13457 - Accurate Mass Determination of the Nearby Old White Dwarf Stein 2051B through Astrometric Microlensing

Cycle: 21, Proposal Category: GO

(Availability Mode: AVAILABLE)

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?*
01	(1) STEIN-2051B-SOURCE	WFC3/UVIS	1	21-Apr-2014 21:02:14.0	yes
02	(1) STEIN-2051B-SOURCE	WFC3/UVIS	1	21-Apr-2014 21:02:27.0	yes
03	(2) STEIN-2051AB (3) STEIN-2051B-1024	WFC3/UVIS	1	21-Apr-2014 21:02:58.0	yes
04	(1) STEIN-2051B-SOURCE (3) STEIN-2051B-1024 (4) LHS26-SOURCE	WFC3/UVIS	1	21-Apr-2014 21:03:55.0	yes
05	(1) STEIN-2051B-SOURCE (3) STEIN-2051B-1024 (4) LHS26-SOURCE	WFC3/UVIS	1	21-Apr-2014 21:04:49.0	yes
06	(1) STEIN-2051B-SOURCE (4) LHS26-SOURCE	WFC3/UVIS	1	21-Apr-2014 21:05:21.0	yes

6 Total Orbits Used

ABSTRACT

The very nearby and well-known cool white dwarf (WD) Stein 2051B will pass very close to a 19.5-mag background star in March 2014, with an impact parameter of <0.2 arcsec. This affords a unique opportunity for a direct determination of its mass, through measurement of the gravitational deflection of the background star's image.

As it passes in front, Stein 2051B will cause a deflection of the background star's image by ~3 milliarcsec, an amount detectable at the ~10-sigma level with HST/WFC3. The gravitational deflection angle depends only on the distances and relative positions of the stars, and on the mass of the WD. Since the distances and positions can be determined precisely before the event, the astrometric measurement offers a unique and direct method to measure the mass of the WD to high accuracy (<5%).

One key astrophysical prediction for WDs is the existence of a mass-radius relation, which depends primarily on the core composition of the WD. Since the radius of Stein 2051B is known (from its distance, luminosity, and effective temperature), our mass measurement will provide an important addition to the very small number of WDs with well-determined radii and masses. The mass of Stein 2051B is of special interest because it is an old and relatively massive WD.

OBSERVING DESCRIPTION

We need to know accurate locations and proper motions for Stein 2051B and the source star, in order to predict the precise circumstances of the event, including the date and impact parameter. The existing ground-based measurements do not have the 1 mas accuracy needed for these purposes, especially given the 6.5 mas/day proper motion of Stein 2051B. Therefore, we will use direct imaging with WFC3 to determine the astrometric parameters of Stein 2051B, the source star, and the surrounding reference field. These determinations need to be done well in advance of the closest encounter in March 2014, beginning in Cycle 21.

The maximum deflection of the source position that is actually observable occurs just before the images of the two stars become blended (at HST resolution), which happens about 30 days before closest approach (and 30 days after closest approach). So, we need to know the time of closest approach as accurately as possible in order to schedule these two critical observations. Additional observations should be scheduled before and after those critical times, when the deflection is changing most rapidly with time.

Visit

Proposal 13457, Visit 01, completed Tue Apr 22 01:05:37 GMT 2014

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: ORIENT 222.1D TO 228.1 D; BETWEEN 25-MAR-2013 AND 15-OCT-2013

Comments: ORIENT constraints are used to avoid diffraction spikes and bleed columns from Stein 2051A and B falling near the faint source star

Fixed Targets

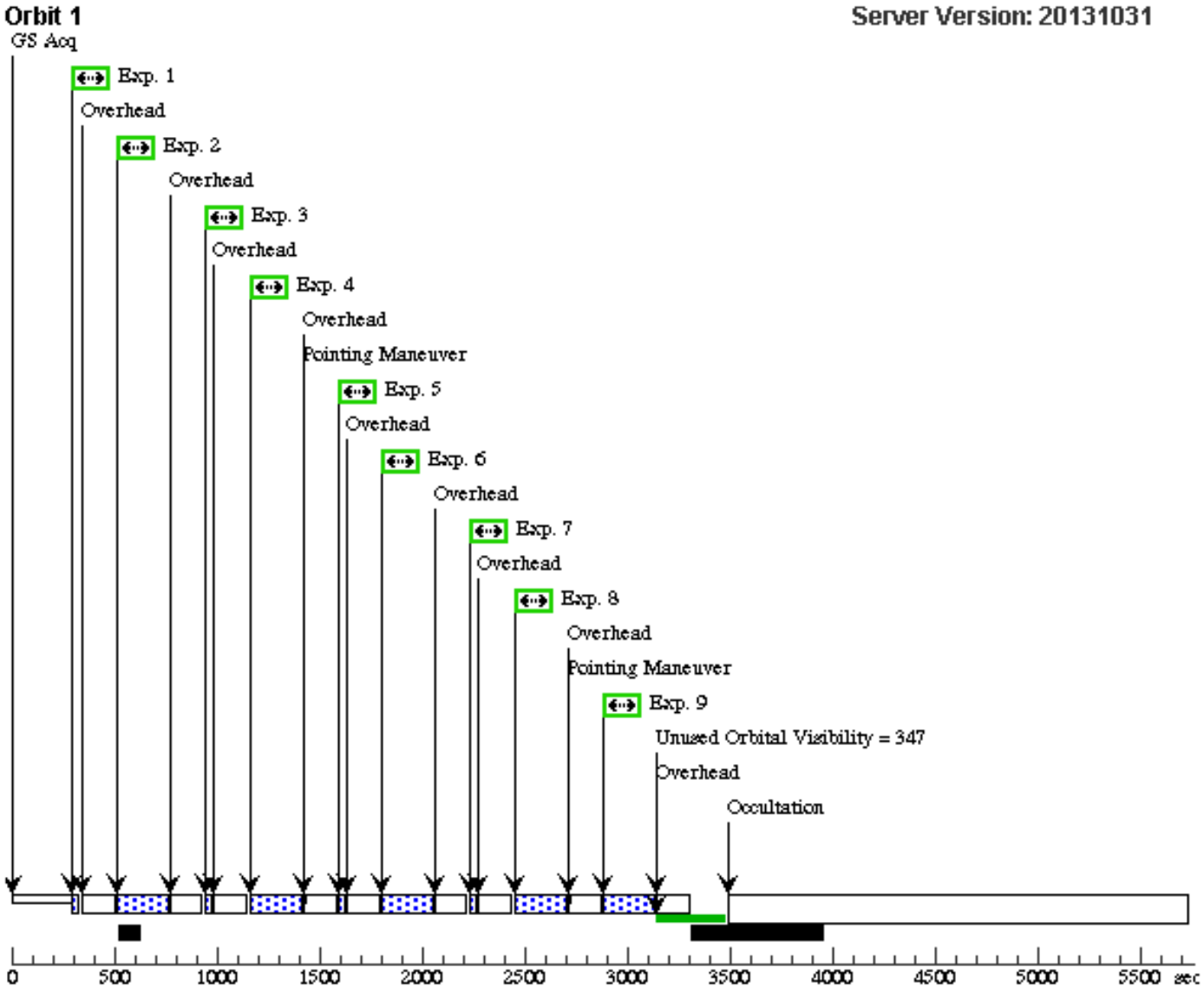
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	STEIN-2051B-SOURCE	RA: 04 31 15.0090 (67.8125375d) Dec: +58 58 13.17 (58.97032d) Equinox: J2000		V=12.45	Reference Frame: ICRS

