

V&V Reference Report

L2 ASCDS Version : 7.6.10

Observation 3170 - L2 Version 002
Chandra X-Ray Center

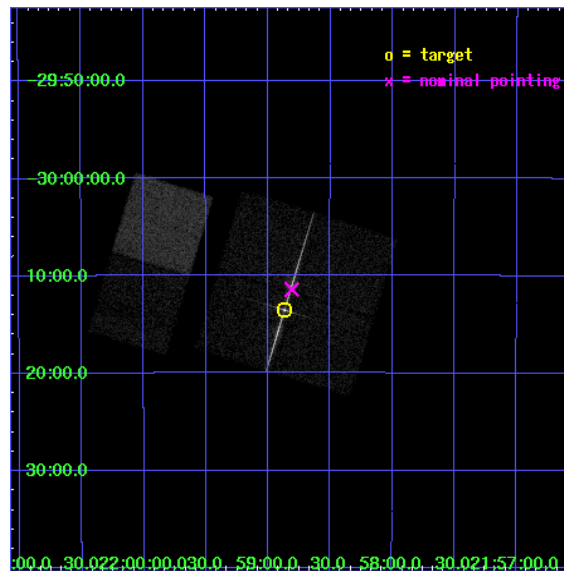
L2 Processing Date : Mar 13 2007

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1 Front

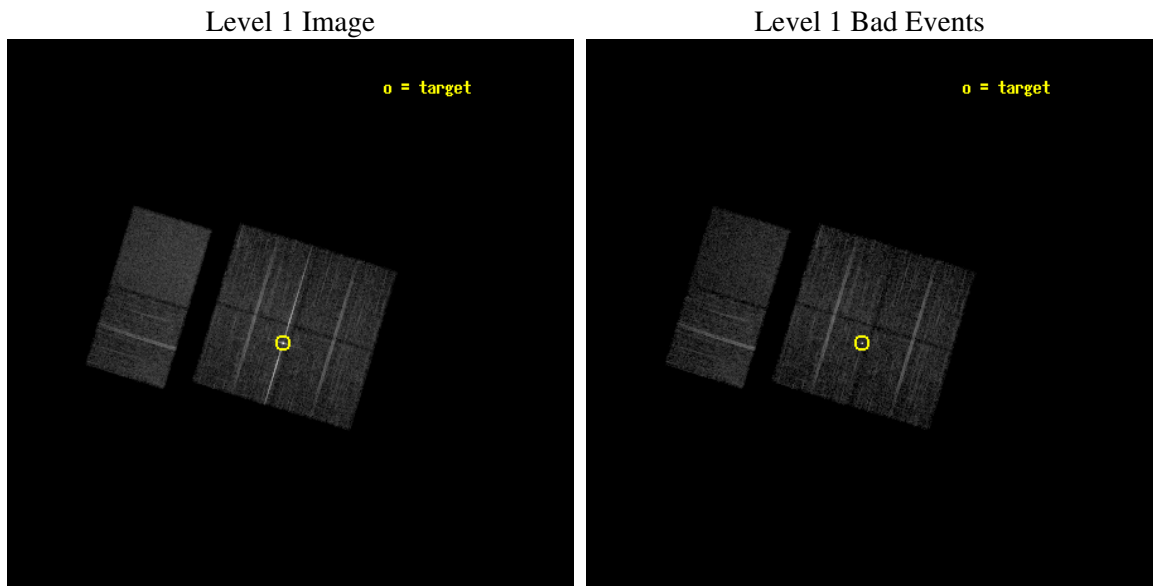
seq_num	790064
obs_id	3170
title	AO3 LETG/ACIS-I CALIBRATION OBSERVATIONS OF PKS2155-304
observer	Dr. CXC Calibration
object	PKS2155-304
dtcycle	0
cycle	P
ra_targ	329.716667
dec_targ	-30.225556
ra_nom	329.70208329324
dec_nom	-30.190360840102
roll_nom	287.03130457439
revision	4
ontime	7753.6000072211
livetime	7655.4192552723
ontime0	7753.6000072211
ontime1	7753.6000072211
ontime2	7753.6000072211
ontime3	7753.6000072211
ontime6	7753.6000072211
ontime7	7753.6000072211
l2events	77323



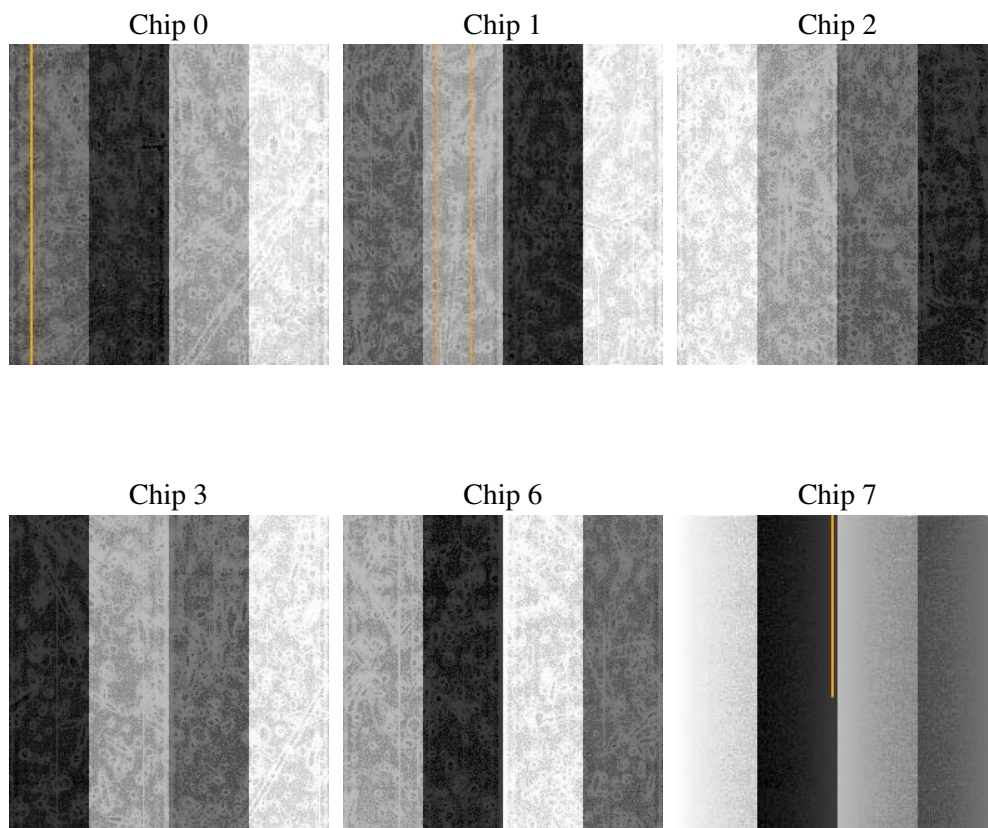
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1
ascdsver	7.6.10
caldbver	3.3.0
date	2007-01-20T09:55:13
revision	2

sched_exp_time	8000.000000
ontime	7753.6000072211
ontime0	7753.6000072211
ontime1	7753.6000072211
ontime2	7753.6000072211
ontime3	7753.6000072211
ontime6	7753.6000072211
ontime7	7753.6000072211
l1events	335928

