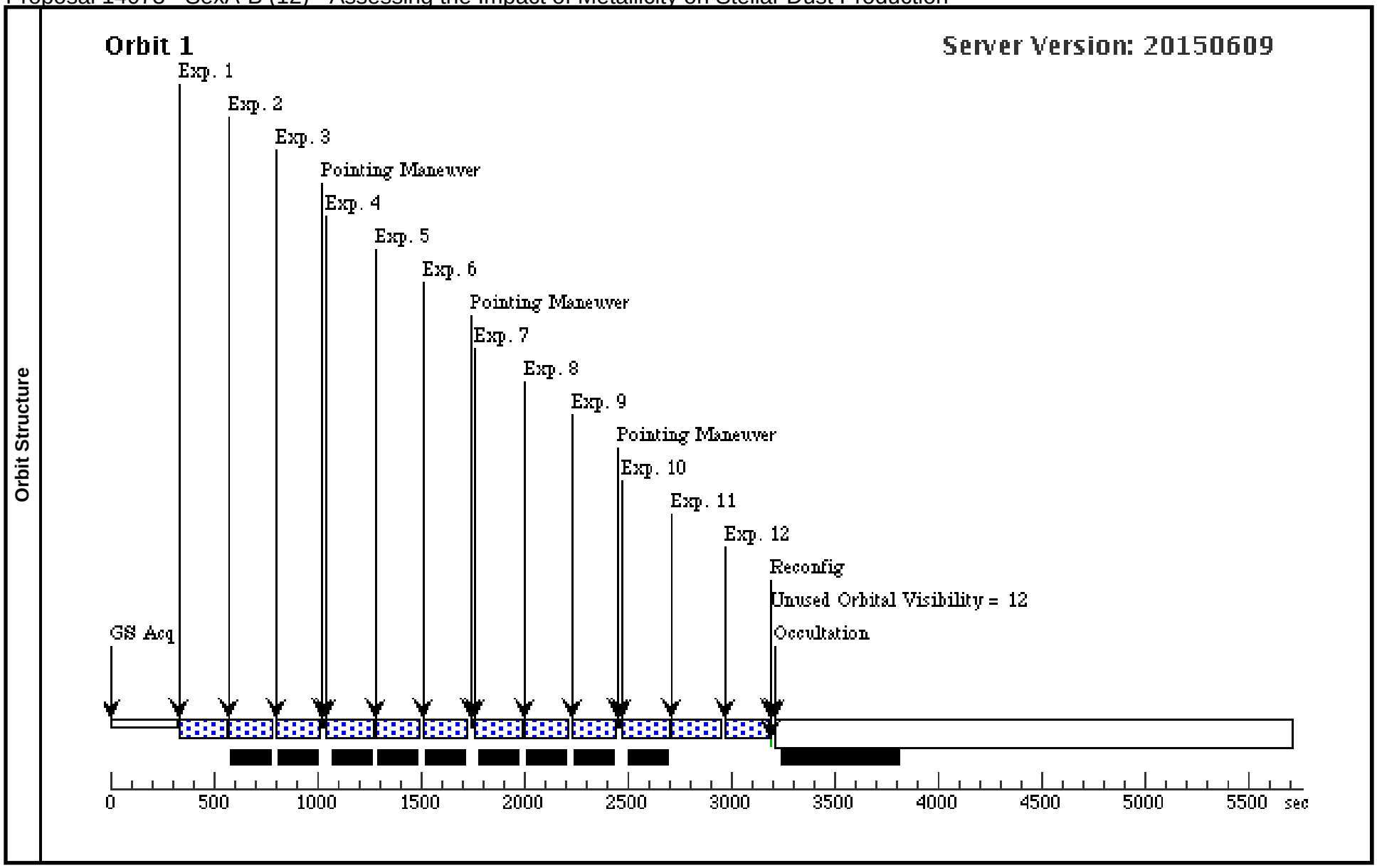
Comments: This is a star field, with a wide range of V-mags. The brightest star in an adjacent HST optical field is about V=20 mag. The stars of interest to this program range from approximately V=21-26 mag.

