

V&V Reference Report

L2 ASCDS Version : 7.6.8.1

Observation 4431 - L2 Version 001
Chandra X-Ray Center

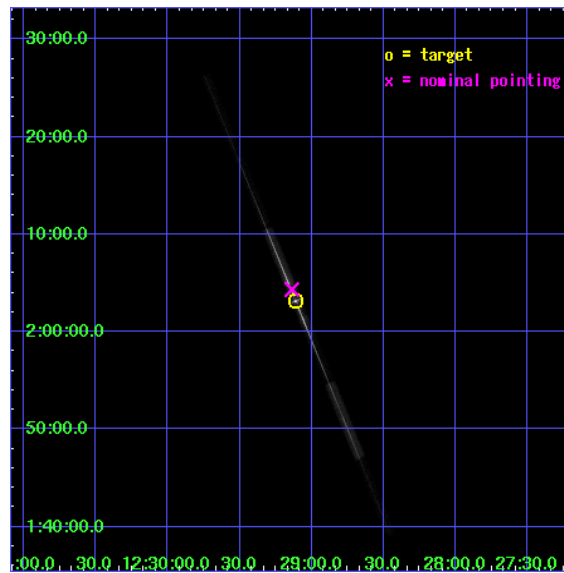
L2 Processing Date : Aug 10 2006

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1 Front

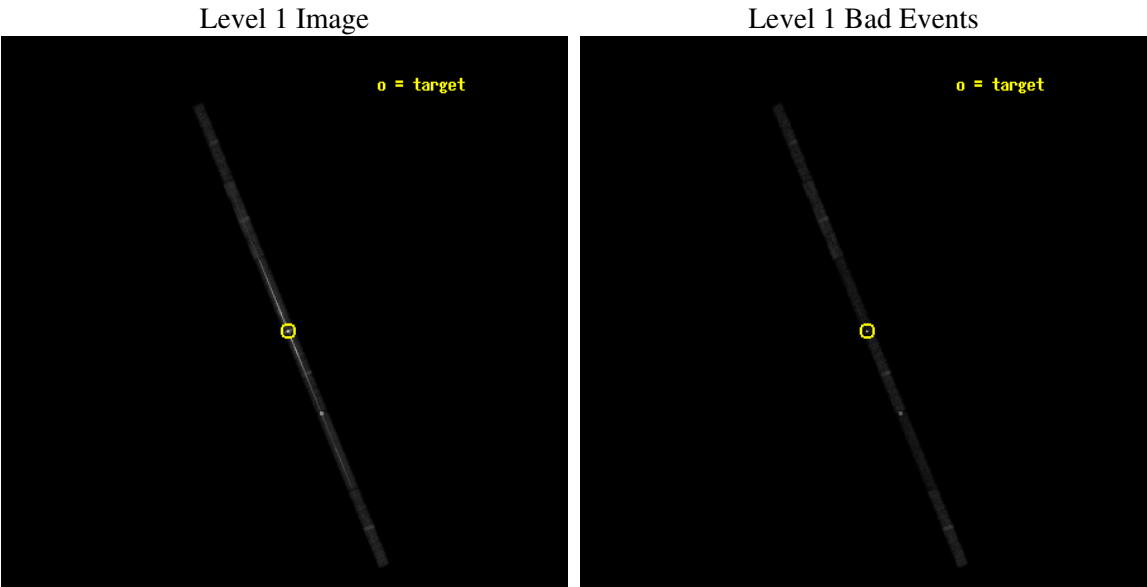
seq_num	790088
obs_id	4431
title	AO4 CALIBRATION OBSERVATIONS OF 3C273
observer	Dr. CXC Calibration
object	3C273
dtcycle	0
cycle	P
ra_targ	187.277917
dec_targ	2.052389
ra_nom	187.28441210808
dec_nom	2.0724086355504
roll_nom	247.66889086897
revision	3
ontime	27971.299523652
livetime	26422.203479645
ontime4	27971.299523652
ontime5	27971.299523652
ontime6	27971.299523652
ontime7	27971.299523652
ontime8	27971.299523652
ontime9	27971.299523652
l2events	199674



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 4

Chip 5

Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.8.1
caldsver	3.2.2
date	2006-08-10T15:52:31
revision	3

sched_exp_time	27459.000000
ontime	27972.43937093
ontime4	27972.43937093
ontime5	27972.43937093
ontime6	27972.43937093
ontime7	27972.43937093
ontime8	27972.43937093
ontime9	27972.43937093
l1events	382166

2.1.4 Events

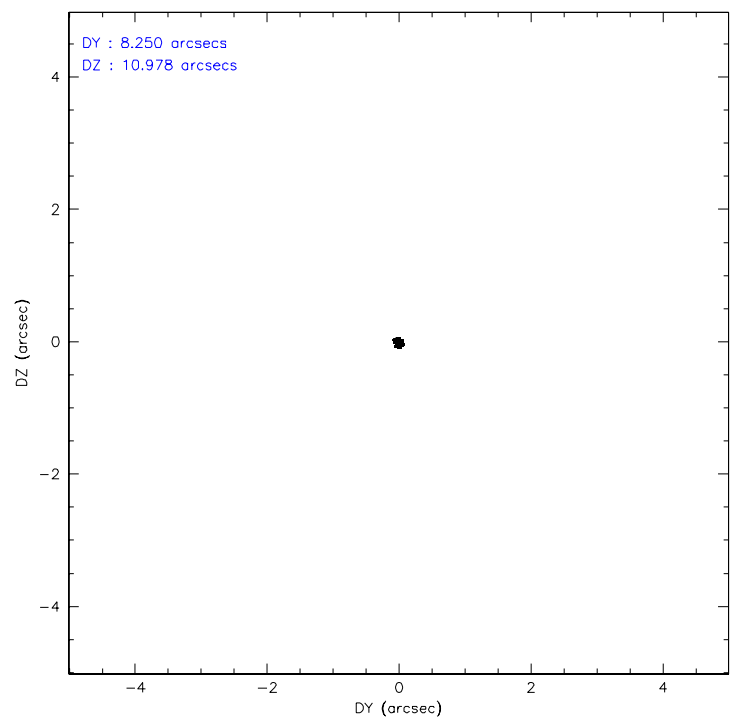
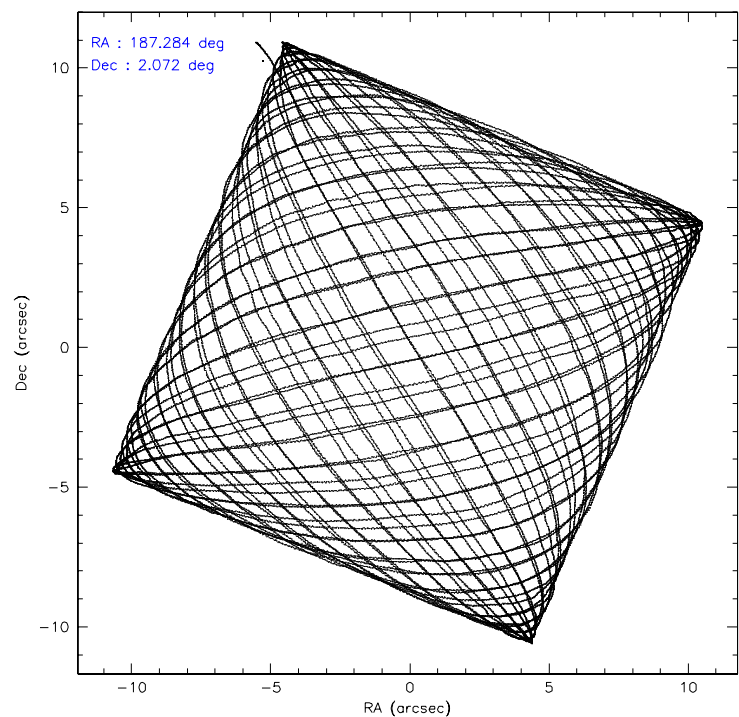
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	33074	52714	76303	150202	42200	27673
rejected events	28454	20596	25383	34403	31542	23201
rejected %	86%	39%	33%	22%	74%	83%

