

V&V Reference Report

L2 ASCDS Version : 7.6.8.1

Observation 3175 - L2 Version 002
Chandra X-Ray Center

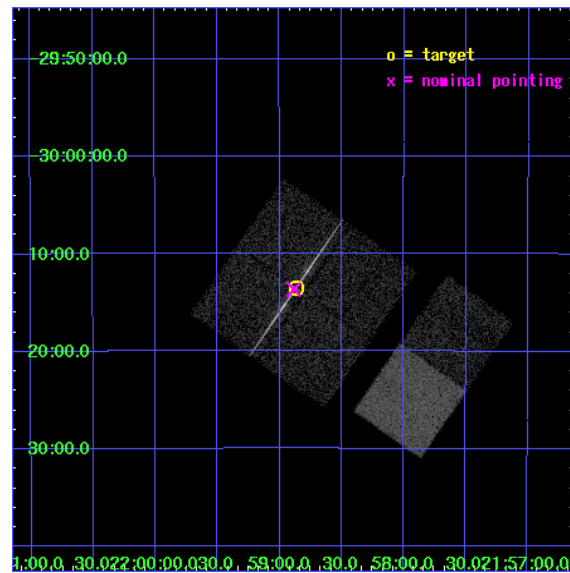
L2 Processing Date : Nov 22 2006

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
3	Gratings	17
3.1	LETG Arm	17
A	Summary	19
A.1	Status	19
A.2	Comments	19

1 Front

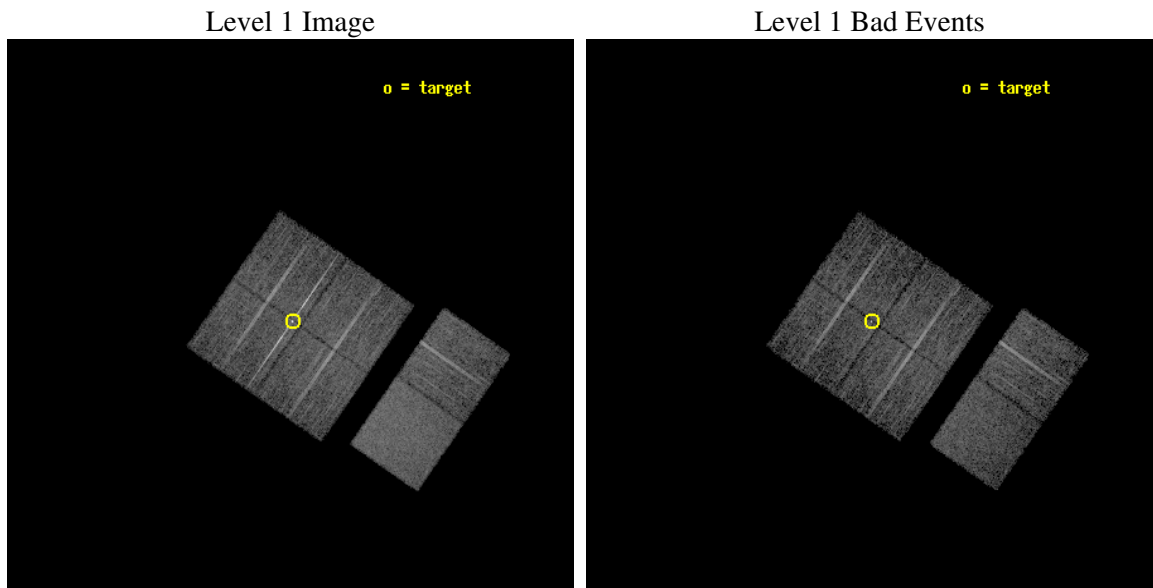
seq_num	790069
obs_id	3175
title	AO3 LETG/ACIS-I CALIBRATION OBSERVATIONS OF PKS2155-304
observer	Dr. CXC Calibration
object	PKS2155-304
dtcycle	0
cycle	P
ra_targ	329.716667
dec_targ	-30.225556
ra_nom	329.72105913553
dec_nom	-30.227872723937
roll_nom	124.82366359759
revision	4
ontime	7785.6000072509
livetime	7687.0140520336
ontime0	7785.6000072509
ontime1	7785.6000072509
ontime2	7785.6000072509
ontime3	7785.2772114277
ontime6	7785.1951613277
ontime7	7785.236201331
l2events	59234



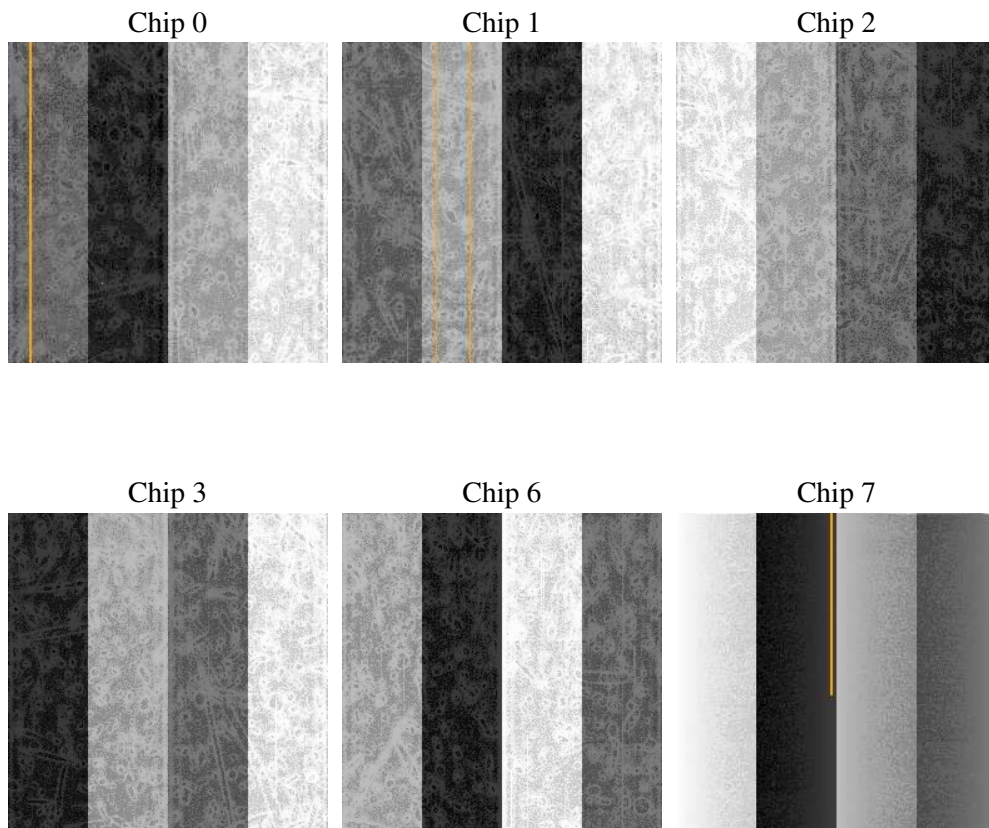
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1
ascdsver	7.6.8.1
caldbver	3.2.3
date	2006-09-09T10:24:11
revision	2

sched_exp_time	8000.000000
ontime	7791.362166211
ontime0	7791.362166211
ontime1	7791.362166211
ontime2	7791.362166211
ontime3	7788.1211262196
ontime6	7788.1211561263
ontime7	7788.1211561263
l1events	316400

