



14024 - IR grisms: trace and flux calibration

Cycle: 22, Proposal Category: CAL/WFC3

(Availability Mode: RESTRICTED)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
Dr. Norbert Pirzkal (PI) (Contact)	Space Telescope Science Institute	npirzkal@stsci.edu
Dr. Gabriel Brammer (CoI) (ESA Member)	Space Telescope Science Institute - ESA	brammer@stsci.edu

VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) GD-71	WFC3/IR	2	03-Oct-2014 21:25:16.0	yes
02	(1) GD-71	WFC3/IR	2	03-Oct-2014 21:25:23.0	yes

4 Total Orbits Used

ABSTRACT

This program will observe GD-71 inside the field and near the left edge (inside 3 times, outside 7 times) different positions using the WFC3 IR G102 and G141 grisms. The data will be used to calculate wavelength solutions for the grisms, and will be compared with those derived from programs 11937, 12355, 12356 and 13093 to monitor for potential time evolution of the calibration. This program provides an extension over the previous cycles including POSTARG offset positions with the target just off of the left edge of the field of view to test the extrapolation of the trace polynomials.

OBSERVING DESCRIPTION

GD-153 field is observed as a wavelength calibrator at three different positions in the field through each of the G102 and G141 grisms. As in previous calibration programs, each dispersed exposure is preceded by two direct images, to measure the source offsets between direct and dispersed

Proposal 14024 (STScI Edit Number: 1, Created: Friday, October 3, 2014 8:25:26 PM EST) - Overview

modes, and establish the wavelength zeropoint for each dispersed exposure. For G102 (G140) observations, the F098M and F105W (F140W and F160W) filters are used for the accompanying direct exposures. The number of FPA readouts (nsamp) is minimized for each exposure in order to avoid as much visibility time lost to buffer dumps as possible. POSTARGs are used to move the target to different locations in the field. POSTARGs are also used at the central exposure of the pattern in order to shift the location of the first-order spectrum so that it is near the center of the FOV.

This program extends the Cycle 21 program (15579) to include offset positions with the target just off the left edge of the frame to test the extrapolation of the trace/wavelength polynomials.

Proposal 14024 - G102 (01) - IR grisms: trace and flux calibration

Sat Oct 04 01:25:26 GMT 2014

Visit	Proposal 14024, G102 (01), implementation Diagnostic Status: Warning Scientific Instruments: WFC3/IR Special Requirements: (none) <i>Comments: Shift target just off x=0 edge</i>																	
	Diagnostics	(G102 (01)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE																
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		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous											
(1)	GD-71	RA: 05 52 27.6300 (88.1151250d) Dec: +15 53 13.37 (15.88705d) Equinox: J2000		V=13.06	Reference Frame: ICRS													

