

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2335 - L2 Version 3
Chandra X-Ray Center

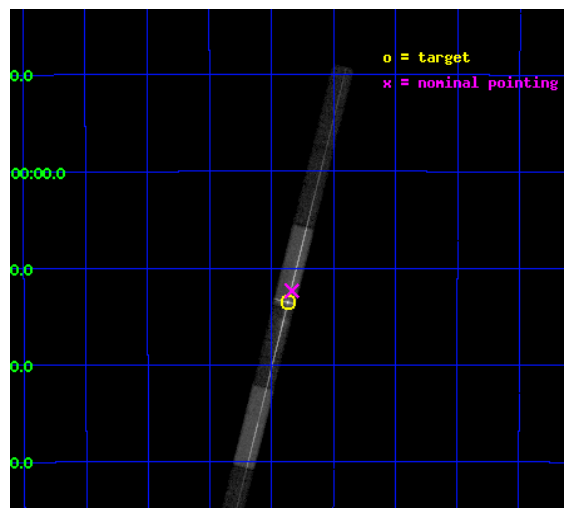
L2 Processing Date : Sep 4 2012

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1 Front

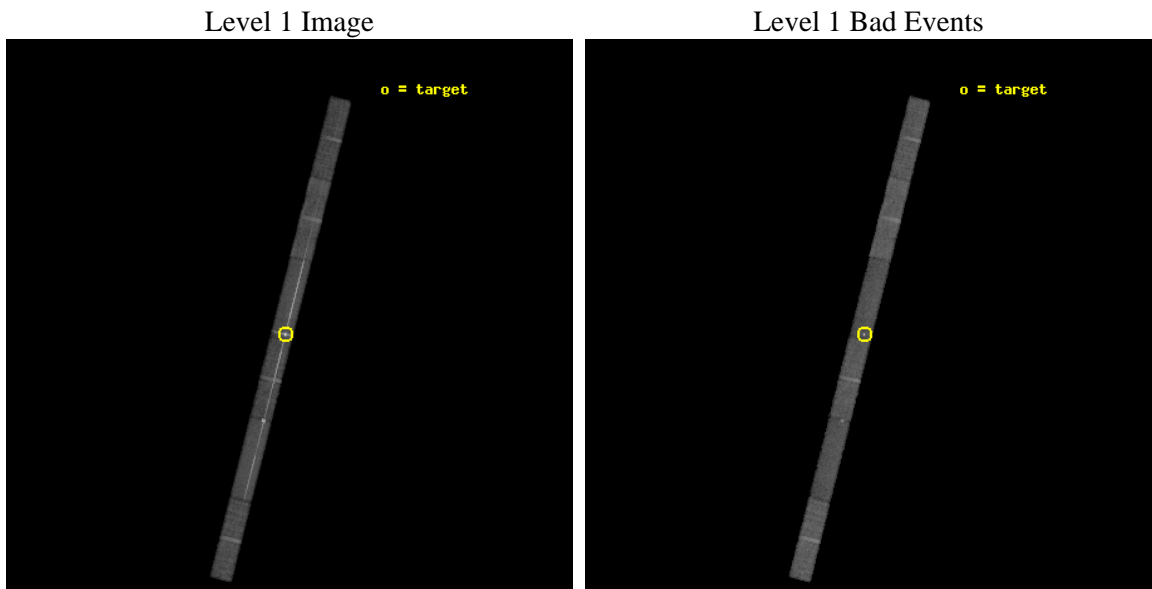
seq_num	390022	Sequence number
obs_id	2335	Observation id
title	GRATINGS CALIBRATION OBSERVATIONS OF PKS2155-304	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS2155-304	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	329.716667	Observer's specified target RA [deg]
dec_targ	-30.225556	Observer's specified target Dec [deg]
ra_nom	329.7088897146	Nominal RA [deg]
dec_nom	-30.205788934358	Nominal Dec [deg]
roll_nom	284.17453871418	Nominal Roll [deg]
revision	3	Processing version of data
ontime	30149.89983663	Sum of GTIs [s]
livetime	29065.492726191	Livetime [s]
ontime4	30148.75881657	Sum of GTIs [s]
ontime5	30148.758796632	Sum of GTIs [s]
ontime6	30149.89983663	Sum of GTIs [s]
ontime7	30149.89983663	Sum of GTIs [s]
ontime8	30149.89983663	Sum of GTIs [s]
ontime9	30149.89983663	Sum of GTIs [s]
l2events	199159	Number of level 2 events



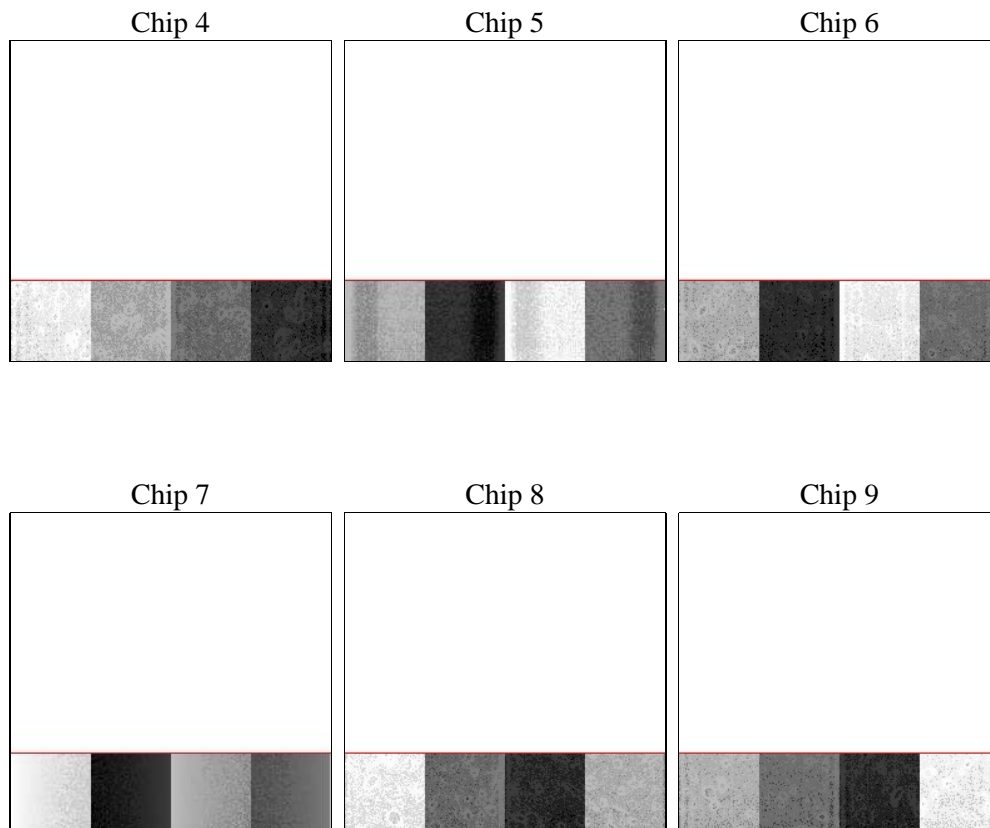
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	30149.89983663	Sum of GTIs [s]
caldbver	4.5.1.1	 	ontime4	30148.75881657	Sum of GTIs [s]
date	2012-09-04T05:16:16	Date and time of file creation	ontime5	30148.758796632	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	30149.89983663	Sum of GTIs [s]
			ontime7	30149.89983663	Sum of GTIs [s]
			ontime8	30149.89983663	Sum of GTIs [s]
			ontime9	30149.89983663	Sum of GTIs [s]
			l1events	496802	Number of level 1 events

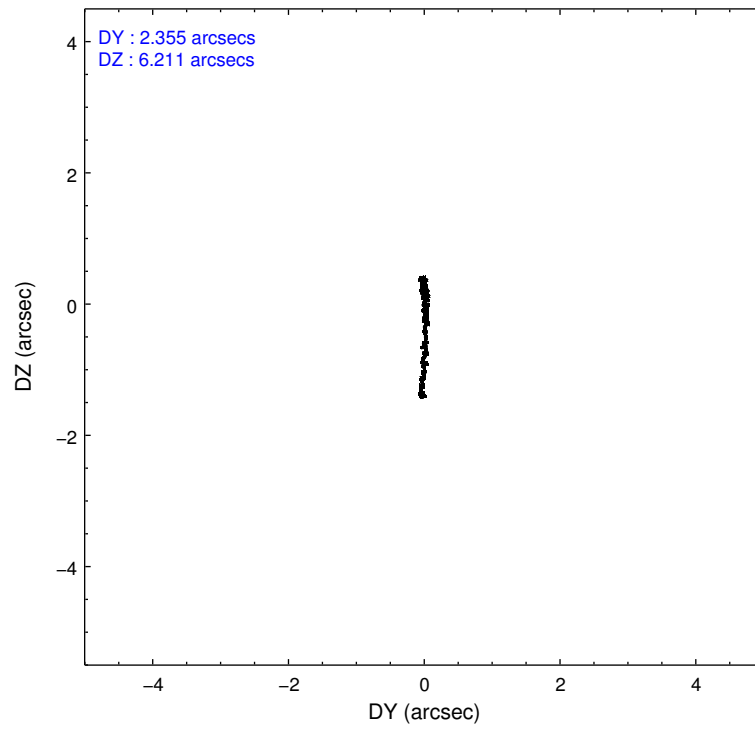
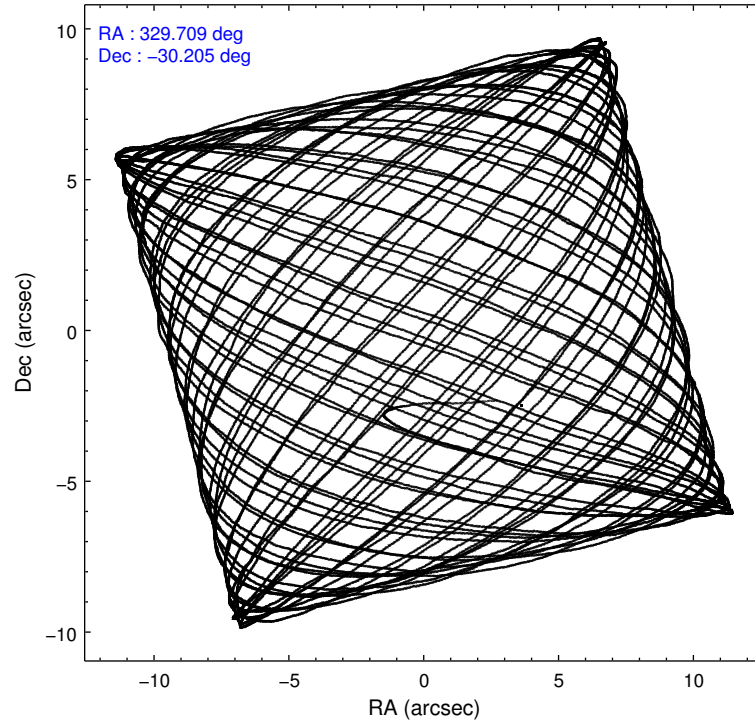
2.1.4 Events

