13645 - Galactic Environment of A Twenty-Billion Solar-Mass Black Hole at the End of Reionization

Cycle: 22, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

Name	*Institution*	*E-Mail*
Prof. Xiaohui Fan (PI) (Contact)	**University of Arizona**	**fan@as.arizona.edu**
Dr. Feige Wang (CoI) (Contact)	Peking University	fgwang.astro@gmail.com
Mr. Zheng Cai (CoI)	University of Arizona	caiz@email.arizona.edu
Xue-Bing Wu (CoI)	Peking University	wuxb@pku.edu.cn
Dr. Ian McGreer (CoI)	University of Arizona	imcgreer@as.arizona.edu
Dr. Fuyan Bian (CoI)	Australian National University	fuyan.bian@anu.edu.au
Dr. Ran Wang (CoI)	University of Arizona	rwangpku@gmail.com
Dr. Linhua Jiang (CoI)	Arizona State University	linhua.jiang@asu.edu

VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) J0100+2802	ACS/WFC	3	06-Aug-2014 21:10:34.0	yes
02	(1) J0100+2802	ACS/WFC	3	06-Aug-2014 21:10:35.0	yes
03	(1) J0100+2802	WFC3/IR	1	06-Aug-2014 21:10:41.0	yes
04	(1) J0100+2802	WFC3/IR	1	06-Aug-2014 21:10:49.0	yes
05	(2) J0059+2809	WFC3/IR	1	06-Aug-2014 21:10:55.0	yes
06	(1) J0100+2802	WFC3/IR	1	06-Aug-2014 21:11:01.0	yes
07	(1) J0100+2802	WFC3/IR	1	06-Aug-2014 21:11:07.0	yes

11 Total Orbits Used

ABSTRACT

When did the first supermassive black holes (SMBHs) appear in the universe? How do they co-evolve with and impact their galactic environment? We propose to carry out deep HST ACS and WFC/IR imaging of a newly discovered ultra-luminous quasar at z=6.30. At about 10 times brighter than an average SDSS z~6 quasar, this object is the most luminous quasar yet known at z>5.5 and is powered by a SMBH with an estimated mass of 20 billion M_sun, comparable to the most massive SMBHs found in the local universe. It is among the most massive systems in the observable early universe and likely resides in the densest and most biased environment at the end of cosmic reionization. Our WFC/IR J and H band observations will reveal the rest-frame UV emission in the quasar host galaxy, directly probing the coeval star formation in quasar host when the SMBH is accreting at the highest rate. Deep HST images will be used to rule out or confirm lensing magnification and to search for signatures of major merger activity. We will use the ACS i and z band imaging, combined with WFC/IR imaging, to select young star forming galaxies in the quasar environment and to study whether this ultra-luminous quasar lives in a significant galaxy overdensity, or whether early reionization has suppressed galaxy formation in the quasar environment. The HST observations will provide key insight into the formation and evolution of the earliest 10^10 M_sun BH systems in the universe.

OBSERVING DESCRIPTION

Image in F775W for 2 orbits and F850LP for 4 orbits for J0100+2802.

One 5-orbit packages, to observe an J0100+2802 and a nearby star as a PSF model for eventual subtraction. We found that the individual WFC3 exposure can only be short ~20sec to avoid the saturation of the bright quasar. ACS parallel individual exposure has to follow the same very short exposure according to that of WFC3. ACS parallel exposure, in this case, is limited by read-out noise and too shallow to meet our original science goal. We decide to delete the parallel observations for this program.

Visit 1 : SDSSJ0100+2802 : 1-orbit F775W, 2-orbit F850LP

Visit 2 : SDSSJ0100+2802 : 1-orbit F775W, 2-orbit F850LP

Visit 3: SDSSJ0100+2802 : 1-orbit (F125W, F160W), each individual exposure has a different POS-TARG offsets according to 4-point dither pattern and the scale of the 4-point dither pattern. We no longer need parallel at this point

Visit 4: SDSSJ0100+2802 : 1-orbit (F125W, F160W), each individual exposure has the same POS-TARGs offset with that of Visit 03. We no longer need parallel.

Visit 5: PSF STAR (J0059+2809) : 1-orbit (F125W, F160W), each individual exposure has a different POST-TARG offsets according to 4-point dither pattern and the scale of the 4-point dither pattern

Visit 6: SDSSJ0100+2802 : 1-orbit (F125W, F160W), each individual exposure has the same POS-TARGs offset with that of Visit 03. We no longer need parallel. We no longer need parallel

Visit 7: SDSSJ0100+2802 : 1-orbit (F125W, F160W), each individual exposure has the same POS-TARGs offset with that of Visit 03. We no longer need parallel. We no longer need parallel

Visit

Proposal 13645, Visit 01, implementation Thu Aug 07 01:11:09 GMT 2014

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false		(1), (2)