Proposal 14024 - G102 (01) - IR grisms: trace and flux calibration

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
Exposures	1	In Center F098M	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F098M	SAMP-SEQ=RAPID ; NSAMP=2	POS TARG -20,0	Sequence 1-3 Non-Int in G102 (01)	5.864582 Secs (5.865 Secs)	[1]
	2	In Center F105W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F105W	SAMP-SEQ=RAPID ; NSAMP=1	POS TARG -20,0	Sequence 1-3 Non-Int in G102 (01)	2.932291 Secs (2.932 Secs)	[1]
	3	In Center G102	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G102	SAMP-SEQ=SPARS 25; NSAMP=5	POS TARG -20,0	Sequence 1-3 Non-Int in G102 (01)	102.934351 Secs (102.934 Secs)	[1]
	4	Far Left Center F098M	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F098M	SAMP-SEQ=RAPID ; NSAMP=2	POS TARG -90,0	Sequence 4-6 Non-Int in G102 (01)	5.864582 Secs (5.865 Secs)	[1]
	5	Far Left Center F105W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F105W	SAMP-SEQ=RAPID ; NSAMP=1	POS TARG -90,0	Sequence 4-6 Non-Int in G102 (01)	2.932291 Secs (2.932 Secs)	[1]
	6	Far Left Center G102	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G102	SAMP-SEQ=SPARS 25; NSAMP=5	POS TARG -90,0	Sequence 4-6 Non-Int in G102 (01)	102.934351 Secs (102.934 Secs)	[1]
	7	Left -3 F098M	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F098M	SAMP-SEQ=RAPID ; NSAMP=2	POS TARG -71.0,-50	Sequence 7-9 Non-Int in G102 (01)	5.864582 Secs (5.865 Secs)	[1]
	8	Left -3 F105W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F105W	SAMP-SEQ=RAPID ; NSAMP=1	POS TARG -71.0,-50	Sequence 7-9 Non-Int in G102 (01)	2.932291 Secs (2.932 Secs)	[1]
	9	Left -3 G102	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G102	SAMP-SEQ=SPARS 25; NSAMP=5	POS TARG -71.0,-50	Sequence 7-9 Non-Int in G102 (01)	102.934351 Secs (102.934 Secs)	[1]
	10	Left -2 F098M	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F098M	SAMP-SEQ=RAPID ; NSAMP=2	POS TARG -71.0,-35	Sequence 10-12 Non-Int in G102 (01)	5.864582 Secs (5.865 Secs)	[1]
	11	Left -2 F105W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F105W	SAMP-SEQ=RAPID ; NSAMP=1	POS TARG -71.0,-35	Sequence 10-12 Non-Int in G102 (01)	2.932291 Secs (2.932 Secs)	[1]
	12	Left -2 G102	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G102	SAMP-SEQ=SPARS 25; NSAMP=5	POS TARG -71.0,-35	Sequence 10-12 Non-Int in G102 (01)	102.934351 Secs (102.934 Secs)	[1]
	13	Left -1 F098M	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F098M	SAMP-SEQ=RAPID ; NSAMP=2	POS TARG -71.0,-10	Sequence 13-15 Non-Int in G102 (01)	5.864582 Secs (5.865 Secs)	[1]
	14	Left -1 F105W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F105W	SAMP-SEQ=RAPID ; NSAMP=1	POS TARG -71.0,-10	Sequence 13-15 Non-Int in G102 (01)	2.932291 Secs (2.932 Secs)	[1]
	15	Left -1 G102	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G102	SAMP-SEQ=SPARS 25; NSAMP=5	POS TARG -71.0,-10	Sequence 13-15 Non-Int in G102 (01)	102.934351 Secs (102.934 Secs)	[1]
	16	Left +0 F098M	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F098M	SAMP-SEQ=RAPID ; NSAMP=2	POS TARG -71.0,-0	Sequence 16-18 Non-Int in G102 (01)	5.864582 Secs (5.865 Secs)	[1]