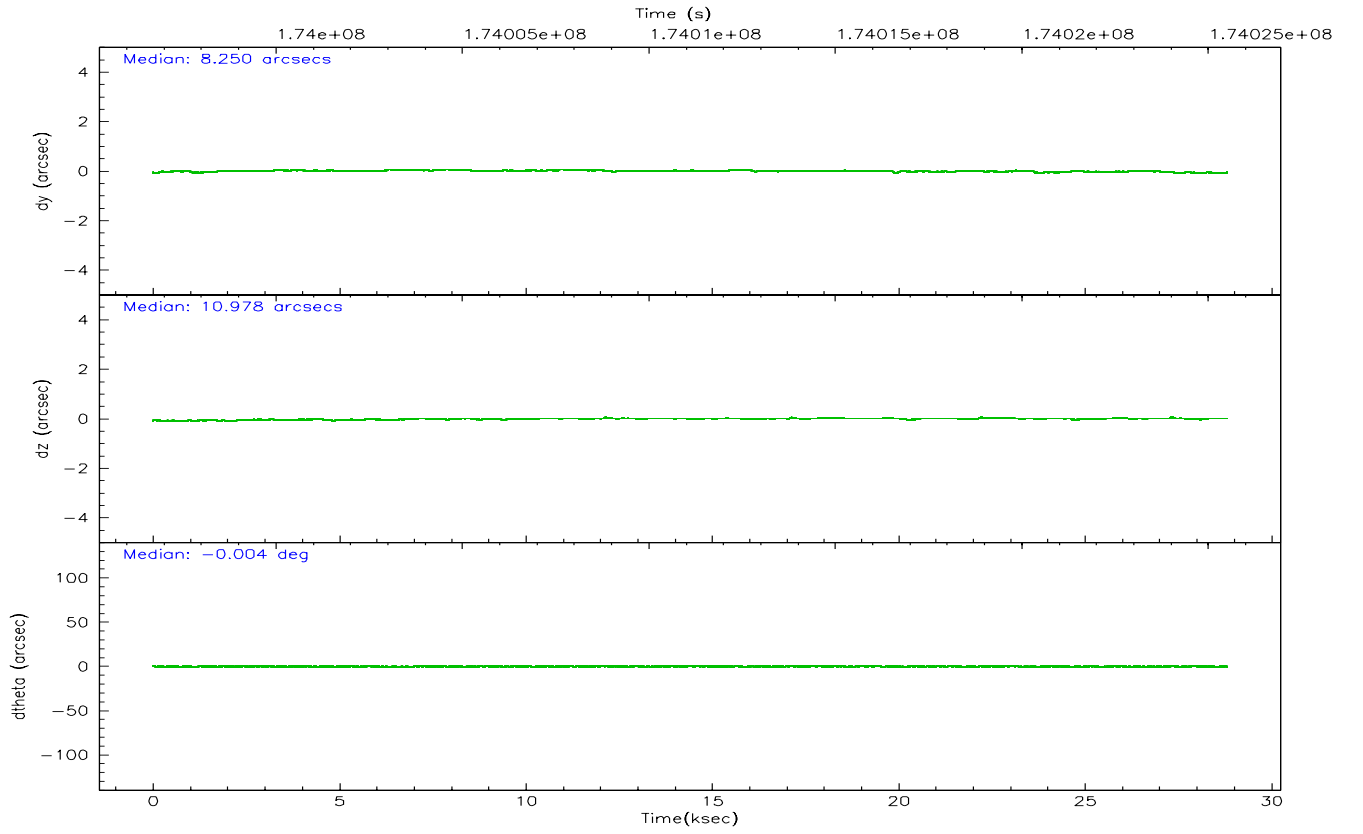
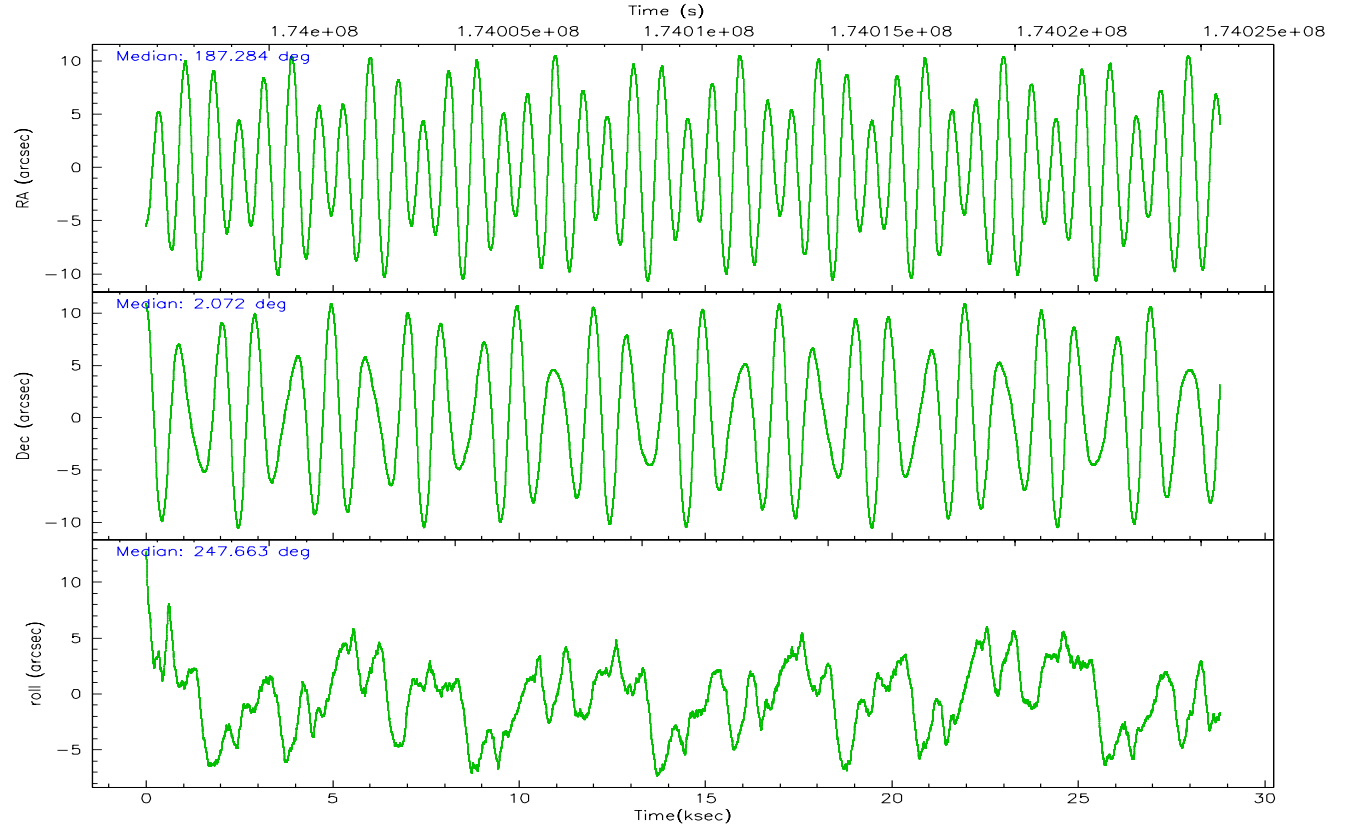
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	2224	10226	39310	25690	4946	2192
	6%	19%	51%	17%	11%	7%
grade 1 events	11	1826	87	989	15	10
	0%	3%	0%	0%	0%	0%
grade 2 events	762	7753	5633	28732	1645	634
	2%	14%	7%	19%	3%	2%
grade 3 events	526	1984	2074	12396	939	548
	1%	3%	2%	8%	2%	1%
grade 4 events	546	2323	2031	12262	868	560
	1%	4%	2%	8%	2%	2%
grade 5 events	869	3718	922	7163	1121	909
	2%	7%	1%	4%	2%	3%
grade 6 events	562	9839	1874	36729	2260	539
	1%	18%	2%	24%	5%	1%
grade 7 events	27574	15045	24372	26241	30406	22281
	83%	28%	31%	17%	72%	80%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	LETG	LETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	CUSTOM	1/8
Pointing RA	187.280402	187.2844121080831	Subarray start row	113	113
Pointing Dec	2.099349	2.07240863555038	Subarray row count	128	128
Pointing Roll	247.512404	247.668890868971	Alternating exposures requested	N	N
Window start time	170812864.184000	170812864.184000	Primary exposure time	0.000000	0.7
Window stop time	175910464.184000	175910464.184000			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-182.132523	-182.1370004450064			
SIM translation stage offset (mm)	-8	-7.995522138001405			
Observation start time	173998052.184000	173996176.00205			
Observation start date	2003-07-07T20:46:28	2003-07-07T20:16:16			
Observation end time	174025511.184000	174026501.14085			
Observation end date	2003-07-08T04:24:07	2003-07-08T04:41:41			
Read mode	TIMED	TIMED			