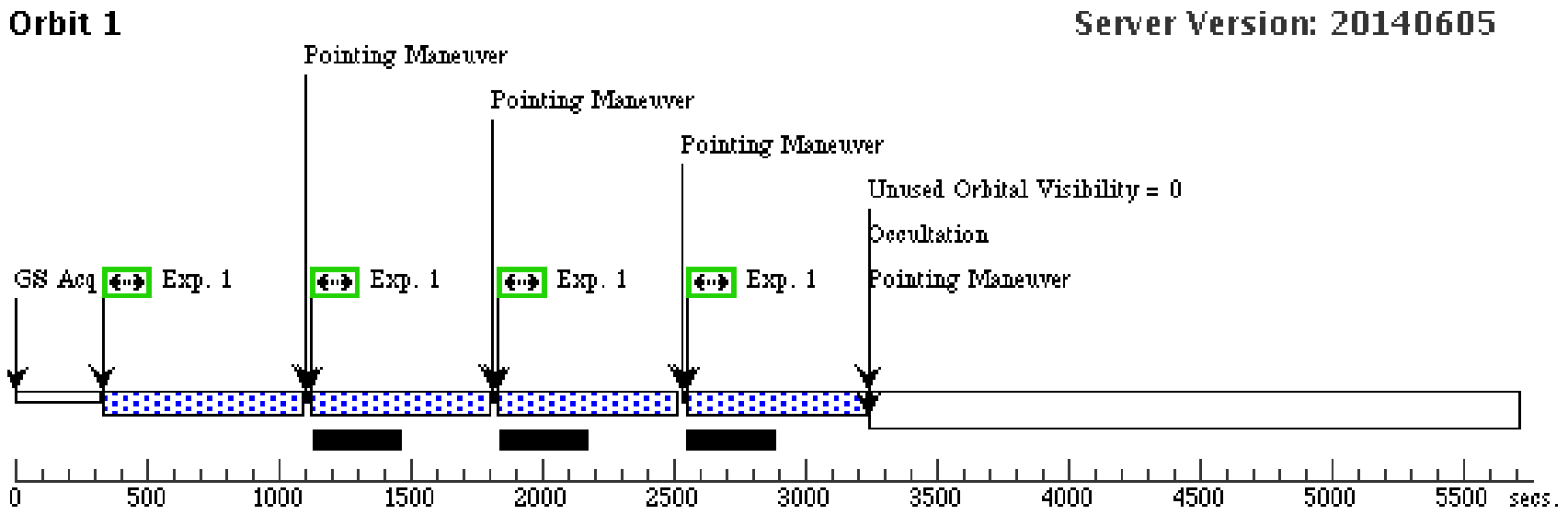
Fixed Targets

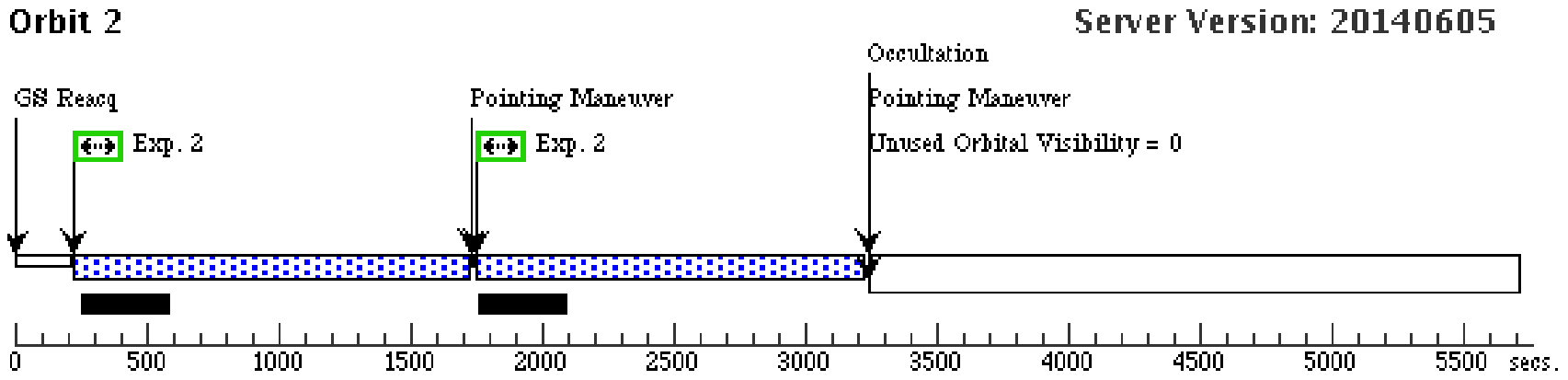
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	J0100+2802 Alt Name1: QSO	RA: 01 00 13.0200 (15.0542500d) Dec: +28 02 25.80 (28.04050d) Equinox: J2000		V=(?) z_AB=18.4	Reference Frame: ICRS

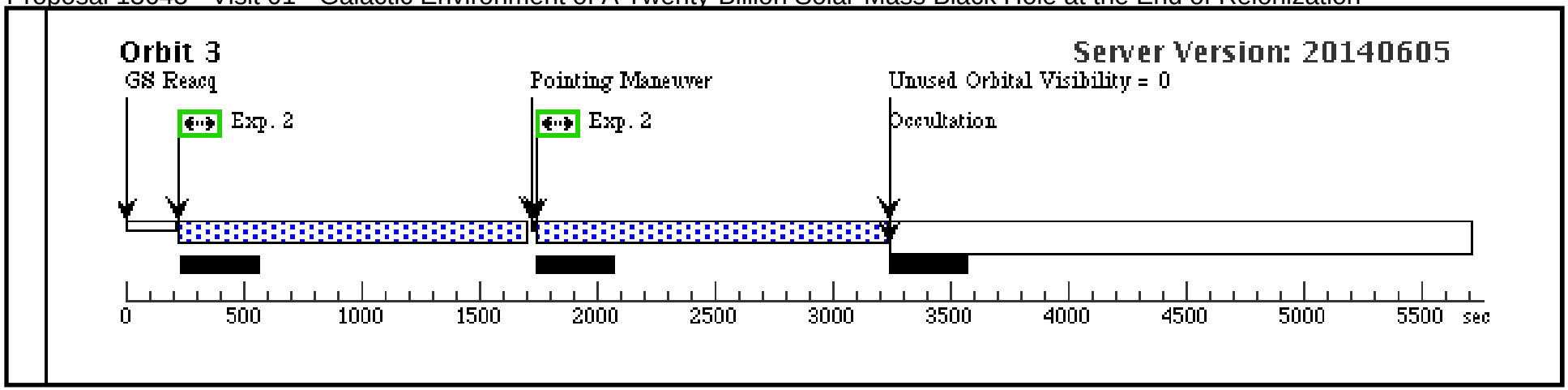
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	QSOJ0100+2802 F775W	(1) J0100+2802	ACS/WFC, ACCUM, WFC	F775W	CR-SPLIT=NO		Pattern 1, Exps 1-1 in Visit 01 (1)	570 Secs (2214 Secs)	
								[==>554.0 Secs (Pattern 1)] *[==>554.0 Secs (Pattern 2)]* *[==>553.0 Secs (Pattern 3)]* *[==>553.0 Secs (Pattern 4)]*	***[1]***
2	QSOJ0100+2802 F850LP	(1) J0100+2802	ACS/WFC, ACCUM, WFC	F850LP	CR-SPLIT=NO		Pattern 1, Exps 2-2 in Visit 01 (1)	1360 Secs (5420 Secs)	
								[==>1348.0 Secs (Pattern 1)] *[==>1349.0 Secs (Pattern 2)]*	***[2]***
								[==>1361.0 Secs (Pattern 3)] *[==>1362.0 Secs (Pattern 4)]*	***[3]***