2.1.4 Events

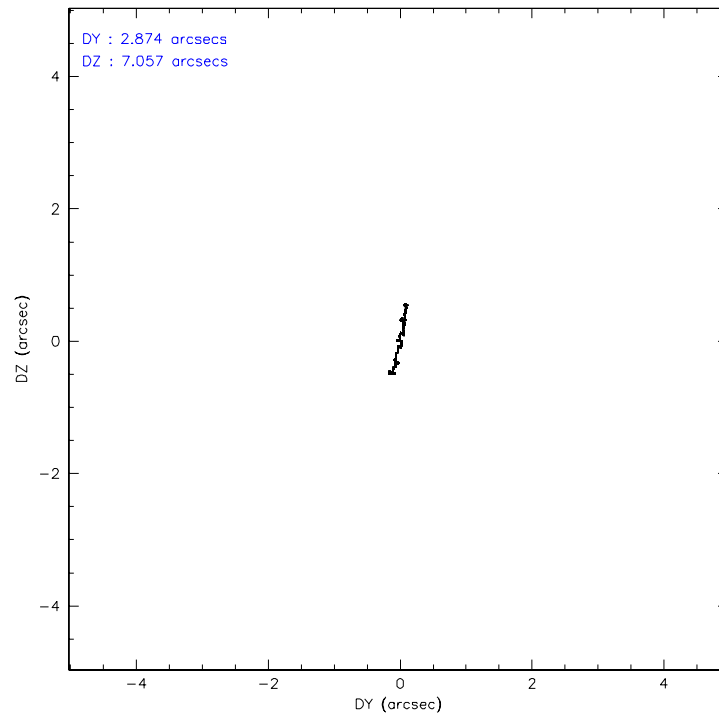
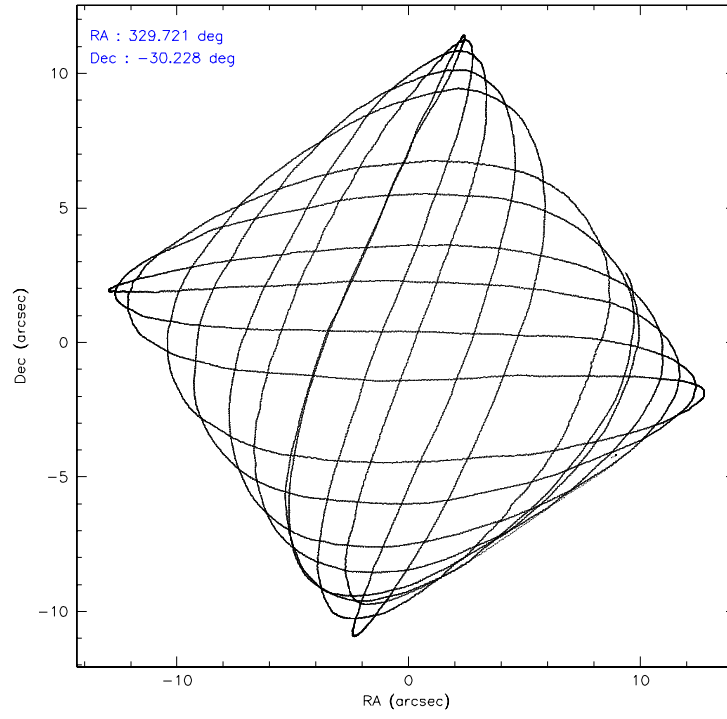
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	50198	52521	50354	49754	49706	63867
rejected events	38565	39552	44809	44103	44180	39556
rejected %	76%	75%	88%	88%	88%	61%

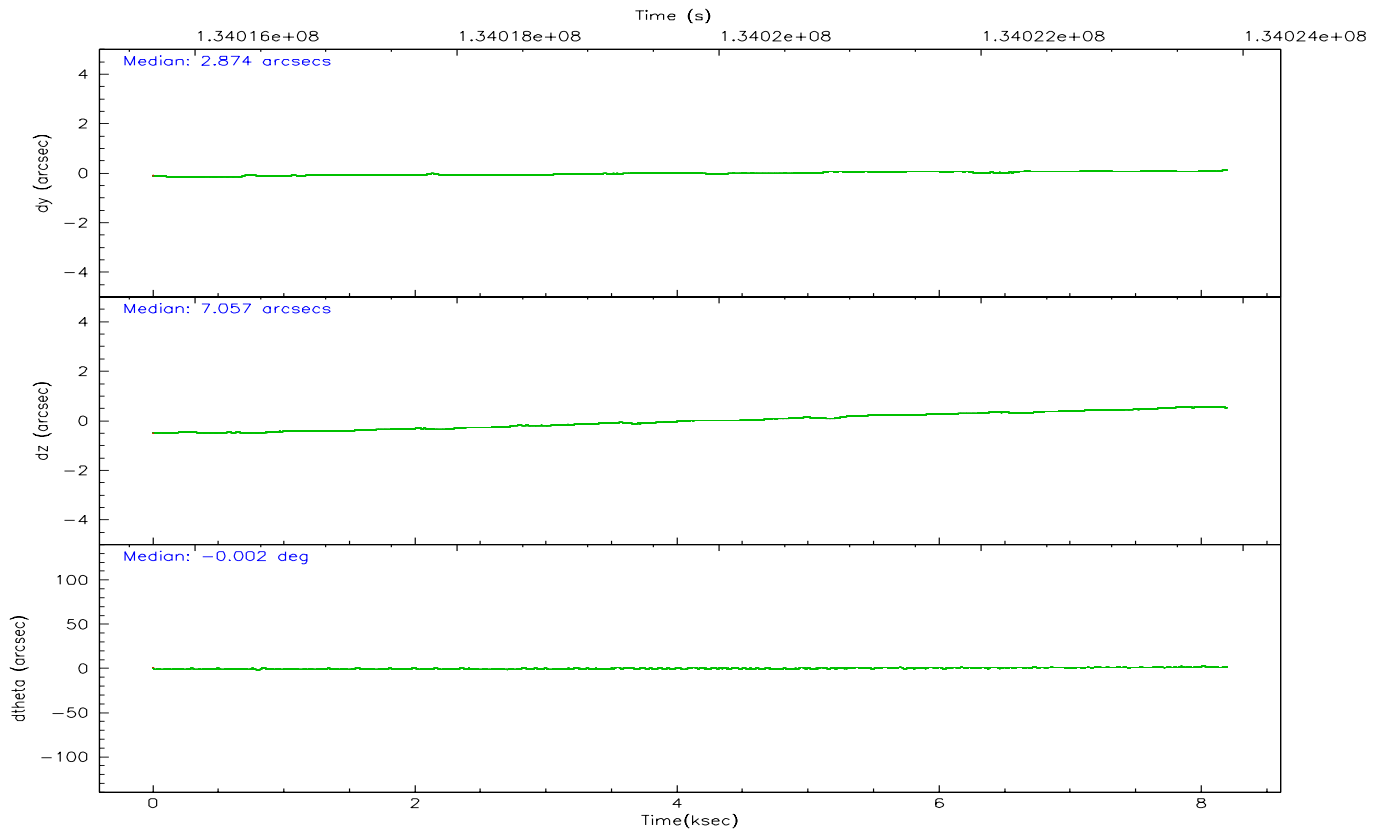
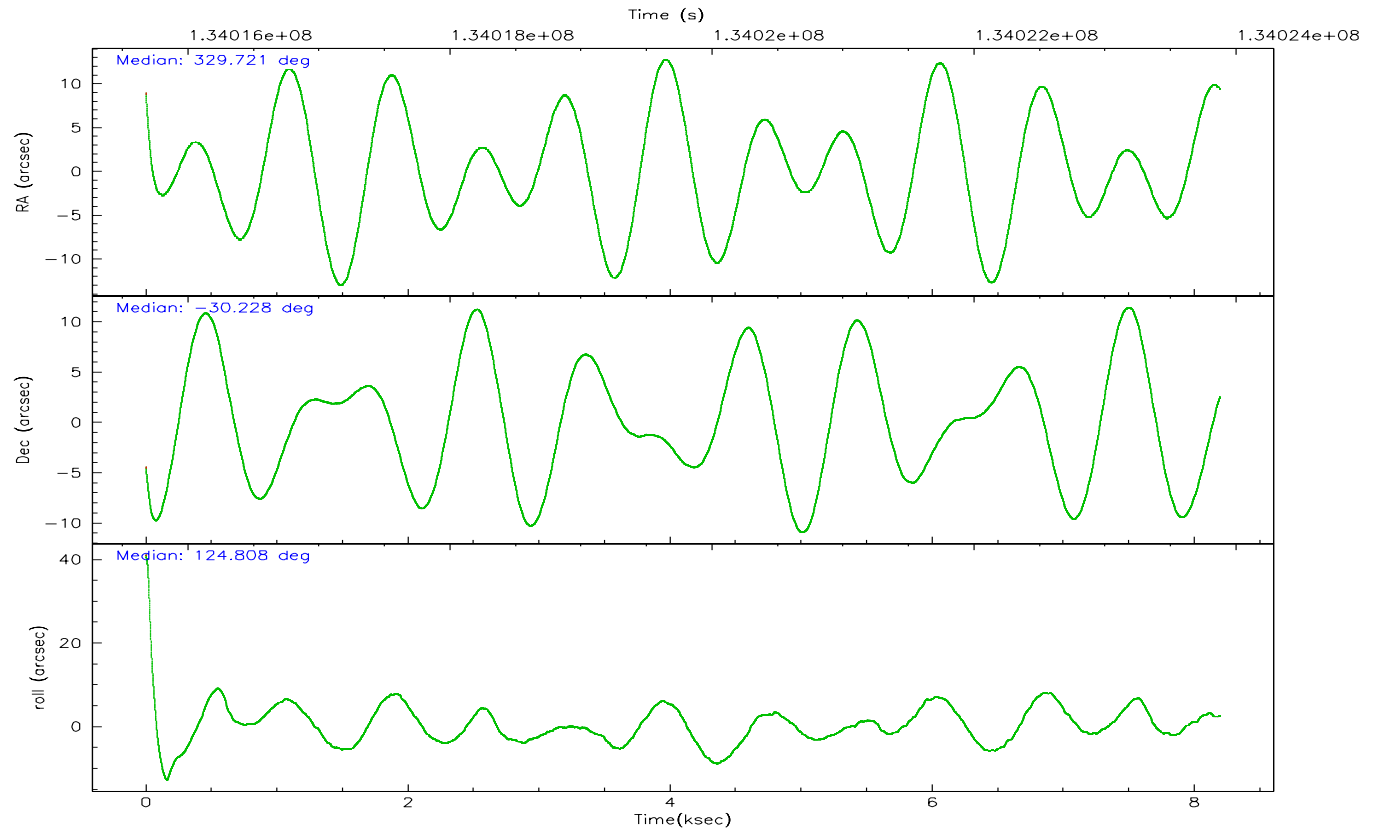
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	7179	7973	2325	2320	2108	1304
	14%	15%	4%	4%	4%	2%
grade 1 events	56	154	22	23	24	34
	0%	0%	0%	0%	0%	0%
grade 2 events	1893	1921	1228	1179	1172	5911
	3%	3%	2%	2%	2%	9%
grade 3 events	781	845	534	539	558	1258
	1%	1%	1%	1%	1%	1%
grade 4 events	666	875	494	565	546	1282
	1%	1%	0%	1%	1%	2%
grade 5 events	1759	2009	1821	2044	2147	4257
	3%	3%	3%	4%	4%	6%
grade 6 events	1123	1368	965	1051	1143	14559
	2%	2%	1%	2%	2%	22%
grade 7 events	36741	37376	42965	42033	42008	35262
	73%	71%	85%	84%	84%	55%