2.1.4 Events

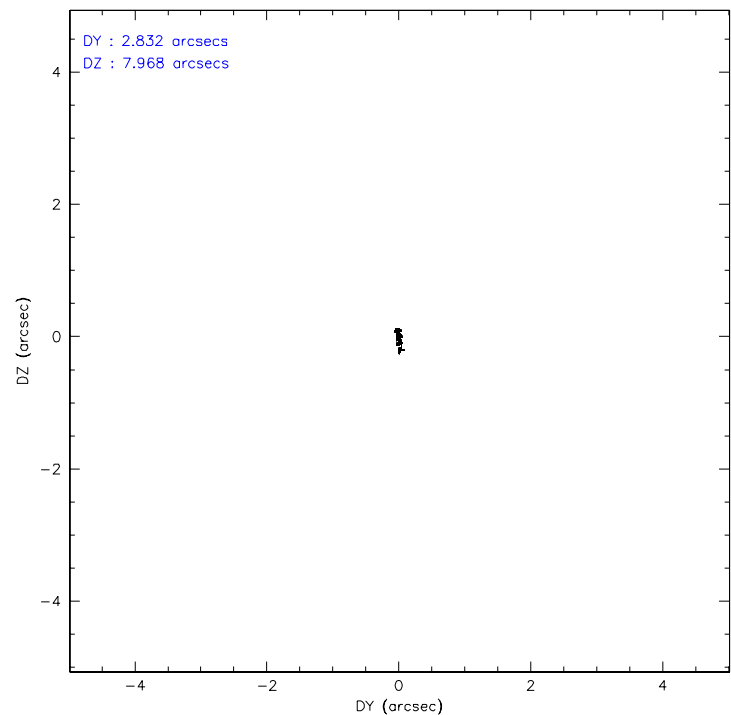
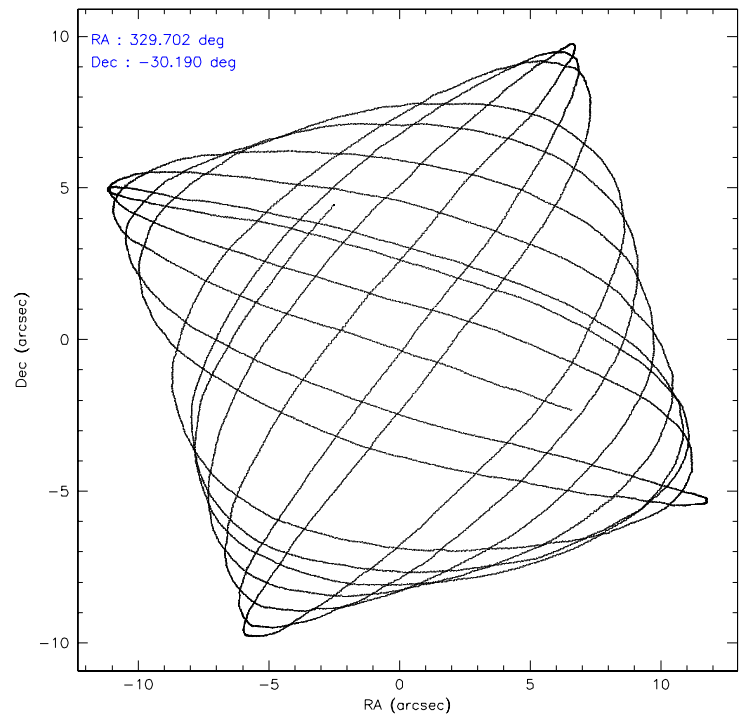
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	46217	46409	68216	60358	51914	62814
rejected events	39502	39789	45713	45681	45819	36620
rejected %	85%	85%	67%	75%	88%	58%

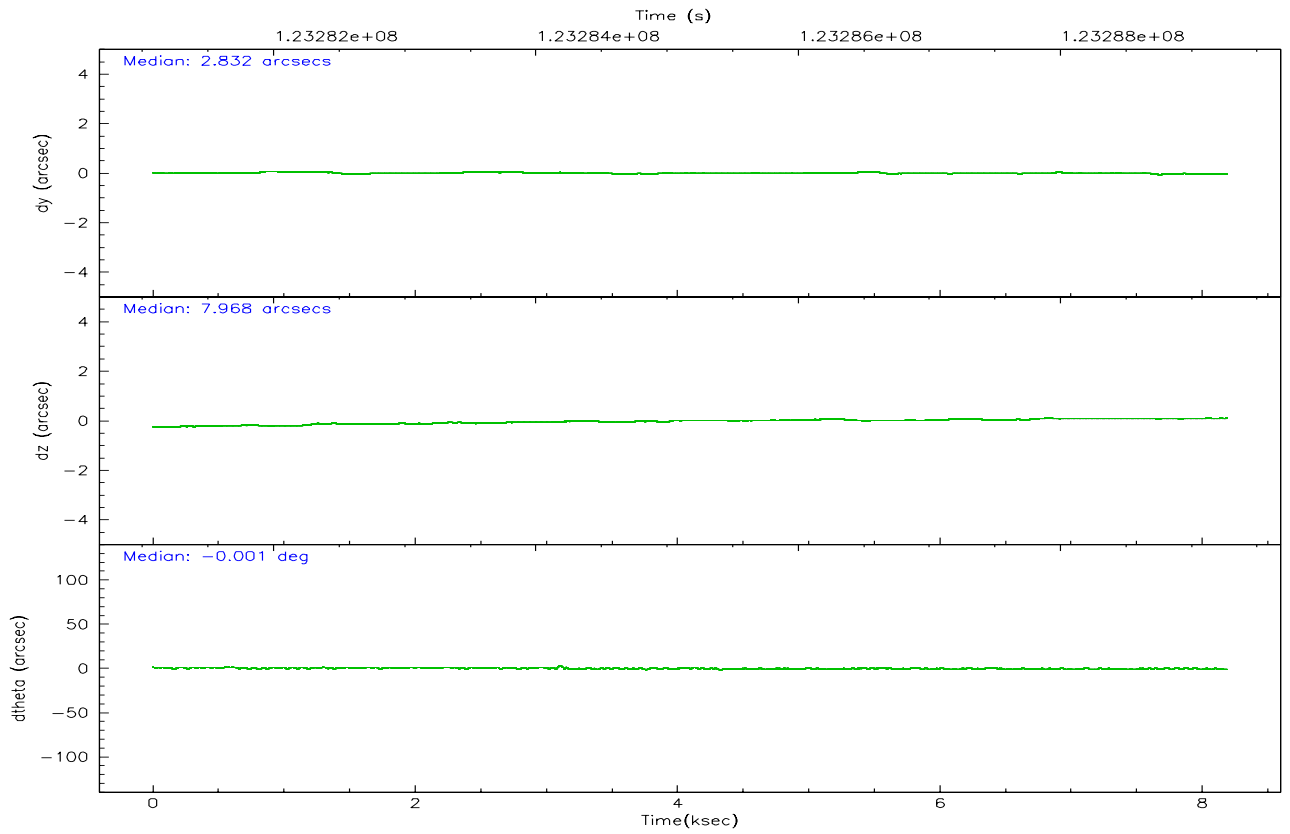
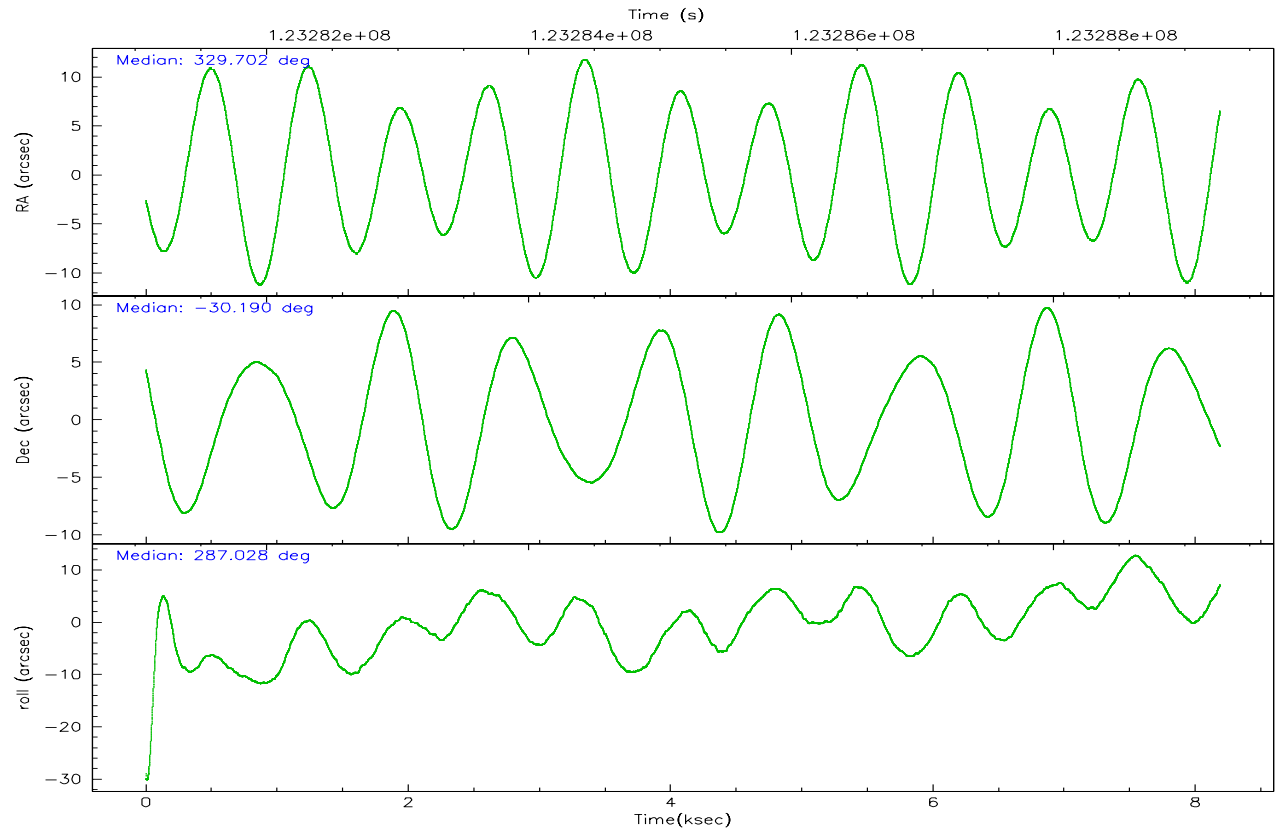
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	3027	2661	15272	9919	2442	2345
	6%	5%	22%	16%	4%	3%
grade 1 events	22	20	627	80	33	53
	0%	0%	0%	0%	0%	0%
grade 2 events	1466	1454	3158	2047	1314	5130
	3%	3%	4%	3%	2%	8%
grade 3 events	579	654	1100	738	570	2332
	1%	1%	1%	1%	1%	3%
grade 4 events	519	618	1145	726	550	2391
	1%	1%	1%	1%	1%	3%
grade 5 events	1812	1929	2359	1942	2117	6124
	3%	4%	3%	3%	4%	9%
grade 6 events	1130	1235	1836	1254	1226	14014
	2%	2%	2%	2%	2%	22%
grade 7 events	37662	37838	42719	43652	43662	30425
	81%	81%	62%	72%	84%	48%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	LETG	LETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	329.678896	329.7020832932447	Subarray requested	NONE	NONE
Pointing Dec	-30.171704	-30.19036084010217	Alternating exposures requested	N	N
Pointing Roll	286.810961	287.0313045743865	Primary exposure time	0.000000	3.2
Window start time	120960064.184000	120960064.184000			
Window stop time	126144064.184000	126144064.184000			
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	123281271.184000	123280894.88117			
Observation start date	2001-11-27T20:46:47	2001-11-27T20:41:34			
Observation end time	123289271.184000	123290301.81904			
Observation end date	2001-11-27T23:00:07	2001-11-27T23:18:21			
Read mode	TIMED	TIMED			