Orbit Structure






Orbit 3
Server Version: 20140605
GS Reacq
Exp. 2
Pointing Maneuver
Exp. 2
Unused Orbital Visibility = 0
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 13645, Visit 02, implementation Thu Aug 07 01:11:09 GMT 2014

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: AFTER 01 BY 0 D TO 60 D

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false		(1), (2)

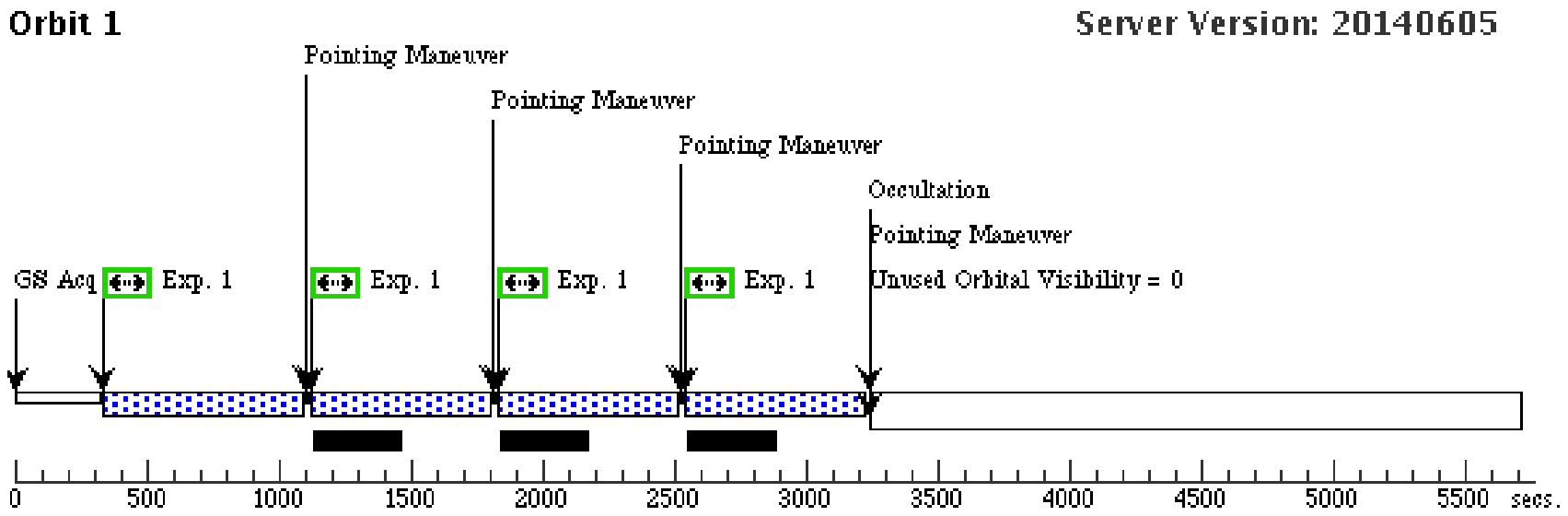
Fixed Targets

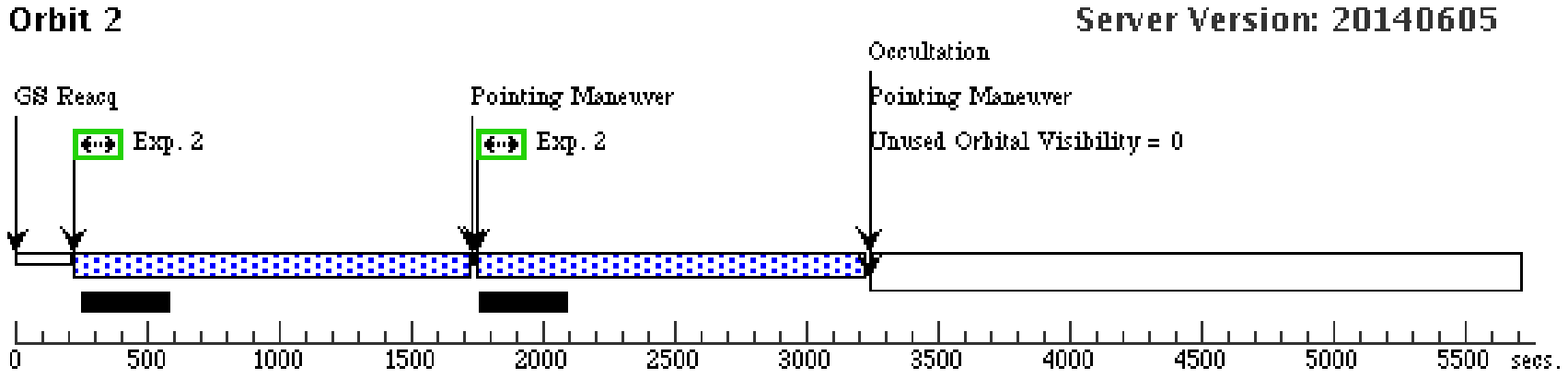
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	J0100+2802 Alt Name1: QSO	RA: 01 00 13.0200 (15.0542500d) Dec: +28 02 25.80 (28.04050d) Equinox: J2000		V=(?) z_AB=18.4	Reference Frame: ICRS