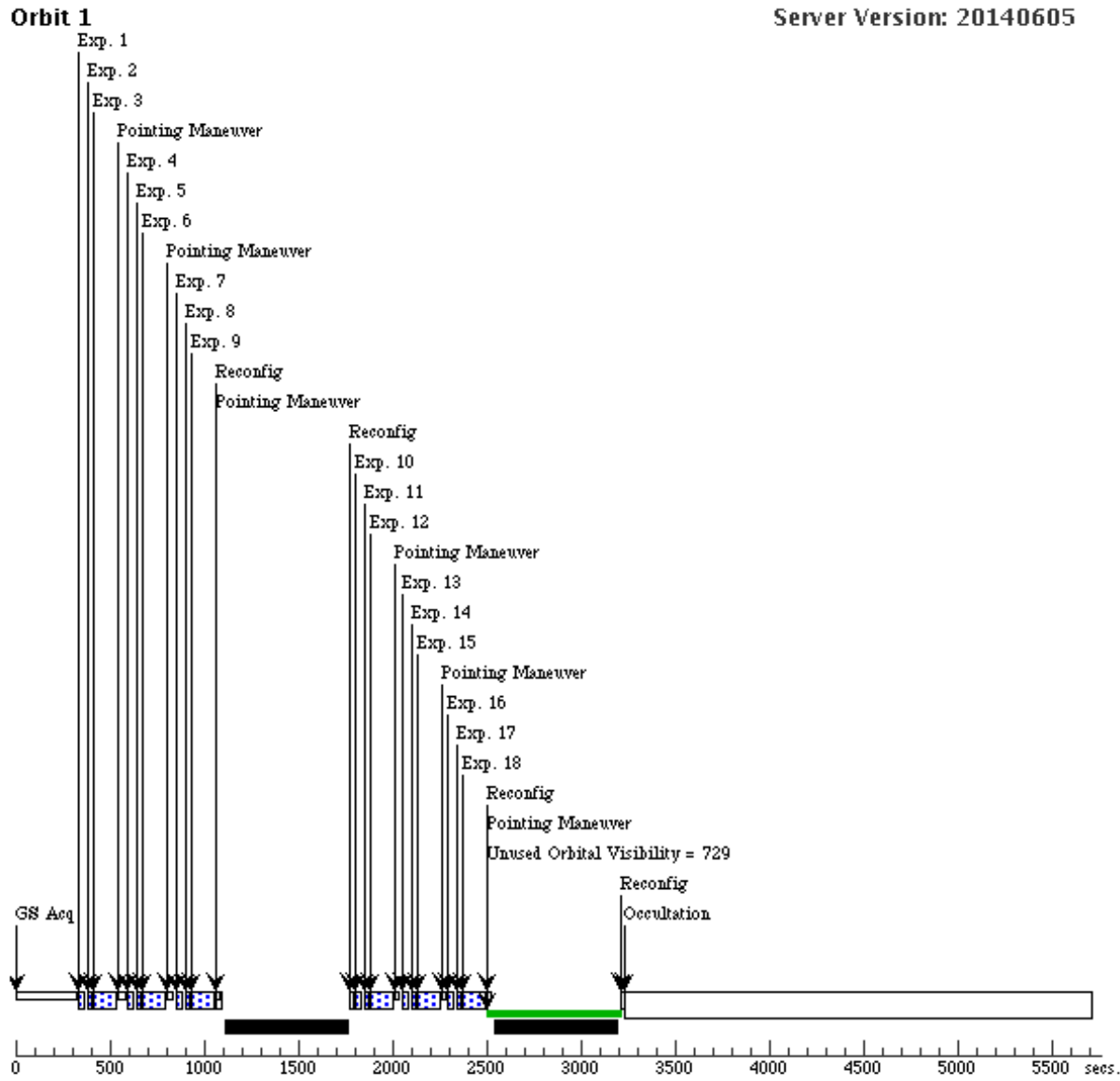
Proposal 14024 - G102 (01) - IR grisms: trace and flux calibration