2.3 Aspect



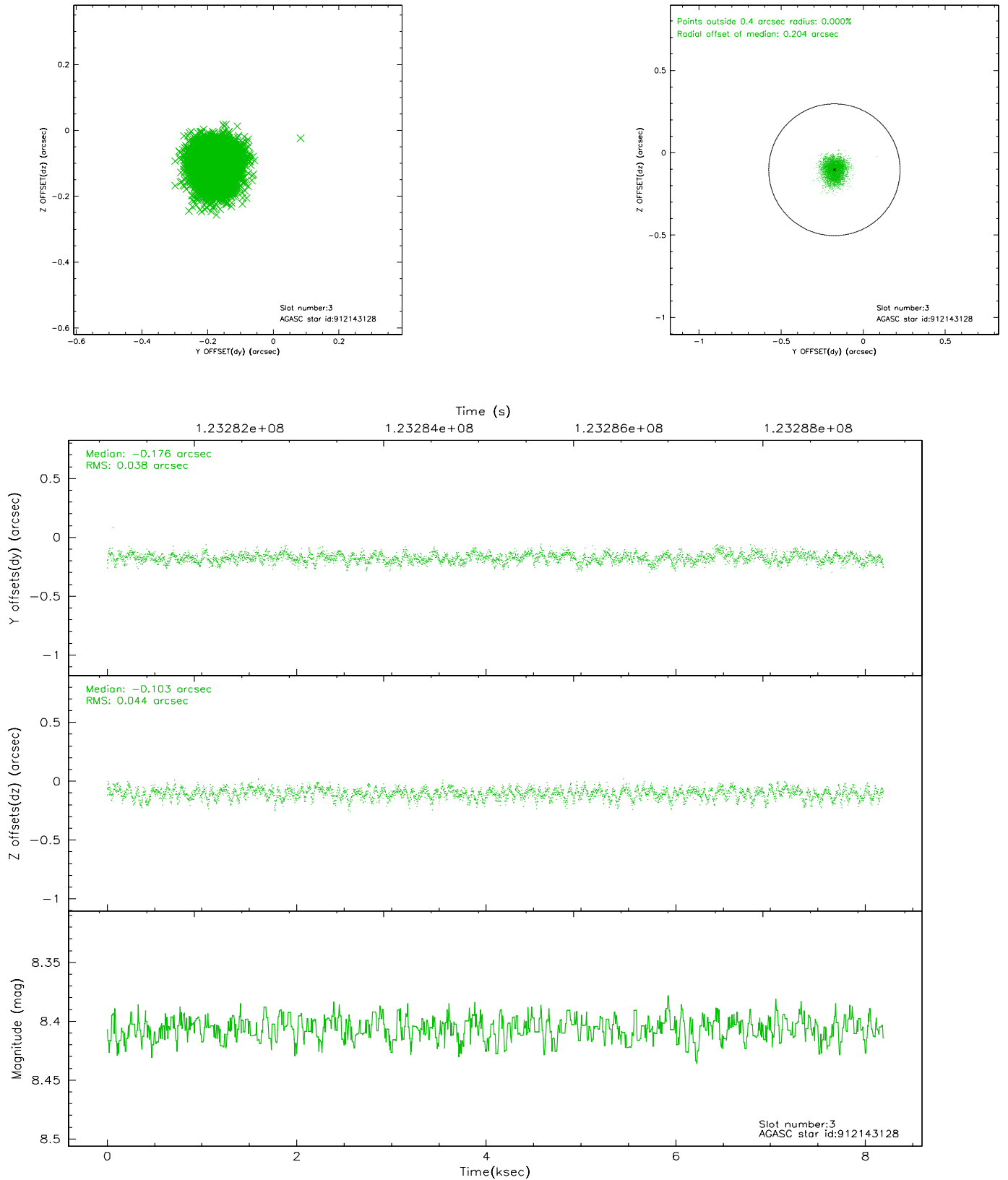


Slot Statistics

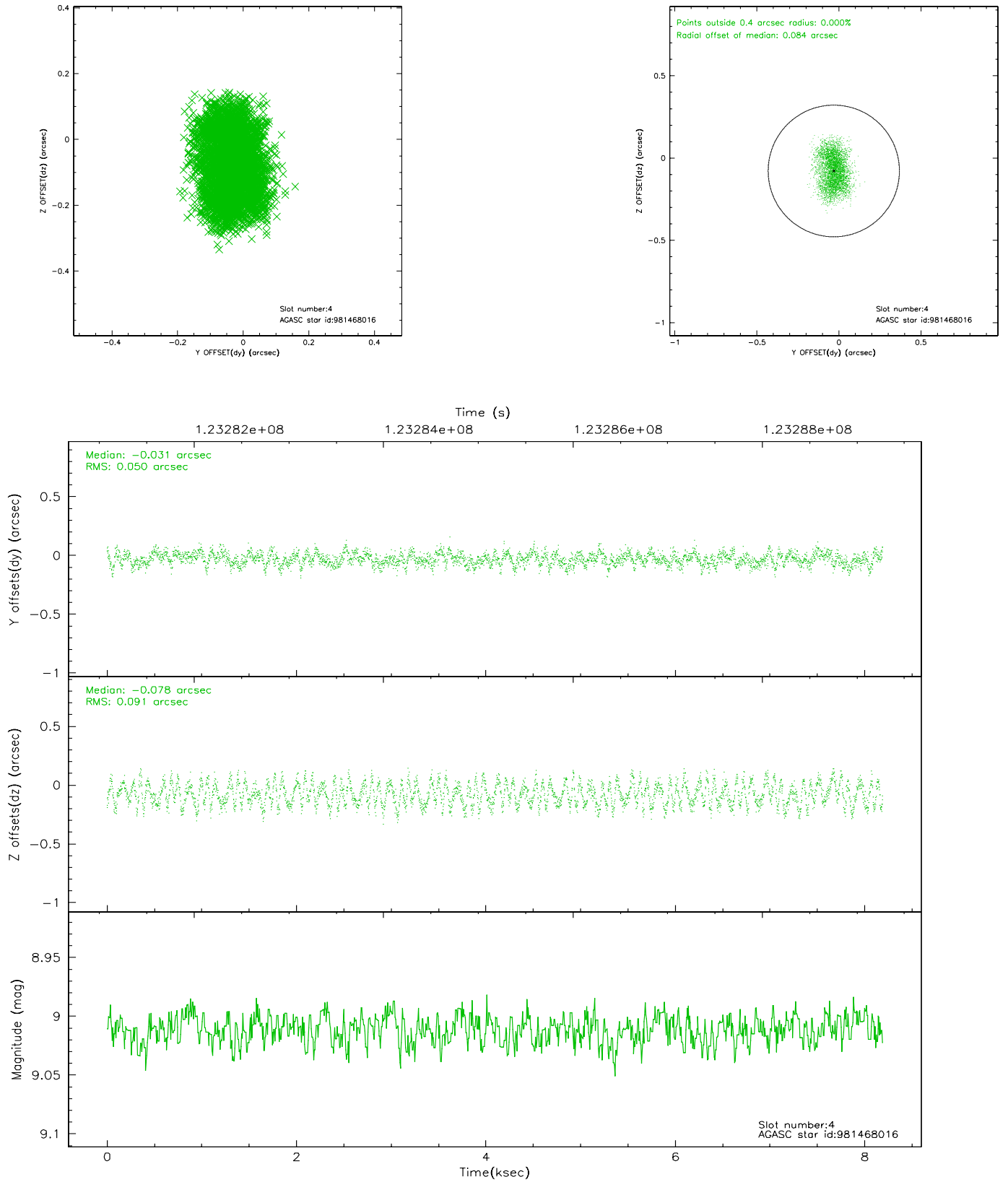
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	1998	-0.040	0.082	0.008	0.015	0.000000	0.000000	936.91	-831.29
1	FID	ACIS-I-5	7.24	1998	-0.009	0.034	0.007	0.012	0.000000	0.000000	-1810.76	1065.85
2	FID	ACIS-I-6	7.26	1998	-0.043	-0.046	0.007	0.011	0.000000	0.000000	401.75	1711.02
3	GUIDE	912143128	8.41	3996	-0.176	-0.103	0.062	0.098	328.924992	-29.706140	-2277.99	-1773.85
4	GUIDE	981468016	9.01	3990	-0.031	-0.078	0.114	0.175	328.842457	-30.034984	-1215.91	-2355.86
5	GUIDE	912275088	9.05	3996	0.017	0.016	0.070	0.114	329.619228	-29.738698	-1545.86	272.20
6	GUIDE	981478152	9.40	3988	0.054	0.143	0.083	0.133	329.415589	-30.057192	-630.75	-665.68
7	GUIDE	981469488	9.60	3984	0.135	0.024	0.087	0.142	329.261199	-30.045155	-809.72	-1114.57