2.3 Aspect



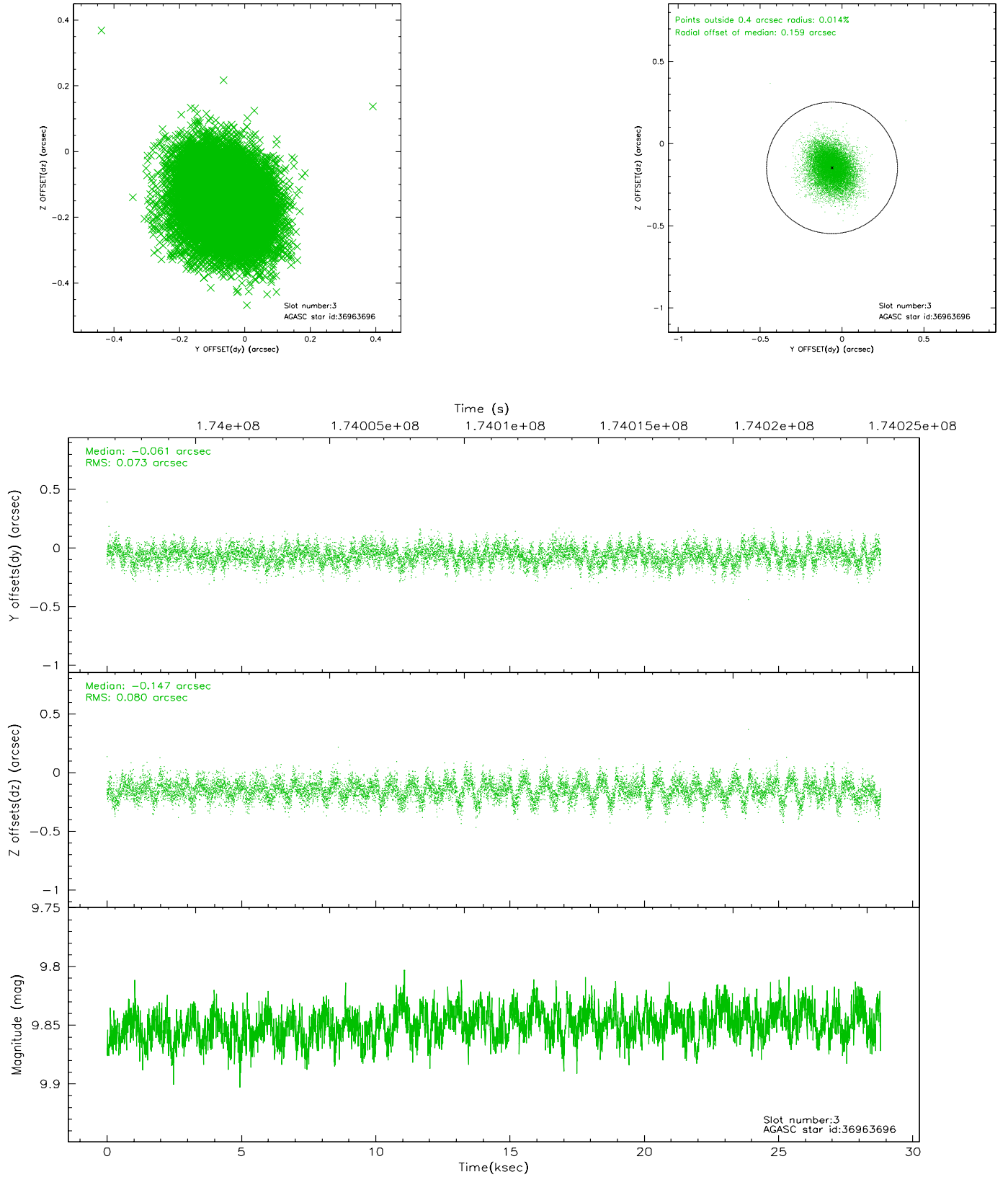


Slot Statistics

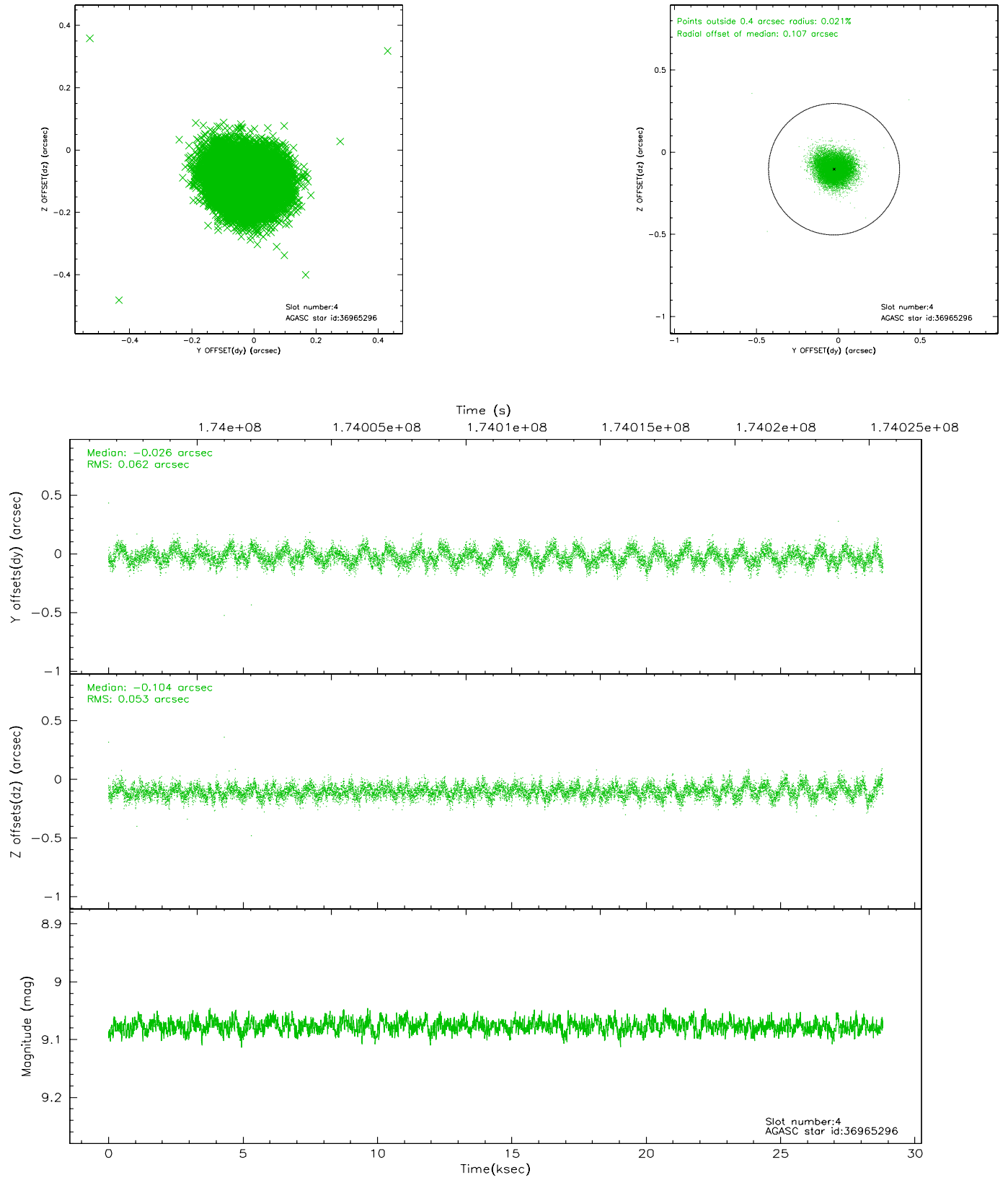
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.08	7028	-0.029	-0.074	0.006	0.010	0.000000	0.000000	-760.49	-1897.03
1	FID	ACIS-S-4	7.17	7028	0.014	0.034	0.005	0.009	0.000000	0.000000	2152.79	11.44
2	FID	ACIS-S-5	7.22	7028	-0.016	0.048	0.006	0.010	0.000000	0.000000	-1813.21	5.21
3	GUIDE	36963696	9.85	14045	-0.061	-0.147	0.115	0.188	186.971396	1.870472	1186.71	-712.24
4	GUIDE	36965296	9.08	14050	-0.026	-0.104	0.087	0.137	186.926292	1.837429	1358.81	-816.80
5	GUIDE	36965816	9.26	14052	-0.023	-0.081	0.091	0.148	186.823353	1.771455	1719.92	-1068.15
6	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	37883040	10.02	14041	0.110	0.337	0.128	0.211	187.575516	1.280402	2318.07	2109.59