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	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	NONE	NONE
Pointing RA	329.749783	329.7210591355312	Alternating exposures requested	N	N
Pointing Dec	-30.239426	-30.22787272393712	Primary exposure time	0.000000	3.2
Pointing Roll	124.629373	124.8236635975899			
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-238.277263	-238.2741181829365			
SIM translation stage offset (mm)	4.6848	4.681665180006831			
Observation start time	134015855.184000	134014851.11359			
Observation start date	2002-04-01T02:36:31	2002-04-01T02:20:51			
Observation end time	134023855.184000	134024457.41398			
Observation end date	2002-04-01T04:49:51	2002-04-01T05:00:57			
Read mode	TIMED	TIMED			

2.3 Aspect



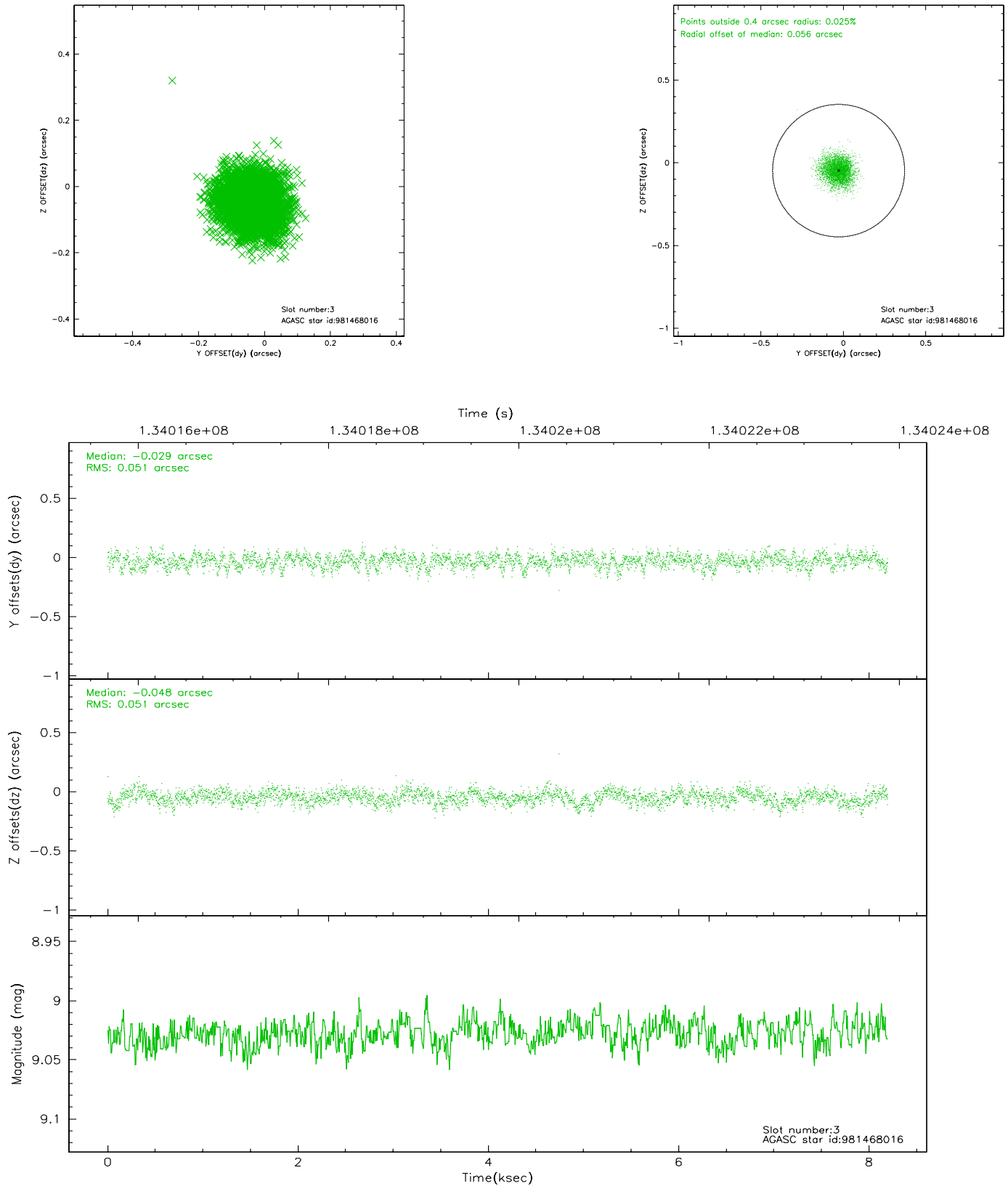


Slot Statistics

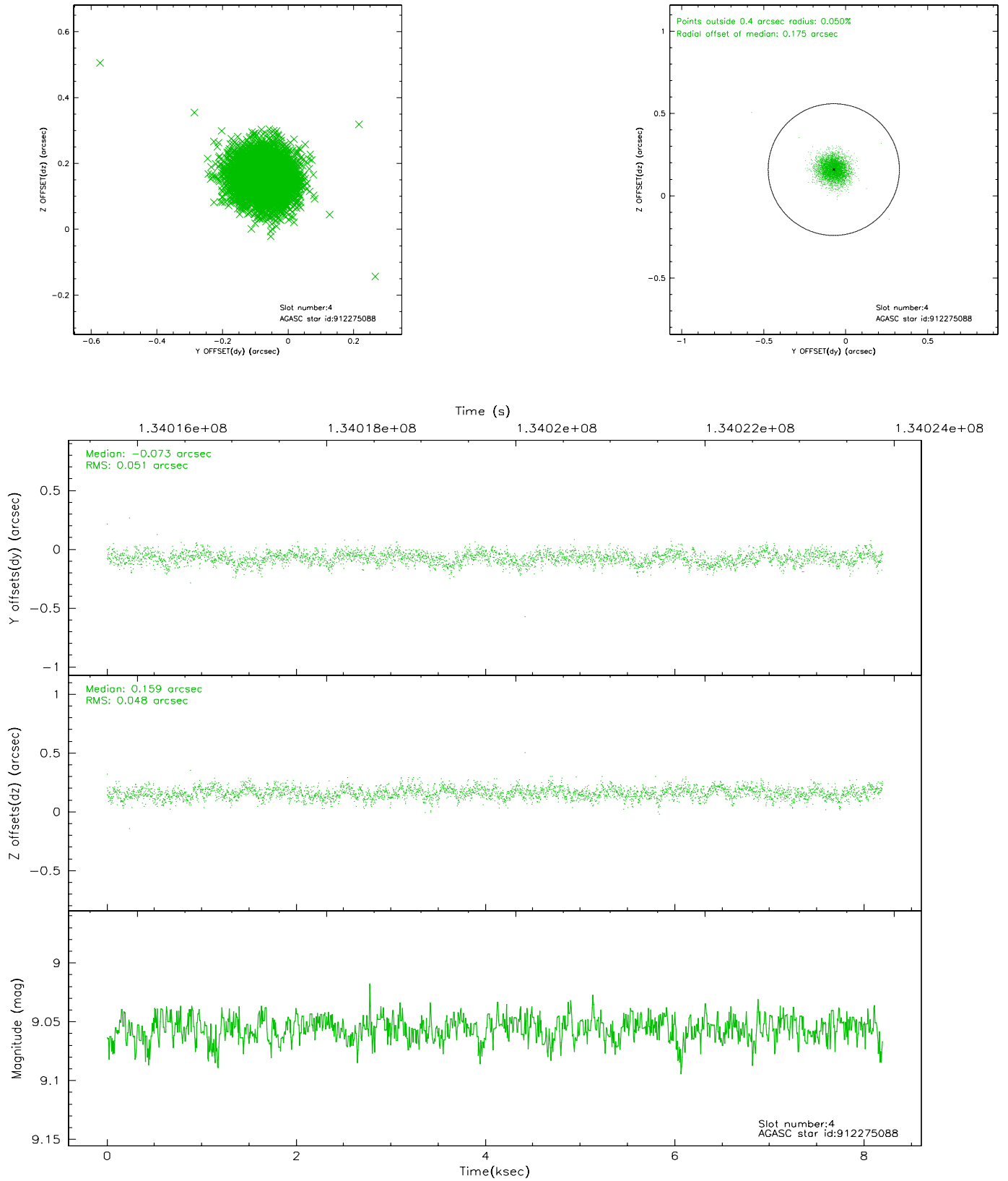
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.26	2000	-0.111	0.135	0.020	0.028	0.000000	0.000000	936.91	-734.03
1	FID	ACIS-I-5	7.24	2000	0.019	-0.026	0.008	0.013	0.000000	0.000000	-1810.69	1163.00
2	FID	ACIS-I-6	7.25	2000	0.001	-0.039	0.014	0.021	0.000000	0.000000	401.83	1808.26
3	GUIDE	981468016	9.03	3995	-0.029	-0.048	0.077	0.124	328.842457	-30.034984	2203.22	1915.15
4	GUIDE	912275088	9.06	3984	-0.073	0.159	0.073	0.118	329.619228	-29.738698	1716.18	-687.77
5	GUIDE	981478152	9.38	3999	0.019	-0.150	0.147	0.212	329.415589	-30.057192	1131.11	484.48
6	GUIDE	981468128	9.36	4000	0.189	0.145	0.088	0.146	329.756350	-30.158334	229.55	-182.81
7	GUIDE	981469488	9.59	3995	-0.094	-0.105	0.097	0.166	329.261199	-30.045155	1438.22	857.10