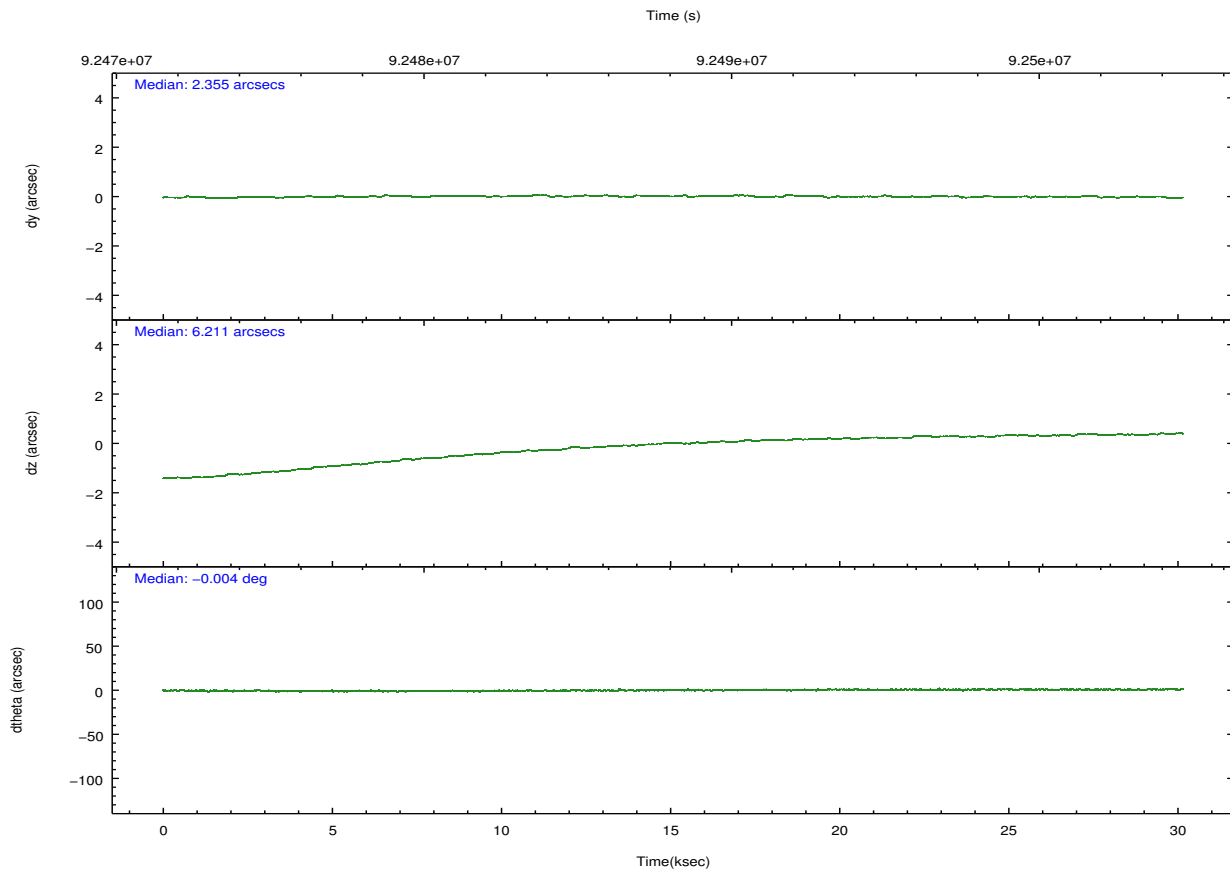
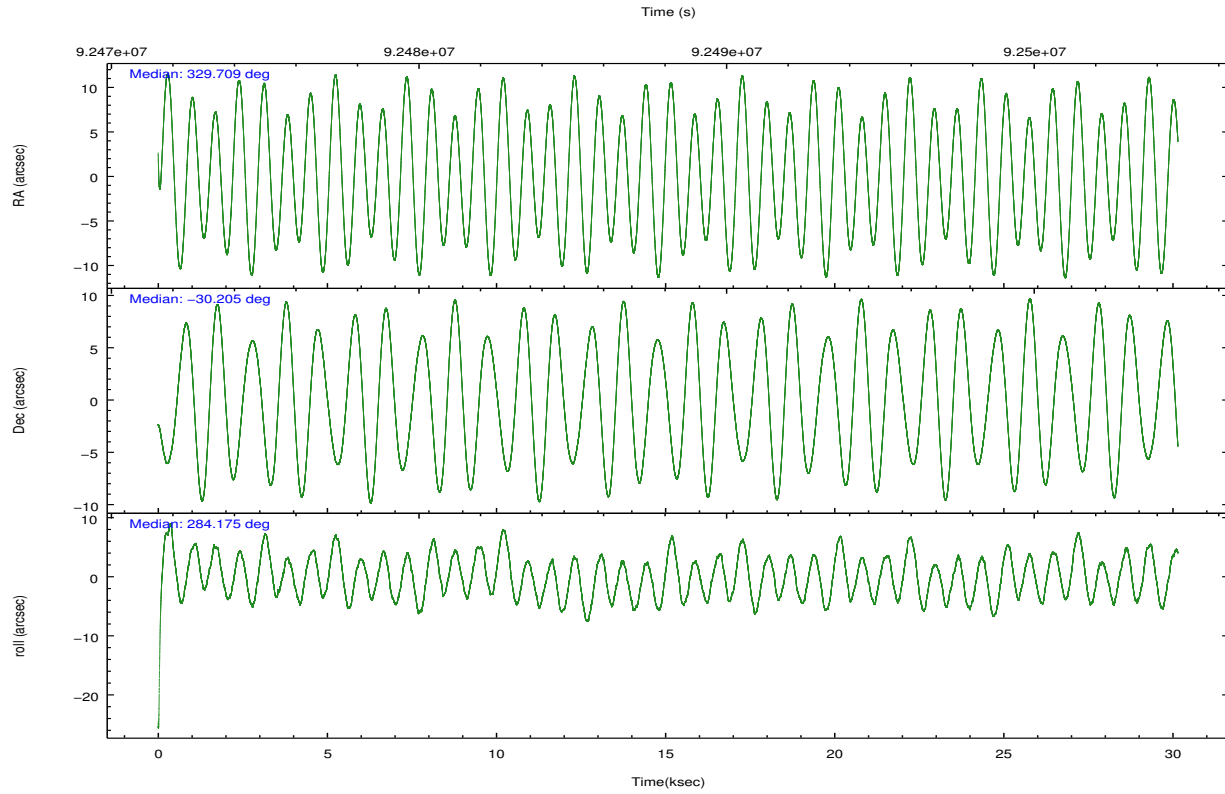
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	59500	85390	81240	153134	69910	47628	grade 0 events	3073	20192	27711	27488	6768	3096
rejected events	52614	32833	45634	49547	54023	41040		5%	23%	34%	17%	9%	6%
rejected %	88%	38%	56%	32%	77%	86%	grade 1 events	24	520	73	1137	30	12
								0%	0%	0%	0%	0%	0%
							grade 2 events	1297	12088	3563	24470	2667	1025
								2%	14%	4%	15%	3%	2%
							grade 3 events	870	3359	1594	11319	1681	822
								1%	3%	1%	7%	2%	1%
							grade 4 events	791	3194	1540	11016	1650	789
								1%	3%	1%	7%	2%	1%
							grade 5 events	1387	5884	1611	9612	2064	1546
								2%	6%	1%	6%	2%	3%
							grade 6 events	982	14701	1471	30113	3382	970
								1%	17%	1%	19%	4%	2%
							grade 7 events	51076	25452	43677	37979	51668	39368
								85%	29%	53%	24%	73%	82%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	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
[deg] Pointing RA	329.686653	329.7088897146034	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	-30.186340	-30.2057889343576	Subarray start row	1	1
[deg] Pointing Roll	284.006737	284.1745387141834	Subarray row count	256	256
[s] Window start time (MET)	89424064.184000	89424064.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	94608064.184000	94608064.184000	[s] Primary exposure time	0.000000	1.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-182.132523	-182.1370004450064			
[mm] SIM translation stage offset	-8	-7.995522138001405			
[s] Observation start time (MET)	92473171.184000	92472094.04126699			
Observation start date	2000-12-06T06:58:27	2000-12-06T06:41:34			
[s] Observation end time (MET)	92503171.184000	92503305.29245999			
Observation end date	2000-12-06T15:18:27	2000-12-06T15:21:45			
Read mode	TIMED	TIMED			