Constraints ensure HST observations of this target within 20 days (preferably 15 days) of Spitzer
Spitzer timing constraint windows for Sextans A:
23-Feb-2016 to 29-Feb-2016
29-Mar-2016 to 04-Apr-2016

There is only one corresponding Spitzer field for both SEXTANSA-A and SEXTANSA-B, it's referred to as SextansA in the Spitzer Program.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M	(12) SEXTANSA-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	GS ACQ SCENARIO BASE1B3		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
2	F139M	(12) SEXTANSA-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
3	F153M	(12) SEXTANSA-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
4	F139M - offset1	(12) SEXTANSA-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
5	F153M - offset1	(12) SEXTANSA-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
6	F127M - offset1	(12) SEXTANSA-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
7	F153M - offset2	(12) SEXTANSA-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
8	F127M - offset2	(12) SEXTANSA-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
9	F139M - offset2	(12) SEXTANSA-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
10	F127M - offset3	(12) SEXTANSA-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG -0.203,0.303		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
11	F139M - offset3	(12) SEXTANSA-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=SPARS25; NSAMP=10	POS TARG -0.203,0.303		227.936926 Secs (227.937 Secs) *[==>]*	 ***[1]***
12	F153M - offset3	(12) SEXTANSA-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG -0.203,0.303		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20150609
Exp. 1
Exp. 2
Exp. 3
Pointing Maneuver
Exp. 4
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 7
Exp. 8
Exp. 9
Pointing Maneuver
Exp. 10
Exp. 11
Exp. 12
Reconfig
Unused Orbital Visibility = 12
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14073, SagDIG-A (13), implementation Fri Sep 04 01:01:54 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: BETWEEN 14-DEC-2015 AND 19-DEC-2015; BETWEEN 19-JAN-2016 AND 24-JAN-2016; BETWEEN 01-JUL-2016 AND 30-AUG-2016

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(13)	SAGDIG-A	RA: 19 29 48.0740 (292.4503083d) Dec: -17 39 59.21 (-17.66645d) Equinox: J2000		V=19.5+/-0.5	Reference Frame: ICRS

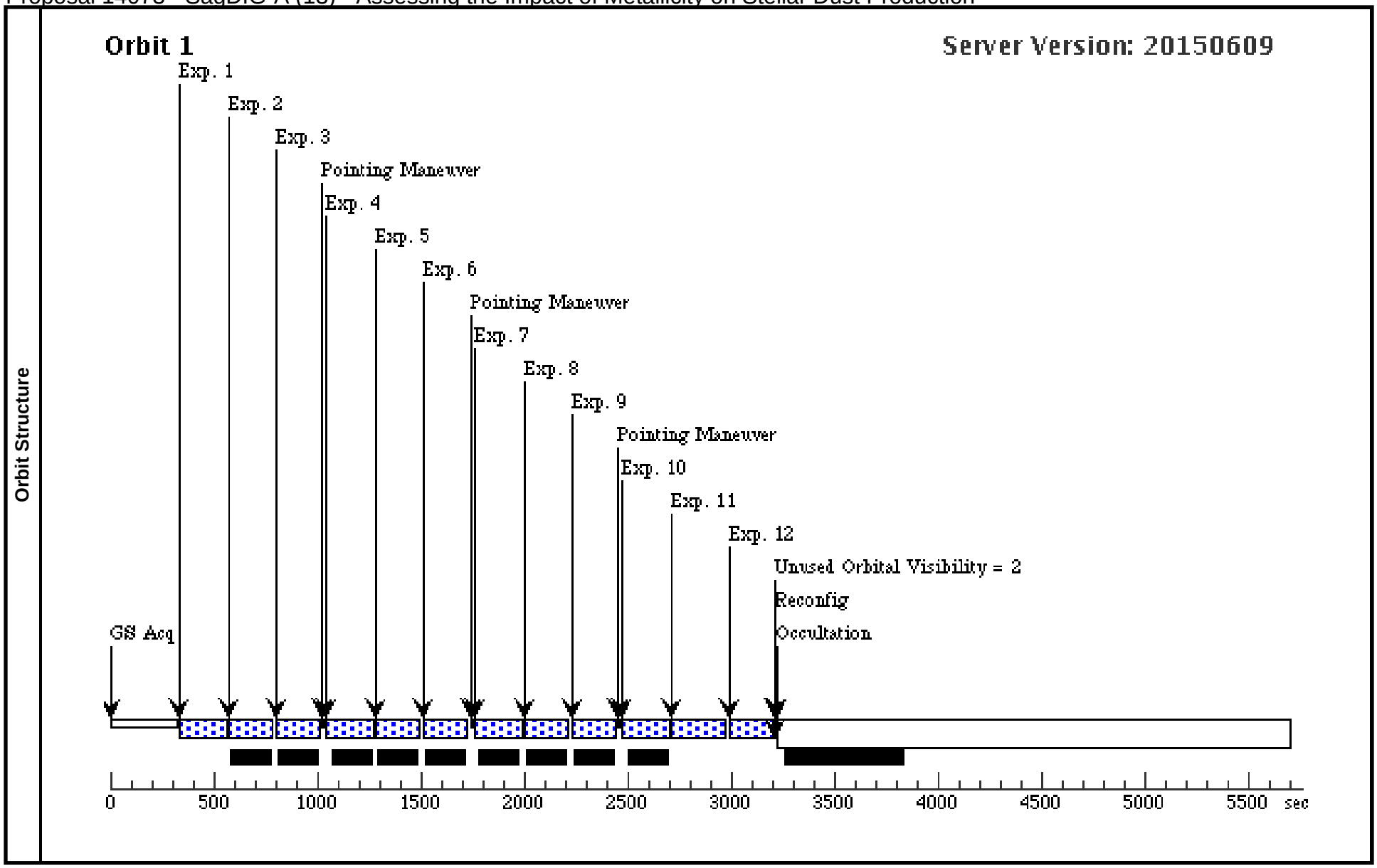
Comments: This is a star field, with a wide range of V-mags. The brightest star in an adjacent HST optical field is about B=19 mag (F606W). The stars of interest to this program range from approximately V=21-26 mag.