2.4 Star Slots

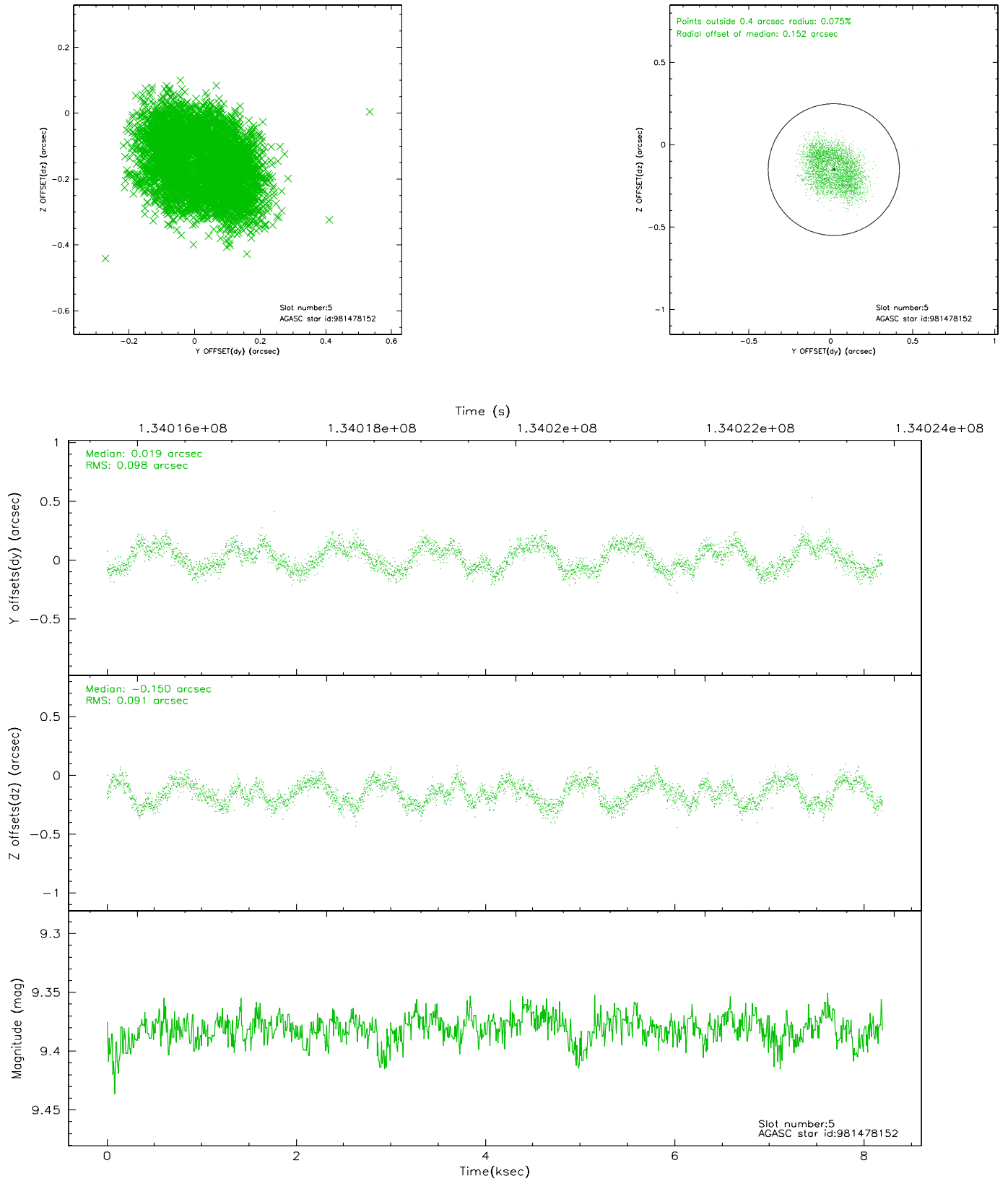
2.4.1 Slot 3



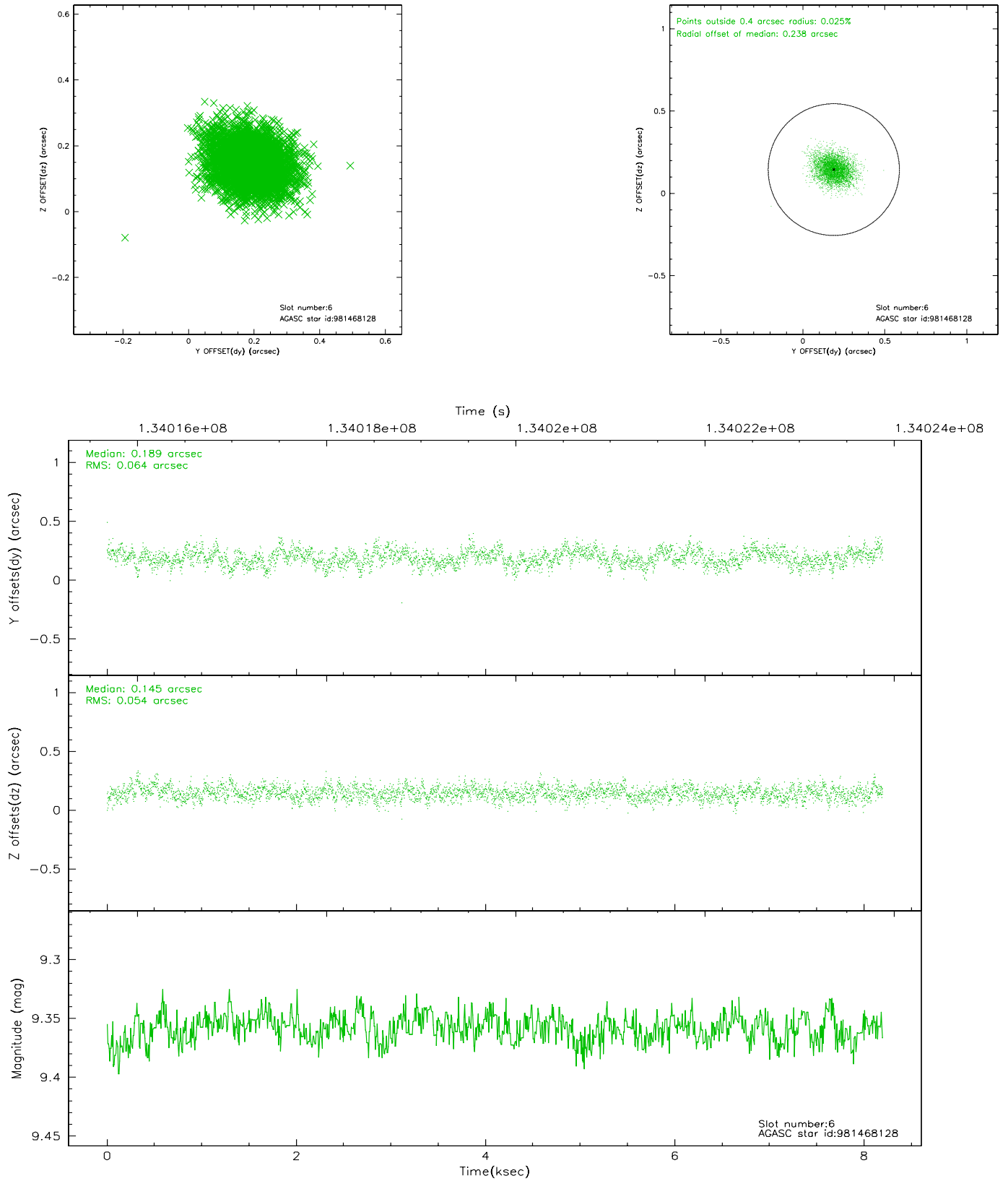
2.4.2 Slot 4



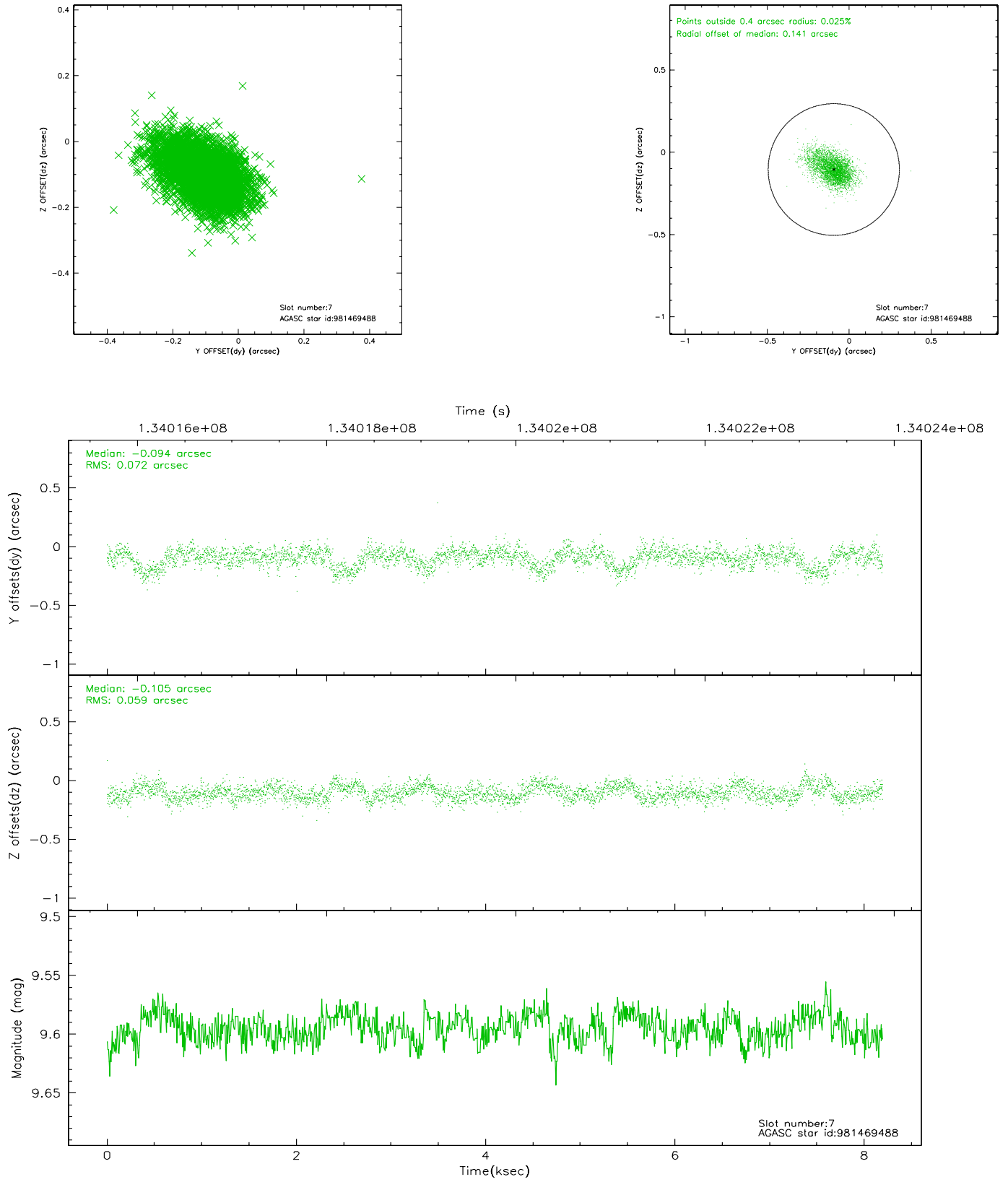