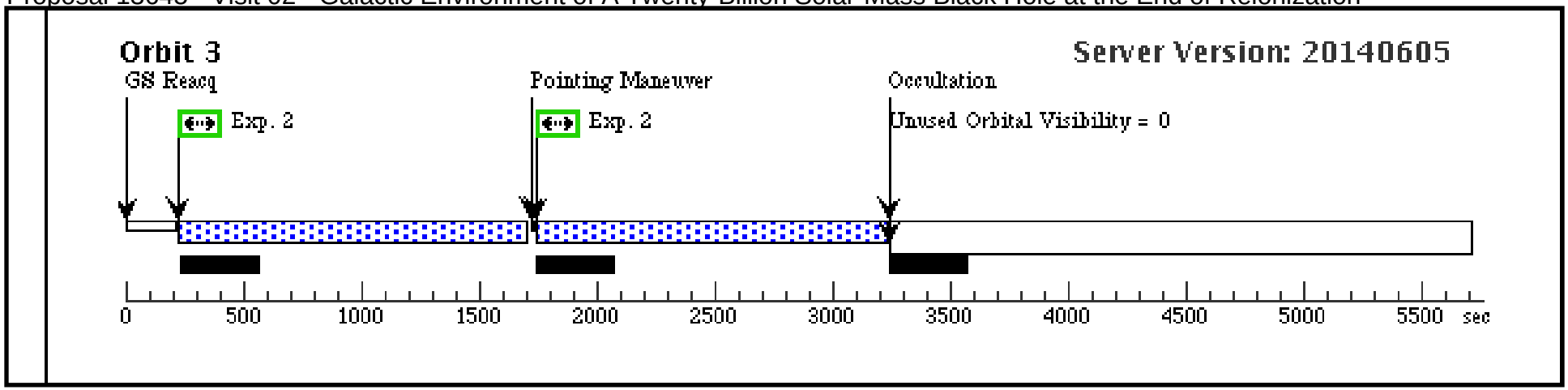
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	QSOJ0100+2802 F775W	(1) J0100+2802	ACS/WFC, ACCUM, WFC	F775W	CR-SPLIT=NO		Pattern 1, Exps 1-1 in Visit 02 (1)	570 Secs (2214 Secs)	
								[==>553.0 Secs (Pattern 1)] *[==>553.0 Secs (Pattern 2)]* *[==>554.0 Secs (Pattern 3)]* *[==>554.0 Secs (Pattern 4)]*	***[1]***
2	QSOJ0100+2802 F850LP	(1) J0100+2802	ACS/WFC, ACCUM, WFC	F850LP	CR-SPLIT=NO		Pattern 1, Exps 2-2 in Visit 02 (1)	1360 Secs (5420 Secs)	
								[==>1348.0 Secs (Pattern 1)] *[==>1349.0 Secs (Pattern 2)]*	***[2]***
								[==>1361.0 Secs (Pattern 3)] *[==>1362.0 Secs (Pattern 4)]*	***[3]***

Orbit Structure






Orbit 3
Server Version: 20140605
GS Reacq
Exp. 2
Pointing Maneuver
Exp. 2
Occultation
Unused Orbital Visibility = 0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 13645, Visit 03, implementation Thu Aug 07 01:11:10 GMT 2014

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD

Comments: First orbit of QSO observations

To ensure maximum thermal stability (and thus PSF stability) for these PSF-sensitive observations, we request one of the following constraints, if possible and if they do not interfere with the schedulability of other programs.

1) If our observations occur directly after an SAA transit, that the telescope be slewed to our initial pointing before the SAA transit, allowing thermal settling to occur during the transit.
2) Our observations occur directly after observations on a nearby target, to minimize the change in pointing angle (and thus thermal settling time) at the beginning of our observations.

Diagnostics

(Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03) Warning (Form): No Parallel Exposures Specified in Parallel Exposure Group

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	J0100+2802	RA: 01 00 13.0200 (15.0542500d)		V=(?)	Reference Frame: ICRS
	Alt Name1: QSO	Dec: +28 02 25.80 (28.04050d)		z_AB=18.4	
		Equinox: J2000			

Exposures

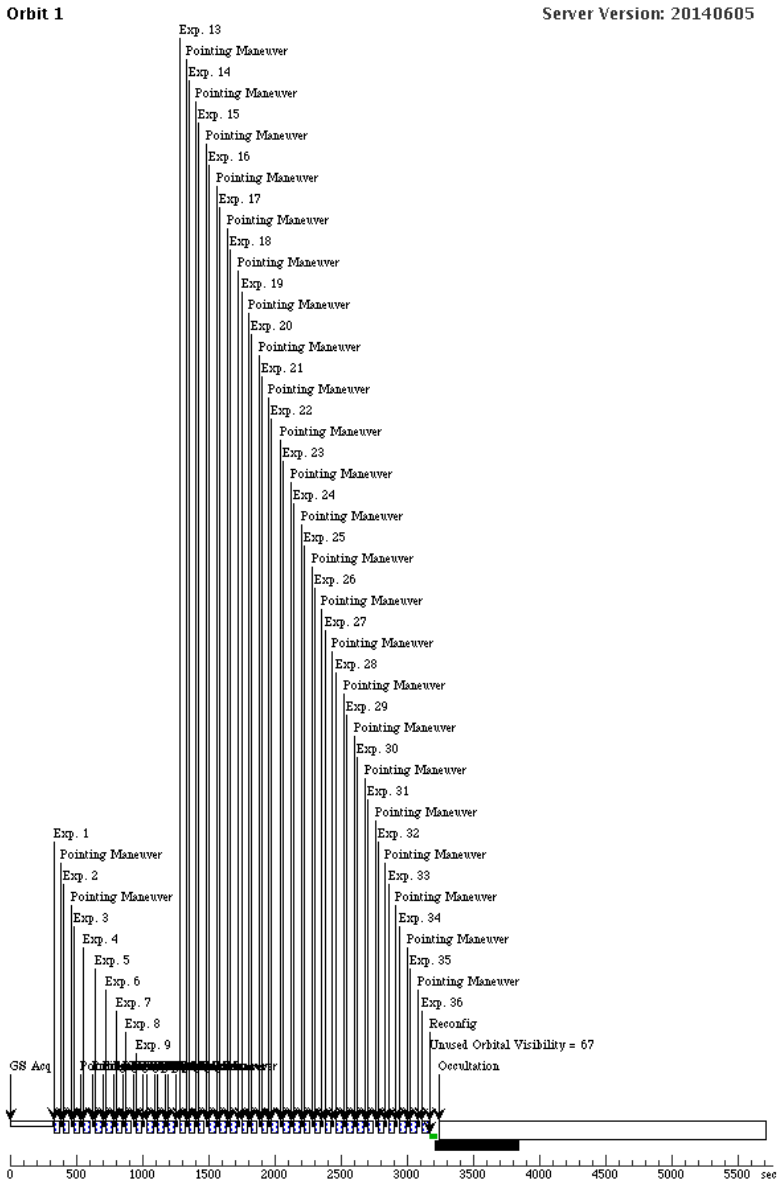
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	QSO J Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
2	QSO J Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
3	QSO J Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,-0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
4	QSO H Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	22.623854 Secs (22.624 Secs) *[==>]*	*[1]*
5	QSO H Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	22.623854 Secs (22.624 Secs) *[==>]*	*[1]*
6	QSO H Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,-0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	22.623854 Secs (22.624 Secs) *[==>]*	*[1]*
7	QSO J Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,-0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
8	QSO J Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,0.730	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
9	QSO J Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,0.730	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*