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 (Total)/[Actual Dur.]	Orbit
1		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F606W	FLASH=12; BLADE=A	POS TARG 10.4,9		0.5 Secs (0.5 Secs) *[==>]*	 ***[1]***
2		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F606W	FLASH=1	SAME POS AS 1		250 Secs (250 Secs) *[==>]*	 ***[1]***
3		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F814W	FLASH=12; BLADE=A	SAME POS AS 1		0.5 Secs (0.5 Secs) *[==>]*	 ***[1]***
4		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F814W	FLASH=6	SAME POS AS 1		250 Secs (250 Secs) *[==>]*	 ***[1]***
5		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F606W	FLASH=12; BLADE=A	POS TARG 14.35,9		0.5 Secs (0.5 Secs) *[==>]*	 ***[1]***
6		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F606W	FLASH=1	SAME POS AS 5		250 Secs (250 Secs) *[==>]*	 ***[1]***
7		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F814W	FLASH=12; BLADE=A	SAME POS AS 5		0.5 Secs (0.5 Secs) *[==>]*	 ***[1]***
8		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F814W	FLASH=6	SAME POS AS 5		250 Secs (250 Secs) *[==>]*	 ***[1]***
9		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F814W	FLASH=6	POS TARG 10.39,12.95		250 Secs (250 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 13457, Visit 02, completed Tue Apr 22 01:05:39 GMT 2014

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: ORIENT 122D TO 122 D; BETWEEN 02-JAN-2014 AND 15-JAN-2014

Fixed Targets

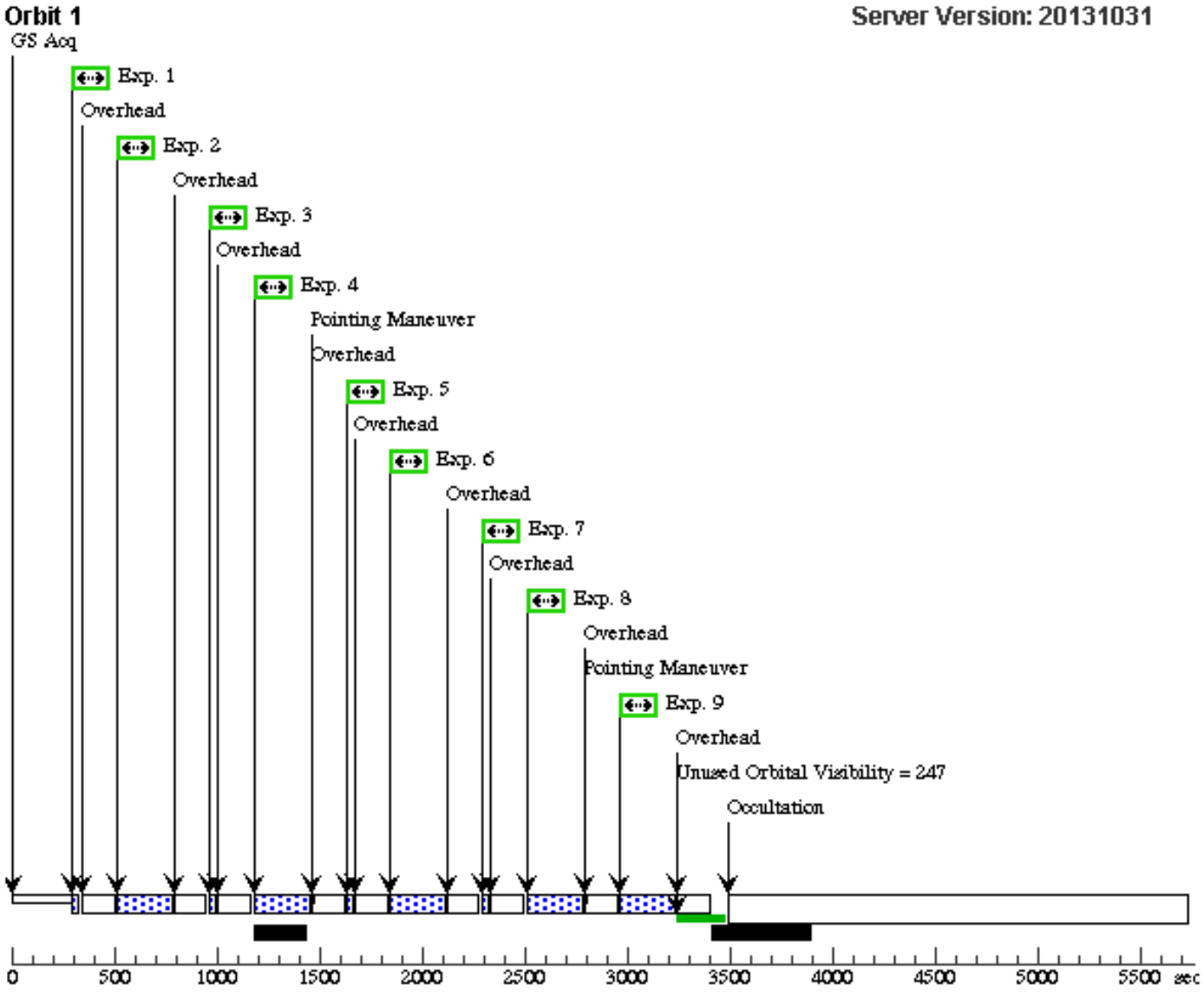
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	STEIN-2051B-SOURCE	RA: 04 31 15.0090 (67.8125375d) Dec: +58 58 13.17 (58.97032d) Equinox: J2000		V=12.45	Reference Frame: ICRS

