

V&V Reference Report

L2 ASCDS Version : 7.6.10

Observation 3177 - L2 Version 002
Chandra X-Ray Center

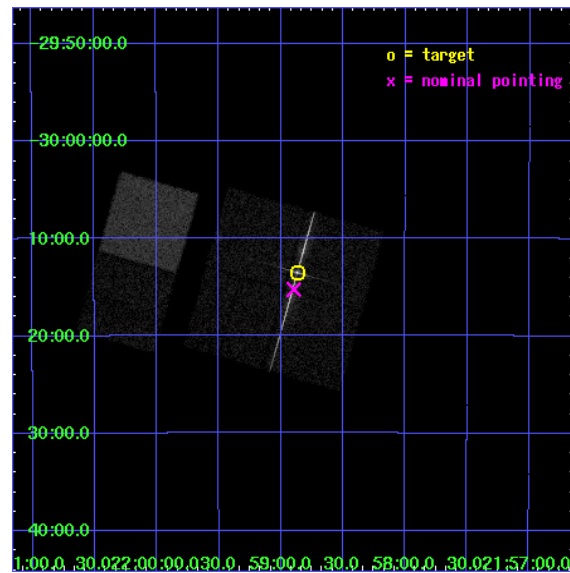
L2 Processing Date : Feb 27 2007

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1 Front

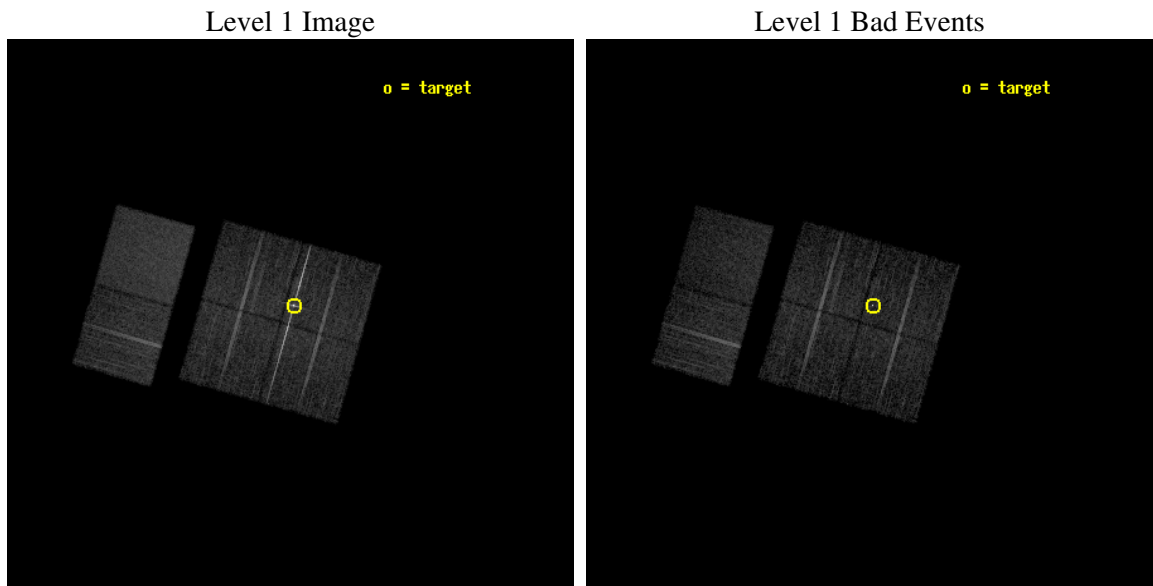
seq_num	790071
obs_id	3177
title	AO3 LETG/ACIS-I CALIBRATION OBSERVATIONS OF PKS2155-304
observer	Dr. CXC Calibration
object	PKS2155-304
dtcycle	0
cycle	P
ra_targ	329.716667
dec_targ	-30.225556
ra_nom	329.72386033145
dec_nom	-30.254283274481
roll_nom	285.91825850265
revision	4
ontime	8156.8000075966
livetime	8053.5136944651
ontime0	8156.8000075966
ontime1	8156.8000075966
ontime2	8156.8000075966
ontime3	8156.8000075966
ontime6	8156.8000075966
ontime7	8156.8000075966
l2events	80690



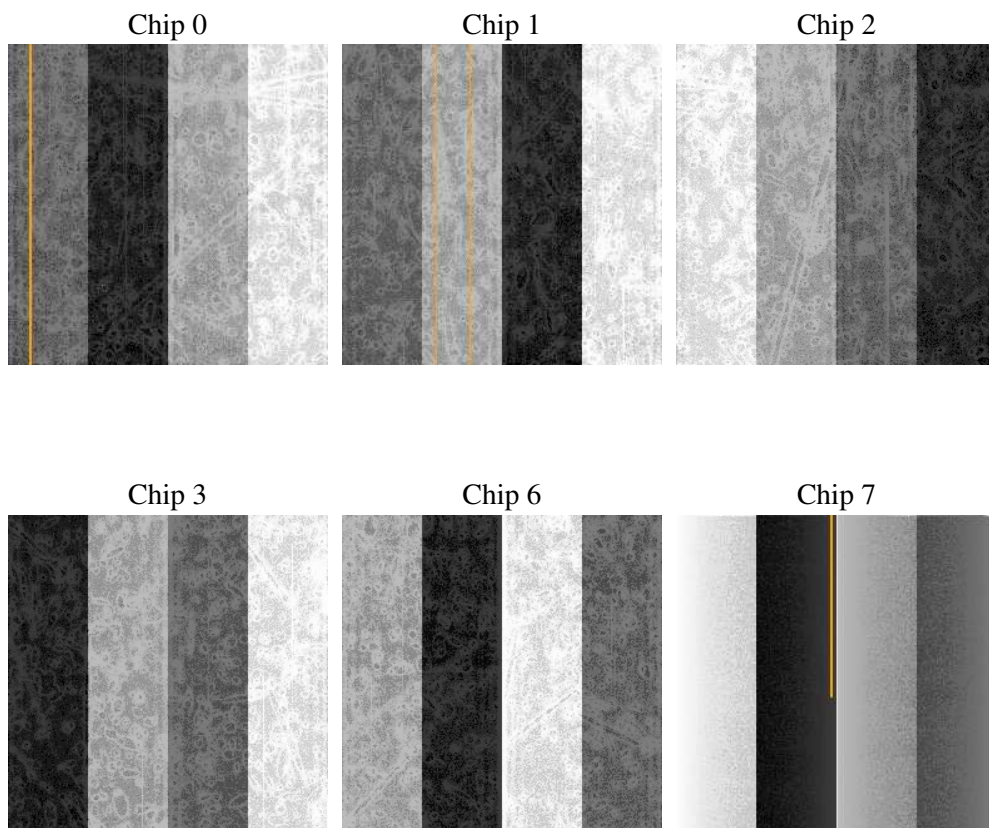
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1
ascdsver	7.6.10
caldsver	3.3.0
date	2007-01-20T12:04:17
revision	2

sched_exp_time	8400.688000
ontime	8156.8000075966
ontime0	8156.8000075966
ontime1	8156.8000075966
ontime2	8156.8000075966
ontime3	8156.8000075966
ontime6	8156.8000075966
ontime7	8156.8000075966
l1events	356925