2.4 Star Slots

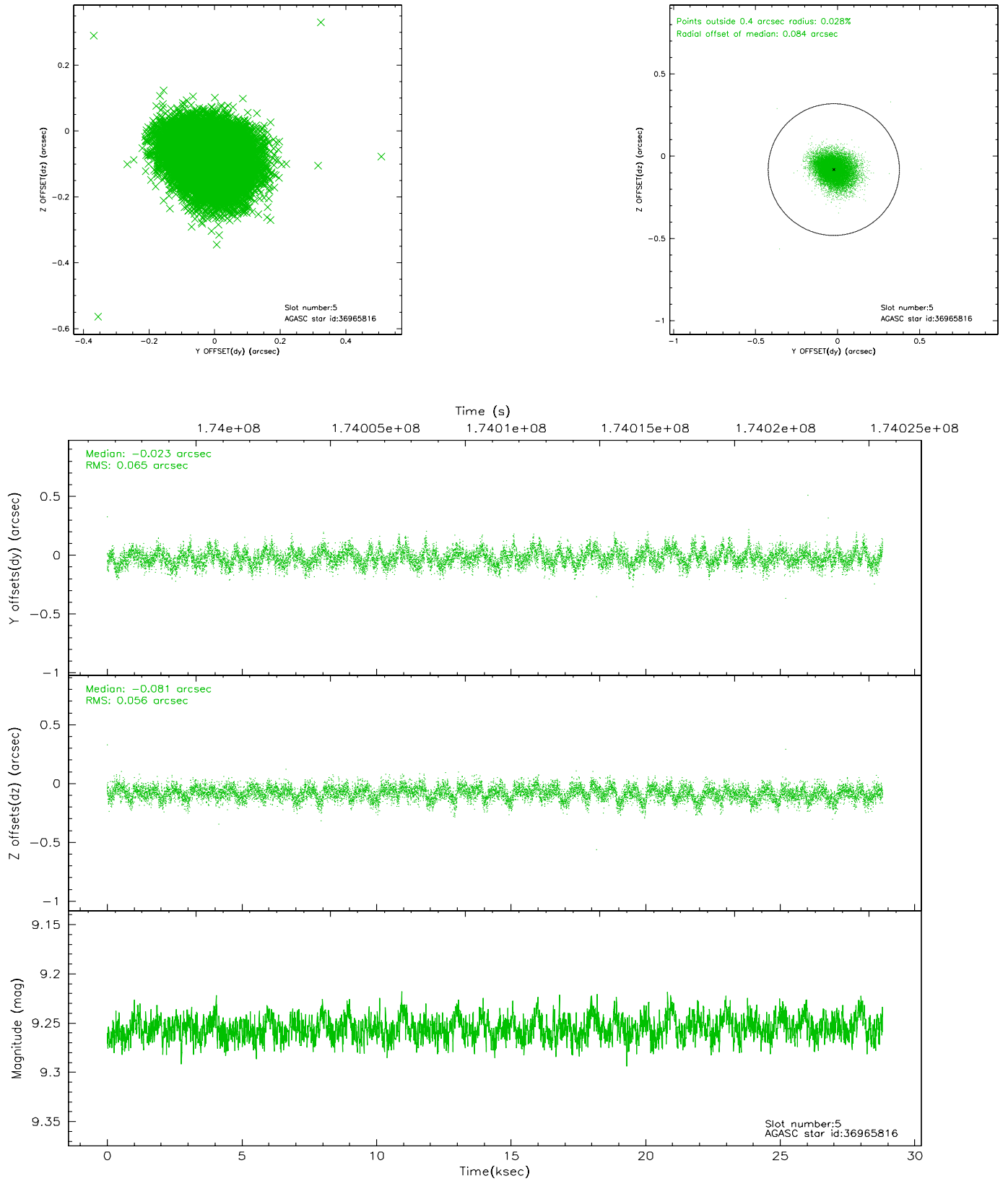
2.4.1 Slot 3



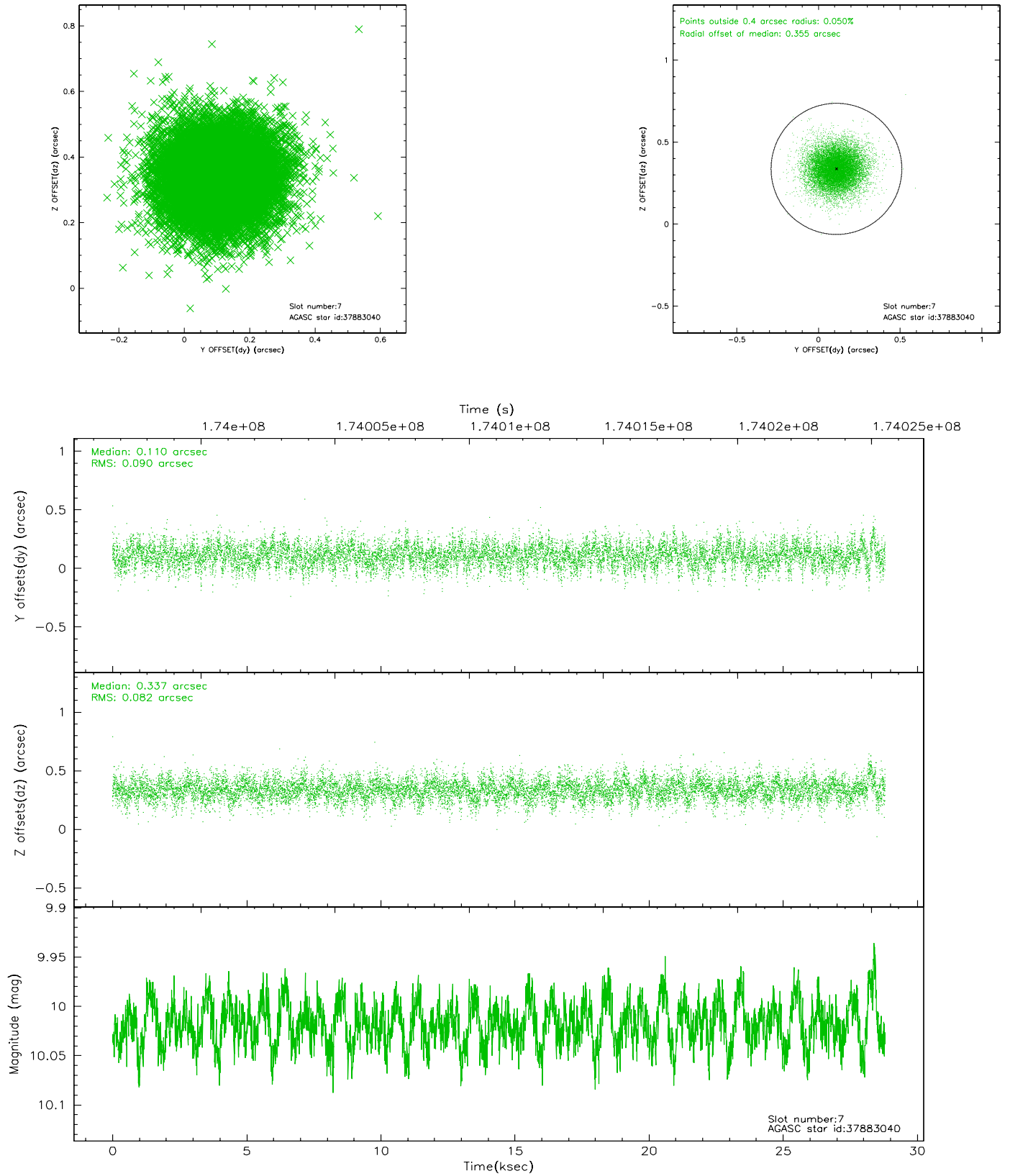
2.4.2 Slot 4