Constraints ensure HST observations of this target within 20 days (preferably 15 days) of Spitzer
Spitzer timing constraint windows for Sag DIG:
14-Dec-2015 to 19-Dec-2015
19-Jan-2016 to 24-Jan-2016
10-Jul-2016 to 15-Jul-2016
14-Aug-2016 to 19-Aug-2016

There is only one corresponding Spitzer field for both SAGDIG-A and SAGDIG-B, it's referred to as SagDIG in the Spitzer Program.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M	(13) SAGDIG-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
2	F139M	(13) SAGDIG-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
3	F153M	(13) SAGDIG-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
4	F139M - offset1	(13) SAGDIG-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
5	F153M - offset1	(13) SAGDIG-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
6	F127M - offset1	(13) SAGDIG-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
7	F153M - offset2	(13) SAGDIG-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
8	F127M - offset2	(13) SAGDIG-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
9	F139M - offset2	(13) SAGDIG-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
10	F127M - offset3	(13) SAGDIG-A	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG -0.203,0.303		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
11	F139M - offset3	(13) SAGDIG-A	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP50; NSAMP=10	POS TARG -0.203,0.303		249.23203 Secs (249.232 Secs) *[==>]*	 ***[1]***
12	F153M - offset3	(13) SAGDIG-A	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG -0.203,0.303		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***


Orbit 1
Server Version: 20150609
Orbit Structure
Exp. 1
Exp. 2
Exp. 3
Pointing Maneuver
Exp. 4
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 7
Exp. 8
Exp. 9
Pointing Maneuver
Exp. 10
Exp. 11
Exp. 12
Unused Orbital Visibility = 2
Reconfig
Occultation
GS Acq
0
500
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3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14073, SagDIG-B (14), implementation Fri Sep 04 01:01:55 GMT 2015

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: BETWEEN 14-DEC-2015 AND 19-DEC-2015; BETWEEN 19-JAN-2016 AND 24-JAN-2016; BETWEEN 01-JUL-2016 AND 30-AUG-2016

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(14)	SAGDIG-B	RA: 19 29 58.0410 (292.4918375d) Dec: -17 41 7.73 (-17.68548d) Equinox: J2000		V=19+/-0.5	Reference Frame: ICRS