2.1.4 Events

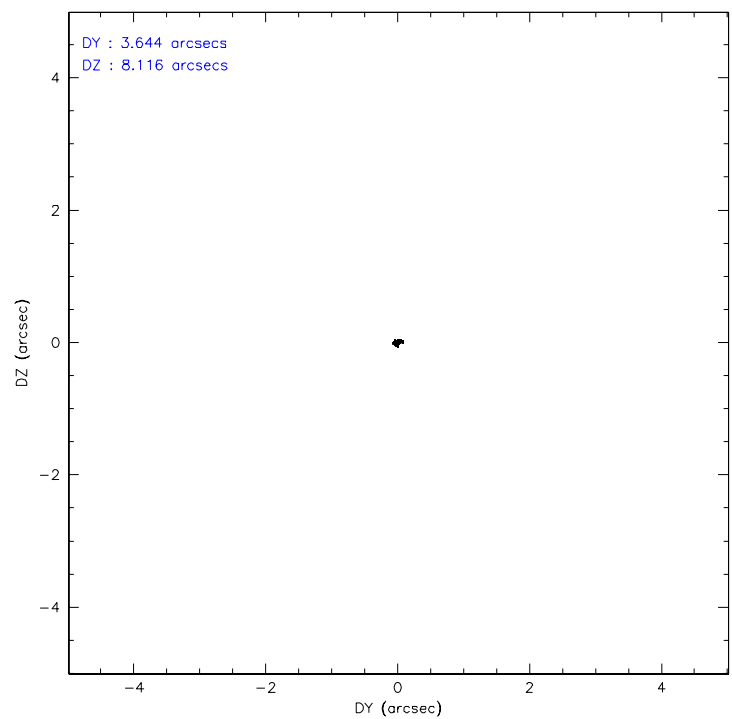
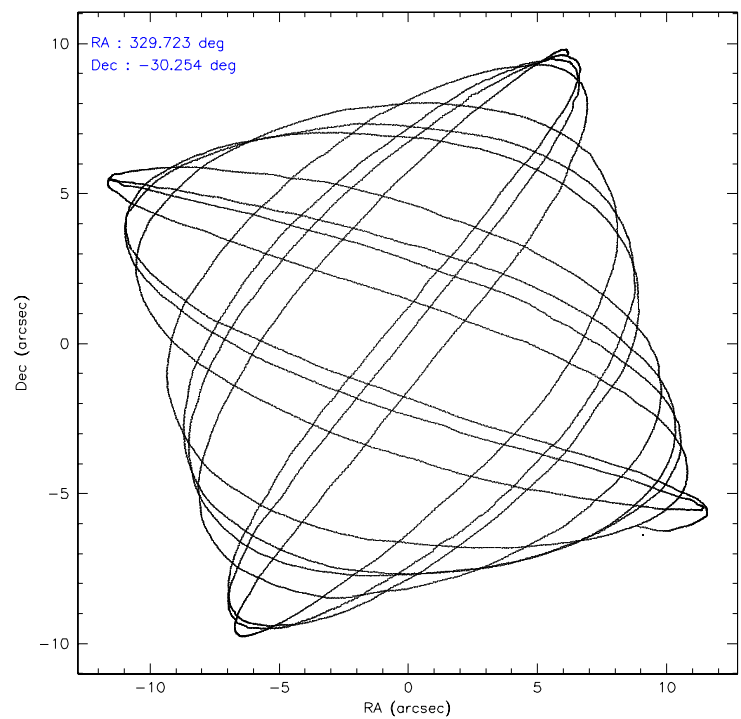
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	58546	70705	50795	52601	56255	68023
rejected events	41507	45439	44799	46227	50281	40250
rejected %	70%	64%	88%	87%	89%	59%

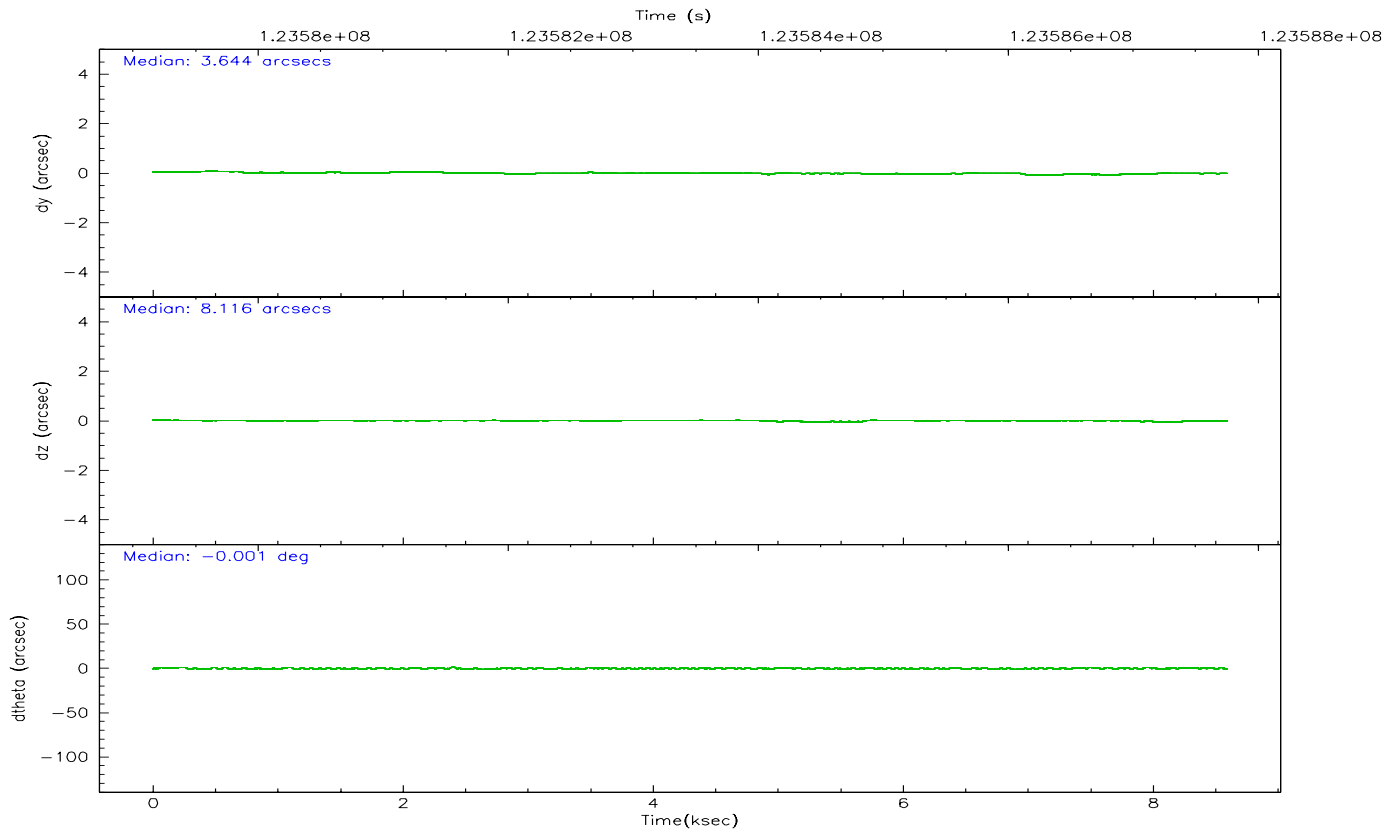
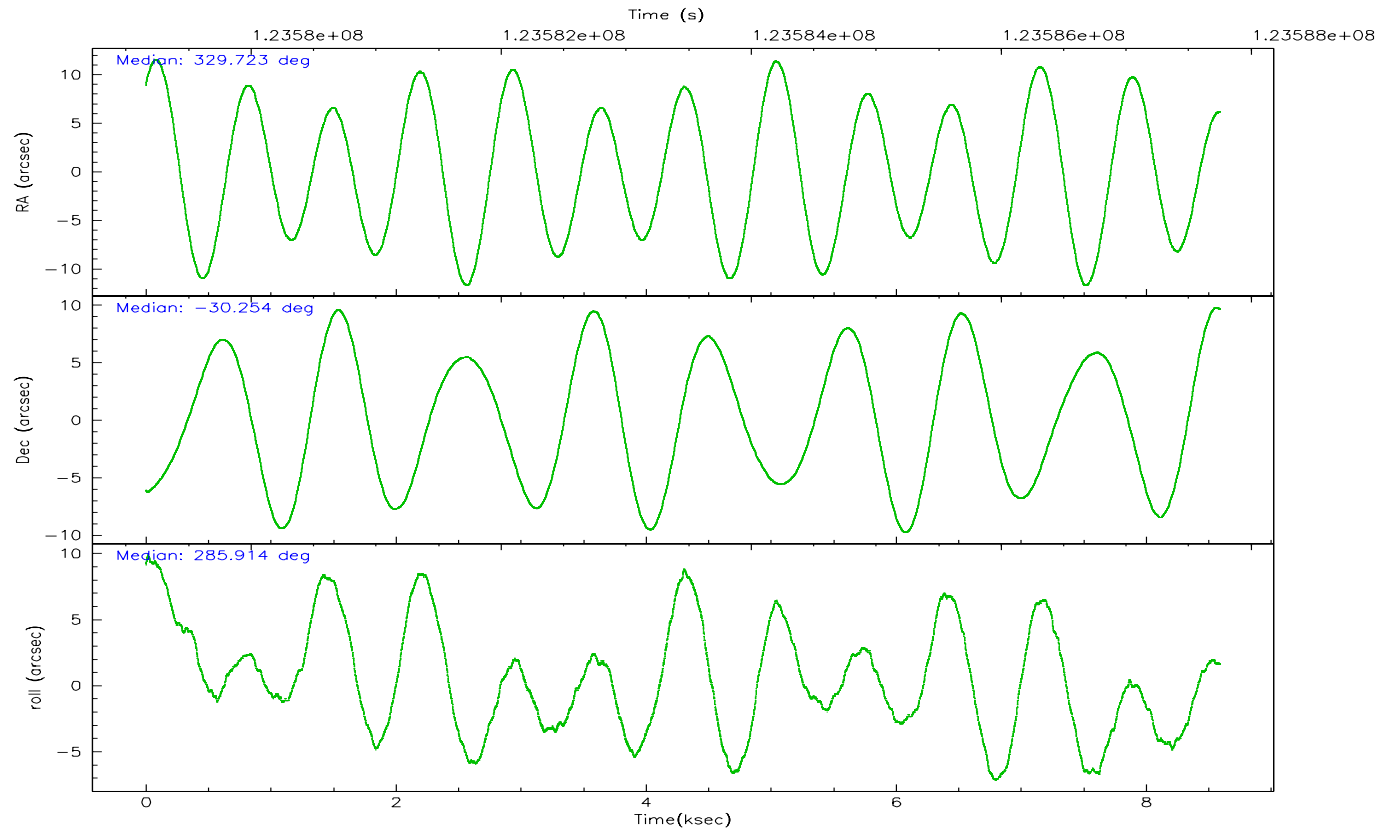
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	11995	17341	2576	2788	2287	2446
	20%	24%	5%	5%	4%	3%
grade 1 events	93	489	22	28	30	62
	0%	0%	0%	0%	0%	0%
grade 2 events	2192	3269	1292	1328	1195	5529
	3%	4%	2%	2%	2%	8%
grade 3 events	842	1220	512	596	598	2510
	1%	1%	1%	1%	1%	3%
grade 4 events	804	1263	550	541	641	2450
	1%	1%	1%	1%	1%	3%
grade 5 events	1983	2823	1791	2052	2377	6601
	3%	3%	3%	3%	4%	9%
grade 6 events	1209	2185	1067	1121	1253	14854
	2%	3%	2%	2%	2%	21%
grade 7 events	39428	42115	42985	44147	47874	33571
	67%	59%	84%	83%	85%	49%