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 (Total)/[Actual Dur.]	Orbit
1		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F606W	FLASH=12; BLADE=A	POS TARG 10.4,9		0.5 Secs (0.5 Secs) *[==>]*	 ***[1]***
2		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F606W	FLASH=1	SAME POS AS 1		270 Secs (270 Secs) *[==>]*	 ***[1]***
3		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F814W	FLASH=12; BLADE=A	SAME POS AS 1		1.0 Secs (1 Secs) *[==>]*	 ***[1]***
4		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F814W	FLASH=6	SAME POS AS 1		270 Secs (270 Secs) *[==>]*	 ***[1]***
5		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F606W	FLASH=12; BLADE=A	POS TARG 14.35,9		0.5 Secs (0.5 Secs) *[==>]*	 ***[1]***
6		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F606W	FLASH=1	SAME POS AS 5		270 Secs (270 Secs) *[==>]*	 ***[1]***
7		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F814W	FLASH=12; BLADE=A	SAME POS AS 5		1.0 Secs (1 Secs) *[==>]*	 ***[1]***
8		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F814W	FLASH=6	SAME POS AS 5		270 Secs (270 Secs) *[==>]*	 ***[1]***
9		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F814W	FLASH=6	POS TARG 10.39,12 .95		270 Secs (270 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 13457, Visit 03, completed Tue Apr 22 01:05:40 GMT 2014

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: ORIENT 115D TO 115 D; BETWEEN 09-FEB-2014 AND 11-FEB-2014; VISIBILITY INTERVAL 62 M