2.4.3 Slot 5

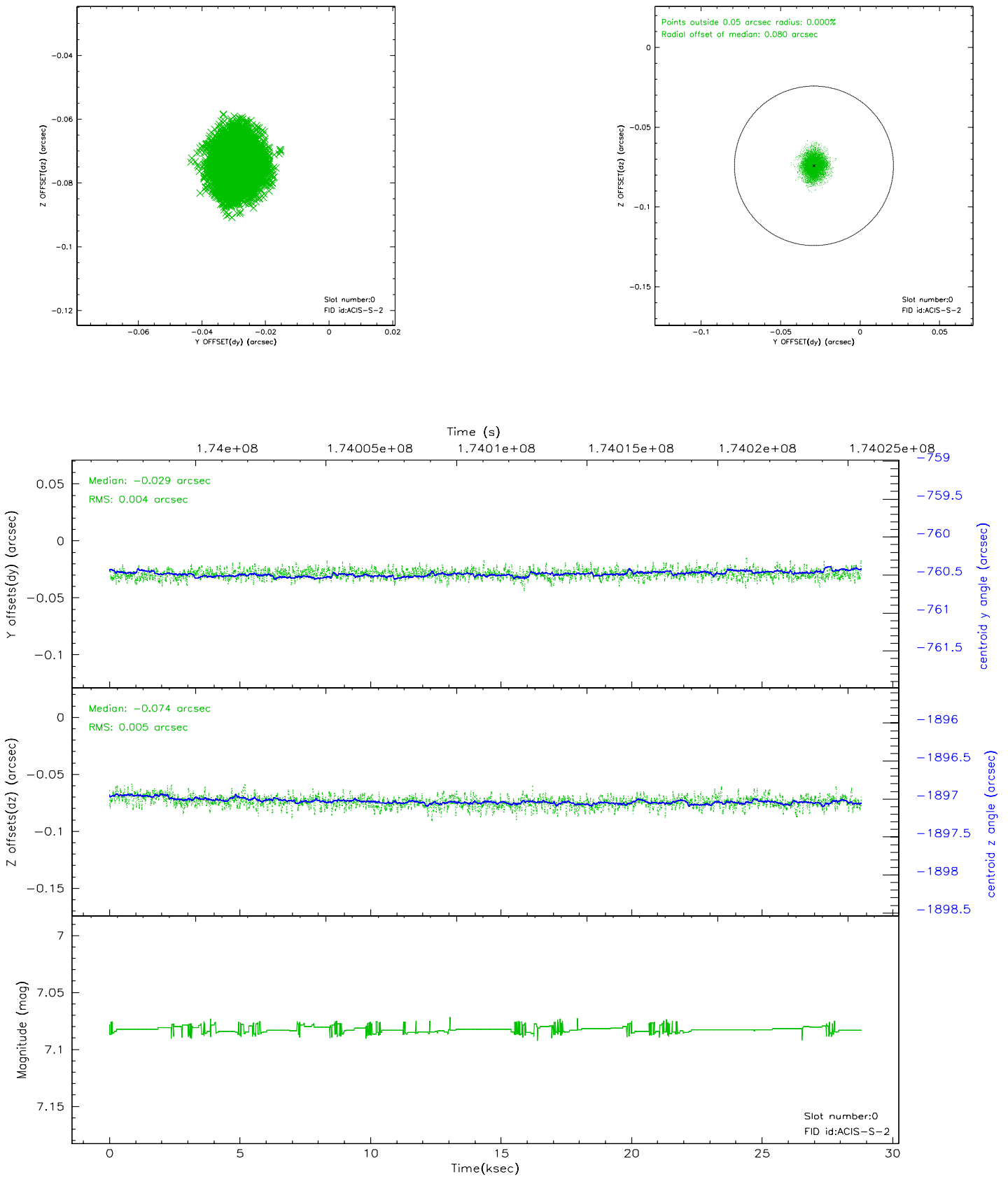


2.4.4 Slot 7

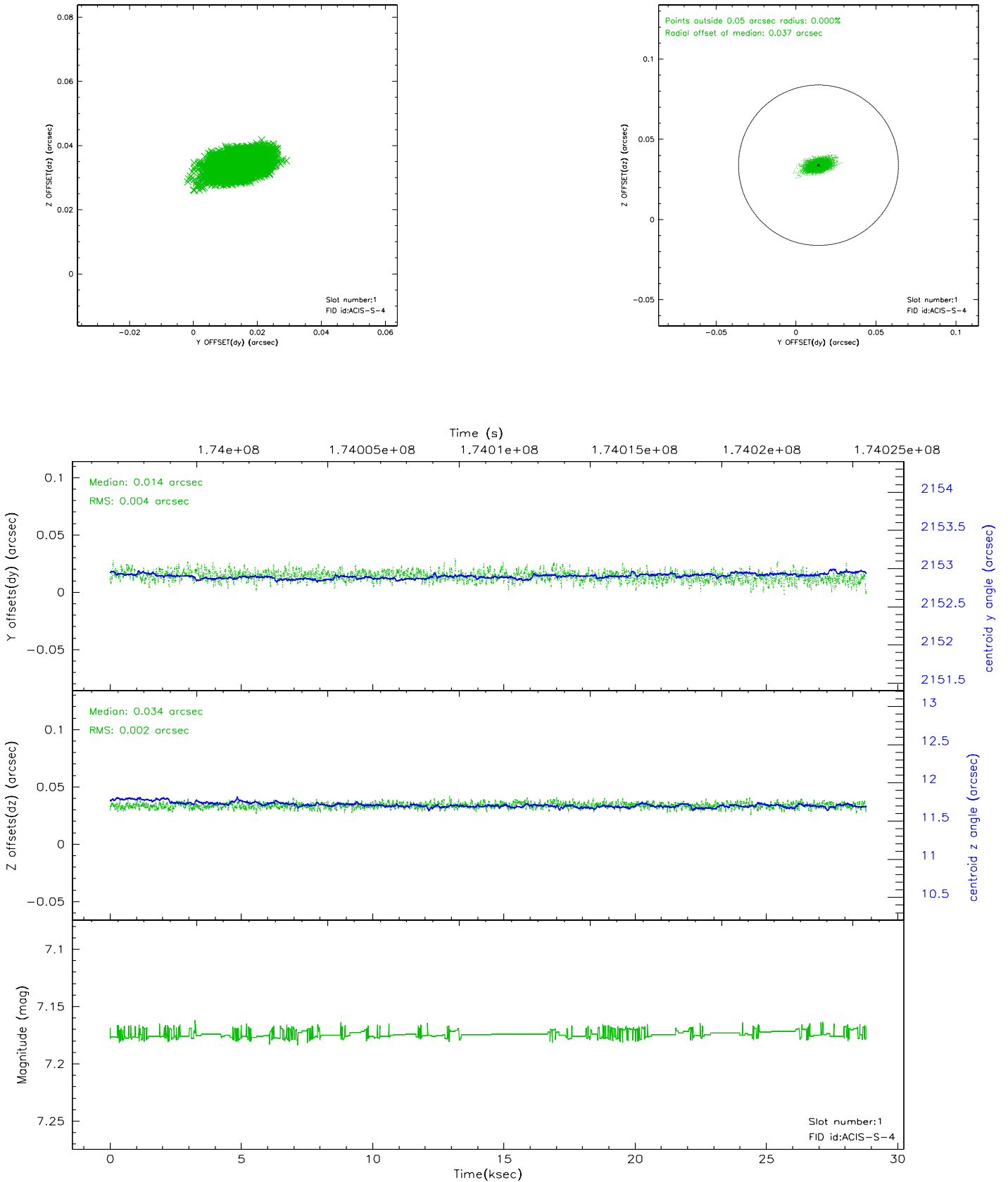


2.5 FID Slots