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	329.700979	329.7238603314452	Subarray requested	NONE	NONE
Pointing Dec	-30.235252	-30.25428327448054	Alternating exposures requested	N	N
Pointing Roll	285.698050	285.9182585026519	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)	-238.277263	-238.2741181829365			
SIM translation stage offset (mm)	4.6848	4.681665180006831			
Observation start time	123579350.184000	123578973.6056			
Observation start date	2001-12-01T07:34:46	2001-12-01T07:29:33			
Observation end time	123587750.184000	123588065.35596			
Observation end date	2001-12-01T09:54:46	2001-12-01T10:01:05			
Read mode	TIMED	TIMED			

2.3 Aspect



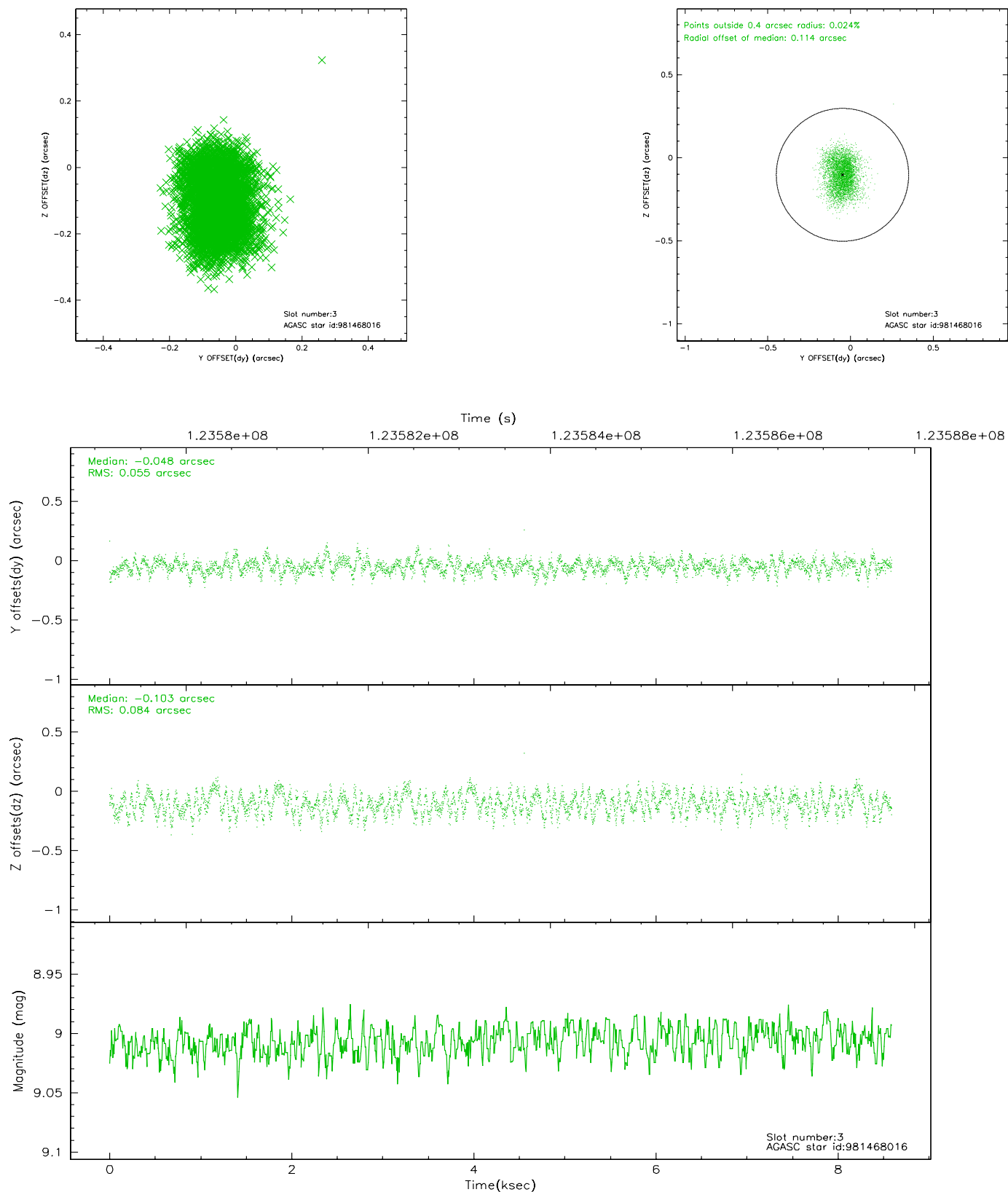


Slot Statistics

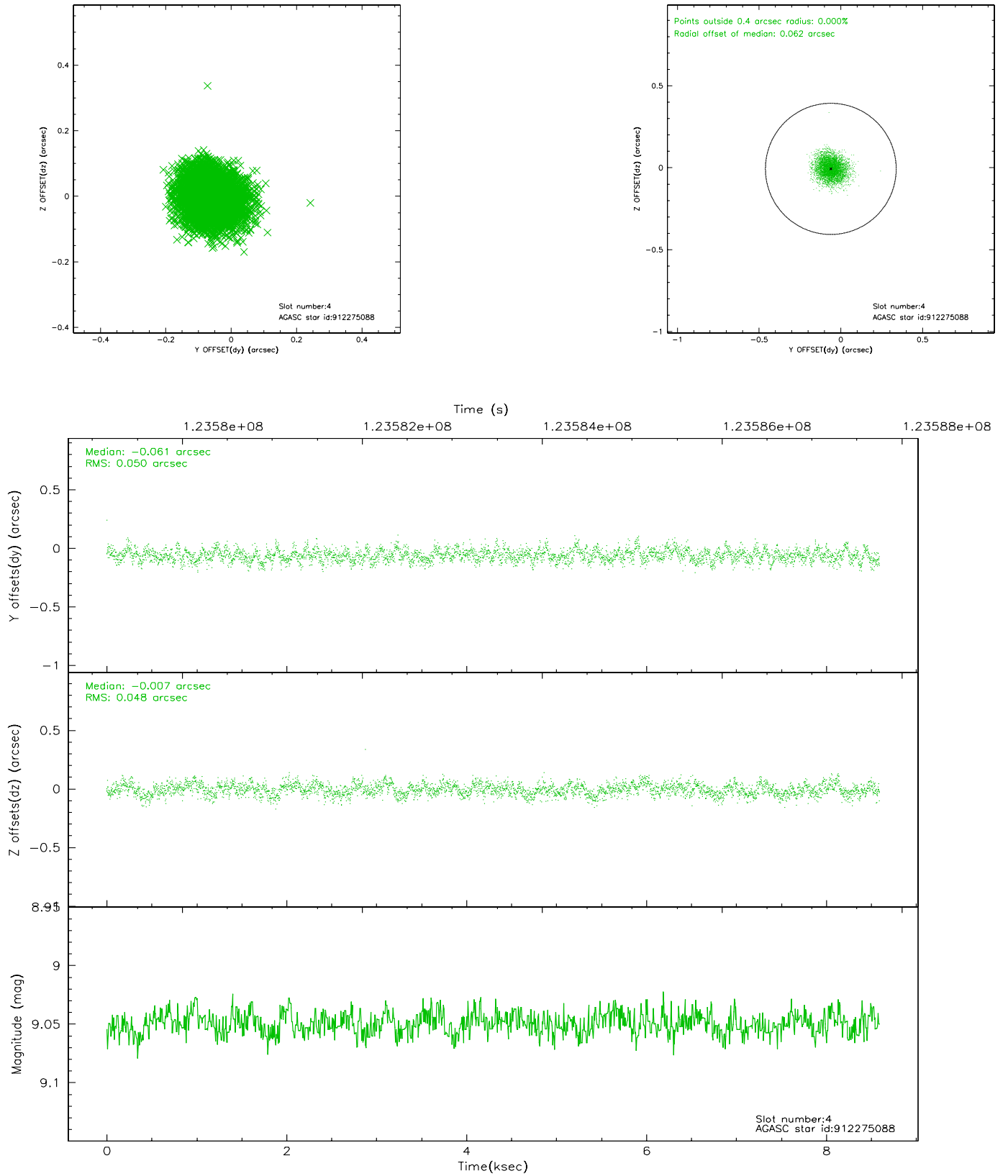
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.25	2096	-0.077	0.104	0.006	0.010	0.000000	0.000000	936.13	-735.17
1	FID	ACIS-I-5	7.24	2095	-0.006	-0.002	0.006	0.010	0.000000	0.000000	-1811.52	1161.98
2	FID	ACIS-I-6	7.25	2095	-0.009	-0.032	0.006	0.011	0.000000	0.000000	401.08	1807.14
3	GUIDE	981468016	9.01	4188	-0.048	-0.103	0.109	0.171	328.842457	-30.034984	-1406.55	-2382.95
4	GUIDE	912275088	9.05	4189	-0.061	-0.007	0.075	0.119	329.619228	-29.738698	-1788.69	237.71
5	GUIDE	981478152	9.41	4186	-0.009	0.105	0.076	0.125	329.415589	-30.057192	-855.33	-682.07
6	GUIDE	981468128	9.36	4189	0.049	-0.022	0.092	0.149	329.756350	-30.158334	-218.34	241.44
7	GUIDE	981469488	9.61	4190	0.070	0.032	0.085	0.141	329.261199	-30.045155	-1025.31	-1134.12