Fixed Targets

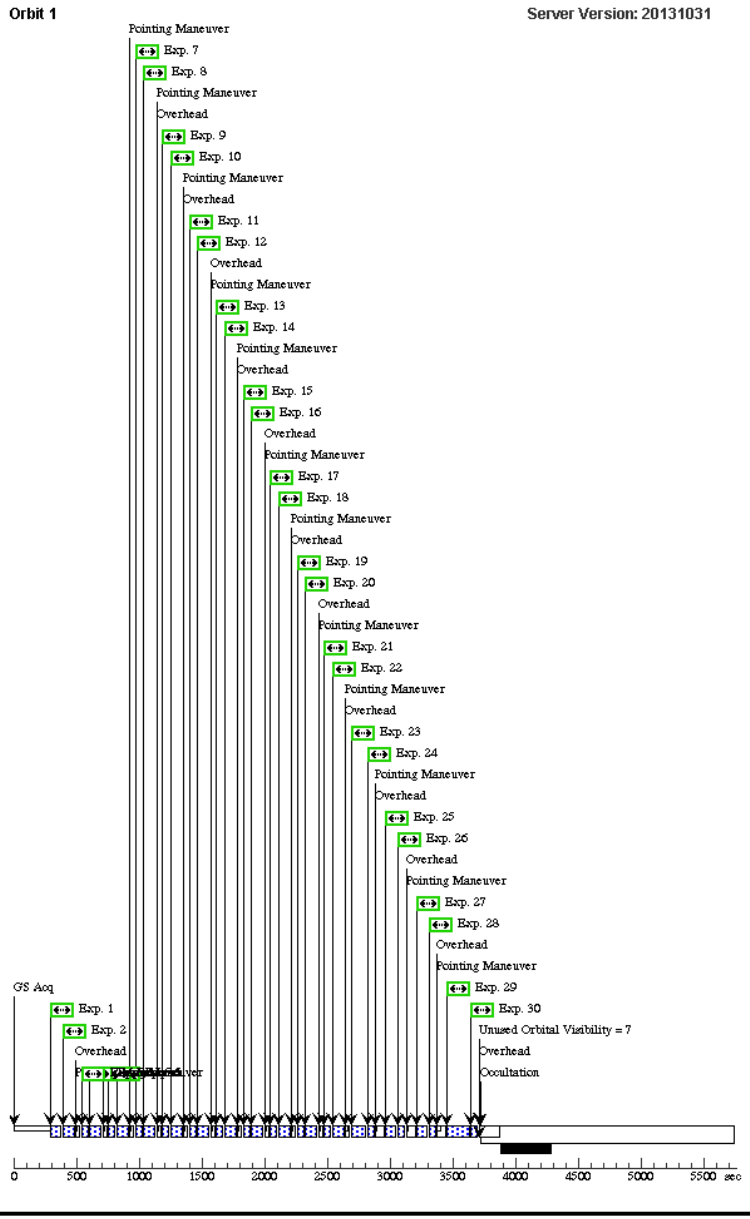
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	STEIN-2051AB	RA: 04 31 14.4950 (67.8103958d) Dec: +58 58 12.00 (58.97000d) Equinox: J2000		V=12.45	Reference Frame: ICRS
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.					
(3)	STEIN-2051B-1024	RA: 04 31 14.8400 (67.8118333d) Dec: +58 58 7.70 (58.96881d) Equinox: J2000		V=12.45	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 (Total)/[Actual Dur.]	Orbit
1		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12; BLADE=A	POS TARG -2,-2	Sequence 1-30 Non-Int in Visit 03	2.9 Secs (2.9 Secs) [==>]	[1]
2		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	SAME POS AS 1	Sequence 1-30 Non-Int in Visit 03	90 Secs (90 Secs) [==>]	[1]
3		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	POS TARG -2.2925, -2.1255	Sequence 1-30 Non-Int in Visit 03	2.9 Secs (2.9 Secs) [==>]	[1]
4		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	SAME POS AS 3	Sequence 1-30 Non-Int in Visit 03	90 Secs (90 Secs) [==>]	[1]
5		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	POS TARG -2.1862, -2.3044	Sequence 1-30 Non-Int in Visit 03	2.9 Secs (2.9 Secs) [==>]	[1]
6		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	SAME POS AS 5	Sequence 1-30 Non-Int in Visit 03	90 Secs (90 Secs) [==>]	[1]
7		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	POS TARG 2,1	Sequence 1-30 Non-Int in Visit 03	2.9 Secs (2.9 Secs) [==>]	[1]
8		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	SAME POS AS 7	Sequence 1-30 Non-Int in Visit 03	90 Secs (90 Secs) [==>]	[1]
9		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	POS TARG 2.19944, 1.19239	Sequence 1-30 Non-Int in Visit 03	2.9 Secs (2.9 Secs) [==>]	[1]
10		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	SAME POS AS 9	Sequence 1-30 Non-Int in Visit 03	90 Secs (90 Secs) [==>]	[1]
11		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	POS TARG 2.09978, 1.28539	Sequence 1-30 Non-Int in Visit 03	2.9 Secs (2.9 Secs) [==>]	[1]
12		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	SAME POS AS 11	Sequence 1-30 Non-Int in Visit 03	90 Secs (90 Secs) [==>]	[1]
13		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	POS TARG 2.29910, 1.07947	Sequence 1-30 Non-Int in Visit 03	2.9 Secs (2.9 Secs) [==>]	[1]
14		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	SAME POS AS 13	Sequence 1-30 Non-Int in Visit 03	90 Secs (90 Secs) [==>]	[1]
15		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	POS TARG 1.0,2.0	Sequence 1-30 Non-Int in Visit 03	2.9 Secs (2.9 Secs) [==>]	[1]
16		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	SAME POS AS 15	Sequence 1-30 Non-Int in Visit 03	90 Secs (90 Secs) [==>]	[1]
17		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	POS TARG 1.19944, 2.19239	Sequence 1-30 Non-Int in Visit 03	2.9 Secs (2.9 Secs) [==>]	[1]
18		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	SAME POS AS 17	Sequence 1-30 Non-Int in Visit 03	90 Secs (90 Secs) [==>]	[1]
19		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	POS TARG 1.09978, 2.28539	Sequence 1-30 Non-Int in Visit 03	2.9 Secs (2.9 Secs) [==>]	[1]
20		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	SAME POS AS 19	Sequence 1-30 Non-Int in Visit 03	90 Secs (90 Secs) [==>]	[1]
21		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	POS TARG 1.29910, 2.07947	Sequence 1-30 Non-Int in Visit 03	2.9 Secs (2.9 Secs) [==>]	[1]
22		(2) STEIN-2051AB	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	FLASH=12	SAME POS AS 21	Sequence 1-30 Non-Int in Visit 03	90 Secs (90 Secs) [==>]	[1]

	23	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=12	POS TARG -3,-3	Sequence 1-30 Non-Int in Visit 03	1.5 Secs (1.5 Secs) *[==>]*	 ***[1]***
	24	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=12	SAME POS AS 23	Sequence 1-30 Non-Int in Visit 03	50 Secs (50 Secs) *[==>]*	 ***[1]***
	25	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=12	POS TARG 3,-3	Sequence 1-30 Non-Int in Visit 03	1.5 Secs (1.5 Secs) *[==>]*	 ***[1]***
	26	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=12	SAME POS AS 25	Sequence 1-30 Non-Int in Visit 03	50 Secs (50 Secs) *[==>]*	 ***[1]***
	27	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=12	POS TARG -3,1	Sequence 1-30 Non-Int in Visit 03	1.5 Secs (1.5 Secs) *[==>]*	 ***[1]***
	28	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=12	SAME POS AS 27	Sequence 1-30 Non-Int in Visit 03	50 Secs (50 Secs) *[==>]*	 ***[1]***
	29	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F814W	FLASH=12	POS TARG 15.5,14.0	Sequence 1-30 Non-Int in Visit 03	1.5 Secs (1.5 Secs) *[==>]*	 ***[1]***
	30	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F814W	FLASH=12	SAME POS AS 29	Sequence 1-30 Non-Int in Visit 03	50 Secs (50 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 13457, Visit 04, completed Tue Apr 22 01:05:43 GMT 2014

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: ORIENT 70D TO 70 D; BETWEEN 27-MAR-2014 AND 28-MAR-2014; ON HOLD ; VISIBILITY INTERVAL 54 M

On Hold Comments: We need to analyze the previous visit HST data before this can be finalyzed.