10	QSO H Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,-0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
11	QSO H Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,0.730	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
12	QSO H Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.532,0.730	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
13	QSO J Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.532,-0.730	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
14	QSO J Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.532,-0.730	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
15	QSO J Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 1.064,0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
16	QSO H Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.532,-0.730	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
17	QSO H Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.532,-0.730	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
18	QSO H Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 1.064,0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***

19	QSO J Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -1.064,0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
20	QSO J Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -1.064,-0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
21	QSO J Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 1.064,-0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
22	QSO H Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -1.064,0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
23	QSO H Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -1.064,-0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
24	QSO H Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 1.064,-0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
25	QSO J Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,1.095	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
26	QSO J Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,1.095	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
27	QSO J Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,-1.095	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***

	28	QSO H Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,1.095	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	29	QSO H Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,1.095	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	30	QSO H Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,-1.095	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	31	QSO J Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,-1.095	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	32	QSO J Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 1.605,0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	33	QSO J Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -1.605,0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	34	QSO H Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,-1.095	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	35	QSO H Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 1.605,0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	36	QSO H Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -1.605,0.365	Sequence 1-36 Non-Int in Visit 03 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 03	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 13645, Visit 04, implementation Thu Aug 07 01:11:10 GMT 2014

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD

Comments: First orbit of QSO observations

To ensure maximum thermal stability (and thus PSF stability) for these PSF-sensitive observations, we request one of the following constraints, if possible and if they do not interfere with the schedulability of other programs.

1) If our observations occur directly after an SAA transit, that the telescope be slewed to our initial pointing before the SAA transit, allowing thermal settling to occur during the transit.
2) Our observations occur directly after observations on a nearby target, to minimize the change in pointing angle (and thus thermal settling time) at the beginning of our observations.

Diagnostics

(Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04) Warning (Form): No Parallel Exposures Specified in Parallel Exposure Group

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	J0100+2802	RA: 01 00 13.0200 (15.0542500d)		V=(?)	Reference Frame: ICRS
	Alt Name1: QSO	Dec: +28 02 25.80 (28.04050d)		z_AB=18.4	
		Equinox: J2000			

Exposures

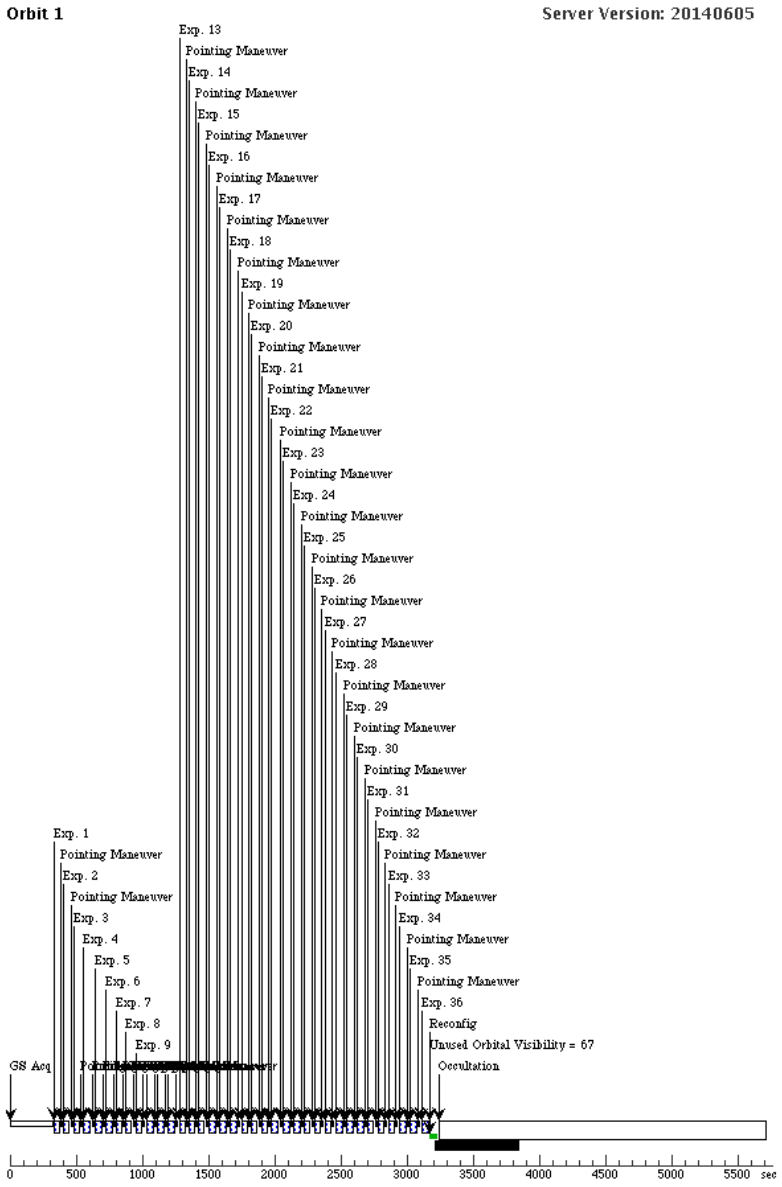
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	QSO J Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
2	QSO J Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
3	QSO J Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,-0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
4	QSO H Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	22.623854 Secs (22.624 Secs) *[==>]*	*[1]*
5	QSO H Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	22.623854 Secs (22.624 Secs) *[==>]*	*[1]*
6	QSO H Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,-0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	22.623854 Secs (22.624 Secs) *[==>]*	*[1]*
7	QSO J Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,-0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
8	QSO J Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,0.730	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
9	QSO J Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,0.730	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*