2.4.3 Slot 5



2.4.4 Slot 6

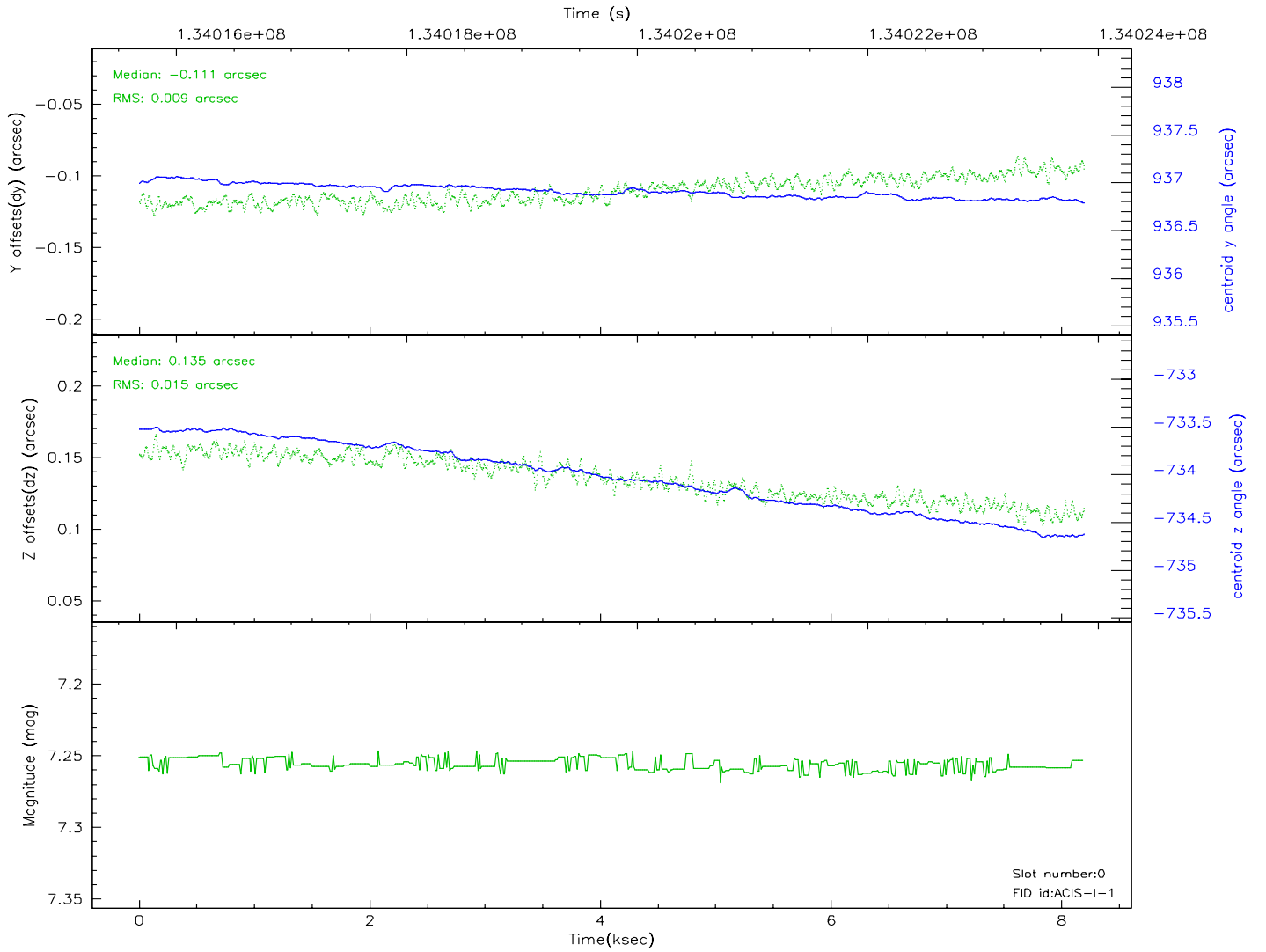
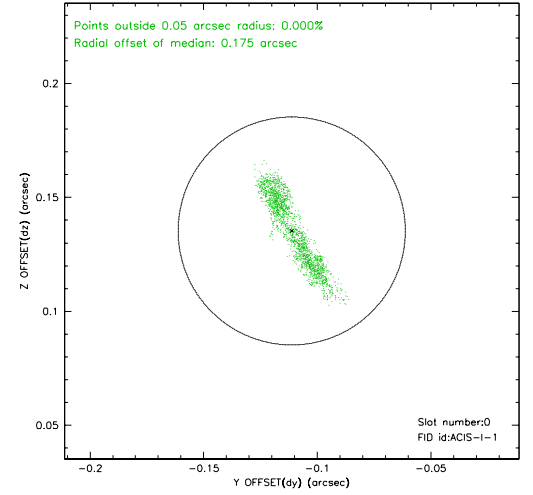
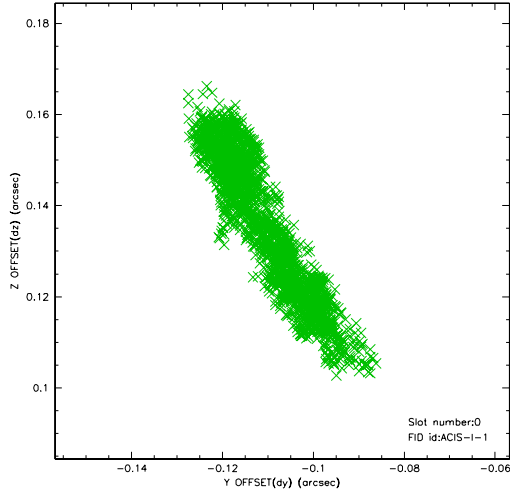