Fixed Targets

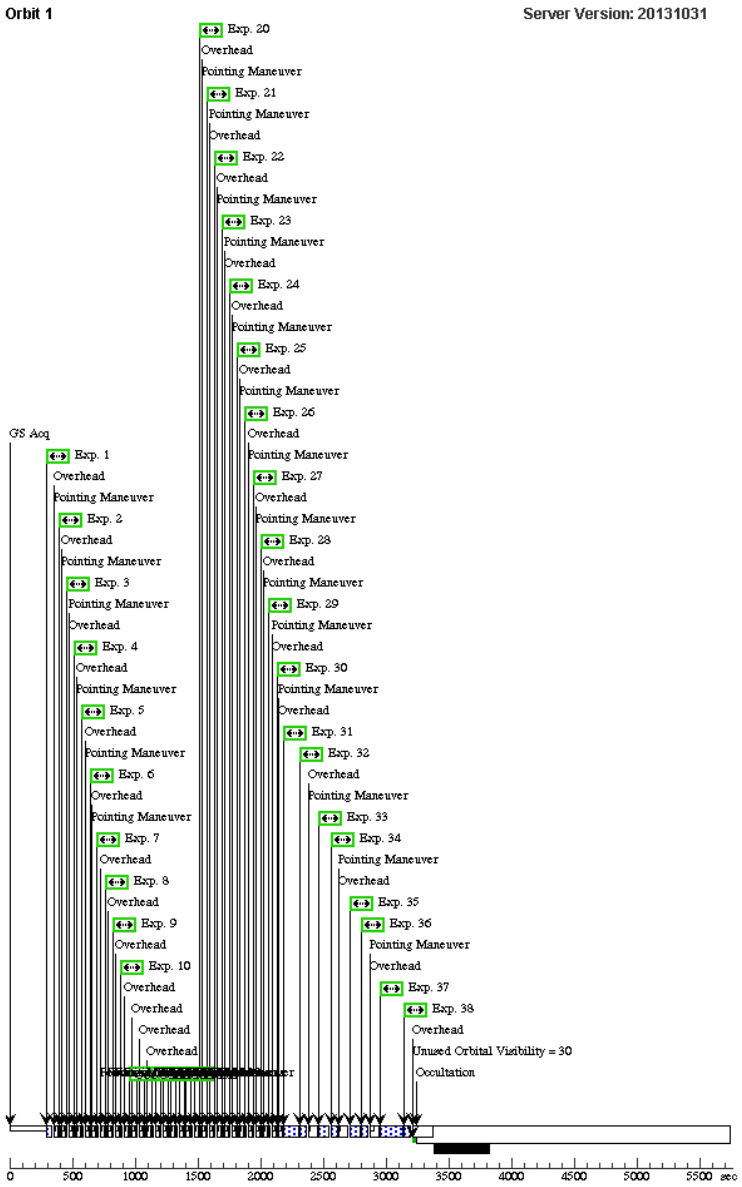
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	STEIN-2051B-SOURCE	RA: 04 31 15.0090 (67.8125375d) Dec: +58 58 13.17 (58.97032d) Equinox: J2000		V=12.45	Reference Frame: ICRS
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.					
(3)	STEIN-2051B-1024	RA: 04 31 14.8400 (67.8118333d) Dec: +58 58 7.70 (58.96881d) Equinox: J2000		V=12.45	Reference Frame: ICRS
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.					
(4)	LHS26-SOURCE	RA: 04 31 13.8920 (67.8078833d) Dec: +58 58 8.00 (58.96889d) Equinox: J2000		V=12.45	Reference Frame: ICRS
Comments: This target will put LHS26 at the same location of STEIN 2051B in the target STEIN-2051B-SOURCE.					

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0,0	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
2		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.04058,0.17073	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
3		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A		Sequence 1-38 Non-Int in Visit 04	0.5 Secs (0.5 Secs)	
								[==>]	***[1]***
4		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.08116, 0.34145	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
5		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.12174, 0.51217	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
6		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.25176, 0.09552	Sequence 1-38 Non-Int in Visit 04	0.5 Secs (0.5 Secs)	
								[==>]	***[1]***
7		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.16231, 0.68289	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
8		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.20856,0.05282	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
9		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.50352, 0.19105	Sequence 1-38 Non-Int in Visit 04	0.5 Secs (0.5 Secs)	
								[==>]	***[1]***
10		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.24914, 0.22355	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
11		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.28972, 0.39427	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
12		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.71571,0.29749	Sequence 1-38 Non-Int in Visit 04	0.5 Secs (0.5 Secs)	
								[==>]	***[1]***
13		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.33029, 0.56500	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
14		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.37087, 0.73571	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
15		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.09436, 0.33957	Sequence 1-38 Non-Int in Visit 04	0.5 Secs (0.5 Secs)	
								[==>]	***[1]***
16		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.41734, 0.14572	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
17		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.45771, 0.27637	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
18		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.34611, 0.43510	Sequence 1-38 Non-Int in Visit 04	0.5 Secs (0.5 Secs)	
								[==>]	***[1]***
19		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.49828, 0.44710	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
20		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.53886, 0.61782	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
21		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.55829, 0.54154	Sequence 1-38 Non-Int in Visit 04	0.5 Secs (0.5 Secs)	
								[==>]	***[1]***
22		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.57943, 0.78854	Sequence 1-38 Non-Int in Visit 04	0.5 Secs (0.5 Secs)	
								[==>]	***[1]***