10	QSO H Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,-0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
11	QSO H Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,0.730	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
12	QSO H Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.532,0.730	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
13	QSO J Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.532,-0.730	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
14	QSO J Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.532,-0.730	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
15	QSO J Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 1.064,0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
16	QSO H Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.532,-0.730	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
17	QSO H Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.532,-0.730	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
18	QSO H Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 1.064,0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***

19	QSO J Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -1.064,0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
20	QSO J Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -1.064,-0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
21	QSO J Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 1.064,-0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
22	QSO H Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -1.064,0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
23	QSO H Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -1.064,-0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
24	QSO H Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 1.064,-0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
25	QSO J Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,1.095	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
26	QSO J Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,1.095	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
27	QSO J Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,-1.095	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***

	28	QSO H Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,1.095	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	29	QSO H Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,1.095	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	30	QSO H Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,-1.095	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	31	QSO J Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,-1.095	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	32	QSO J Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 1.605,0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	33	QSO J Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -1.605,0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	34	QSO H Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,-1.095	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	35	QSO H Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 1.605,0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	36	QSO H Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -1.605,0.365	Sequence 1-36 Non-Int in Visit 04 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 04	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 13645, Visit 05, implementation Thu Aug 07 01:11:11 GMT 2014

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR

Special Requirements: AFTER 04 BY 0.8 Orbits TO 1.2 Orbits

Comments: Orbit of PSF star observations

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	J0059+2809	RA: 00 59 20.2900 (14.8345417d)		V=(?)	Reference Frame: ICRS
	Alt Name1: PSF-STAR	Dec: +28 09 31.33 (28.15870d)		J_Vega=16.75,	
		Equinox: J2000		H_vega=15.67	

Comments: PSF star

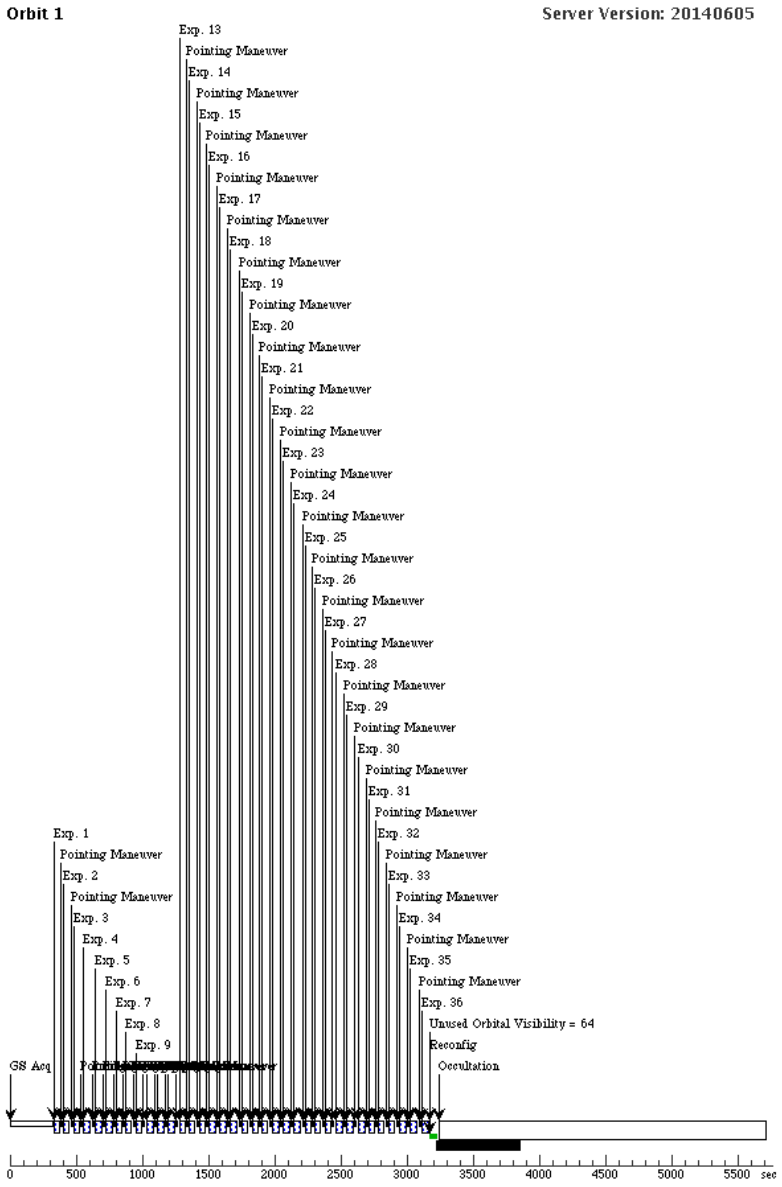
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	PSF J Dither 0	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,0.365	Sequence 1-36 Non-Int in Visit 05	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
2	PSF J Dither 0	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,0.365	Sequence 1-36 Non-Int in Visit 05	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
3	PSF J Dither 0	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,-0.365	Sequence 1-36 Non-Int in Visit 05	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
4	PSF H Dither 0	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,0.365	Sequence 1-36 Non-Int in Visit 05	22.623854 Secs (22.624 Secs) *[==>]*	*[1]*
5	PSF H Dither 0	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,0.365	Sequence 1-36 Non-Int in Visit 05	22.623854 Secs (22.624 Secs) *[==>]*	*[1]*
6	PSF H Dither 0	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,-0.365	Sequence 1-36 Non-Int in Visit 05	22.623854 Secs (22.624 Secs) *[==>]*	*[1]*
7	PSF J Dither 1	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,-0.365	Sequence 1-36 Non-Int in Visit 05	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
8	PSF J Dither 1	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,0.730	Sequence 1-36 Non-Int in Visit 05	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
9	PSF J Dither 1	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,-0.730	Sequence 1-36 Non-Int in Visit 05	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
10	PSF H Dither 1	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,-0.365	Sequence 1-36 Non-Int in Visit 05	22.623854 Secs (22.624 Secs) *[==>]*	*[1]*
11	PSF H Dither 1	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,0.730	Sequence 1-36 Non-Int in Visit 05	22.623854 Secs (22.624 Secs) *[==>]*	*[1]*
12	PSF H Dither 1	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,0.730	Sequence 1-36 Non-Int in Visit 05	22.623854 Secs (22.624 Secs) *[==>]*	*[1]*
13	PSF J Dither 2	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.532,-0.730	Sequence 1-36 Non-Int in Visit 05	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
14	PSF J Dither 2	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.532,-0.730	Sequence 1-36 Non-Int in Visit 05	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
15	PSF J Dither 2	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 1.064,0.365	Sequence 1-36 Non-Int in Visit 05	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
16	PSF H Dither 2	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.532,-0.730	Sequence 1-36 Non-Int in Visit 05	22.623854 Secs (22.624 Secs) *[==>]*	*[1]*