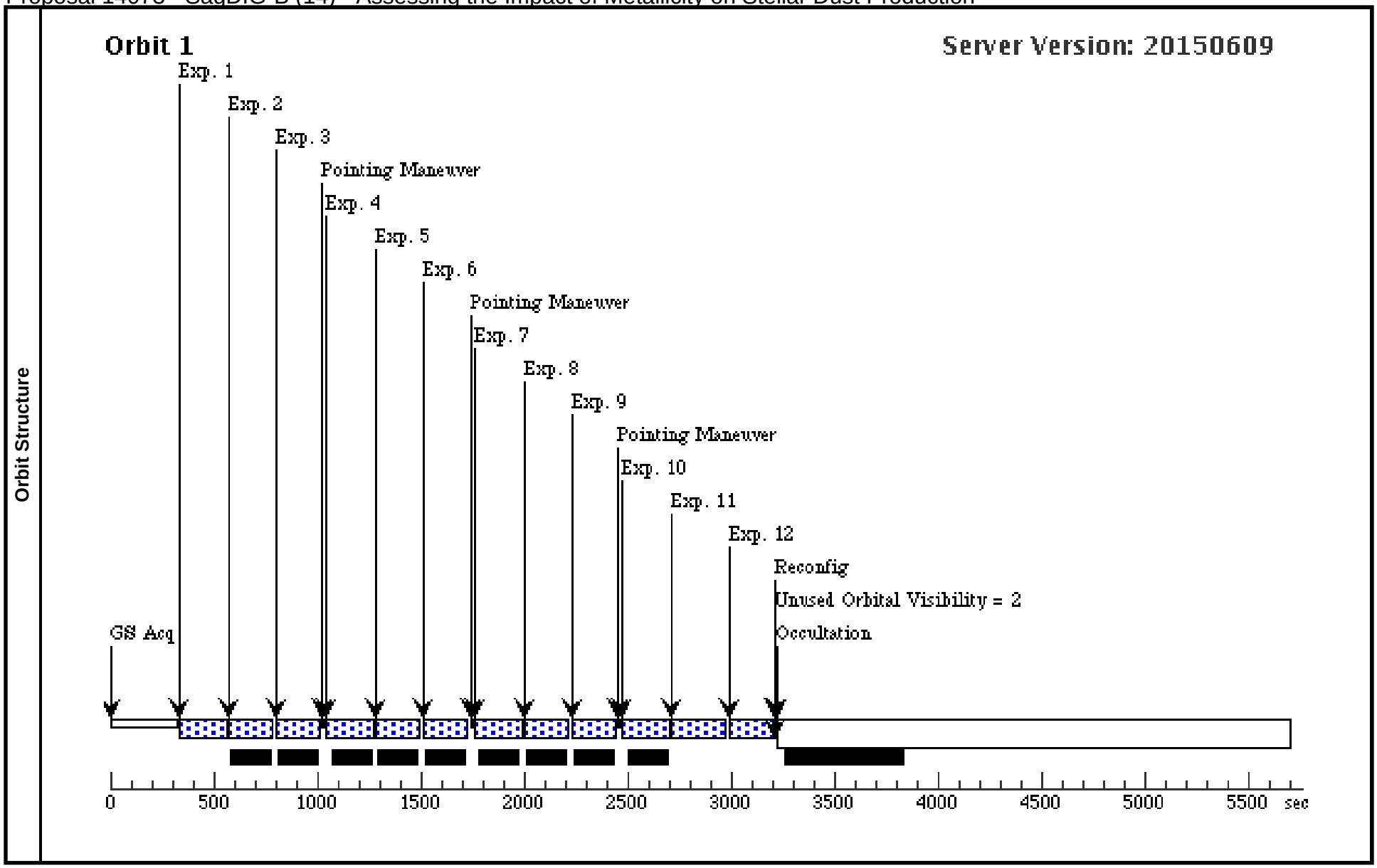
Comments: This is a star field, with a wide range of V-mags. The brightest star in an adjacent HST optical field is about B=19 mag (F606W). The stars of interest to this program range from approximately V=21-26 mag.

Constraints ensure HST observations of this target within 20 days (preferably 15 days) of Spitzer
Spitzer timing constraint windows for Sag DIG:
14-Dec-2015 to 19-Dec-2015
19-Jan-2016 to 24-Jan-2016
10-Jul-2016 to 15-Jul-2016
14-Aug-2016 to 19-Aug-2016

There is only one corresponding Spitzer field for both SAGDIG-A and SAGDIG-B, it's referred to as SagDIG in the Spitzer Program.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	F127M	(14) SAGDIG-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
2	F139M	(14) SAGDIG-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
3	F153M	(14) SAGDIG-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8			199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
4	F139M - offset1	(14) SAGDIG-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
5	F153M - offset1	(14) SAGDIG-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
6	F127M - offset1	(14) SAGDIG-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.542,0.182		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
7	F153M - offset2	(14) SAGDIG-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
8	F127M - offset2	(14) SAGDIG-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
9	F139M - offset2	(14) SAGDIG-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG 0.339,0.485		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
10	F127M - offset3	(14) SAGDIG-B	WFC3/IR, MULTIACCUM, IR	F127M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG -0.203,0.303		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***
11	F139M - offset3	(14) SAGDIG-B	WFC3/IR, MULTIACCUM, IR	F139M	SAMP-SEQ=STEP50; NSAMP=10	POS TARG -0.203,0.303		249.23203 Secs (249.232 Secs) *[==>]*	 ***[1]***
12	F153M - offset3	(14) SAGDIG-B	WFC3/IR, MULTIACCUM, IR	F153M	SAMP-SEQ=STEP100; NSAMP=8	POS TARG -0.203,0.303		199.231 Secs (199.231 Secs) *[==>]*	 ***[1]***


Orbit 1
Server Version: 20150609
Orbit Structure
Exp. 1
Exp. 2
Exp. 3
Pointing Maneuver
Exp. 4
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 7
Exp. 8
Exp. 9
Pointing Maneuver
Exp. 10
Exp. 11
Exp. 12
Reconfig
Unused Orbital Visibility = 2
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec