

V&V Reference Report

L2 ASCDS Version : 7.6.7.1

Observation 7204 - L2 Version 002
Chandra X-Ray Center

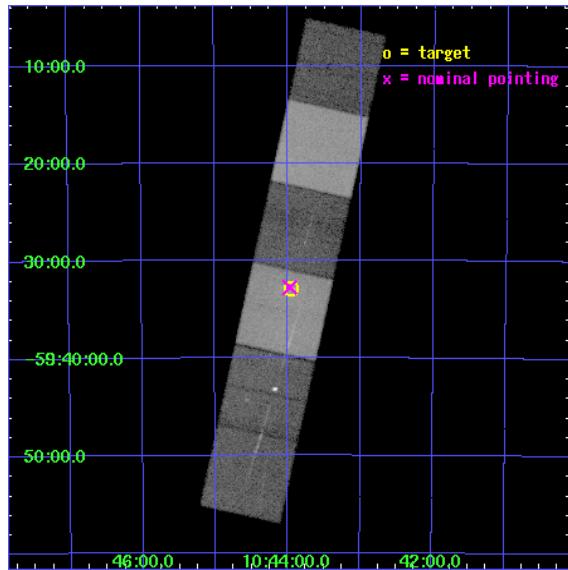
L2 Processing Date : Apr 4 2006

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1 Front

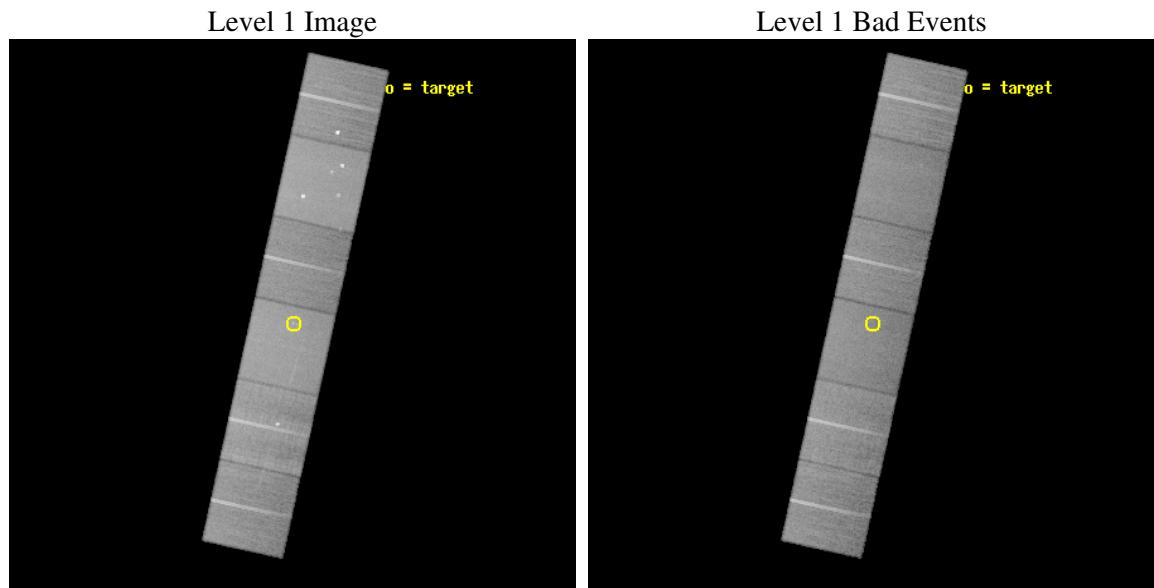
seq_num	200332
obs_id	7204
title	A Chandra HETGS Survey of O-Stars
observer	Dr. Wayne Waldron
object	HD93129AB
dtycycle	0
cycle	P
ra_targ	160.989583
dec_targ	-59.5475
ra_nom	160.99228349112
dec_nom	-59.54593042095
roll_nom	102.45894929636
revision	2
ontime	33628.799874723
livetime	33202.971761877
ontime4	33628.799874723
ontime5	33628.799874723
ontime6	33628.799874723
ontime7	33628.799874723
ontime8	33628.799874723
ontime9	33628.799874723
l2events	458583