2.4.5 Slot 7

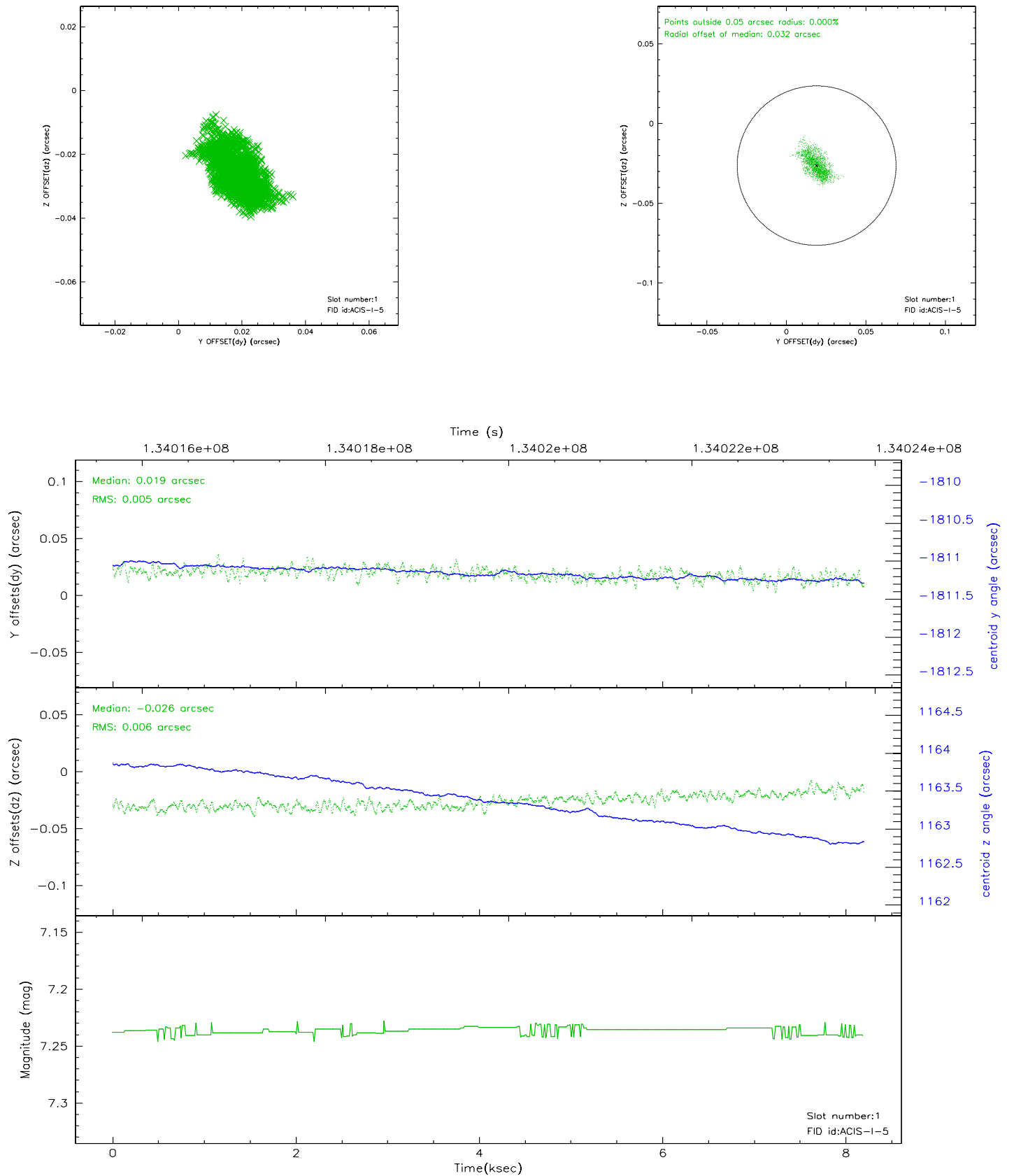


2.5 FID Slots

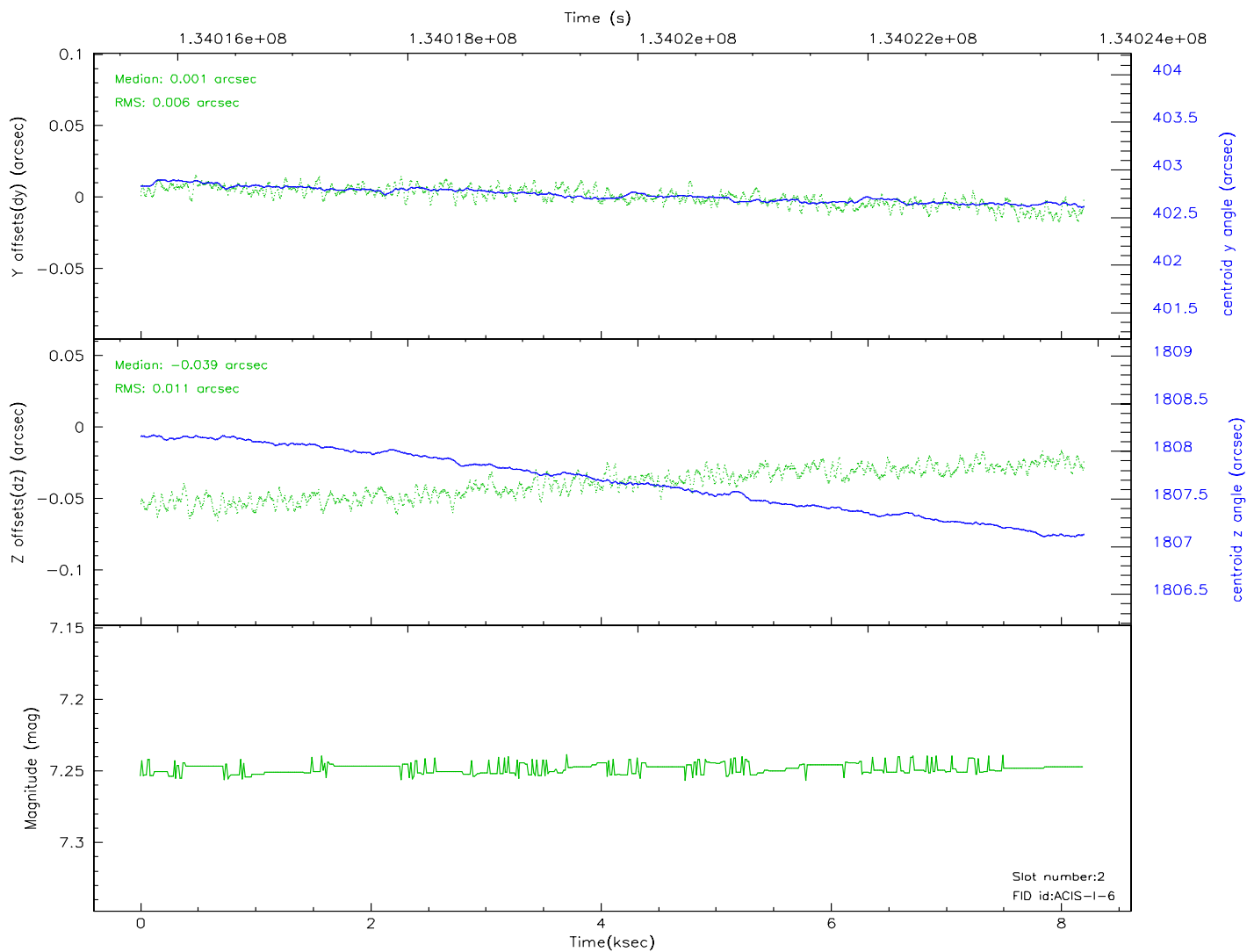
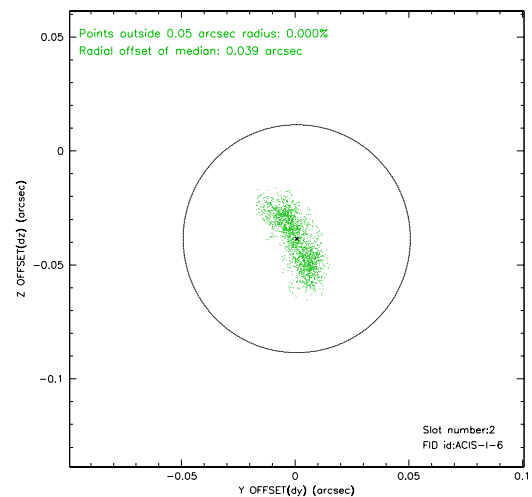
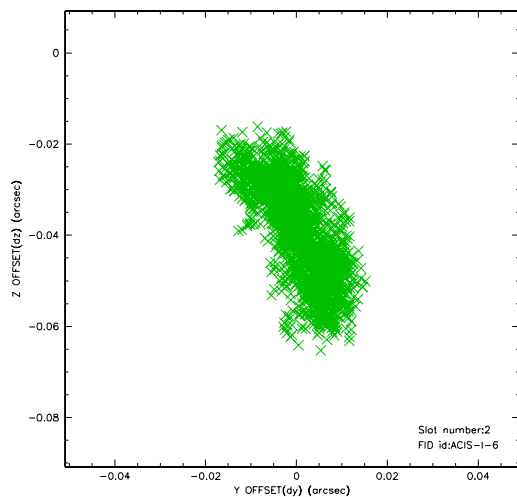
2.5.1 Slot 0