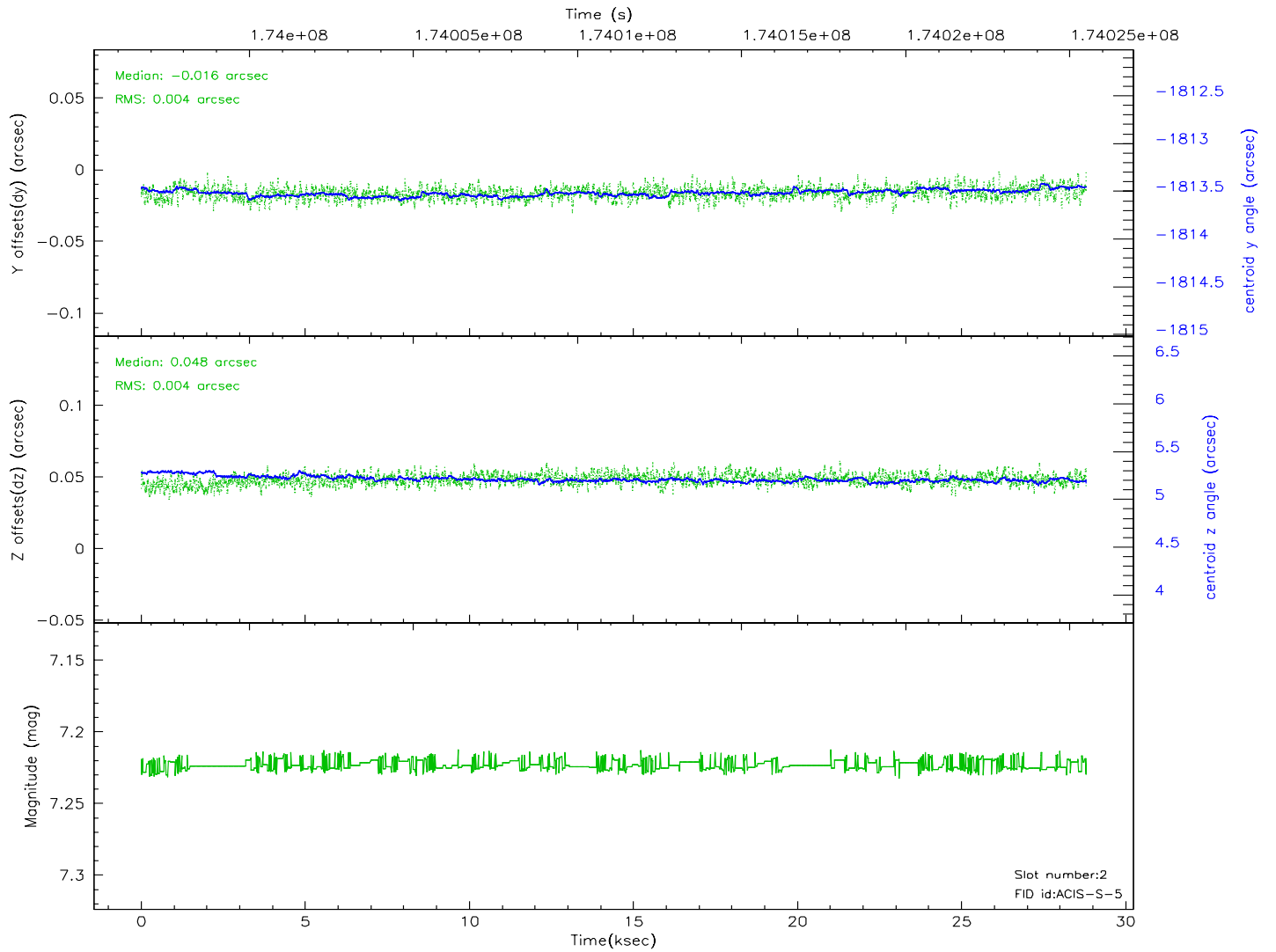
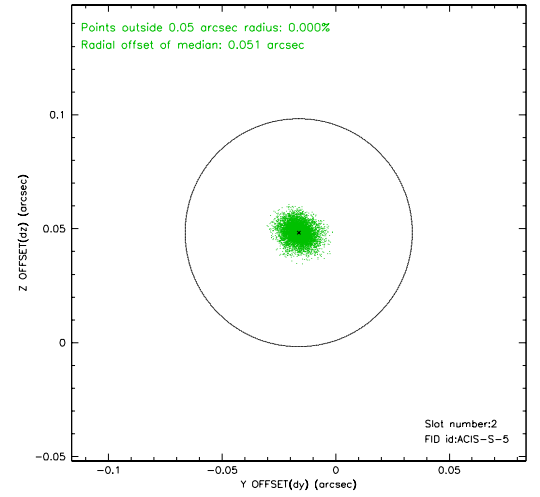
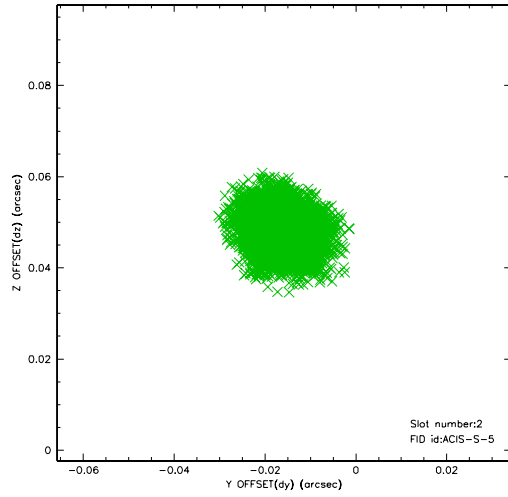
2.5.1 Slot 0