	17	PSF H Dither 2	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.532,-0.730	Sequence 1-36 Non-Int in Visit 05	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	18	PSF H Dither 2	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 1.064,0.365	Sequence 1-36 Non-Int in Visit 05	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	19	PSF J Dither 3	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -1.064,0.365	Sequence 1-36 Non-Int in Visit 05	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	20	PSF J Dither 3	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -1.064,-0.365	Sequence 1-36 Non-Int in Visit 05	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	21	PSF J Dither 3	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 1.064,-0.365	Sequence 1-36 Non-Int in Visit 05	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	22	PSF H Dither 3	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -1.065,0.365	Sequence 1-36 Non-Int in Visit 05	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	23	PSF H Dither 3	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -1.064,-0.365	Sequence 1-36 Non-Int in Visit 05	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	24	PSF H Dither 3	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 1.064,-0.365	Sequence 1-36 Non-Int in Visit 05	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	25	PSF J Dither 4	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,1.095	Sequence 1-36 Non-Int in Visit 05	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	26	PSF J Dither 4	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,1.095	Sequence 1-36 Non-Int in Visit 05	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	27	PSF J Dither 4	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,-1.095	Sequence 1-36 Non-Int in Visit 05	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	28	PSF H Dither 4	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,1.095	Sequence 1-36 Non-Int in Visit 05	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	29	PSF H Dither 4	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,1.095	Sequence 1-36 Non-Int in Visit 05	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	30	PSF H Dither 4	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,-1.095	Sequence 1-36 Non-Int in Visit 05	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	31	PSF J Dither 5	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,-1.095	Sequence 1-36 Non-Int in Visit 05	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	32	PSF J Dither 5	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 1.605,0.365	Sequence 1-36 Non-Int in Visit 05	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***

	33	PSF J Dither 5	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -1.605,0.365	Sequence 1-36 Non-Int in Visit 05	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	34	PSF H Dither 5	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,-1.095	Sequence 1-36 Non-Int in Visit 05	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	35	PSF H Dither 5	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 1.605,0.365	Sequence 1-36 Non-Int in Visit 05	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	36	PSF H Dither 5	(2) J0059+2809	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -1.605,0.365	Sequence 1-36 Non-Int in Visit 05	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 13645, Visit 06, implementation Thu Aug 07 01:11:11 GMT 2014

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD

Comments: First orbit of QSO observations

To ensure maximum thermal stability (and thus PSF stability) for these PSF-sensitive observations, we request one of the following constraints, if possible and if they do not interfere with the schedulability of other programs.

1) If our observations occur directly after an SAA transit, that the telescope be slewed to our initial pointing before the SAA transit, allowing thermal settling to occur during the transit.
2) Our observations occur directly after observations on a nearby target, to minimize the change in pointing angle (and thus thermal settling time) at the beginning of our observations.

Diagnostics

(Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06) Warning (Form): No Parallel Exposures Specified in Parallel Exposure Group

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	J0100+2802	RA: 01 00 13.0200 (15.0542500d)		V=(?)	Reference Frame: ICRS
	Alt Name1: QSO	Dec: +28 02 25.80 (28.04050d)		z_AB=18.4	
		Equinox: J2000			