2.5.2 Slot 1

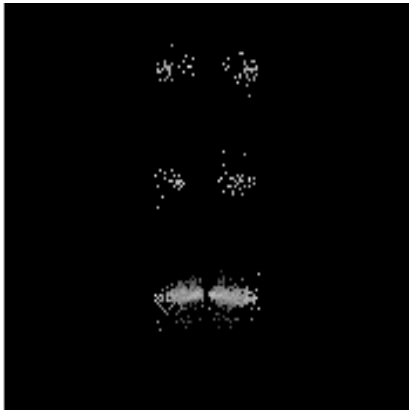


2.5.3 Slot 2

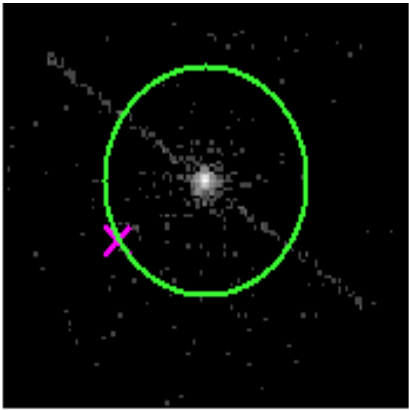


3 Gratings

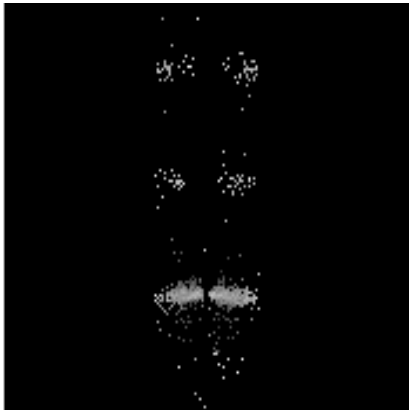
3.1 LETG Arm



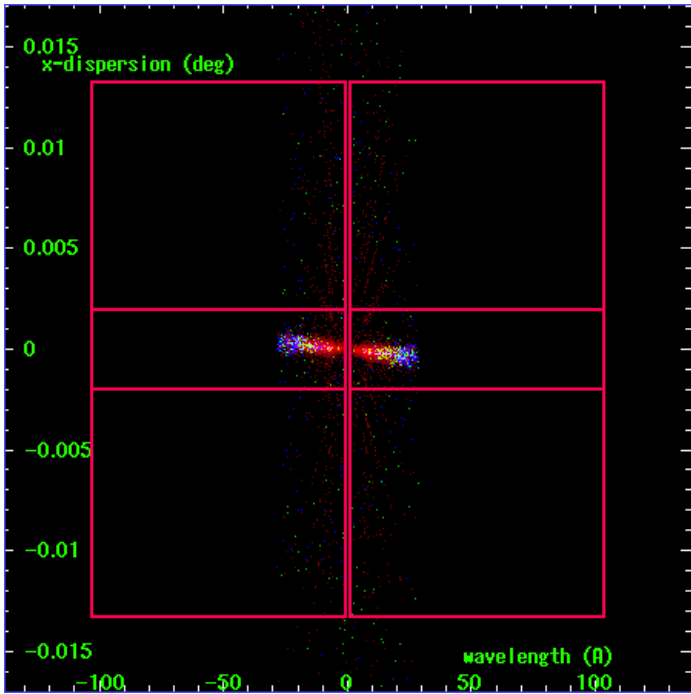
LETG Order Sort 123



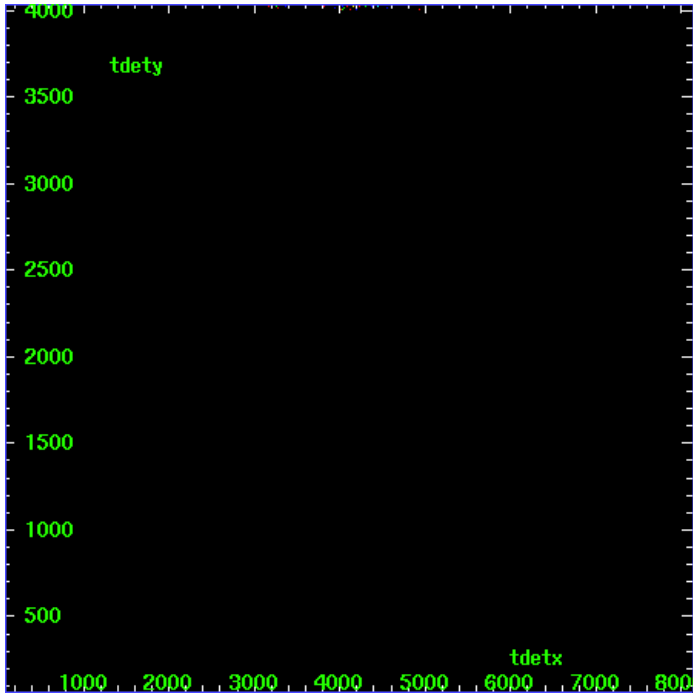
LETG Zero Order



LETG Order Sort ALL

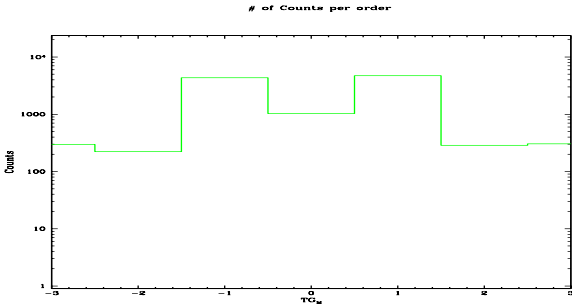


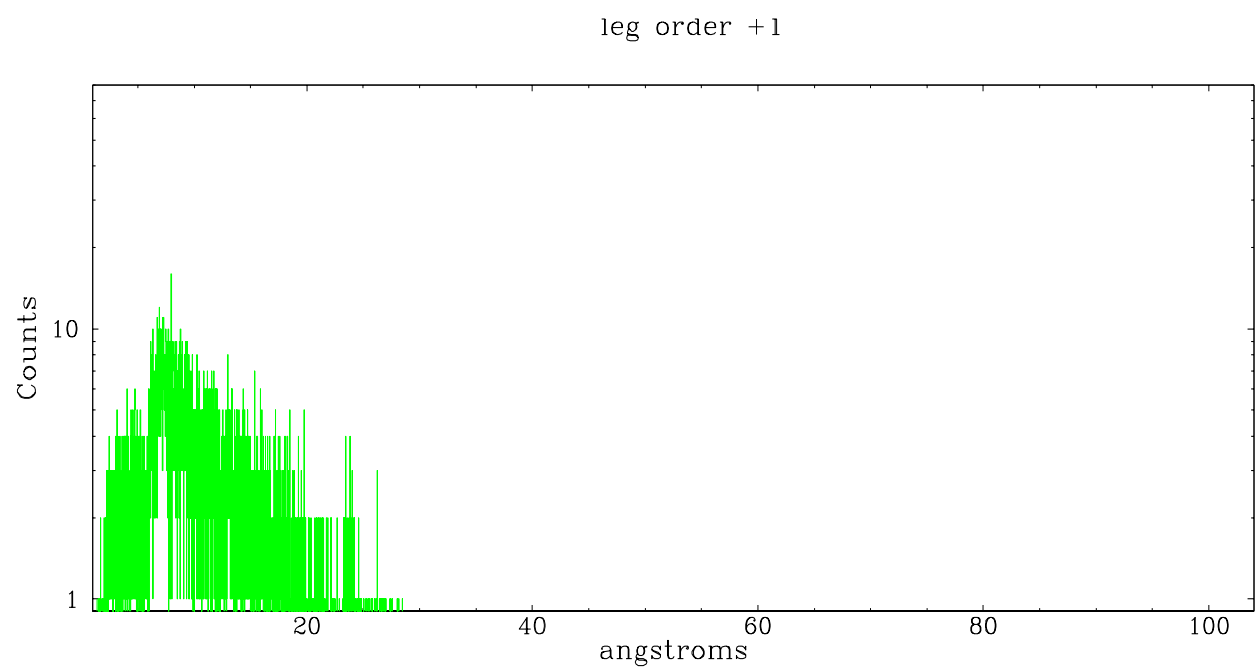
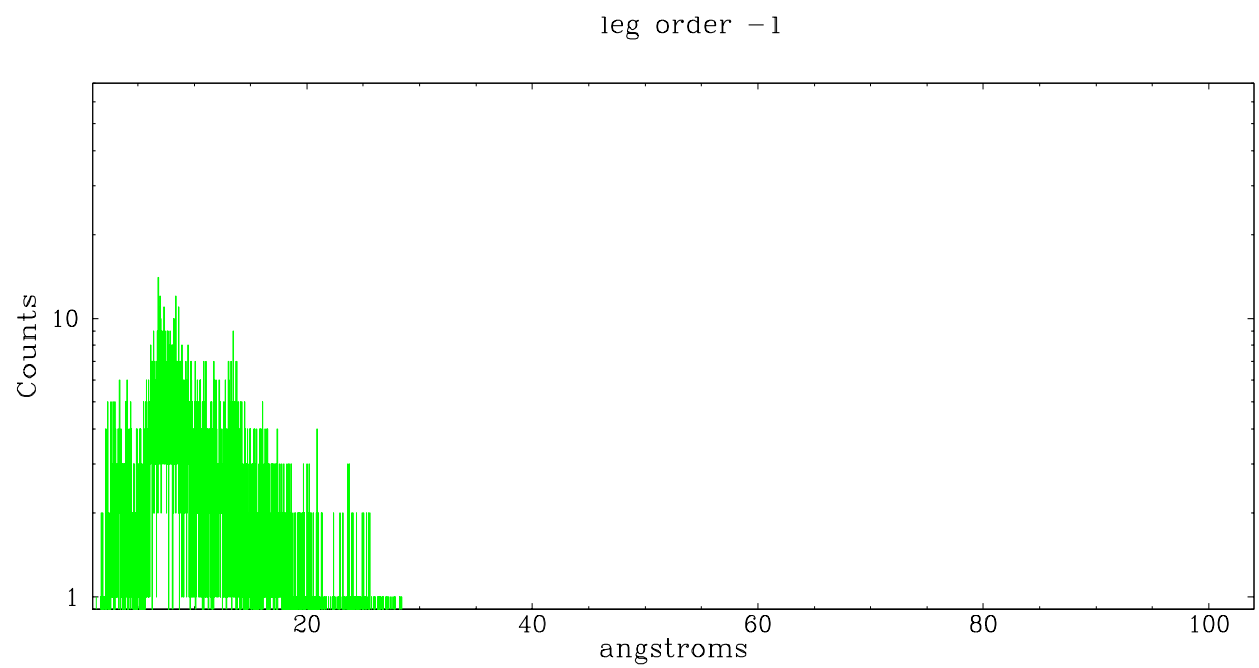
Spot Image LETG



Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	297	222	4326	1023	4719	286	305





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.788

A.2 Comments

This is a calibration observation in a configuration unsupported by standard grating processing (LETG/ACIS-I). As a result, there are a couple problems: tgdetect had an error, but apparently recovered with a valid source position. In the original processing tg_resolve_events completed without error, but it failed to resolve any events because the order sorting energy tables ('osip' file) are not valid for ACIS-I. The observation has been reprocessed from tg_resolve_events on with osipfile=none and osort_hi=0.3,osort_lo=0.3.