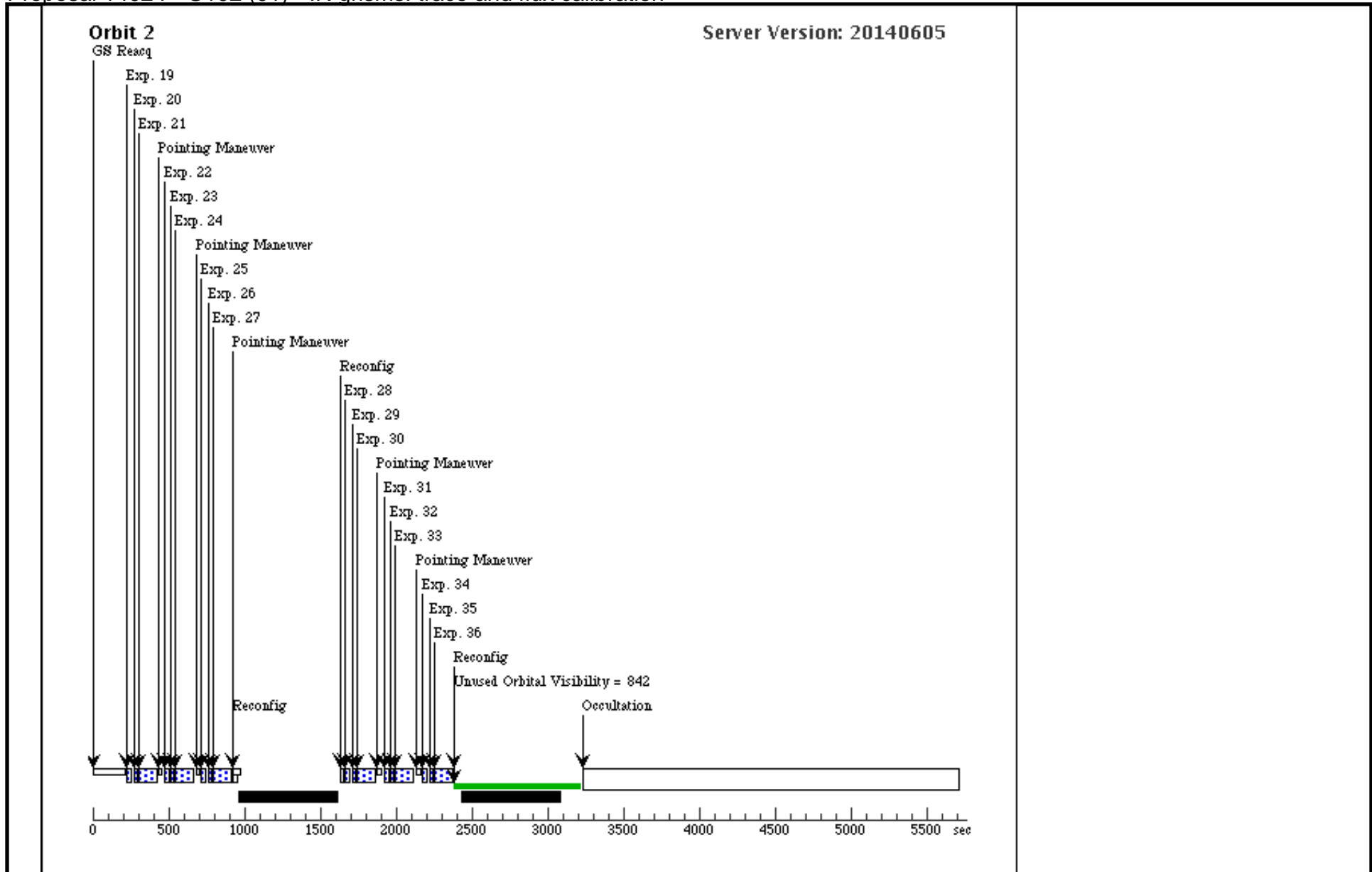
17	Left +0 F10 5W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F105W	SAMP-SEQ=RAPID POS TARG -71.0,-0 ; NSAMP=1	Sequence 16-18 Non -Int in G102 (01)	2.932291 Secs (2.932 Secs) [==>]	[1]
18	Left +0 G10 2	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G102	SAMP-SEQ=SPARS POS TARG -71.0,-0 25; NSAMP=5	Sequence 16-18 Non -Int in G102 (01)	102.934351 Secs (102.934 Secs) [==>]	[1]
19	Left +1 F09 8M	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F098M	SAMP-SEQ=RAPID POS TARG -71.0,10 ; NSAMP=2	Sequence 19-21 Non -Int in G102 (01)	5.864582 Secs (5.865 Secs) [==>]	[2]
20	Left +1 F10 5W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F105W	SAMP-SEQ=RAPID POS TARG -71.0,10 ; NSAMP=1	Sequence 19-21 Non -Int in G102 (01)	2.932291 Secs (2.932 Secs) [==>]	[2]
21	Left +1 G10 2	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G102	SAMP-SEQ=SPARS POS TARG -71.0,10 25; NSAMP=5	Sequence 19-21 Non -Int in G102 (01)	102.934351 Secs (102.934 Secs) [==>]	[2]
22	Left +2 F09 8M	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F098M	SAMP-SEQ=RAPID POS TARG -71.0,35 ; NSAMP=2	Sequence 22-24 Non -Int in G102 (01)	5.864582 Secs (5.865 Secs) [==>]	[2]
23	Left +2 F10 5W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F105W	SAMP-SEQ=RAPID POS TARG -71.0,35 ; NSAMP=1	Sequence 22-24 Non -Int in G102 (01)	2.932291 Secs (2.932 Secs) [==>]	[2]
24	Left +2 G10 2	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G102	SAMP-SEQ=SPARS POS TARG -71.0,35 25; NSAMP=5	Sequence 22-24 Non -Int in G102 (01)	102.934351 Secs (102.934 Secs) [==>]	[2]
25	Left +3 F09 8M	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F098M	SAMP-SEQ=RAPID POS TARG -71.0,+5 ; NSAMP=2	Sequence 25-27 Non -Int in G102 (01)	5.864582 Secs (5.865 Secs) [==>]	[2]
26	Left +3 F10 5W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F105W	SAMP-SEQ=RAPID POS TARG -71.0,50 ; NSAMP=1	Sequence 25-27 Non -Int in G102 (01)	2.932291 Secs (2.932 Secs) [==>]	[2]
27	Left +3 G10 2	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G102	SAMP-SEQ=SPARS POS TARG -71.0,50 25; NSAMP=5	Sequence 25-27 Non -Int in G102 (01)	102.934351 Secs (102.934 Secs) [==>]	[2]
28	In -3 F098M	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F098M	SAMP-SEQ=RAPID POS TARG -55,-50 ; NSAMP=2	Sequence 28-30 Non -Int in G102 (01)	5.864582 Secs (5.865 Secs) [==>]	[2]
29	In -3 F105W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F105W	SAMP-SEQ=RAPID POS TARG -55,-50 ; NSAMP=1	Sequence 28-30 Non -Int in G102 (01)	2.932291 Secs (2.932 Secs) [==>]	[2]
30	In -3 G102	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G102	SAMP-SEQ=SPARS POS TARG -55,-50 25; NSAMP=5	Sequence 28-30 Non -Int in G102 (01)	102.934351 Secs (102.934 Secs) [==>]	[2]
31	In +0 F098 M	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F098M	SAMP-SEQ=RAPID POS TARG -55,0 ; NSAMP=2	Sequence 31-33 Non -Int in G102 (01)	5.864582 Secs (5.865 Secs) [==>]	[2]
32	In +0 F105 W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F105W	SAMP-SEQ=RAPID POS TARG -55,0 ; NSAMP=1	Sequence 31-33 Non -Int in G102 (01)	2.932291 Secs (2.932 Secs) [==>]	[2]