2.4 Star Slots

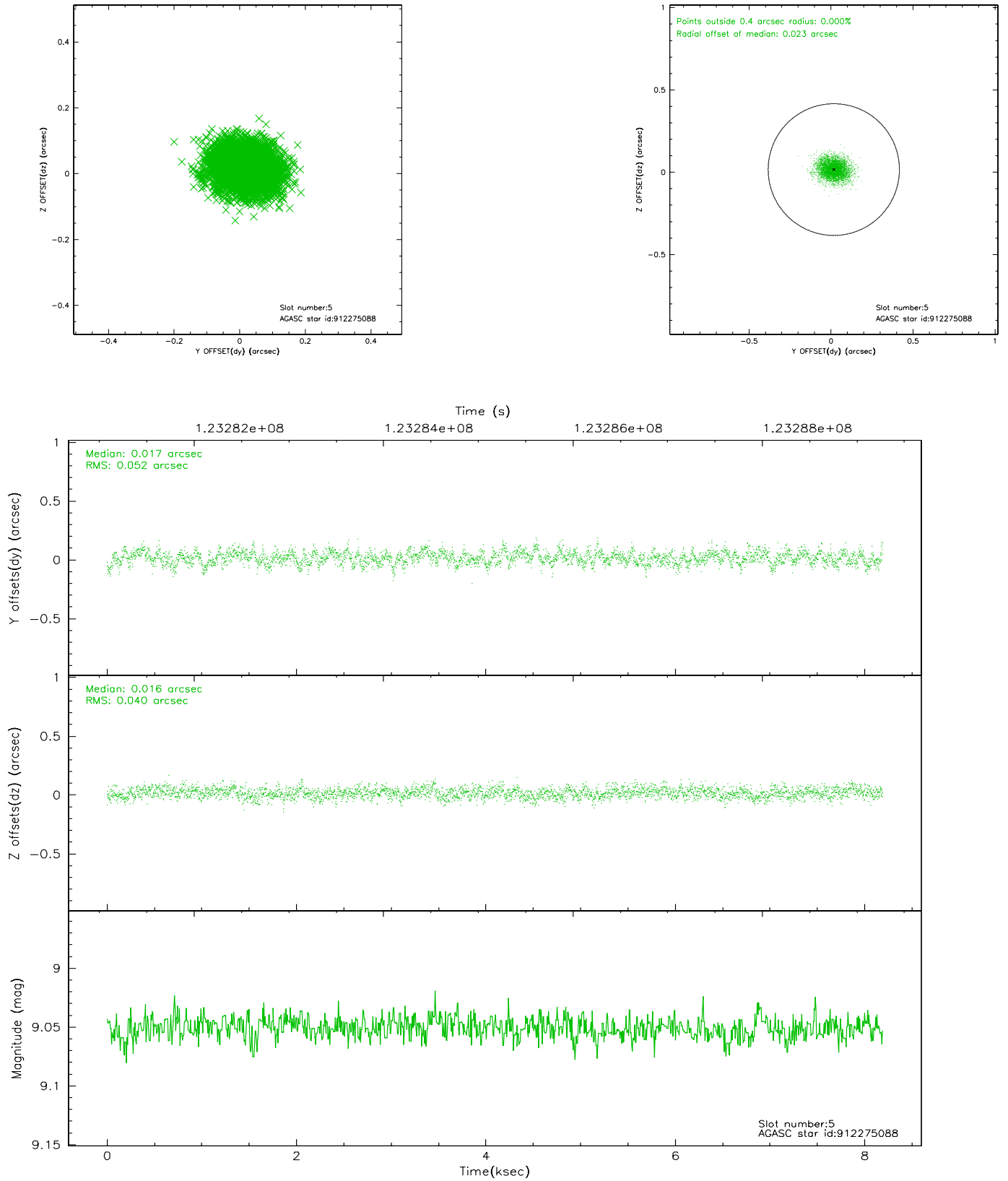
2.4.1 Slot 3



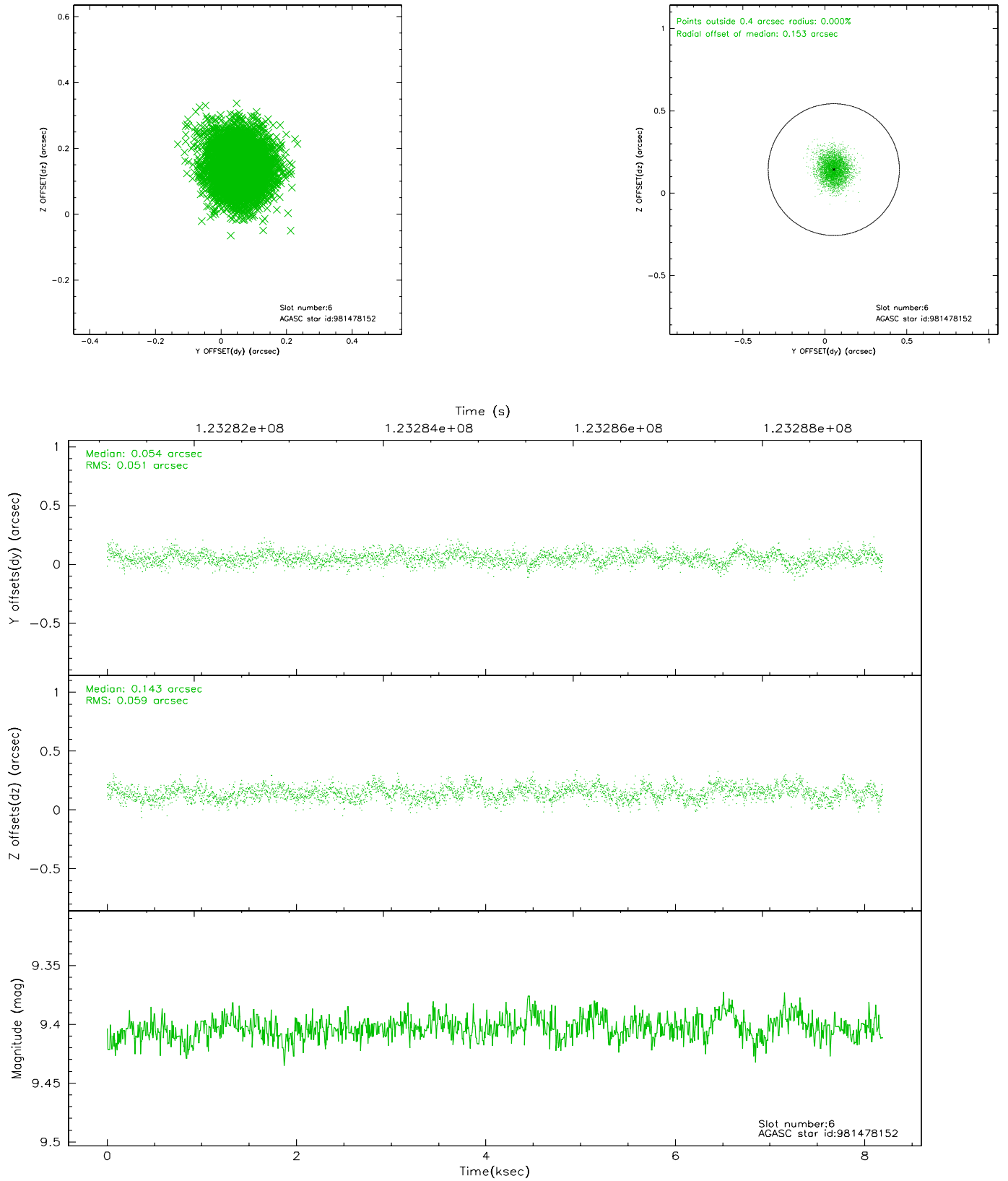
2.4.2 Slot 4