2.5.2 Slot 1

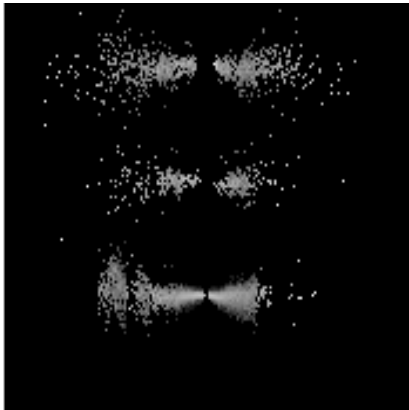


2.5.3 Slot 2

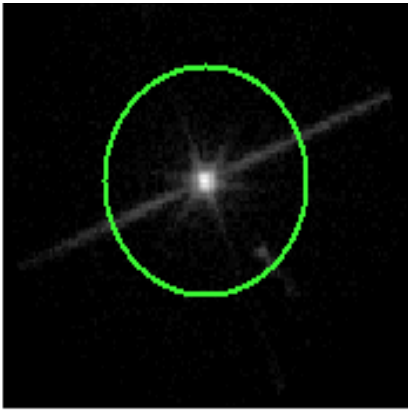


3 Gratings

3.1 LETG Arm



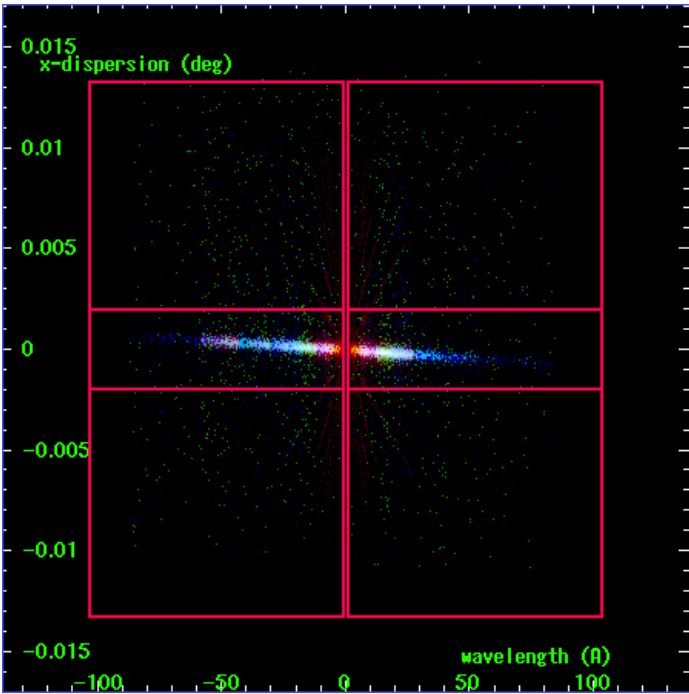
LETG Order Sort 123



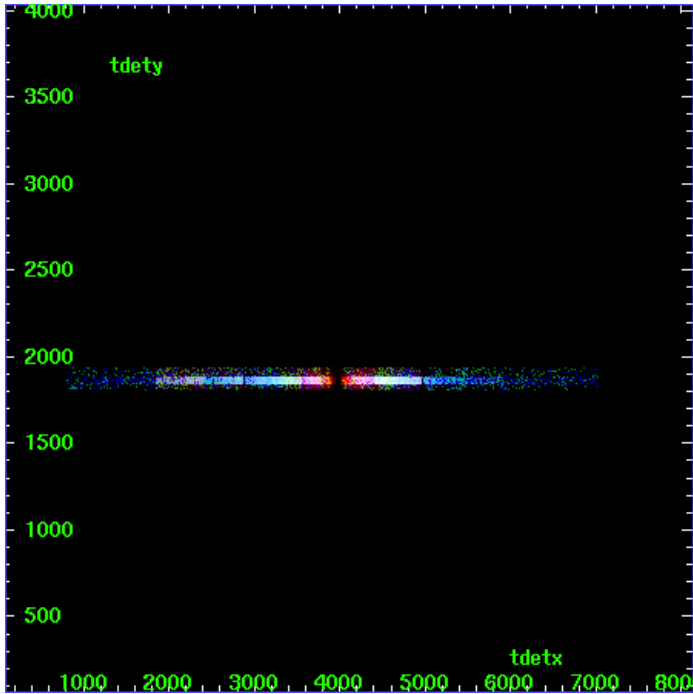
LETG Zero Order



LETG Order Sort ALL

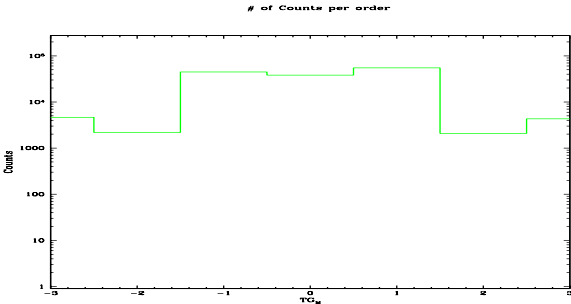


Spot Image LETG

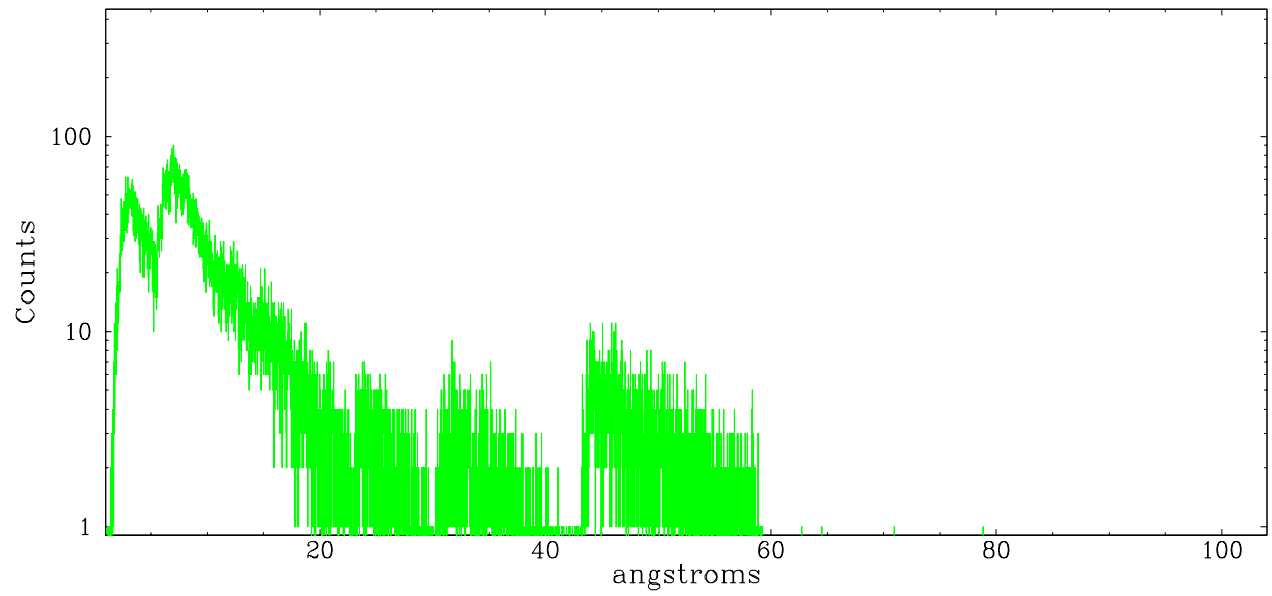


Full Detector LETG