Proposal 14024 - G102 (01) - IR grisms: trace and flux calibration

33	In +0 G102	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G102	SAMP-SEQ=SPARS POS TARG -55,0 25; NSAMP=5	Sequence 31-33 Non -Int in G102 (01)	102.934351 Secs (102.934 Secs)	[==>]	[2]
34	In +3 F098 M	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F098M	SAMP-SEQ=RAPID POS TARG -55,+50 ; NSAMP=2	Sequence 34-36 Non -Int in G102 (01)	5.864582 Secs (5.865 Secs)	[==>]	[2]
35	In +3 F105 W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F105W	SAMP-SEQ=RAPID POS TARG -55,50 ; NSAMP=1	Sequence 34-36 Non -Int in G102 (01)	2.932291 Secs (2.932 Secs)	[==>]	[2]
36	In +3 G102	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G102	SAMP-SEQ=SPARS POS TARG -55,50 25; NSAMP=5	Sequence 34-36 Non -Int in G102 (01)	102.934351 Secs (102.934 Secs)	[==>]	[2]

Orbit Structure





Proposal 14024 - G141 (02) - IR grisms: trace and flux calibration

Sat Oct 04 01:25:27 GMT 2014

Visit	Proposal 14024, G141 (02), implementation Diagnostic Status: Warning Scientific Instruments: WFC3/IR Special Requirements: SAME ORIENT AS 01 <i>Comments: Shift target just off x=0 edge</i>																	
	Diagnostics	(G141 (02)) Warning (Orbit Planner): POS TARG OUTSIDE OF APERTURE																
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		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous											
(1)	GD-71	RA: 05 52 27.6300 (88.1151250d) Dec: +15 53 13.37 (15.88705d) Equinox: J2000		V=13.06	Reference Frame: ICRS													