2.3 Aspect



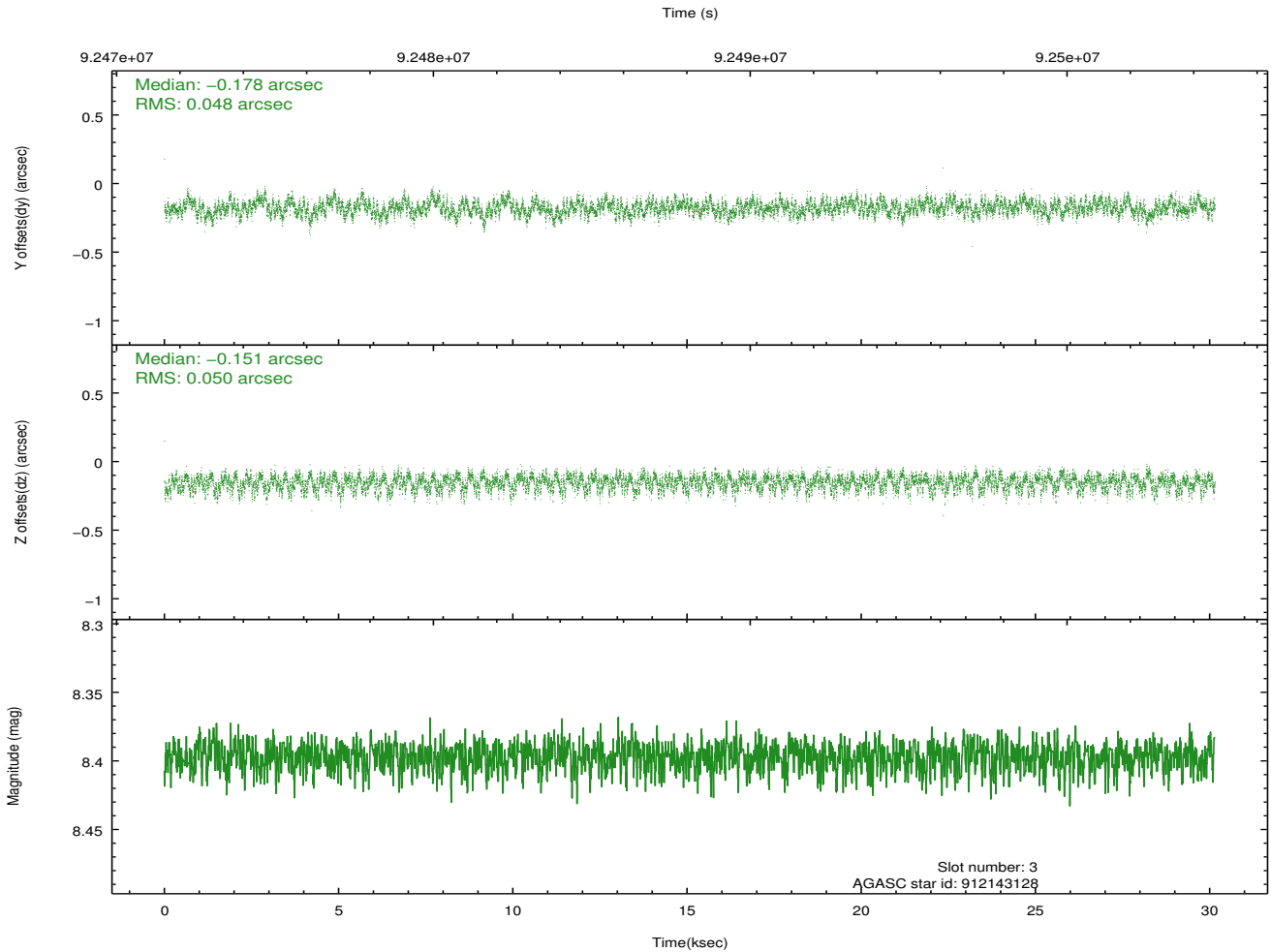
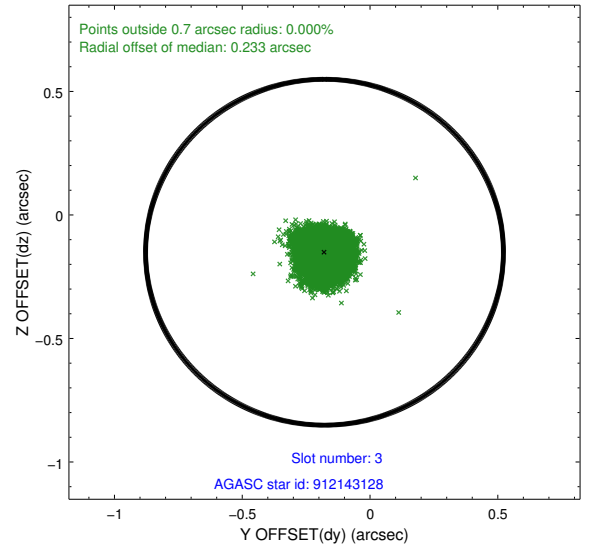
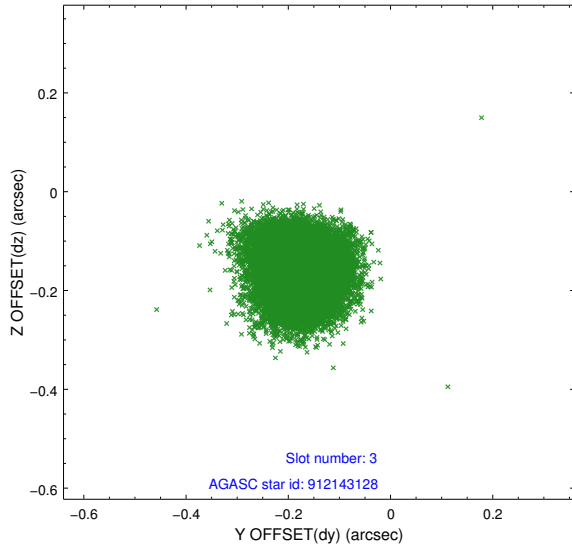


Slot Statistics

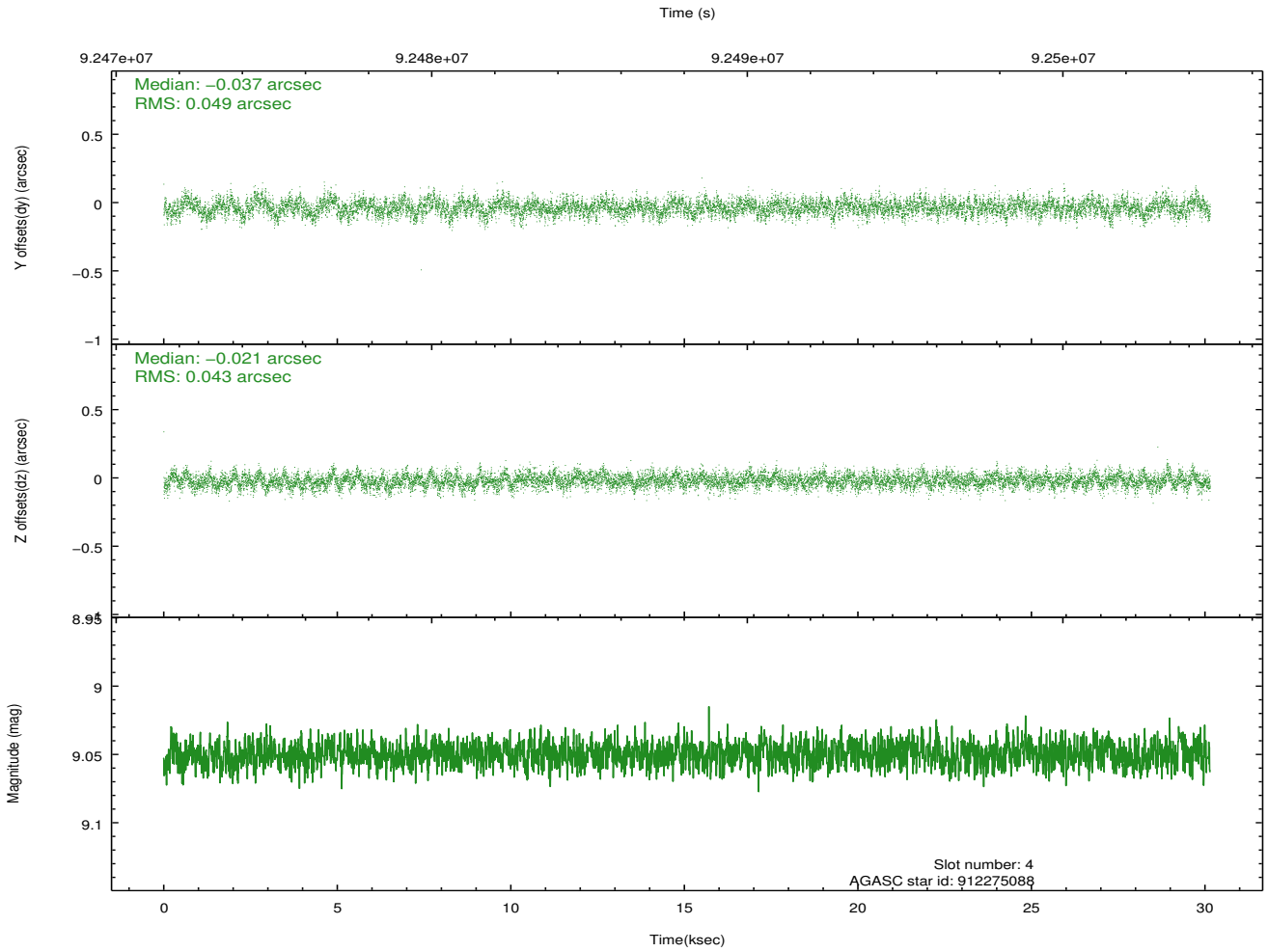
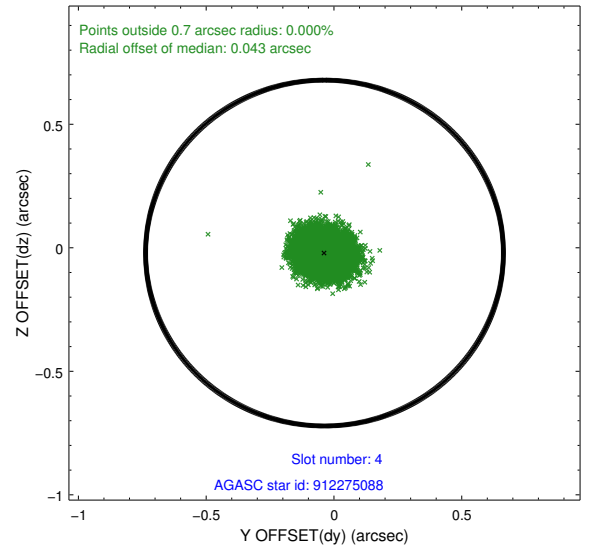
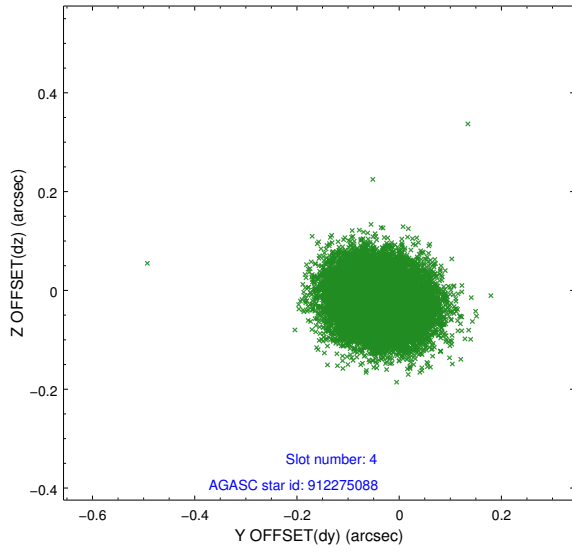
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	7354	-0.047	-0.089	0.018	0.026	0.000000	0.000000	-754.47	-1891.93
1	FID	ACIS-S-4	7.18	7354	0.033	0.047	0.010	0.017	0.000000	0.000000	2158.87	16.56
2	FID	ACIS-S-5	7.23	7354	-0.016	0.051	0.016	0.023	0.000000	0.000000	-1807.17	10.34
3	GUIDE	912143128	8.40	14708	-0.178	-0.151	0.074	0.116	328.924992	-29.706140	-2244.91	-1893.96
4	GUIDE	912275088	9.05	14705	-0.037	-0.021	0.070	0.113	329.619228	-29.738698	-1613.49	185.97
5	GUIDE	981478152	9.40	14700	0.050	0.103	0.080	0.131	329.415589	-30.057192	-653.39	-706.52
6	GUIDE	981468128	9.37	14701	0.109	-0.001	0.081	0.133	329.756350	-30.158334	-43.92	235.42
7	GUIDE	981469488	9.59	14700	0.063	0.069	0.125	0.207	329.261199	-30.045155	-810.38	-1163.33