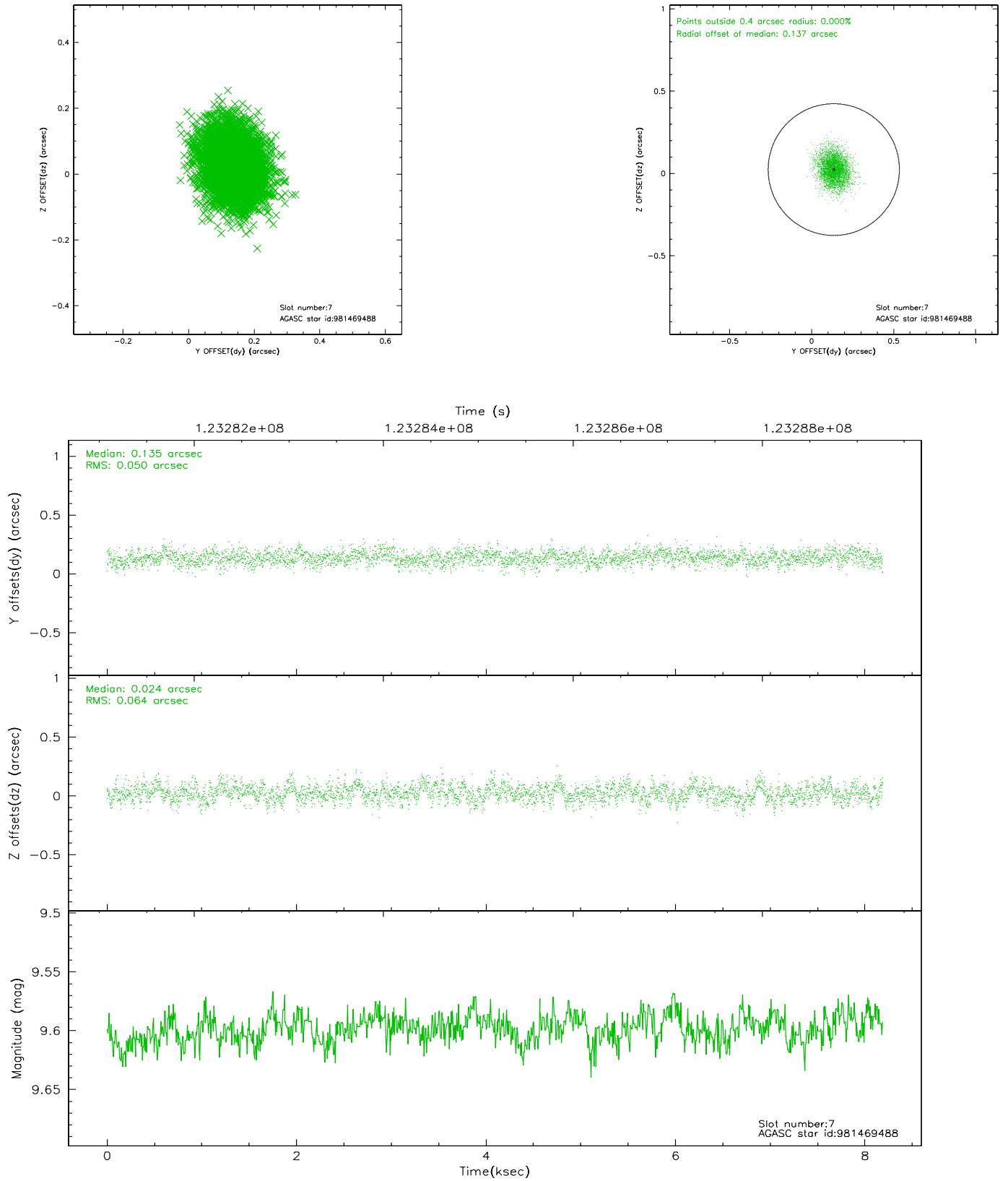
2.4.3 Slot 5



2.4.4 Slot 6

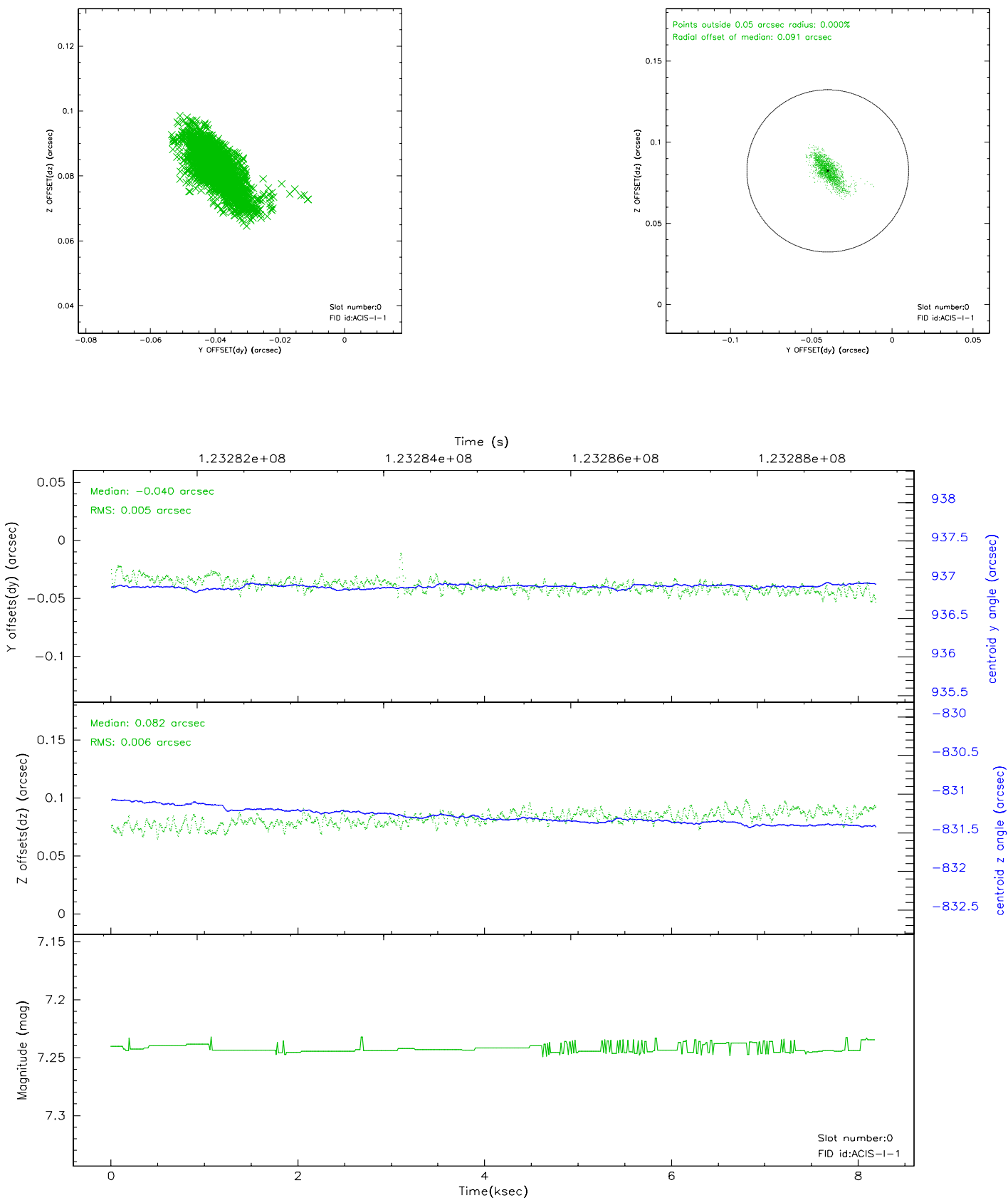


2.4.5 Slot 7