Proposal 14024 - G141 (02) - IR grisms: trace and flux calibration

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
Exposures	1	In Center F1 40W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F140W	SAMP-SEQ=RAPID ; NSAMP=2	POS TARG -20,0	Sequence 1-3 Non-Int in G141 (02)	5.864582 Secs (5.865 Secs)	[1]
	2	In Center F1 60W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F160W	SAMP-SEQ=RAPID ; NSAMP=2	POS TARG -20,0	Sequence 1-3 Non-Int in G141 (02)	5.864582 Secs (5.865 Secs)	[1]
	3	In Center G 141	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G141	SAMP-SEQ=SPARS 25; NSAMP=5	POS TARG -20,0	Sequence 1-3 Non-Int in G141 (02)	102.934351 Secs (102.934 Secs)	[1]
	4	Far Left Center F140W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F140W	SAMP-SEQ=RAPID ; NSAMP=2	POS TARG -90,0	Sequence 4-6 Non-Int in G141 (02)	5.864582 Secs (5.865 Secs)	[1]
	5	Far Left Center F160W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F160W	SAMP-SEQ=RAPID ; NSAMP=2	POS TARG -90,0	Sequence 4-6 Non-Int in G141 (02)	5.864582 Secs (5.865 Secs)	[1]
	6	Far Left Center G141	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G141	SAMP-SEQ=SPARS 25; NSAMP=5	POS TARG -90,0	Sequence 4-6 Non-Int in G141 (02)	102.934351 Secs (102.934 Secs)	[1]
	7	Left -3 F140 W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F140W	SAMP-SEQ=RAPID ; NSAMP=2	POS TARG -71.0,-50	Sequence 7-9 Non-Int in G141 (02)	5.864582 Secs (5.865 Secs)	[1]
	8	Left -3 F160 W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F160W	SAMP-SEQ=RAPID ; NSAMP=2	POS TARG -71.0,-50	Sequence 7-9 Non-Int in G141 (02)	5.864582 Secs (5.865 Secs)	[1]
	9	Left -3 G14 1	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G141	SAMP-SEQ=SPARS 25; NSAMP=5	POS TARG -71.0,-50	Sequence 7-9 Non-Int in G141 (02)	102.934351 Secs (102.934 Secs)	[1]
	10	Left -2 F140 W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F140W	SAMP-SEQ=RAPID ; NSAMP=2	POS TARG -71.0,-35	Sequence 10-12 Non-Int in G141 (02)	5.864582 Secs (5.865 Secs)	[1]
	11	Left -2 F160 W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F160W	SAMP-SEQ=RAPID ; NSAMP=2	POS TARG -71.0,-35	Sequence 10-12 Non-Int in G141 (02)	5.864582 Secs (5.865 Secs)	[1]
	12	Left -2 G14 1	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G141	SAMP-SEQ=SPARS 25; NSAMP=5	POS TARG -71.0,-35	Sequence 10-12 Non-Int in G141 (02)	102.934351 Secs (102.934 Secs)	[1]
	13	Left -1 F140 W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F140W	SAMP-SEQ=RAPID ; NSAMP=2	POS TARG -71.0,-10	Sequence 13-15 Non-Int in G141 (02)	5.864582 Secs (5.865 Secs)	[1]
	14	Left -1 F160 W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F160W	SAMP-SEQ=RAPID ; NSAMP=2	POS TARG -71.0,-10	Sequence 13-15 Non-Int in G141 (02)	5.864582 Secs (5.865 Secs)	[1]
	15	Left -1 G14 1	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G141	SAMP-SEQ=SPARS 25; NSAMP=5	POS TARG -71.0,-10	Sequence 13-15 Non-Int in G141 (02)	102.934351 Secs (102.934 Secs)	[1]
	16	Left +0 F140W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F140W	SAMP-SEQ=RAPID ; NSAMP=2	POS TARG -71.0,-0	Sequence 16-18 Non-Int in G141 (02)	5.864582 Secs (5.865 Secs)	[1]