2.4 Star Slots

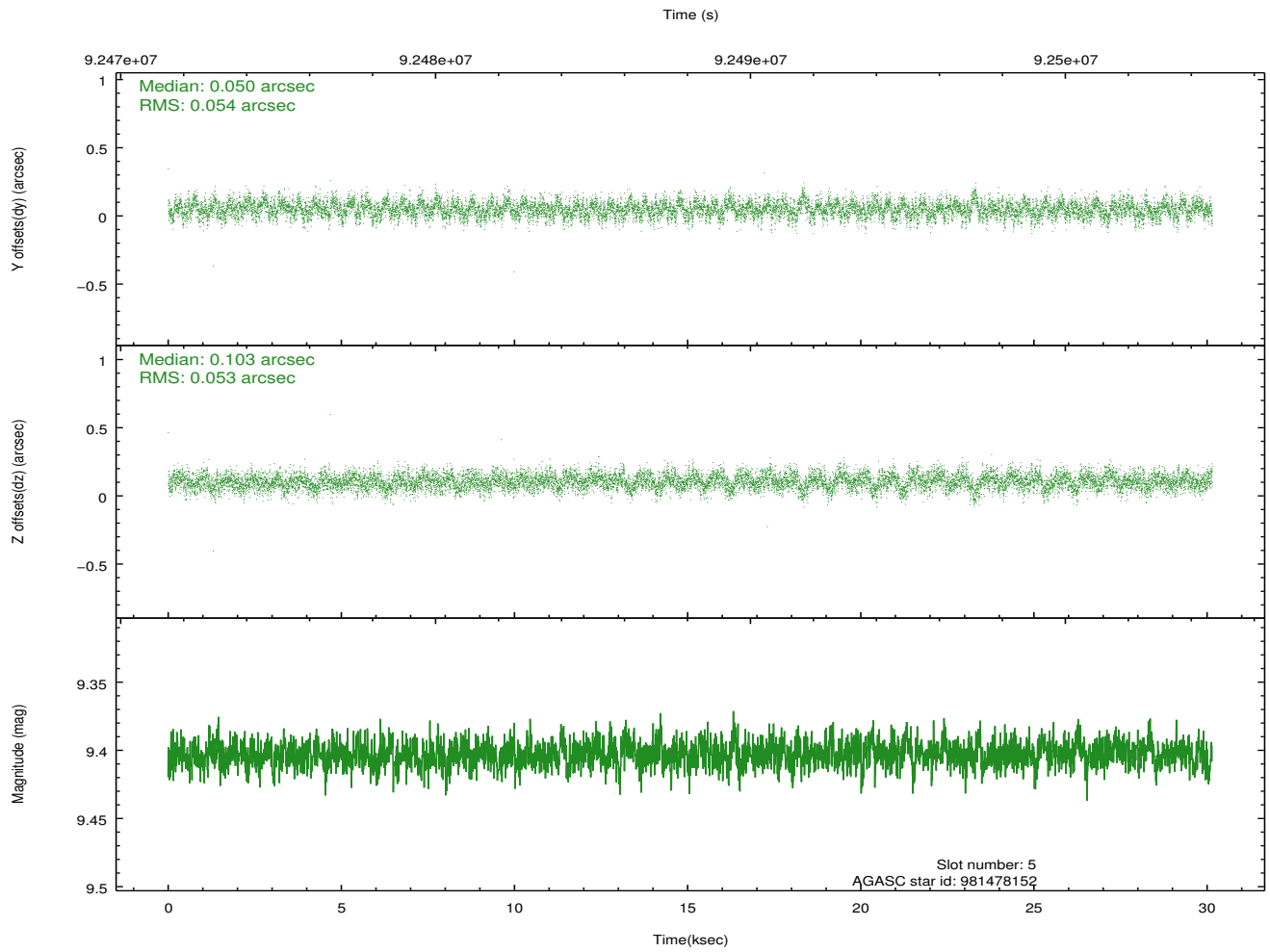
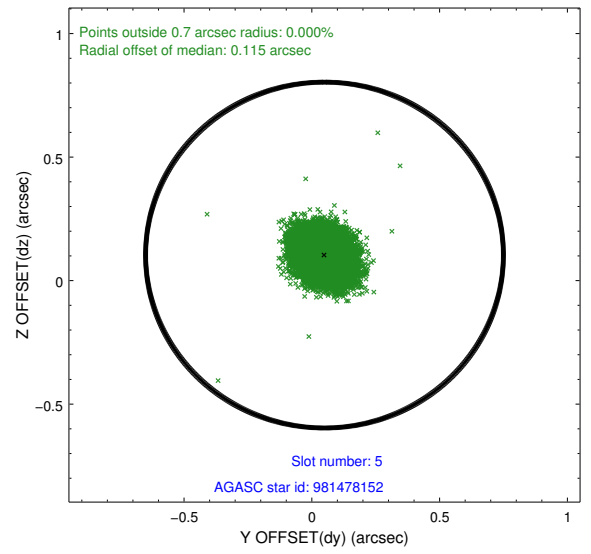
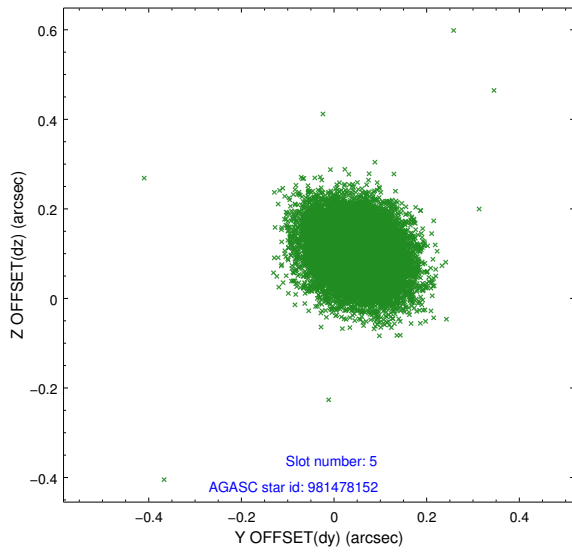
2.4.1 Slot 3