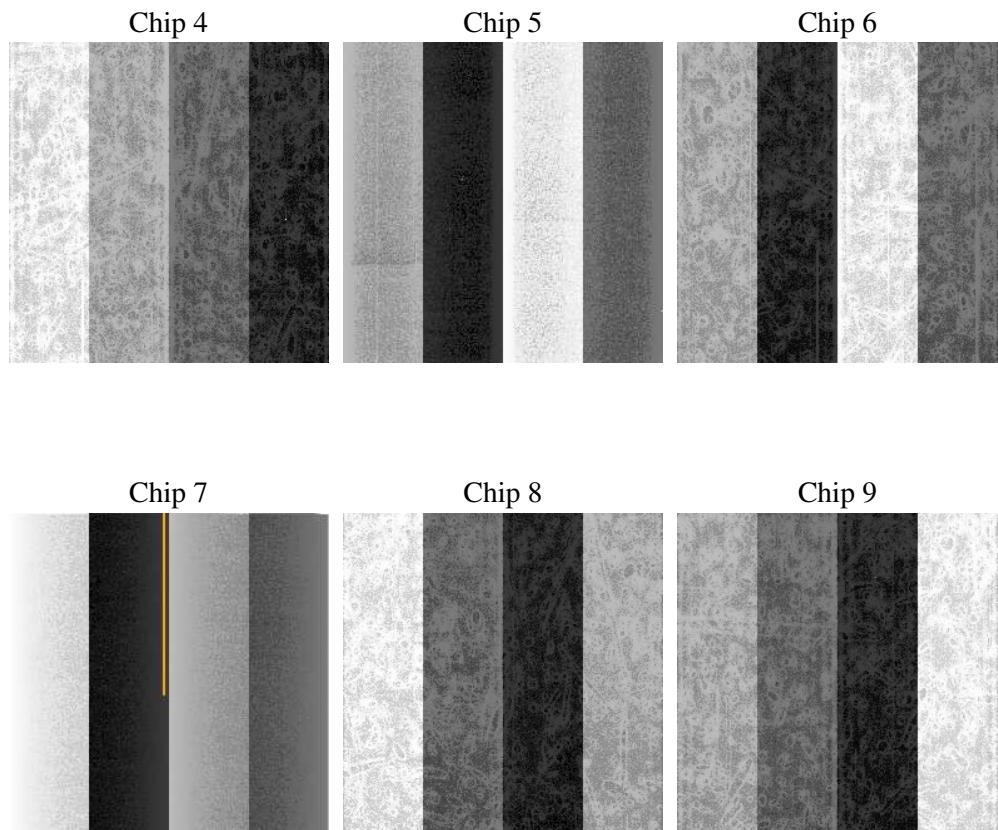
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.1
caldbver	3.2.1
date	2006-04-04T20:27:15
revision	2

sched_exp_time	33500.000000
ontime	33793.928929895
ontime4	33793.928929895
ontime5	33793.928929895
ontime6	33793.928929895
ontime7	33793.928929895
ontime8	33793.928929895
ontime9	33793.928929895
l1events	2019873

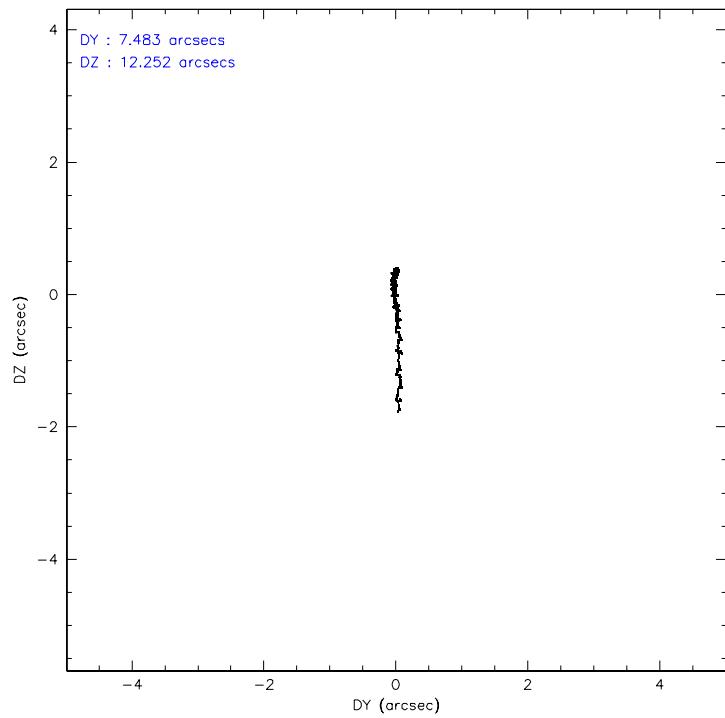
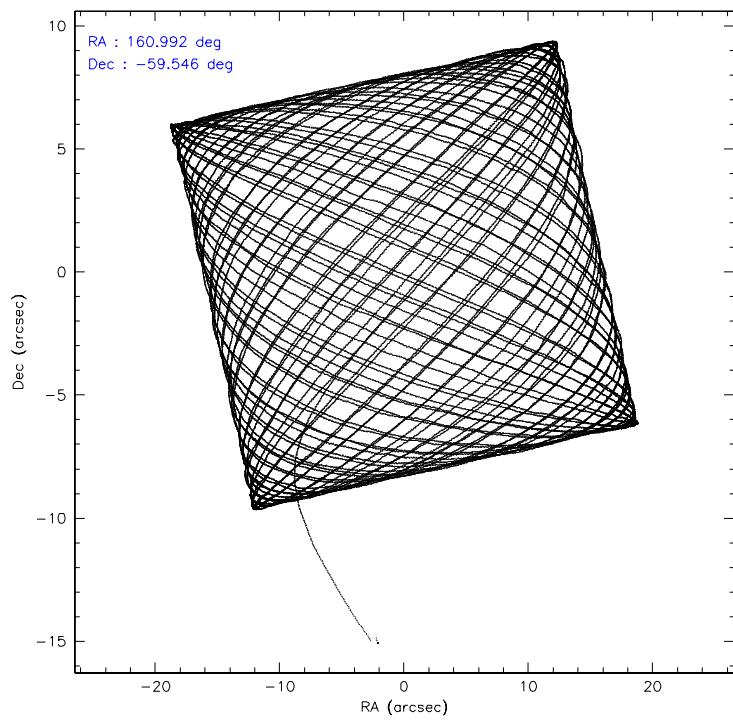
2.1.4 Events