	23	(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.62592, 0.19854	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs) *[==>]*	 ***[1]***
	24	(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.17178 ,0.59799	Sequence 1-38 Non-Int in Visit 04	0.5 Secs (0.5 Secs) *[==>]*	 ***[1]***
	25	(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.66628 ,0.32920	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs) *[==>]*	 ***[1]***
	26	(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.70685, 0.49993	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs) *[==>]*	 ***[1]***
	27	(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.42023, 0.69331	Sequence 1-38 Non-Int in Visit 04	0.5 Secs (0.5 Secs) *[==>]*	 ***[1]***
	28	(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.74742 ,0.67065	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs) *[==>]*	 ***[1]***
	29	(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.78799 ,0.84137	Sequence 1-38 Non-Int in Visit 04	8.5 Secs (8.5 Secs) *[==>]*	 ***[1]***
	30	(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.66870, 0.78864	Sequence 1-38 Non-Int in Visit 04	0.5 Secs (0.5 Secs) *[==>]*	 ***[1]***
	31	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=12; BLADE=A	POS TARG -3,-3	Sequence 1-38 Non-Int in Visit 04	1.5 Secs (1.5 Secs) *[==>]*	 ***[1]***
	32	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=12	SAME POS AS 31	Sequence 1-38 Non-Int in Visit 04	50 Secs (50 Secs) *[==>]*	 ***[1]***
	33	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=12	POS TARG 3,-3	Sequence 1-38 Non-Int in Visit 04	1.5 Secs (1.5 Secs) *[==>]*	 ***[1]***
	34	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=12	SAME POS AS 33	Sequence 1-38 Non-Int in Visit 04	50 Secs (50 Secs) *[==>]*	 ***[1]***
	35	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=12	POS TARG -3,1	Sequence 1-38 Non-Int in Visit 04	1.5 Secs (1.5 Secs) *[==>]*	 ***[1]***
	36	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=12	SAME POS AS 35	Sequence 1-38 Non-Int in Visit 04	50 Secs (50 Secs) *[==>]*	 ***[1]***
	37	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F814W	FLASH=12	POS TARG 15.5,14.0	Sequence 1-38 Non-Int in Visit 04	1.5 Secs (1.5 Secs) *[==>]*	 ***[1]***
	38	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F814W	FLASH=12	SAME POS AS 37	Sequence 1-38 Non-Int in Visit 04	50 Secs (50 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 13457, Visit 05, completed Tue Apr 22 01:05:46 GMT 2014

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: ORIENT 65D TO 65 D; BETWEEN 04-APR-2014 AND 06-APR-2014; ON HOLD ; VISIBILITY INTERVAL 54 M

On Hold Comments: We need to analyze the previous visit HST data before this can be finalyzed.

Fixed Targets

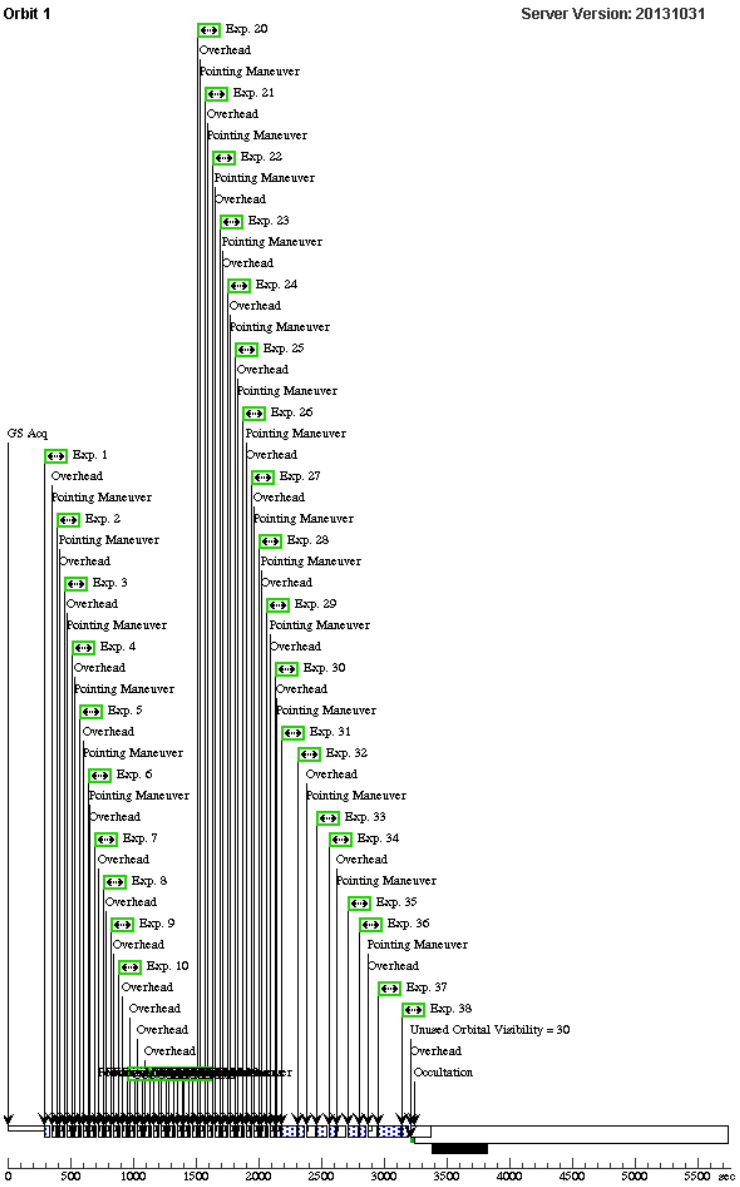
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	STEIN-2051B-SOURCE	RA: 04 31 15.0090 (67.8125375d) Dec: +58 58 13.17 (58.97032d) Equinox: J2000		V=12.45	Reference Frame: ICRS
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.					
(3)	STEIN-2051B-1024	RA: 04 31 14.8400 (67.8118333d) Dec: +58 58 7.70 (58.96881d) Equinox: J2000		V=12.45	Reference Frame: ICRS
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.					
(4)	LHS26-SOURCE	RA: 04 31 13.8920 (67.8078833d) Dec: +58 58 8.00 (58.96889d) Equinox: J2000		V=12.45	Reference Frame: ICRS
Comments: This target will put LHS26 at the same location of STEIN 2051B in the target STEIN-2051B-SOURCE.					