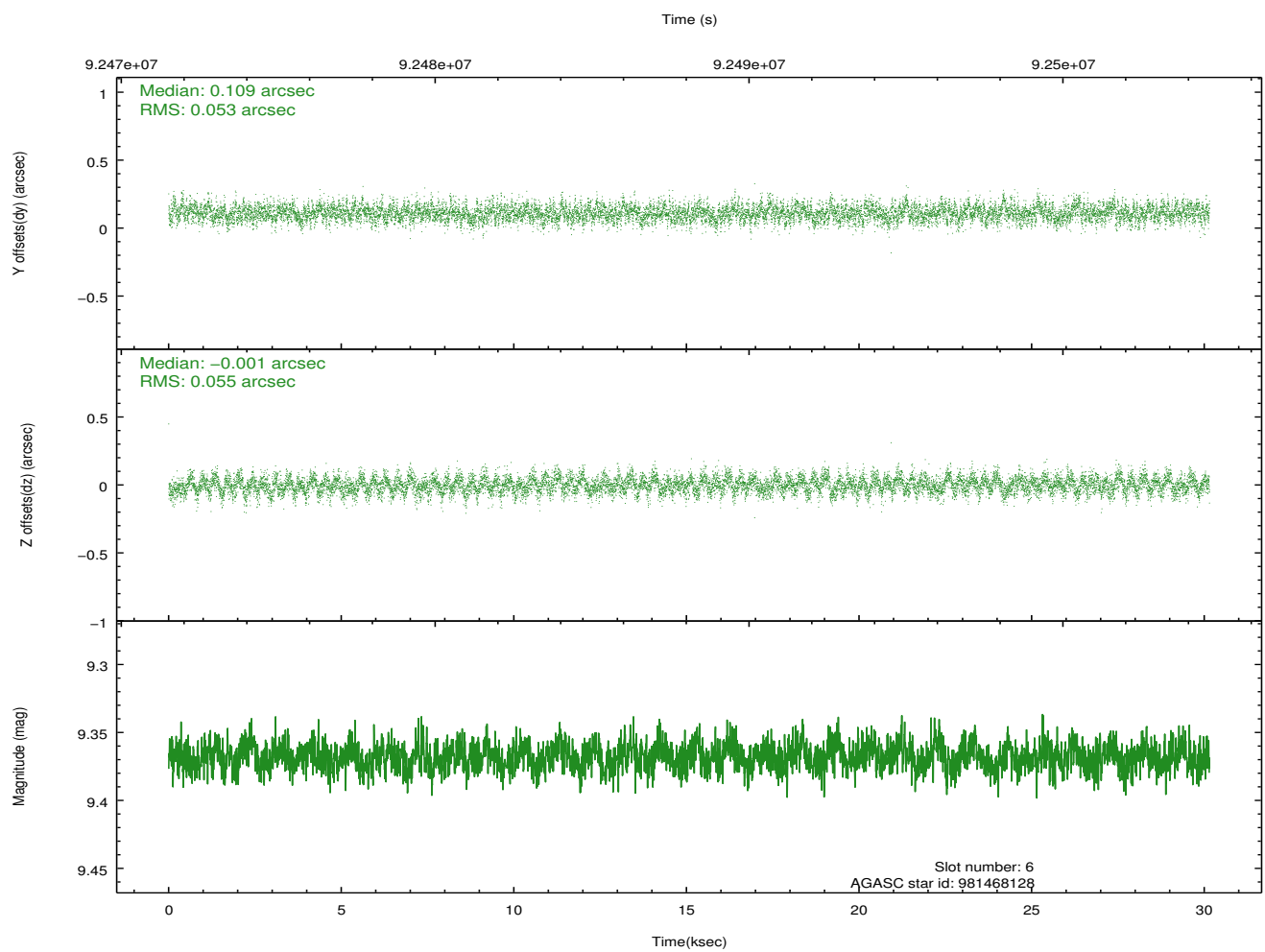
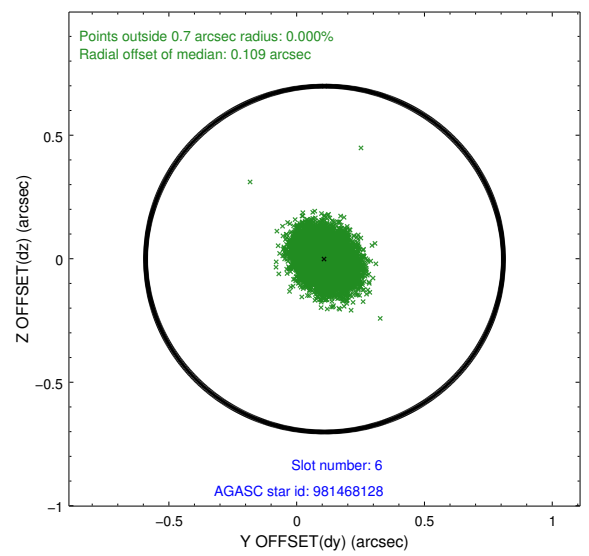
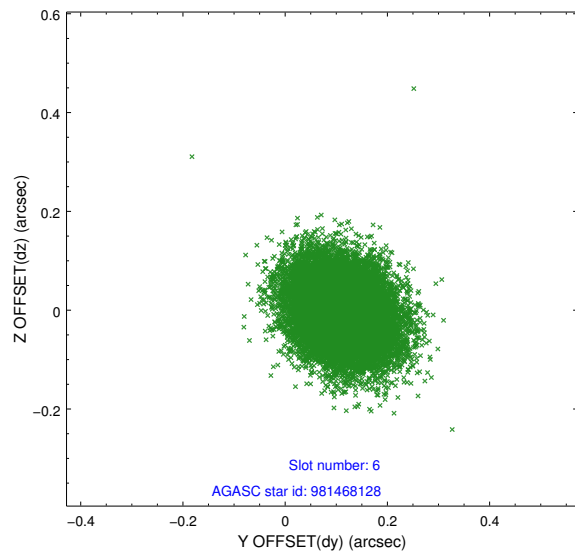
2.4.2 Slot 4



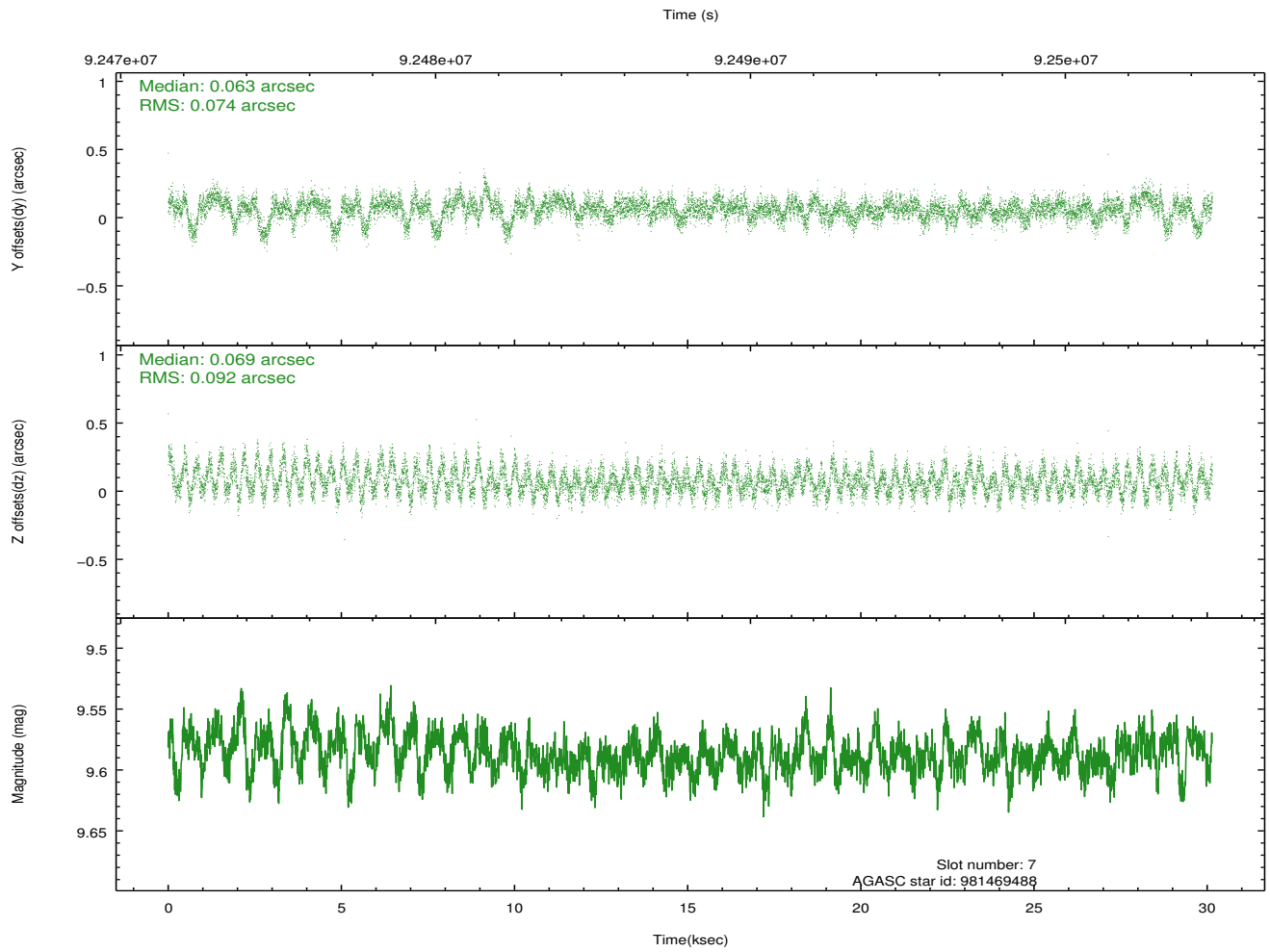
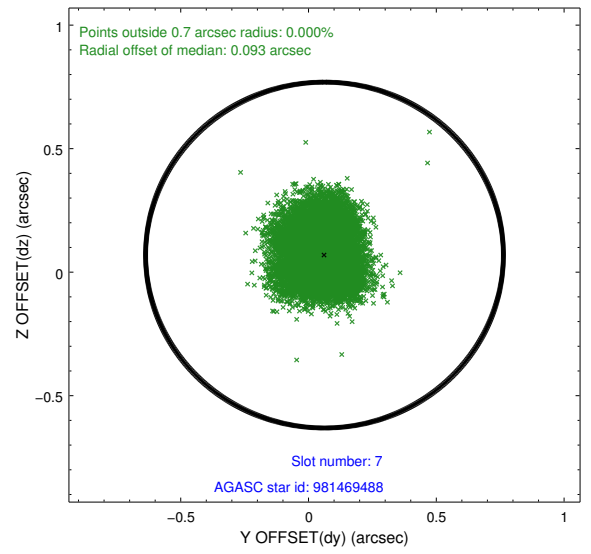
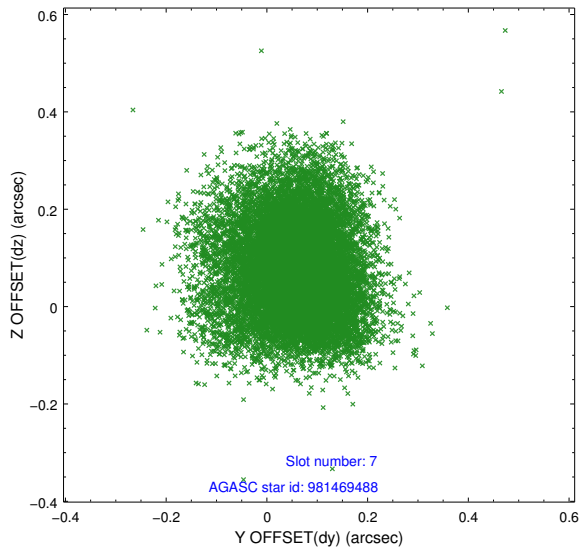
2.4.3 Slot 5