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17	Left +0 F16 0W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F160W	SAMP-SEQ=RAPID POS TARG -71.0,-0 ; NSAMP=2	Sequence 16-18 Non -Int in G141 (02)	5.864582 Secs (5.865 Secs) [==>]	[1]
18	Left +0 G14 1	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G141	SAMP-SEQ=SPARS POS TARG -71.0,-0 25; NSAMP=5	Sequence 16-18 Non -Int in G141 (02)	102.934351 Secs (102.934 Secs) [==>]	[1]
19	Left +1 F14 0W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F140W	SAMP-SEQ=RAPID POS TARG -71.0,10 ; NSAMP=2	Sequence 19-21 Non -Int in G141 (02)	5.864582 Secs (5.865 Secs) [==>]	[2]
20	Left +1 F16 0W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F160W	SAMP-SEQ=RAPID POS TARG -71.0,10 ; NSAMP=2	Sequence 19-21 Non -Int in G141 (02)	5.864582 Secs (5.865 Secs) [==>]	[2]
21	Left +1 G14 1	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G141	SAMP-SEQ=SPARS POS TARG -71.0,10 25; NSAMP=5	Sequence 19-21 Non -Int in G141 (02)	102.934351 Secs (102.934 Secs) [==>]	[2]
22	Left +2 F14 0W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F140W	SAMP-SEQ=RAPID POS TARG -71.0,35 ; NSAMP=2	Sequence 22-24 Non -Int in G141 (02)	5.864582 Secs (5.865 Secs) [==>]	[2]
23	Left +2 F16 0W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F160W	SAMP-SEQ=RAPID POS TARG -71.0,35 ; NSAMP=2	Sequence 22-24 Non -Int in G141 (02)	5.864582 Secs (5.865 Secs) [==>]	[2]
24	Left +2 G14 1	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G141	SAMP-SEQ=SPARS POS TARG -71.0,35 25; NSAMP=5	Sequence 22-24 Non -Int in G141 (02)	102.934351 Secs (102.934 Secs) [==>]	[2]
25	Left +3 F14 0W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F140W	SAMP-SEQ=RAPID POS TARG -71.0,+5 ; NSAMP=2	Sequence 25-27 Non -Int in G141 (02)	5.864582 Secs (5.865 Secs) [==>]	[2]
26	Left +3 F16 0W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F160W	SAMP-SEQ=RAPID POS TARG -71.0,50 ; NSAMP=2	Sequence 25-27 Non -Int in G141 (02)	5.864582 Secs (5.865 Secs) [==>]	[2]
27	Left +3 G14 1	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G141	SAMP-SEQ=SPARS POS TARG -71.0,50 25; NSAMP=5	Sequence 25-27 Non -Int in G141 (02)	102.934351 Secs (102.934 Secs) [==>]	[2]
28	In -3 F140W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F140W	SAMP-SEQ=RAPID POS TARG -55,-50 ; NSAMP=2	Sequence 28-30 Non -Int in G141 (02)	5.864582 Secs (5.865 Secs) [==>]	[2]
29	In -3 F160W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F160W	SAMP-SEQ=RAPID POS TARG -55,-50 ; NSAMP=2	Sequence 28-30 Non -Int in G141 (02)	5.864582 Secs (5.865 Secs) [==>]	[2]
30	In -3 G141	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G141	SAMP-SEQ=SPARS POS TARG -55,-50 25; NSAMP=5	Sequence 28-30 Non -Int in G141 (02)	102.934351 Secs (102.934 Secs) [==>]	[2]
31	In +0 F140 W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F140W	SAMP-SEQ=RAPID POS TARG -55,0 ; NSAMP=2	Sequence 31-33 Non -Int in G141 (02)	5.864582 Secs (5.865 Secs) [==>]	[2]
32	In +0 F160 W	(1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F160W	SAMP-SEQ=RAPID POS TARG -55,0 ; NSAMP=2	Sequence 31-33 Non -Int in G141 (02)	5.864582 Secs (5.865 Secs) [==>]	[2]

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33	In +0 G141 (1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G141	SAMP-SEQ=SPARS POS TARG -55,0 25; NSAMP=5	Sequence 31-33 Non-Int in G141 (02)	102.934351 Secs (102.934 Secs)	
						[==>]	[2]
34	In +3 F140 W (1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F140W	SAMP-SEQ=RAPID POS TARG -55,+50 ; NSAMP=2	Sequence 34-36 Non-Int in G141 (02)	5.864582 Secs (5.865 Secs)	
						[==>]	[2]
35	In +3 F160 W (1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	F160W	SAMP-SEQ=RAPID POS TARG -55,50 ; NSAMP=2	Sequence 34-36 Non-Int in G141 (02)	5.864582 Secs (5.865 Secs)	
						[==>]	[2]
36	In +3 G141 (1) GD-71	WFC3/IR, MULTIACCUM, GRISM1024	G141	SAMP-SEQ=SPARS POS TARG -55,50 25; NSAMP=5	Sequence 34-36 Non-Int in G141 (02)	102.934351 Secs (102.934 Secs)	
						[==>]	[2]

Orbit Structure