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0,0	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
2		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.04058,0.17073	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
3		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A		Sequence 1-38 Non-Int in Visit 05	0.5 Secs (0.5 Secs)	
								[==>]	***[1]***
4		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.08116, 0.34145	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
5		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.12174, 0.51217	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
6		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.25176, 0.09552	Sequence 1-38 Non-Int in Visit 05	0.5 Secs (0.5 Secs)	
								[==>]	***[1]***
7		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.16231, 0.68289	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
8		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.20856,0.05282	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
9		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.50352, 0.19105	Sequence 1-38 Non-Int in Visit 05	0.5 Secs (0.5 Secs)	
								[==>]	***[1]***
10		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.24914, 0.22355	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
11		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.28972, 0.39427	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
12		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.71571,0.29749	Sequence 1-38 Non-Int in Visit 05	0.5 Secs (0.5 Secs)	
								[==>]	***[1]***
13		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.33029, 0.56500	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
14		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.37087, 0.73571	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
15		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.09436, 0.33957	Sequence 1-38 Non-Int in Visit 05	0.5 Secs (0.5 Secs)	
								[==>]	***[1]***
16		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.41734, 0.14572	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
17		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.45771, 0.27637	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
18		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.34611, 0.43510	Sequence 1-38 Non-Int in Visit 05	0.5 Secs (0.5 Secs)	
								[==>]	***[1]***
19		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.49828, 0.44710	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
20		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.53886, 0.61782	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs)	
								[==>]	***[1]***
21		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.55829, 0.54154	Sequence 1-38 Non-Int in Visit 05	0.5 Secs (0.5 Secs)	
								[==>]	***[1]***
22		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.57943, 0.78854	Sequence 1-38 Non-Int in Visit 05	0.5 Secs (0.5 Secs)	
								[==>]	***[1]***

	23	(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.62592, 0.19854	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs) *[==>]*	 ***[1]***
	24	(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.17178 ,0.59799	Sequence 1-38 Non-Int in Visit 05	0.5 Secs (0.5 Secs) *[==>]*	 ***[1]***
	25	(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.66628 ,0.32920	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs) *[==>]*	 ***[1]***
	26	(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.70685, 0.49993	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs) *[==>]*	 ***[1]***
	27	(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.42023, 0.69331	Sequence 1-38 Non-Int in Visit 05	0.5 Secs (0.5 Secs) *[==>]*	 ***[1]***
	28	(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.74742 ,0.67065	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs) *[==>]*	 ***[1]***
	29	(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.78799 ,0.84137	Sequence 1-38 Non-Int in Visit 05	8.5 Secs (8.5 Secs) *[==>]*	 ***[1]***
	30	(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F763M	BLADE=A	POS TARG 0.66870, 0.78864	Sequence 1-38 Non-Int in Visit 05	0.5 Secs (0.5 Secs) *[==>]*	 ***[1]***
	31	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=12; BLADE=A	POS TARG -3,-3	Sequence 1-38 Non-Int in Visit 05	1.5 Secs (1.5 Secs) *[==>]*	 ***[1]***
	32	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=12	SAME POS AS 31	Sequence 1-38 Non-Int in Visit 05	50 Secs (50 Secs) *[==>]*	 ***[1]***
	33	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=12	POS TARG 3,-3	Sequence 1-38 Non-Int in Visit 05	1.5 Secs (1.5 Secs) *[==>]*	 ***[1]***
	34	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=12	SAME POS AS 33	Sequence 1-38 Non-Int in Visit 05	50 Secs (50 Secs) *[==>]*	 ***[1]***
	35	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=12	POS TARG -3,1	Sequence 1-38 Non-Int in Visit 05	1.5 Secs (1.5 Secs) *[==>]*	 ***[1]***
	36	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=12	SAME POS AS 35	Sequence 1-38 Non-Int in Visit 05	50 Secs (50 Secs) *[==>]*	 ***[1]***
	37	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F814W	FLASH=12	POS TARG 15.5,14.0	Sequence 1-38 Non-Int in Visit 05	1.5 Secs (1.5 Secs) *[==>]*	 ***[1]***
	38	(3) STEIN-2051B-1024	WFC3/UVIS, ACCUM, UVIS2-2K2C-SUB	F814W	FLASH=12	SAME POS AS 37	Sequence 1-38 Non-Int in Visit 05	50 Secs (50 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 13457, Visit 06, scheduling Tue Apr 22 01:05:49 GMT 2014