2.4.4 Slot 6

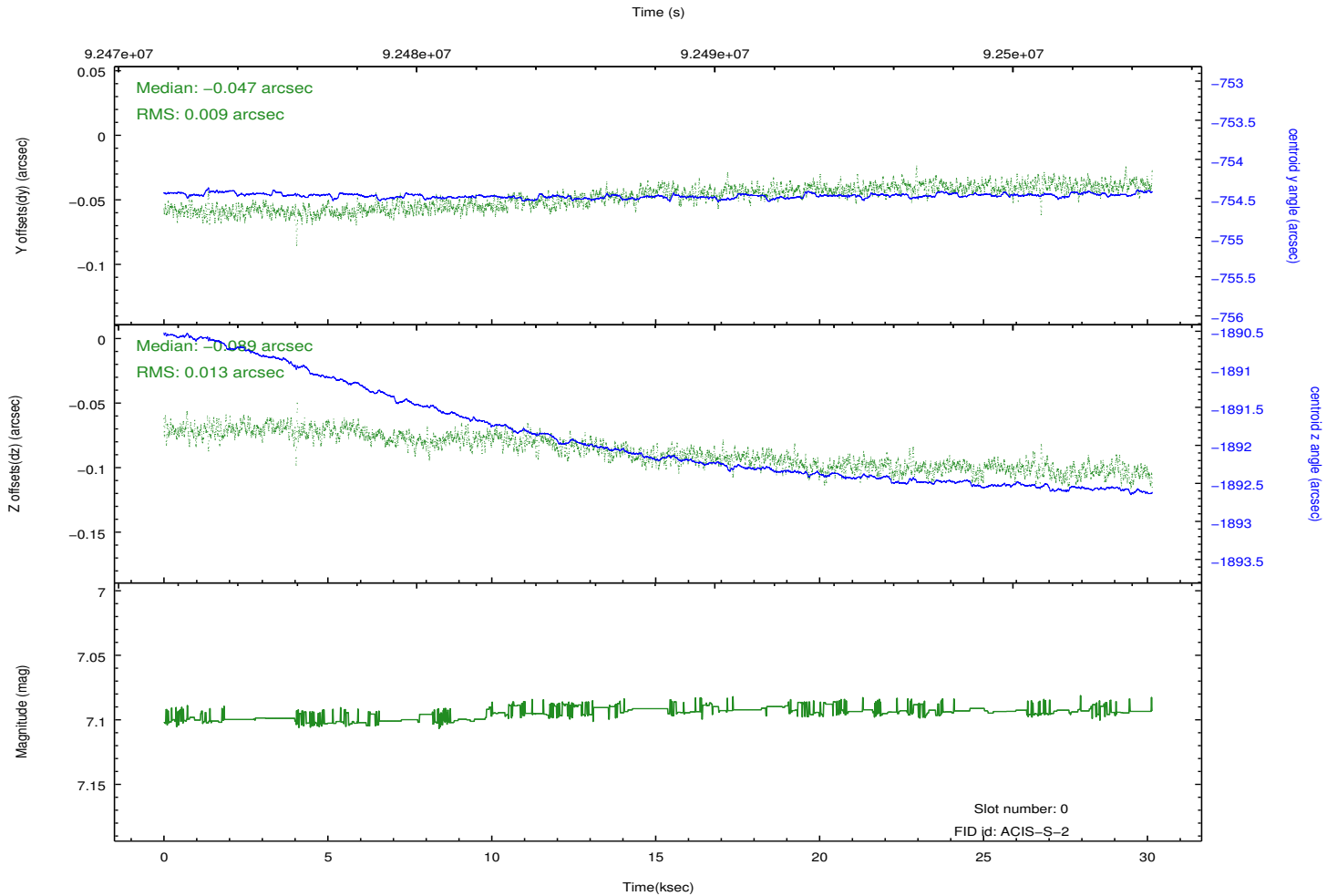
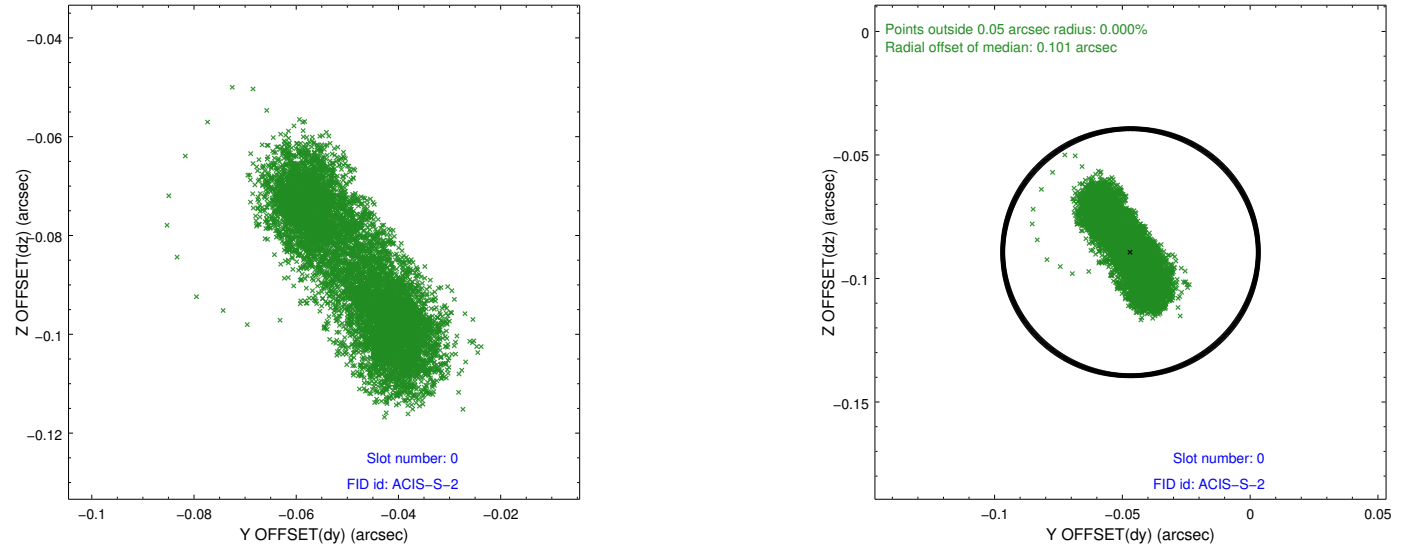


2.4.5 Slot 7

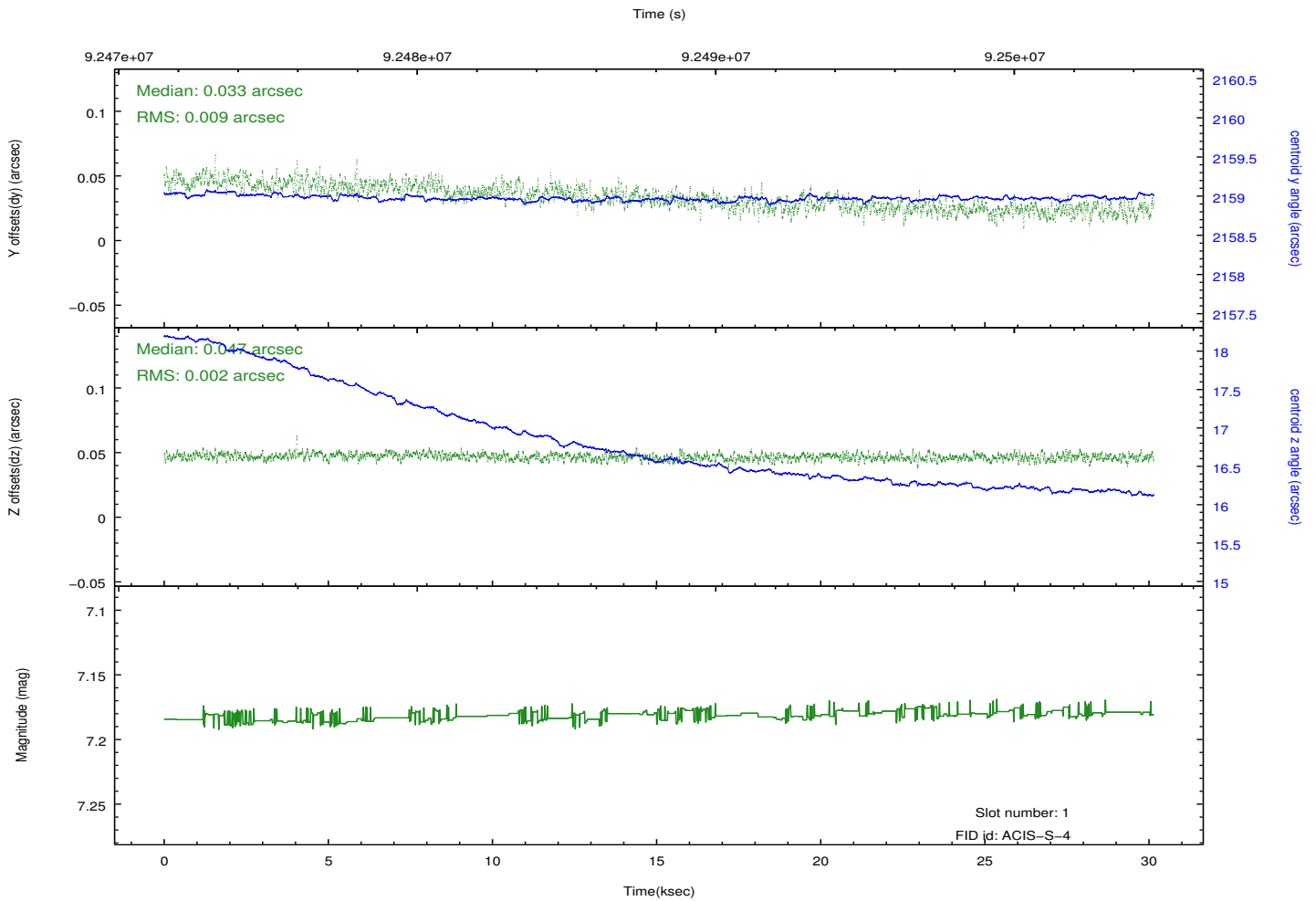
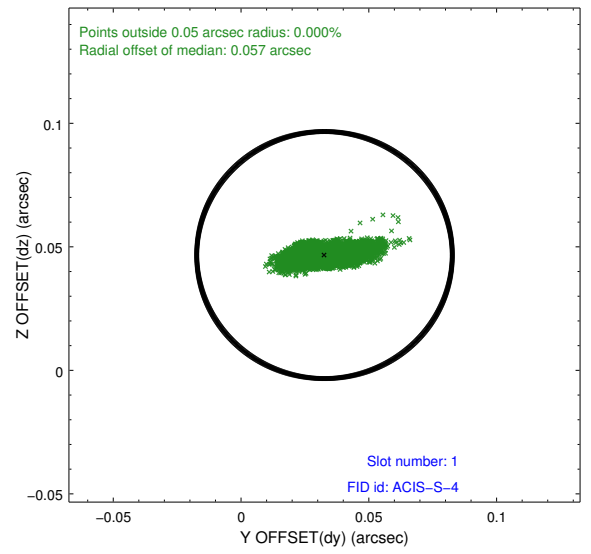
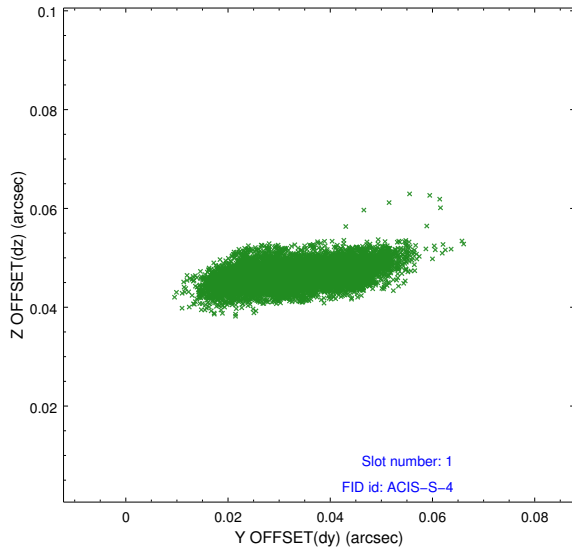