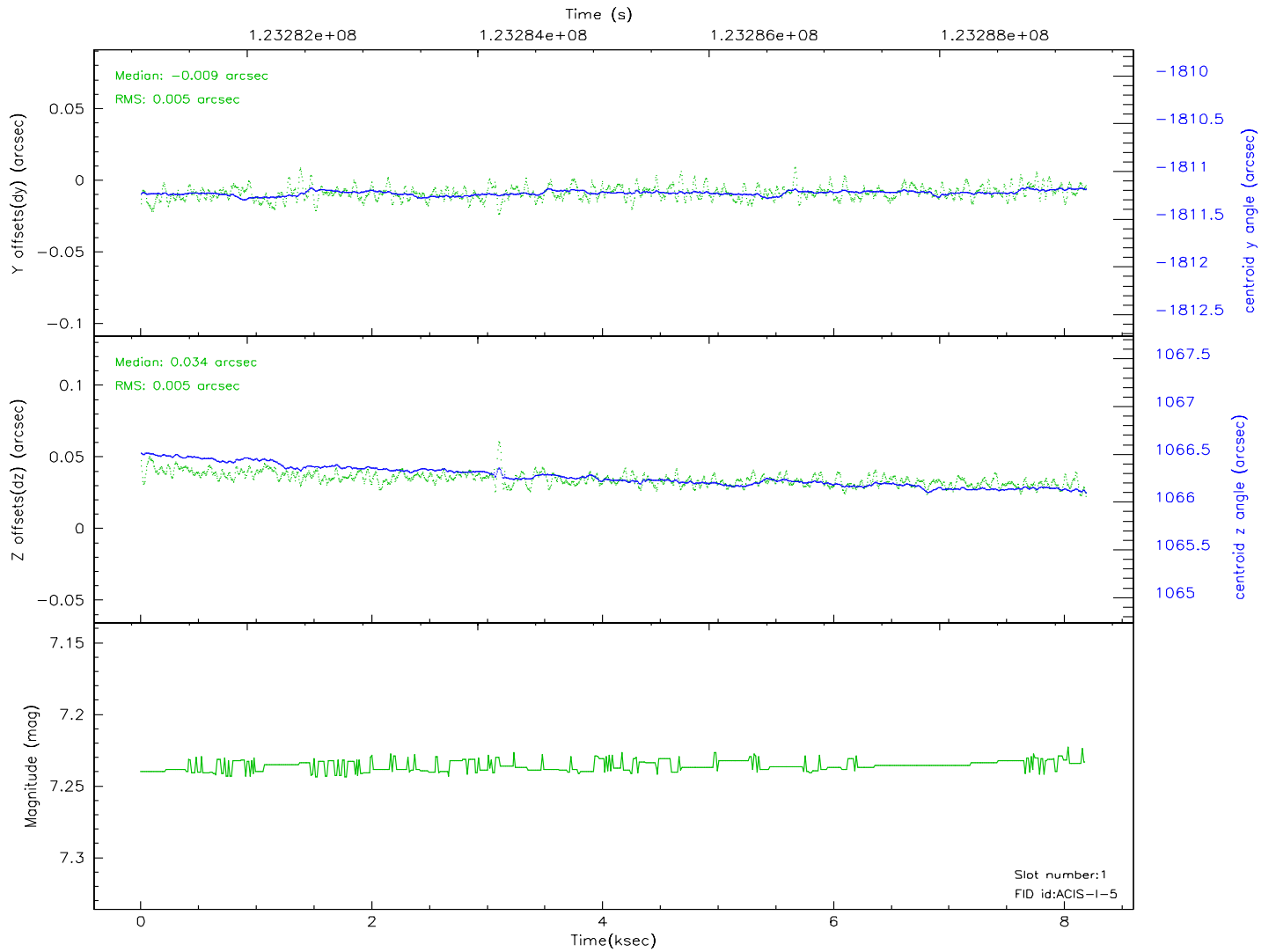
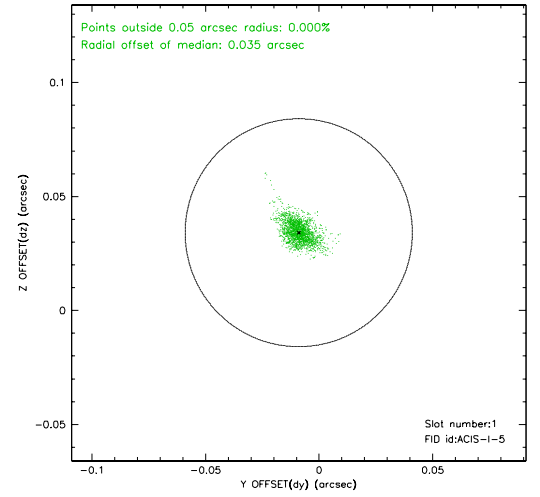
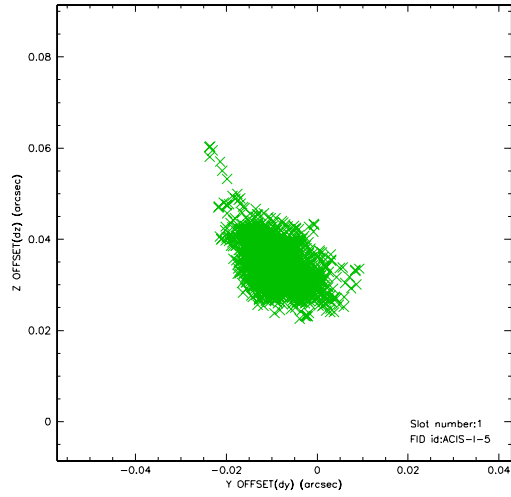