2.4 Star Slots

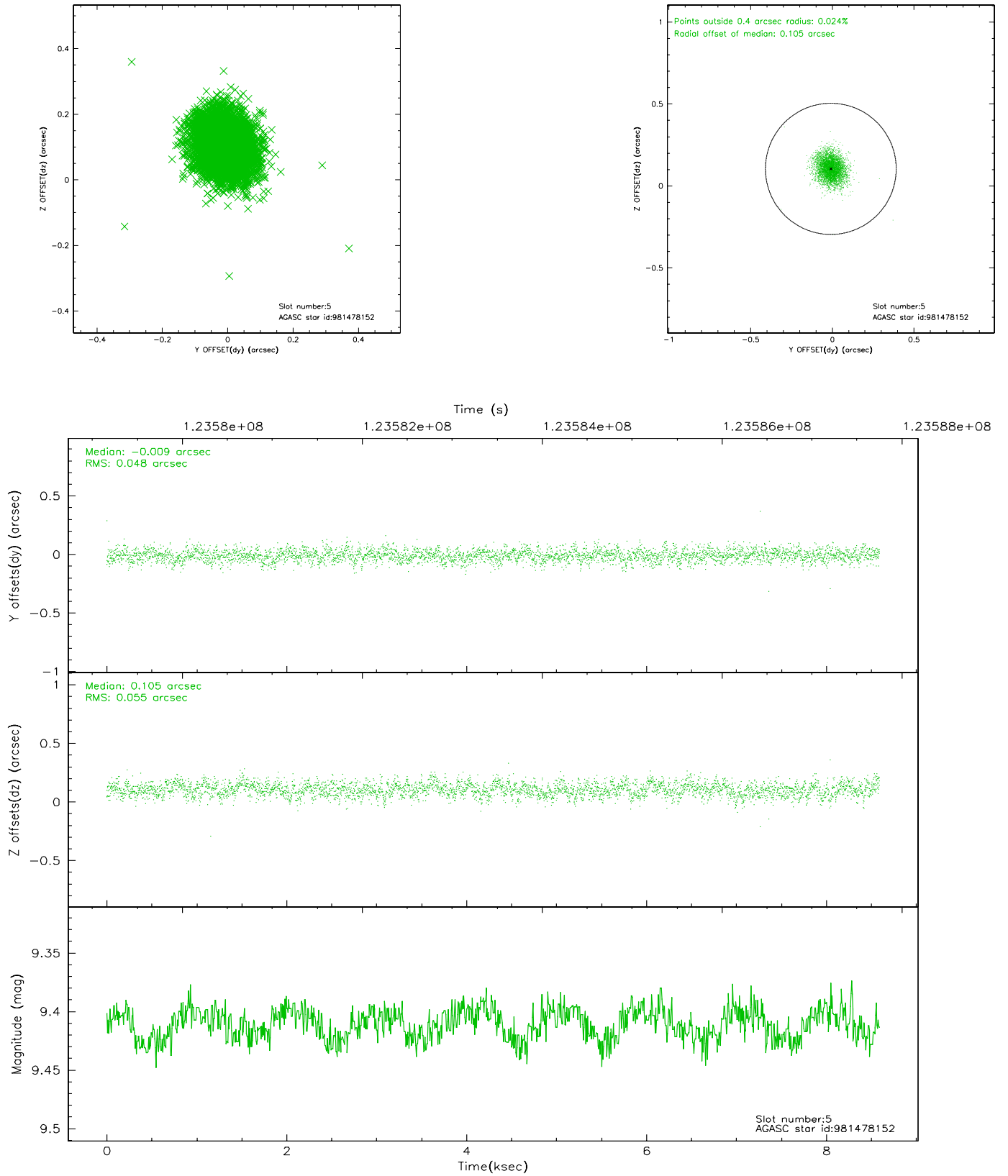
2.4.1 Slot 3



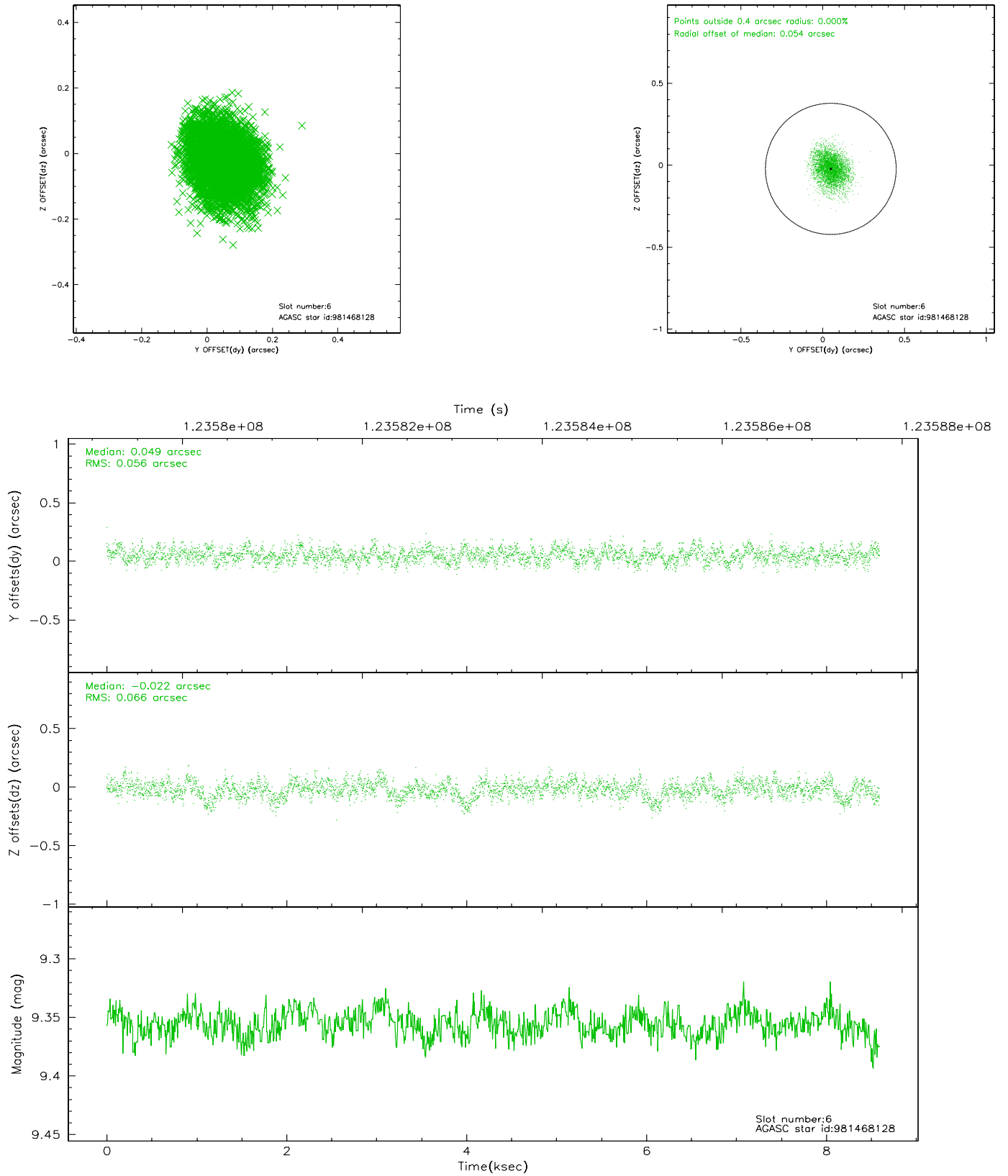
2.4.2 Slot 4



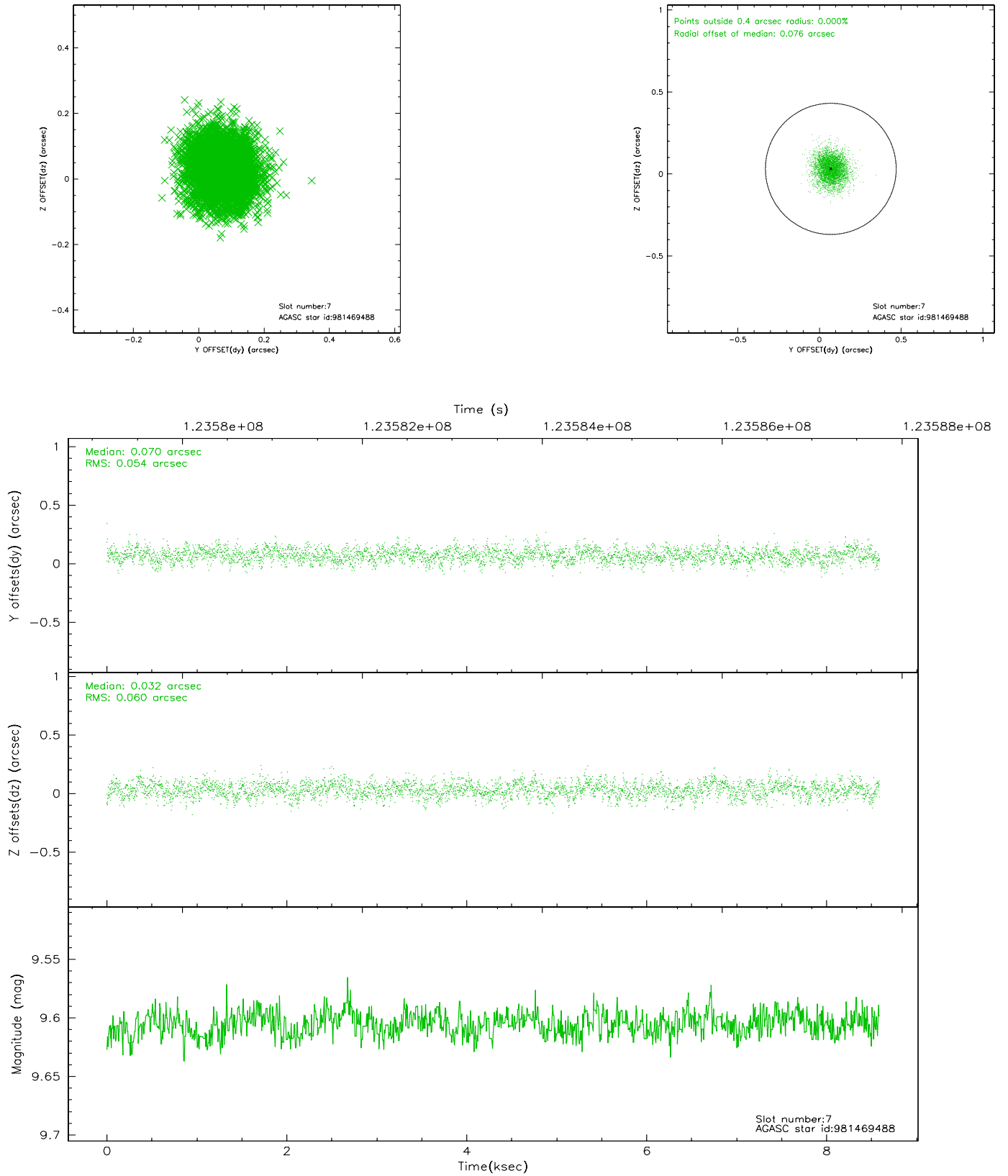
2.4.3 Slot 5



2.4.4 Slot 6

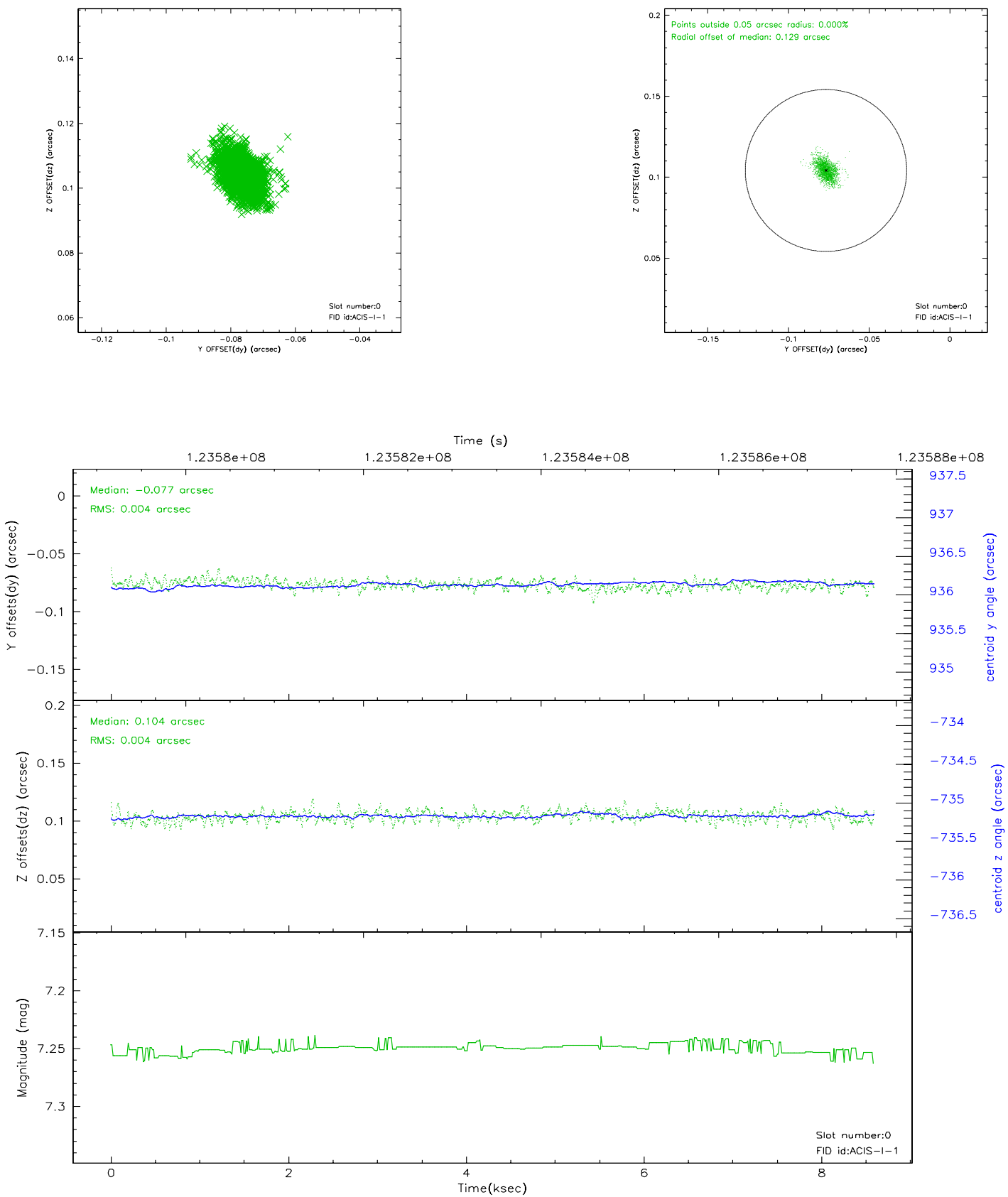


2.4.5 Slot 7