2.5 FID Slots

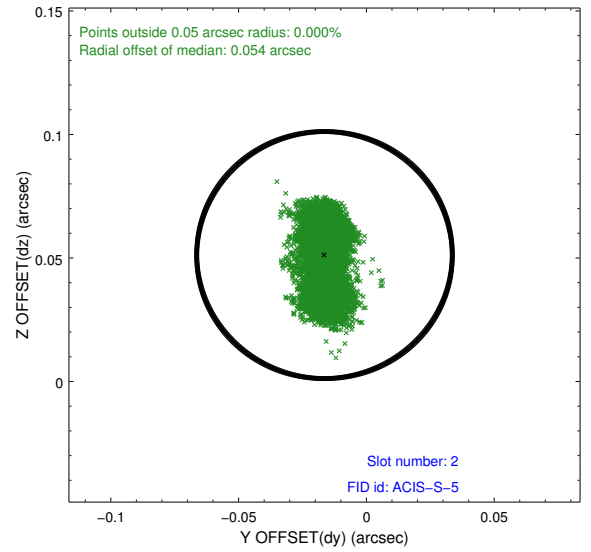
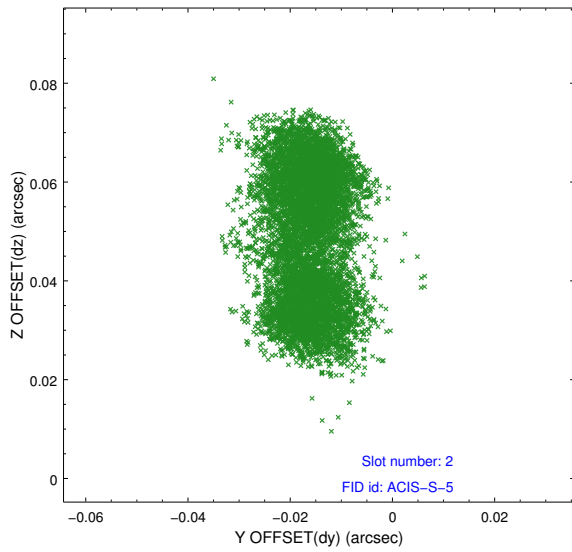
2.5.1 Slot 0



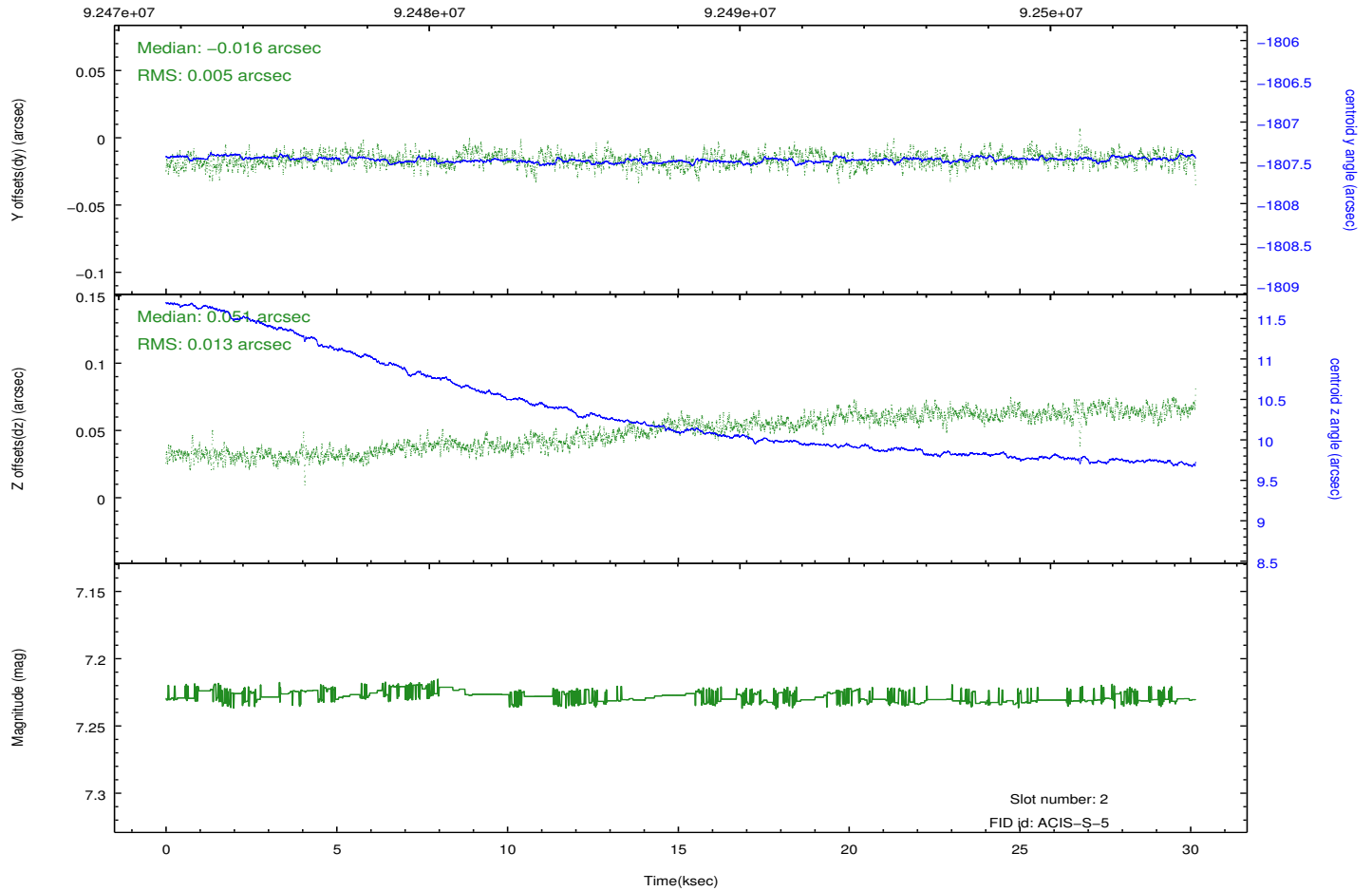
2.5.2 Slot 1



2.5.3 Slot 2

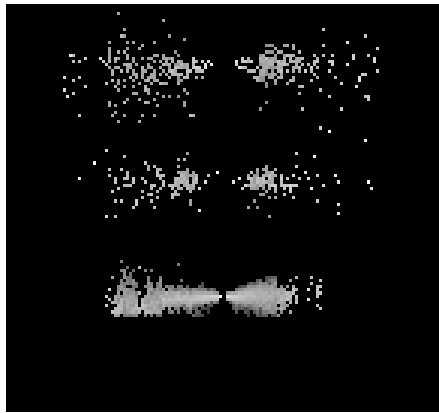


Time (s)