2.5 FID Slots

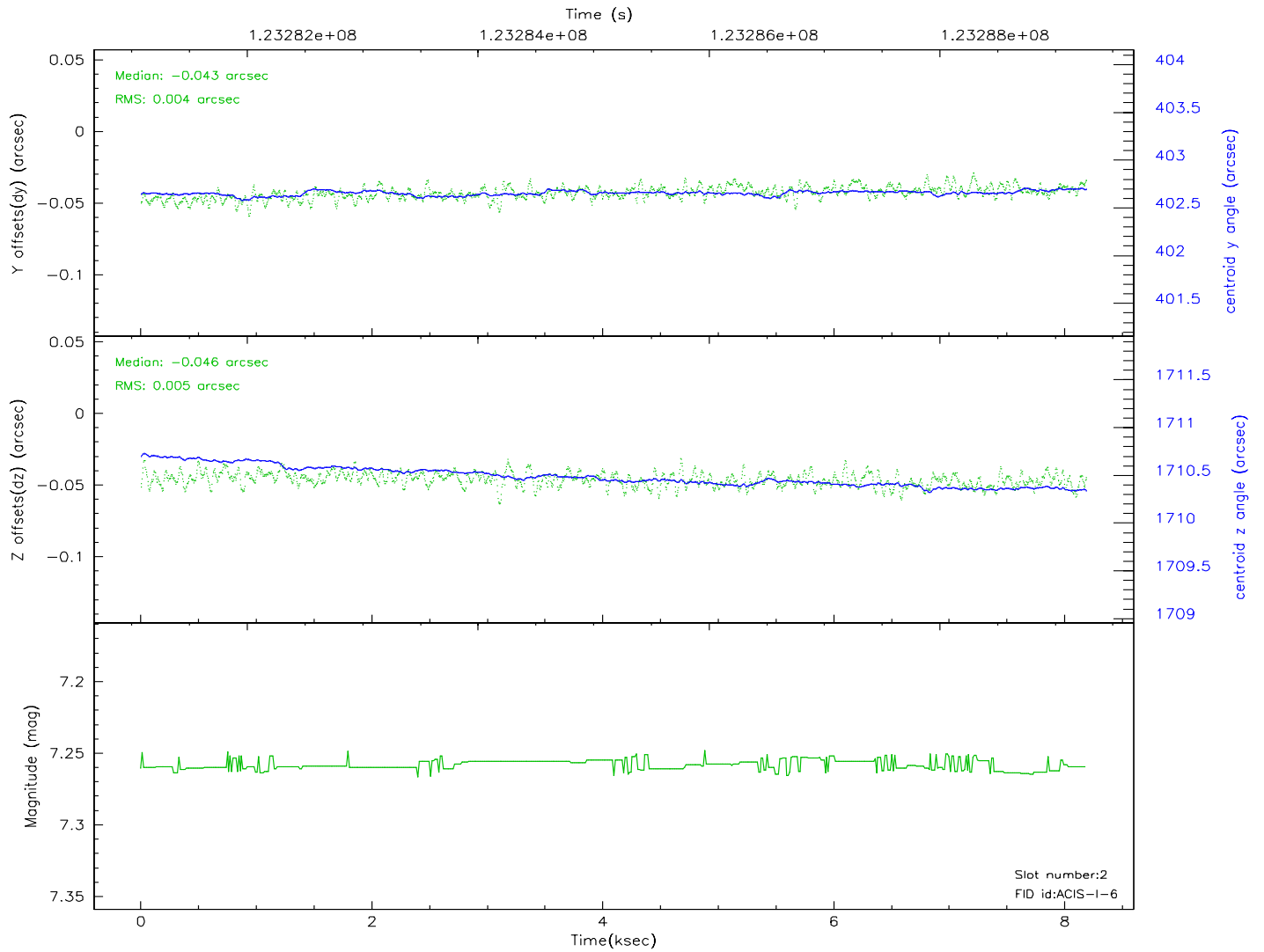
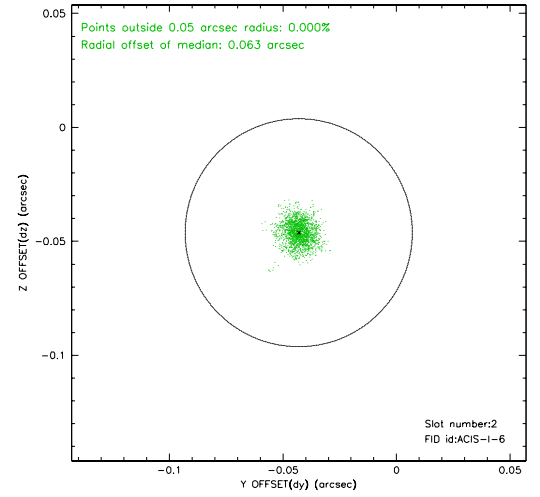
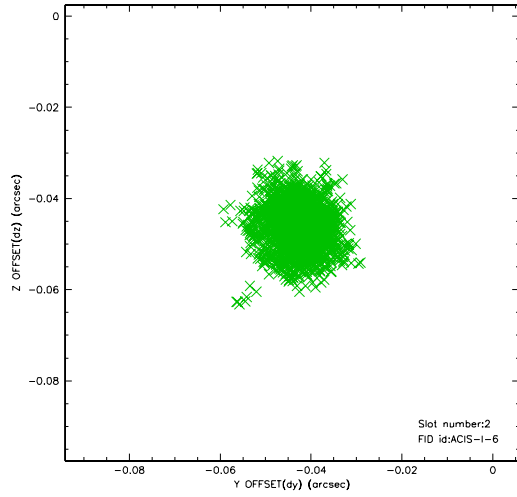
2.5.1 Slot 0