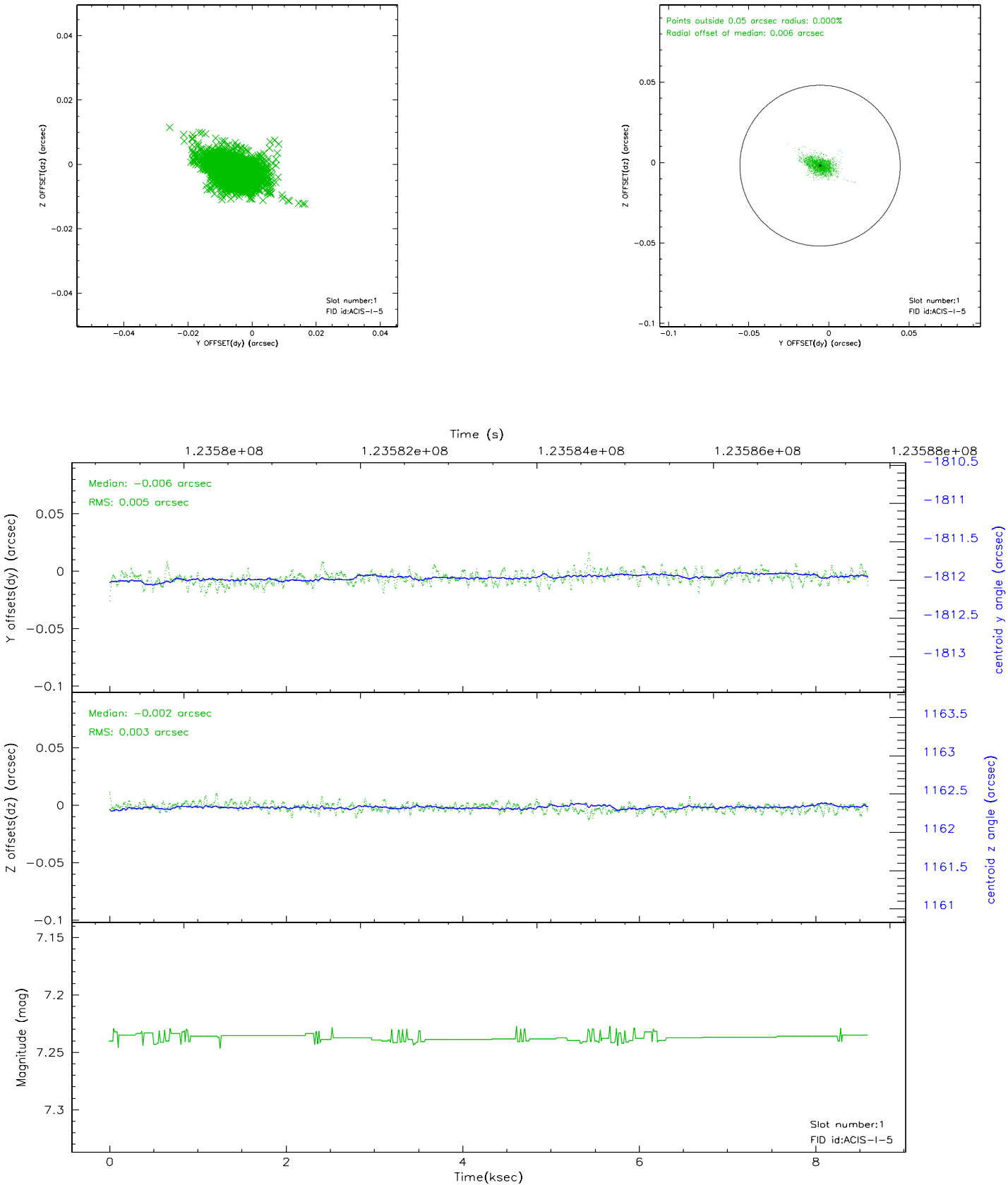


2.5 FID Slots

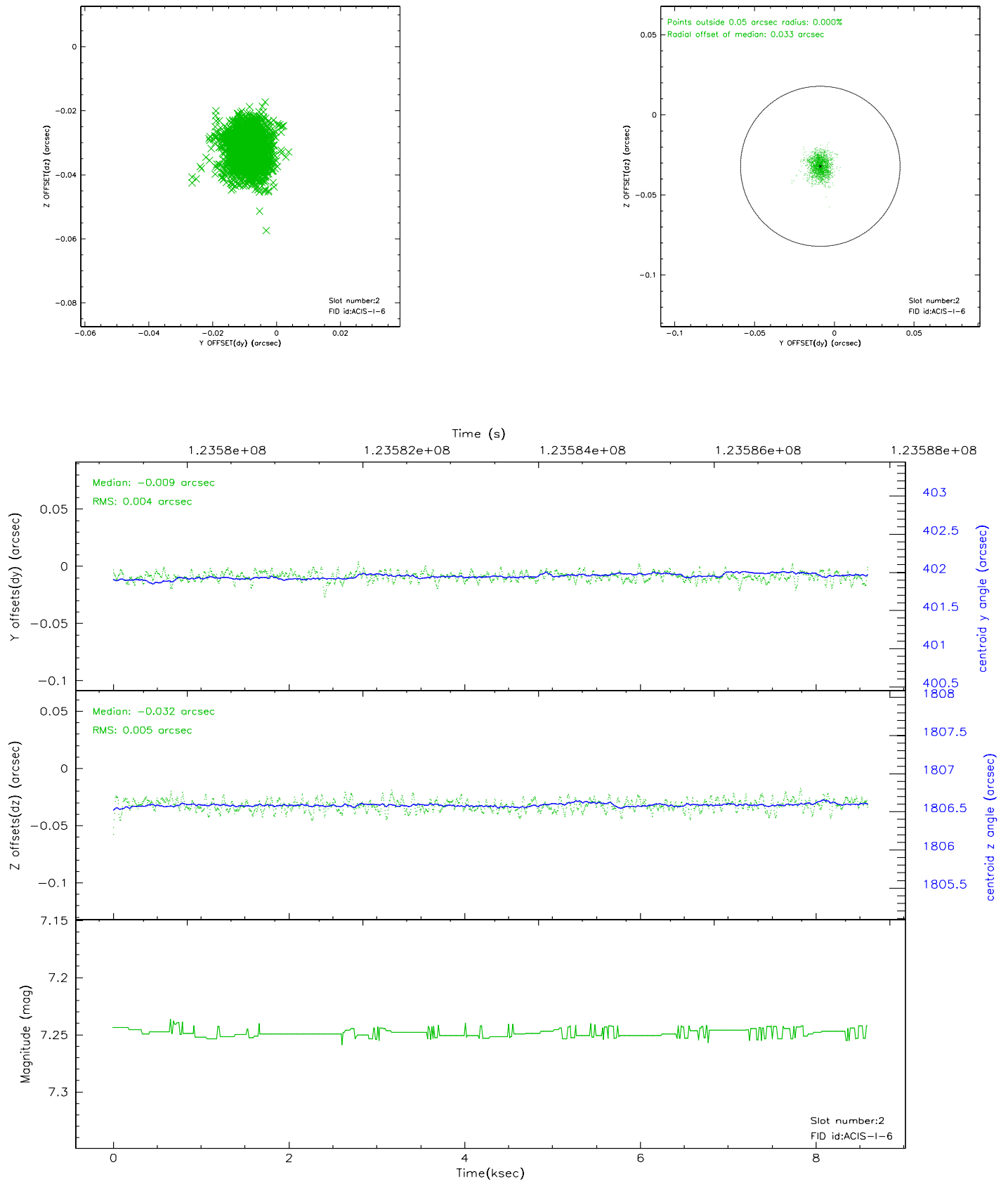
2.5.1 Slot 0



2.5.2 Slot 1

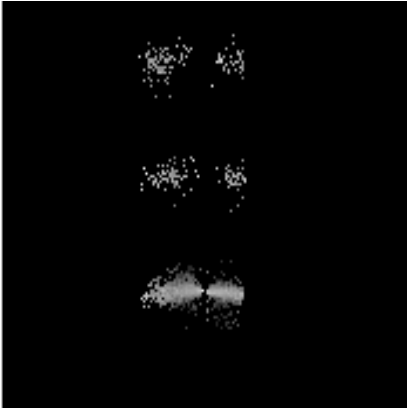


2.5.3 Slot 2

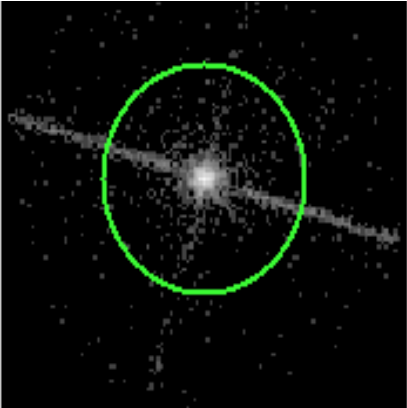


3 Gratings

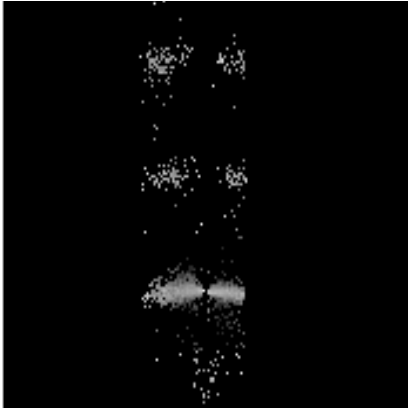
3.1 LETG Arm