Exposures

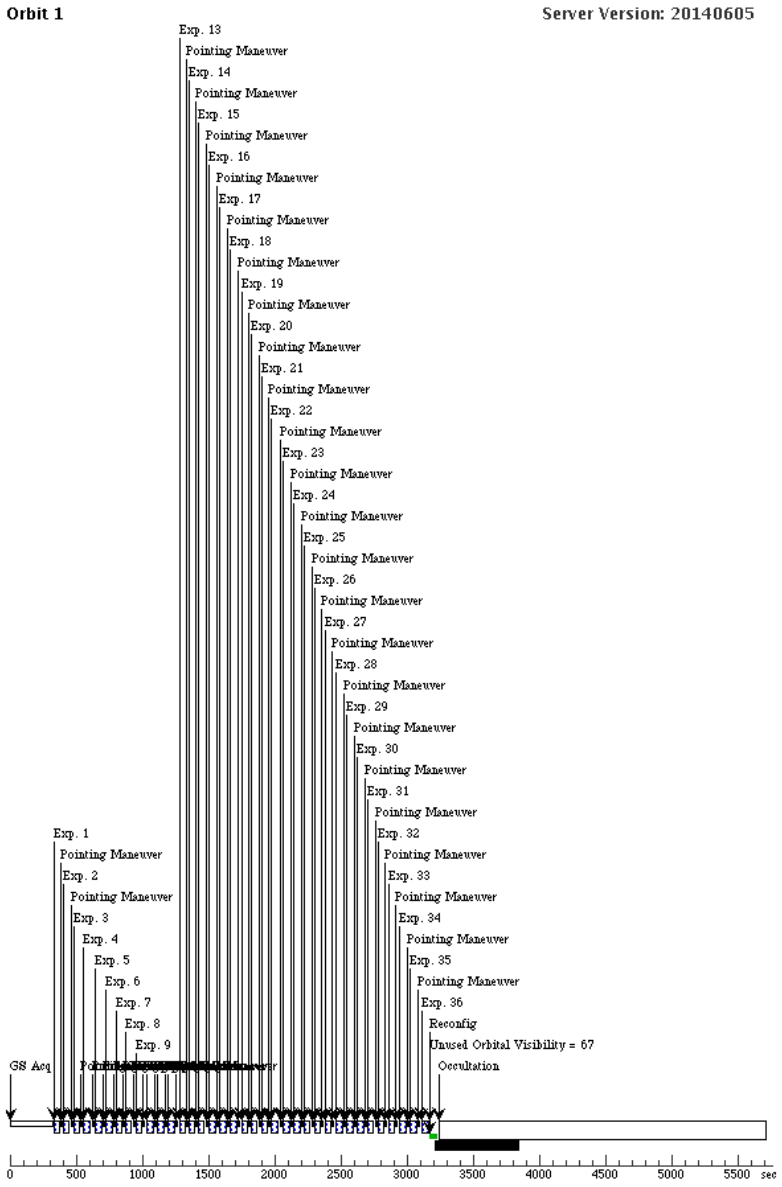
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	QSO J Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
2	QSO J Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
3	QSO J Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,-0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
4	QSO H Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	22.623854 Secs (22.624 Secs) *[==>]*	*[1]*
5	QSO H Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	22.623854 Secs (22.624 Secs) *[==>]*	*[1]*
6	QSO H Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,-0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	22.623854 Secs (22.624 Secs) *[==>]*	*[1]*
7	QSO J Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,-0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
8	QSO J Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,0.730	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*
9	QSO J Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,0.730	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	13.833391 Secs (13.833 Secs) *[==>]*	*[1]*

10	QSO H Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,-0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
11	QSO H Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,0.730	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
12	QSO H Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.532,0.730	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
13	QSO J Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.532,-0.730	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
14	QSO J Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.532,-0.730	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
15	QSO J Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 1.064,0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
16	QSO H Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.532,-0.730	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
17	QSO H Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.532,-0.730	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
18	QSO H Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 1.064,0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***

19	QSO J Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -1.064,0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
20	QSO J Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -1.064,-0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
21	QSO J Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 1.064,-0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
22	QSO H Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -1.064,0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
23	QSO H Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -1.064,-0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
24	QSO H Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 1.064,-0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
25	QSO J Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,1.095	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
26	QSO J Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,1.095	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
27	QSO J Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,-1.095	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***

	28	QSO H Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,1.095	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	29	QSO H Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,1.095	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	30	QSO H Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,-1.095	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	31	QSO J Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,-1.095	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	32	QSO J Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 1.605,0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	33	QSO J Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -1.605,0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	34	QSO H Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,-1.095	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	35	QSO H Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 1.605,0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	36	QSO H Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -1.605,0.365	Sequence 1-36 Non-Int in Visit 06 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 06	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 13645, Visit 07, implementation Thu Aug 07 01:11:11 GMT 2014

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR

Special Requirements: PCS MODE FINE; GUID TOL 0.005"; GYRO MODE 3GOBAD

Comments: First orbit of QSO observations

To ensure maximum thermal stability (and thus PSF stability) for these PSF-sensitive observations, we request one of the following constraints, if possible and if they do not interfere with the schedulability of other programs.

1) If our observations occur directly after an SAA transit, that the telescope be slewed to our initial pointing before the SAA transit, allowing thermal settling to occur during the transit.
2) Our observations occur directly after observations on a nearby target, to minimize the change in pointing angle (and thus thermal settling time) at the beginning of our observations.

Diagnostics

(Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07) Warning (Form): No Parallel Exposures Specified in Parallel Exposure Group

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	J0100+2802	RA: 01 00 13.0200 (15.0542500d)		V=(?)	Reference Frame: ICRS
	Alt Name1: QSO	Dec: +28 02 25.80 (28.04050d)		z_AB=18.4	
		Equinox: J2000			

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	QSO J Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
2	QSO J Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
3	QSO J Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,-0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
4	QSO H Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
5	QSO H Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
6	QSO H Dither 0	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,-0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
7	QSO J Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,-0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
8	QSO J Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,0.730	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
9	QSO J Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,0.730	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***

10	QSO H Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,-0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
11	QSO H Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,0.730	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
12	QSO H Dither 1	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.532,0.730	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
13	QSO J Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.532,-0.730	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
14	QSO J Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.532,-0.730	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
15	QSO J Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 1.064,0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
16	QSO H Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.532,-0.730	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
17	QSO H Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.532,-0.730	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
18	QSO H Dither 2	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 1.064,0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***

19	QSO J Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -1.064,0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
20	QSO J Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -1.064,-0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
21	QSO J Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 1.064,-0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
22	QSO H Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -1.064,0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
23	QSO H Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -1.064,-0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
24	QSO H Dither 3	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 1.064,-0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
25	QSO J Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,1.095	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
26	QSO J Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,1.095	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
27	QSO J Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -0.572,-1.095	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***

	28	QSO H Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,1.095	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	29	QSO H Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,1.095	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	30	QSO H Dither 4	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -0.572,-1.095	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	31	QSO J Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 0.572,-1.095	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	32	QSO J Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG 1.605,0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	33	QSO J Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB512-FIX	F125W	SAMP-SEQ=STEP25; NSAMP=5	POS TARG -1.605,0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	13.833391 Secs (13.833 Secs) *[==>]*	***[1]***
	34	QSO H Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 0.572,-1.095	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	35	QSO H Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG 1.605,0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***
	36	QSO H Dither 5	(1) J0100+2802	WFC3/IR, MULTIACCUM, IRSUB256	F160W	SAMP-SEQ=SPARS25; NSAMP=2	POS TARG -1.605,0.365	Sequence 1-36 Non-Int in Visit 07 Prime + Parallel Group 1-36 in Sequence 1-36 Non-Int in Visit 07	22.623854 Secs (22.624 Secs) *[==>]*	***[1]***

Orbit Structure