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: ORIENT 41D TO 41 D; ON HOLD ; VISIBILITY INTERVAL 54.5 M

On Hold Comments: We need to analyze the previous visit HST data before this can be finalyzed.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	STEIN-2051B-SOURCE	RA: 04 31 15.0090 (67.8125375d) Dec: +58 58 13.17 (58.97032d) Equinox: J2000		V=12.45	Reference Frame: ICRS
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.					
(4)	LHS26-SOURCE	RA: 04 31 13.8920 (67.8078833d) Dec: +58 58 8.00 (58.96889d) Equinox: J2000		V=12.45	Reference Frame: ICRS
Comments: This target will put LHS26 at the same location of STEIN 2051B in the target STEIN-2051B-SOURCE.					

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	BLADE=A; FLASH=12	POS TARG 0,0	Sequence 1-24 Non-Int in Visit 06	3 Secs (3 Secs)	
								[==>]	***[1]***
2		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=10	POS TARG 0,0	Sequence 1-24 Non-Int in Visit 06	75 Secs (75 Secs)	
								[==>]	***[1]***
3		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	BLADE=A; FLASH=12	POS TARG 0,0	Sequence 1-24 Non-Int in Visit 06	2.3 Secs (2.3 Secs)	
								[==>]	***[1]***
4		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	BLADE=A; FLASH=12	POS TARG 0.03993, 0.18187	Sequence 1-24 Non-Int in Visit 06	3 Secs (3 Secs)	
								[==>]	***[1]***
5		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=10	SAME POS AS 4	Sequence 1-24 Non-Int in Visit 06	75 Secs (75 Secs)	
								[==>]	***[1]***
6		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	BLADE=A; FLASH=12	POS TARG 0.03993, 0.18187	Sequence 1-24 Non-Int in Visit 06	2.3 Secs (2.3 Secs)	
								[==>]	***[1]***
7		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	BLADE=A; FLASH=12	POS TARG 0.09982, 0.40488	Sequence 1-24 Non-Int in Visit 06	3 Secs (3 Secs)	
								[==>]	***[1]***
8		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=10	SAME POS AS 7	Sequence 1-24 Non-Int in Visit 06	75 Secs (75 Secs)	
								[==>]	***[1]***
9		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	BLADE=A; FLASH=12	POS TARG 0.09982, 0.40488	Sequence 1-24 Non-Int in Visit 06	2.3 Secs (2.3 Secs)	
								[==>]	***[1]***
10		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	BLADE=A; FLASH=12	POS TARG 0.17948, 0.11141	Sequence 1-24 Non-Int in Visit 06	3 Secs (3 Secs)	
								[==>]	***[1]***
11		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=10	SAME POS AS 10	Sequence 1-24 Non-Int in Visit 06	75 Secs (75 Secs)	
								[==>]	***[1]***
12		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	BLADE=A; FLASH=12	POS TARG 0.17948, 0.11141	Sequence 1-24 Non-Int in Visit 06	2.3 Secs (2.3 Secs)	
								[==>]	***[1]***
13		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	BLADE=A; FLASH=12	POS TARG 0.20944, 0.30258	Sequence 1-24 Non-Int in Visit 06	3 Secs (3 Secs)	
								[==>]	***[1]***
14		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=10	SAME POS AS 13	Sequence 1-24 Non-Int in Visit 06	75 Secs (75 Secs)	
								[==>]	***[1]***
15		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	BLADE=A; FLASH=12	POS TARG 0.20944, 0.30258	Sequence 1-24 Non-Int in Visit 06	2.3 Secs (2.3 Secs)	
								[==>]	***[1]***
16		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	BLADE=A; FLASH=12	POS TARG 0.36899, 0.09403	Sequence 1-24 Non-Int in Visit 06	3 Secs (3 Secs)	
								[==>]	***[1]***
17		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=10	SAME POS AS 16	Sequence 1-24 Non-Int in Visit 06	75 Secs (75 Secs)	
								[==>]	***[1]***
18		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	BLADE=A; FLASH=12	POS TARG 0.36889, 0.09403	Sequence 1-24 Non-Int in Visit 06	2.3 Secs (2.3 Secs)	
								[==>]	***[1]***
19		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	BLADE=A; FLASH=12	POS TARG 0.34899, 0.23212	Sequence 1-24 Non-Int in Visit 06	3 Secs (3 Secs)	
								[==>]	***[1]***
20		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=10	SAME POS AS 19	Sequence 1-24 Non-Int in Visit 06	75 Secs (75 Secs)	
								[==>]	***[1]***
21		(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	BLADE=A; FLASH=12	POS TARG 0.34899, 0.23212	Sequence 1-24 Non-Int in Visit 06	2.3 Secs (2.3 Secs)	
								[==>]	***[1]***
22		(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	BLADE=A; FLASH=12	POS TARG 0.38893, 0.45382	Sequence 1-24 Non-Int in Visit 06	3 Secs (3 Secs)	
								[==>]	***[1]***

	23	(1) STEIN-2051B-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	FLASH=10	SAME POS AS 22	Sequence 1-24 Non-Int in Visit 06	75 Secs (75 Secs) *[==>]*	 ***[1]***
	24	(4) LHS26-SOURCE	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F814W	BLADE=A; FLASH=12	POS TARG 0.38893, 0.45382	Sequence 1-24 Non-Int in Visit 06	2.3 Secs (2.3 Secs) *[==>]*	 ***[1]***

Orbit Structure