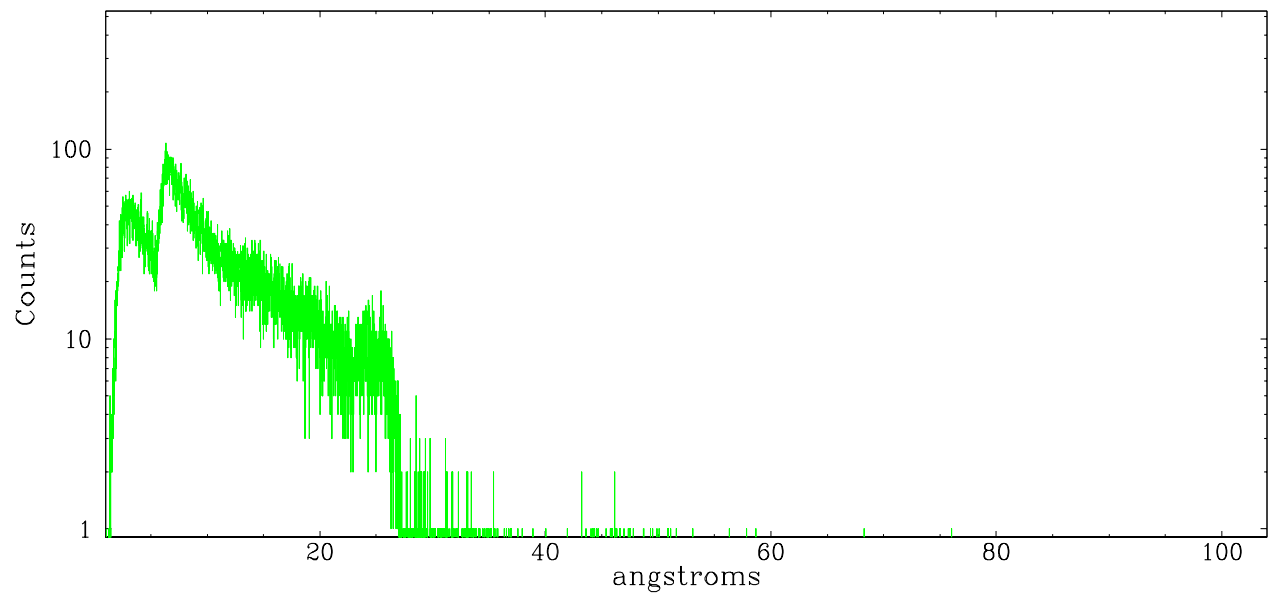
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	4666	2179	44821	38139	54729	2088	4324



leg order -1



leg order +1



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2010.10.04
V&V Edition	2
V&V Disposition and Status	OK
V&V Charge Time	27.971

A.2 Comments

Window constraint satisfied.

The guide star in slot 6 was manually excluded from the processing due to poor data quality.