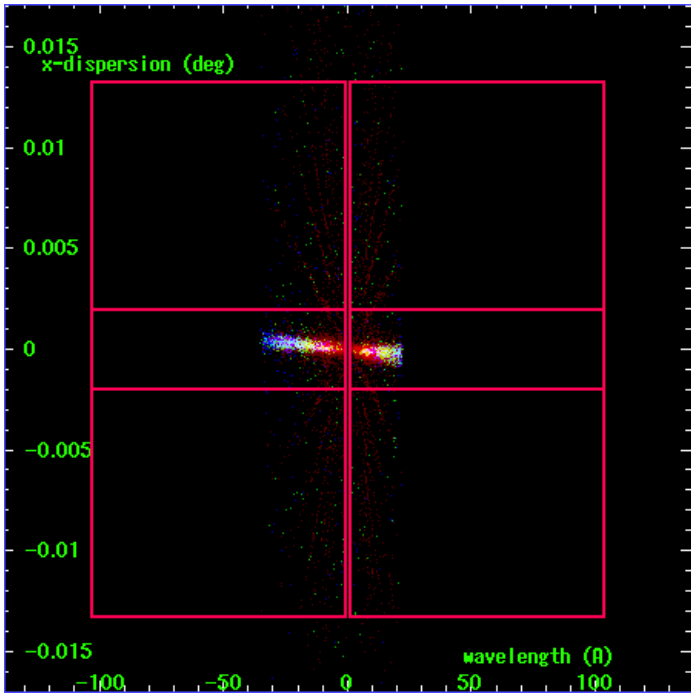
LETG Order Sort 123



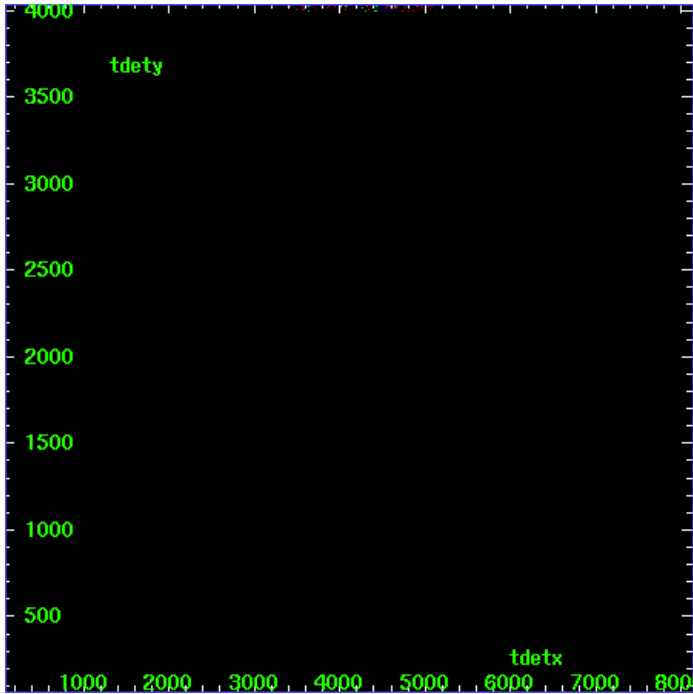
LETG Zero Order



LETG Order Sort ALL

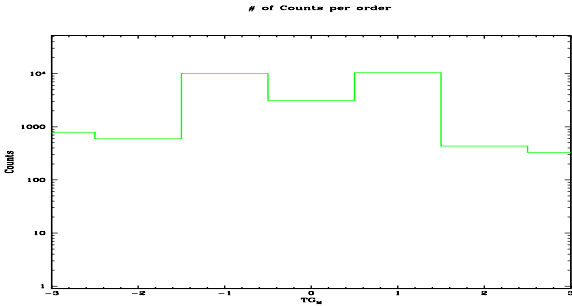


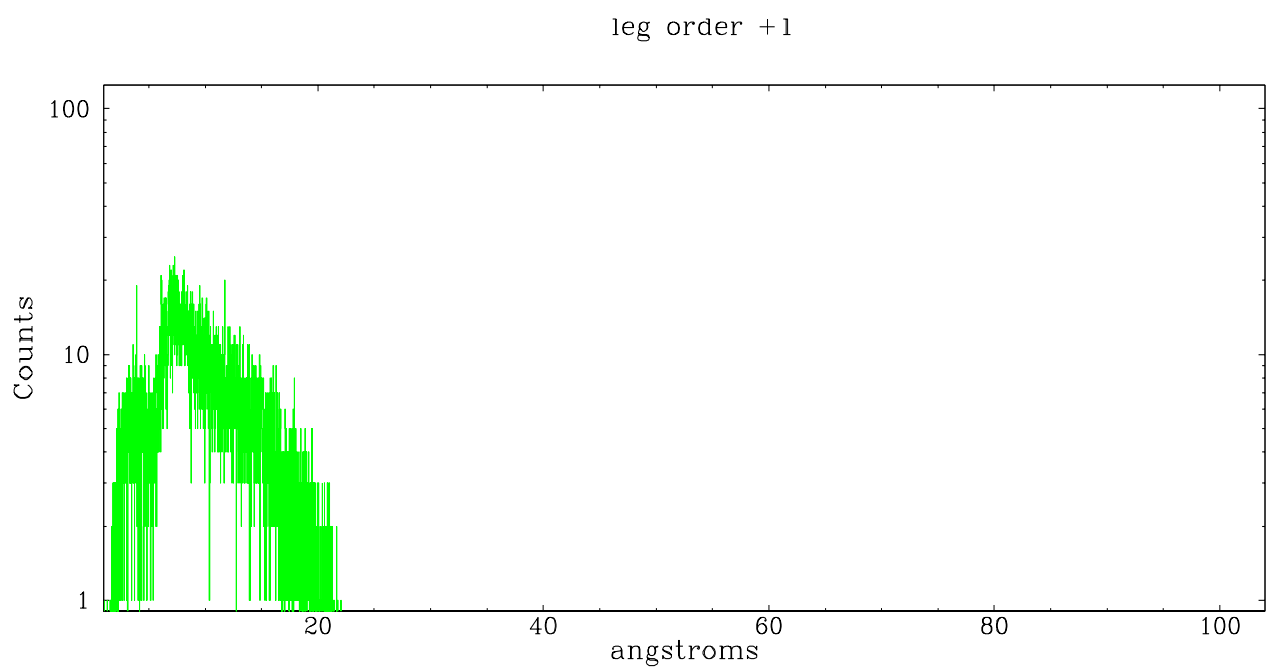
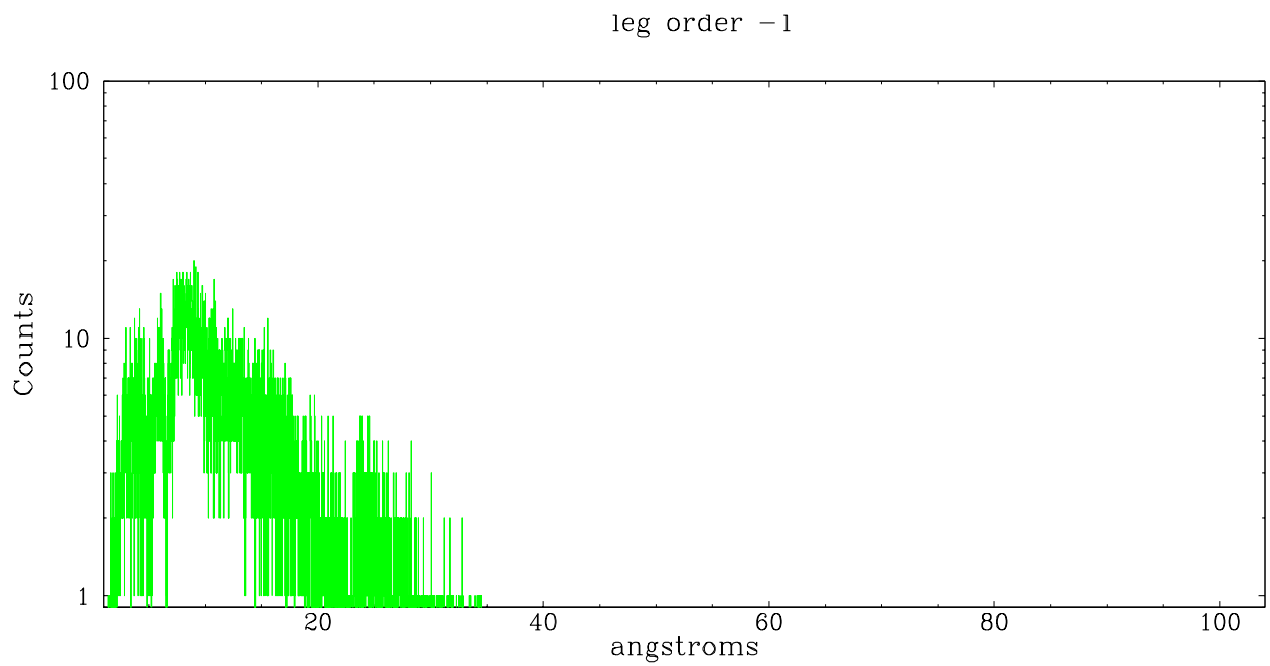
Spot Image LETG



Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	788	594	10049	3151	10370	435	328





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2007.03.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.156

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.