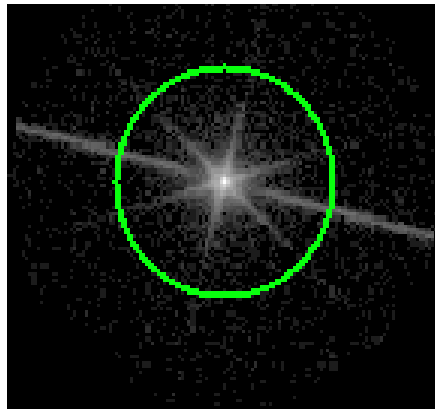


3 Gratings

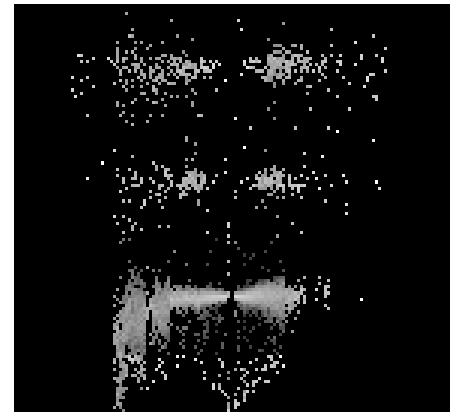
3.1 LETG Arm



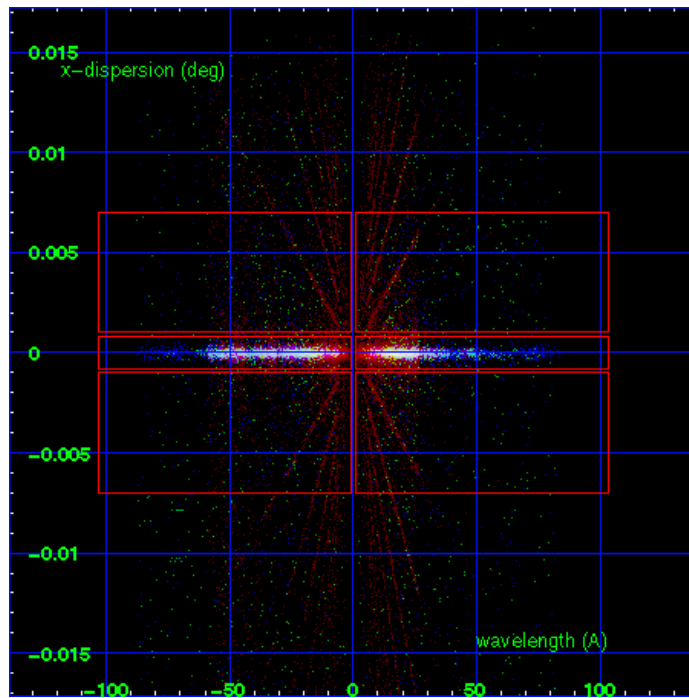
LETG Order Sort 123



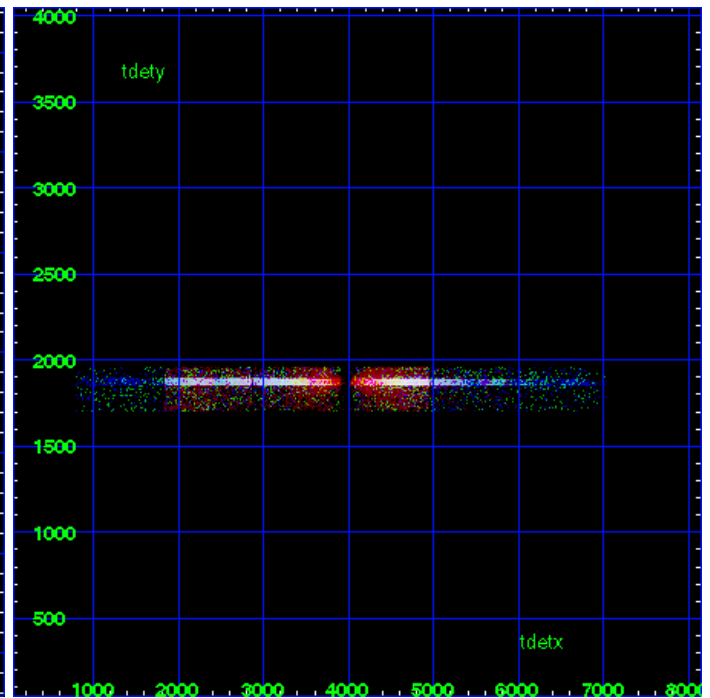
LETG Zero Order



LETG Order Sort ALL

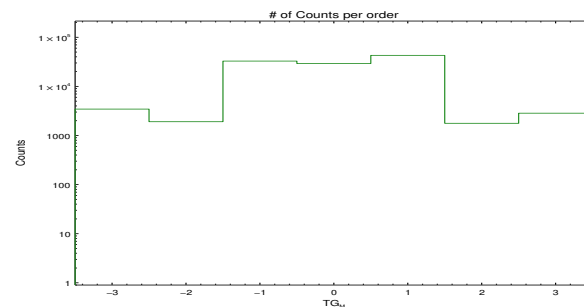


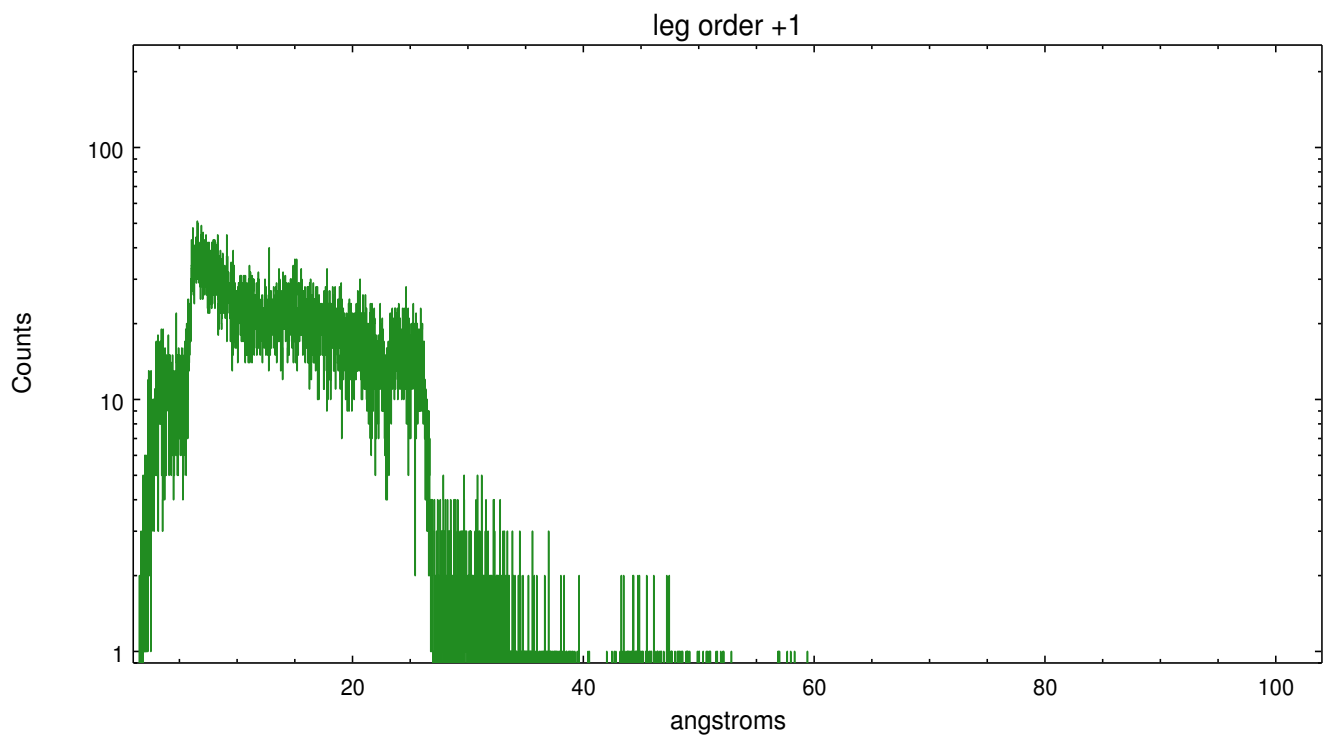
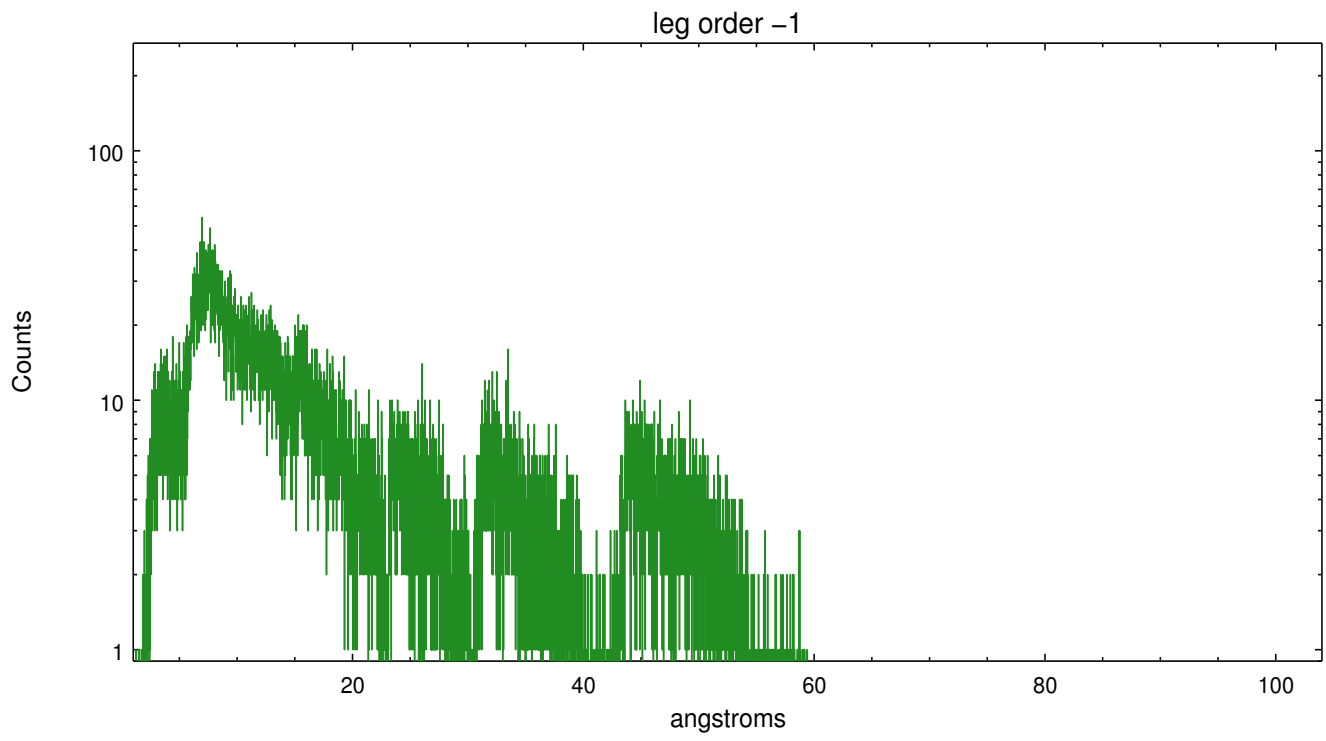
Spot Image LETG



Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	3447	1909	32749	29203	42824	1770	2844





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2013.01.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.149

A.2 Comments