2.5.2 Slot 1

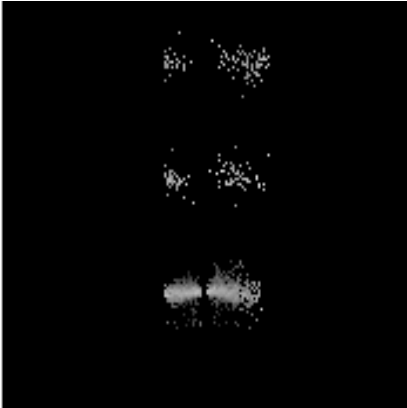


2.5.3 Slot 2

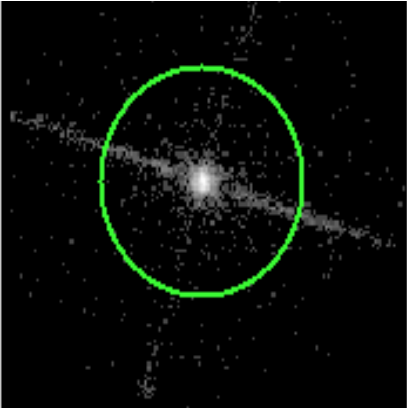


3 Gratings

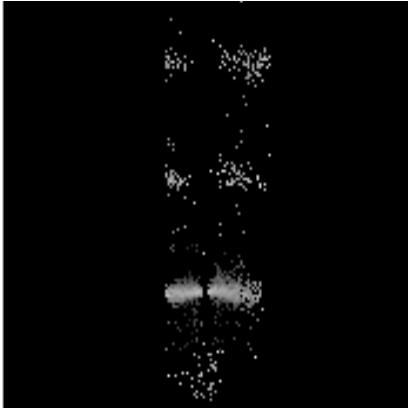
3.1 LETG Arm



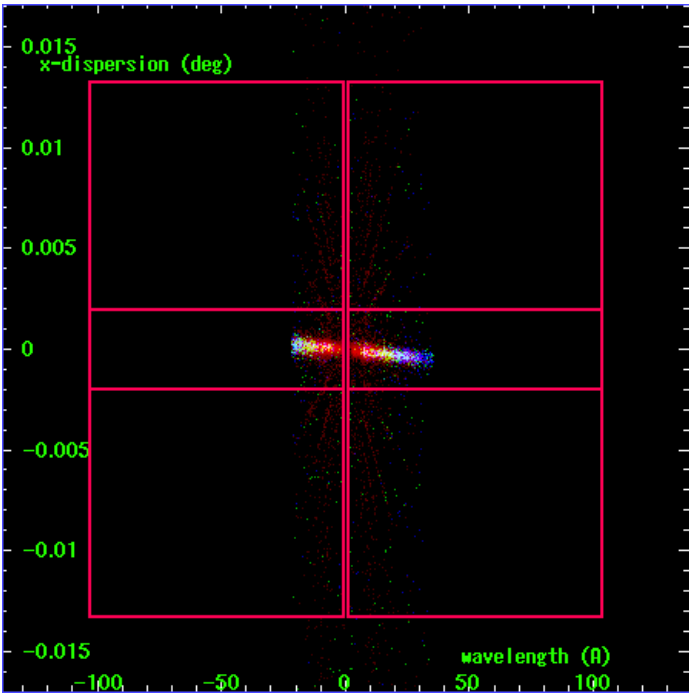
LETG Order Sort 123



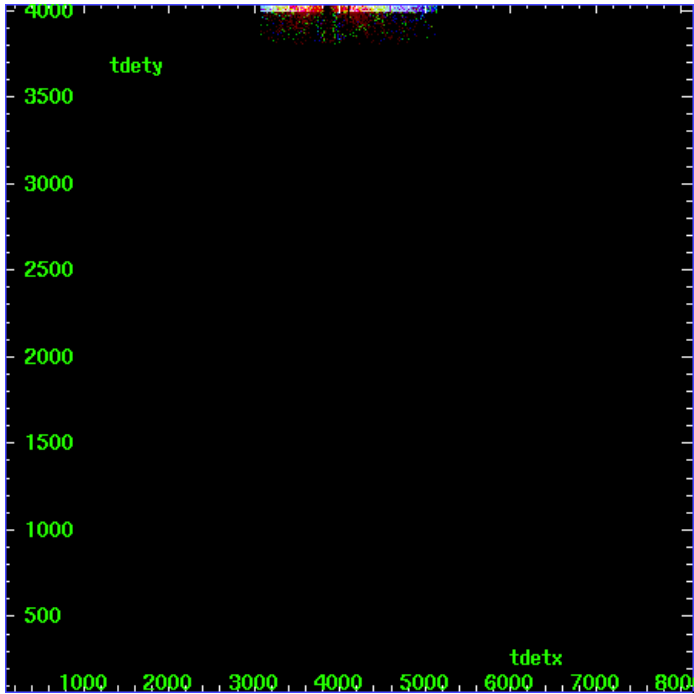
LETG Zero Order



LETG Order Sort ALL

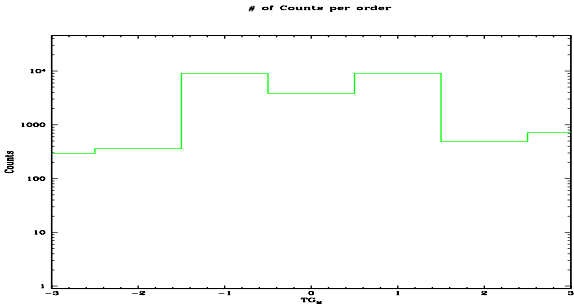


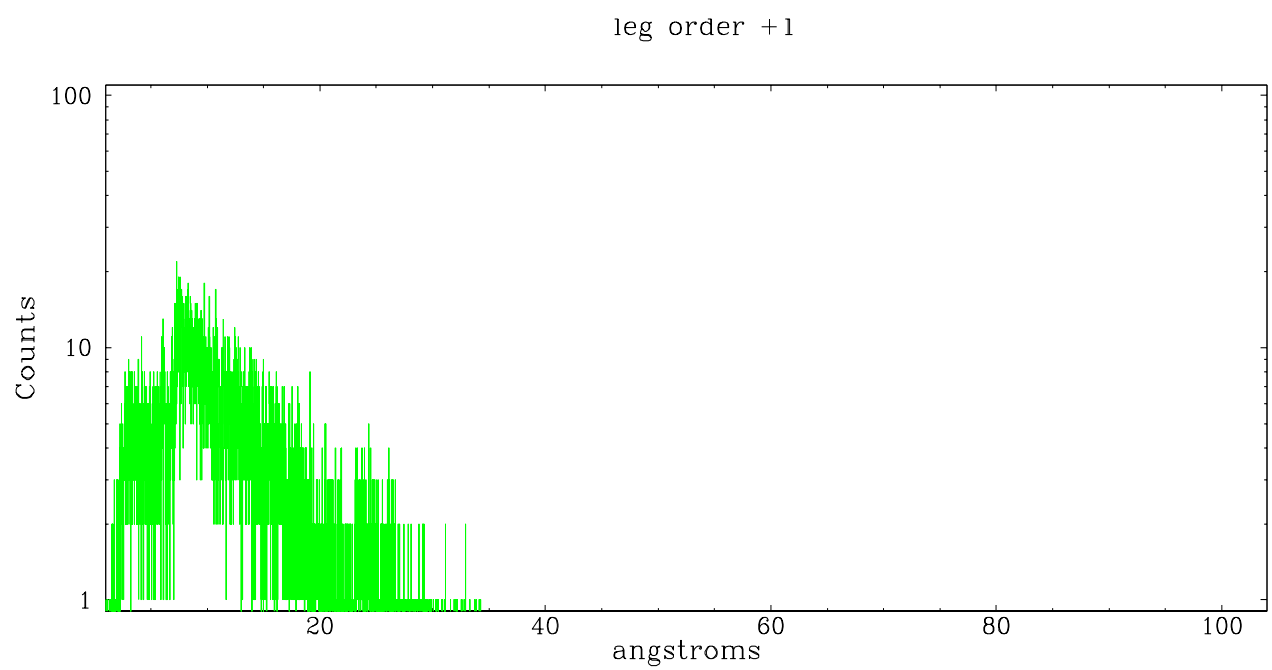
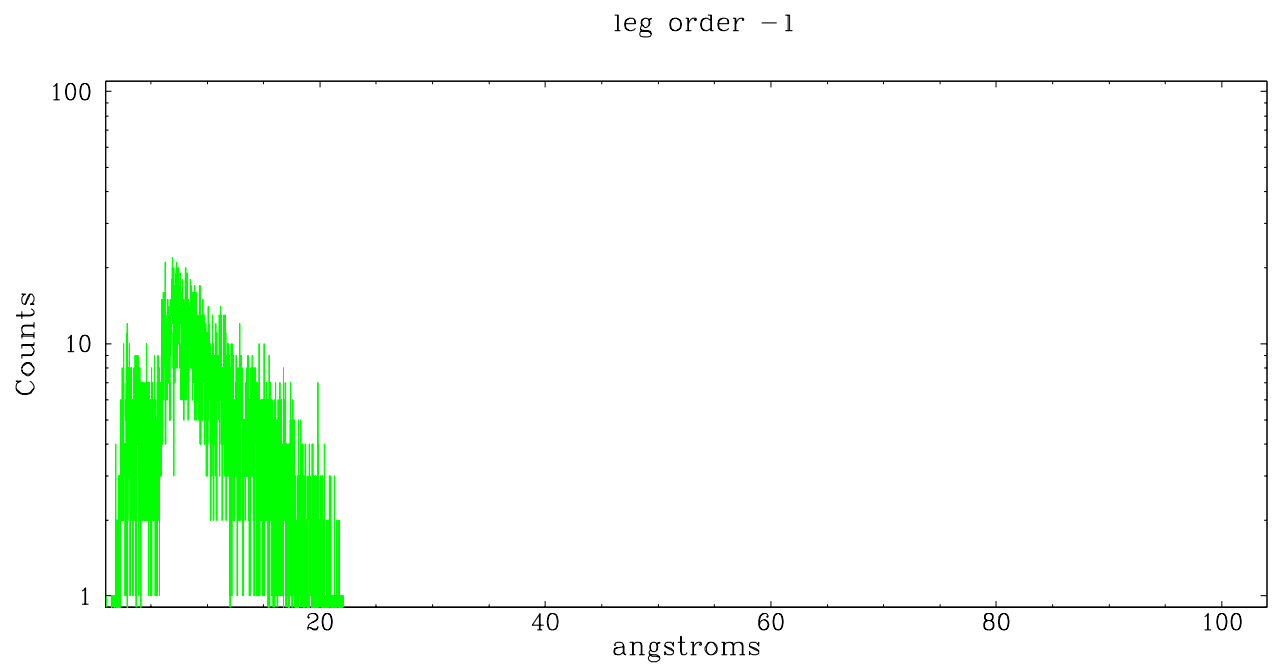
Spot Image LETG



Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	295	362	9003	3830	9070	485	716





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2007.03.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.756

A.2 Comments

Non-standard grating/detector combination requires custom parameters.
To resolve order, tg_resolve_events used osip=NONE and a constant
order-sorting boundary.