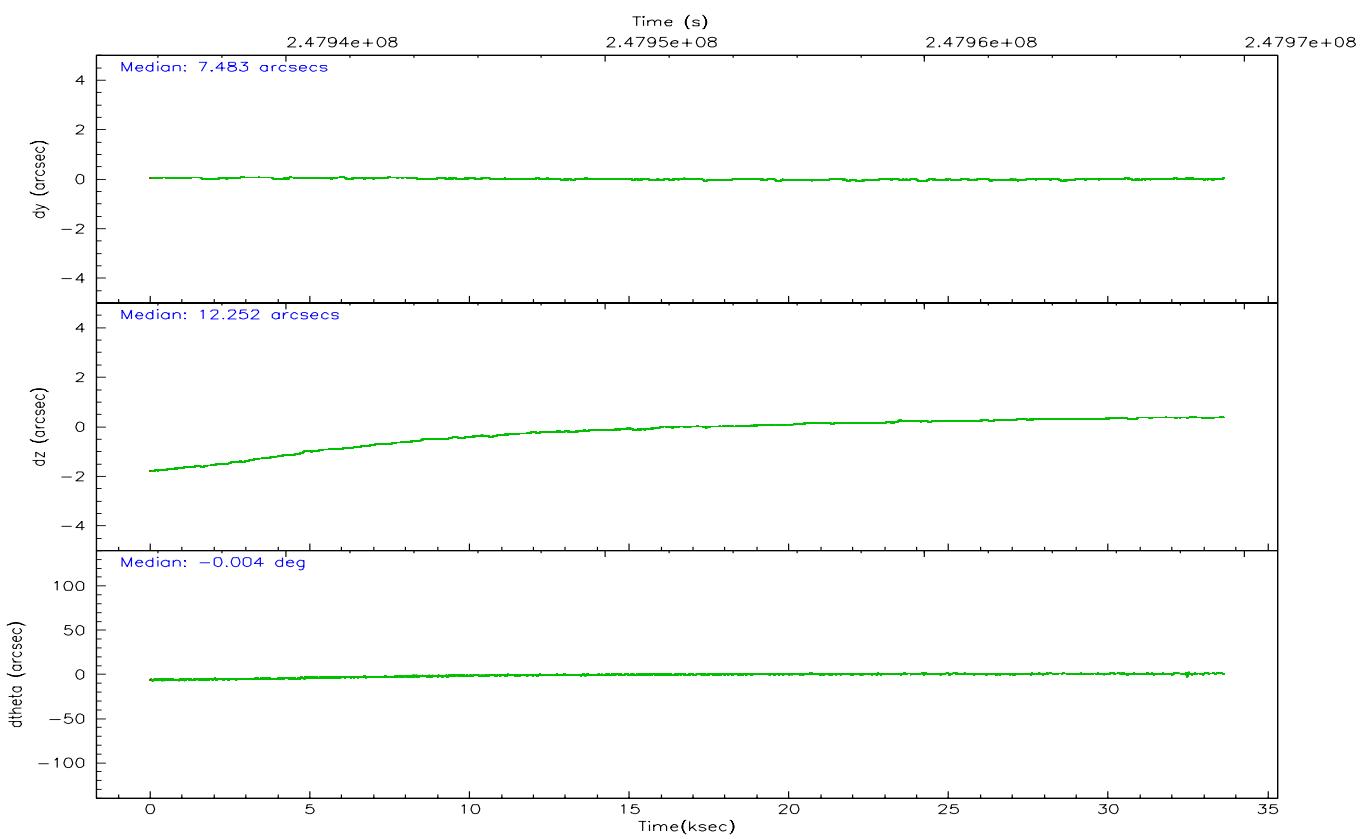
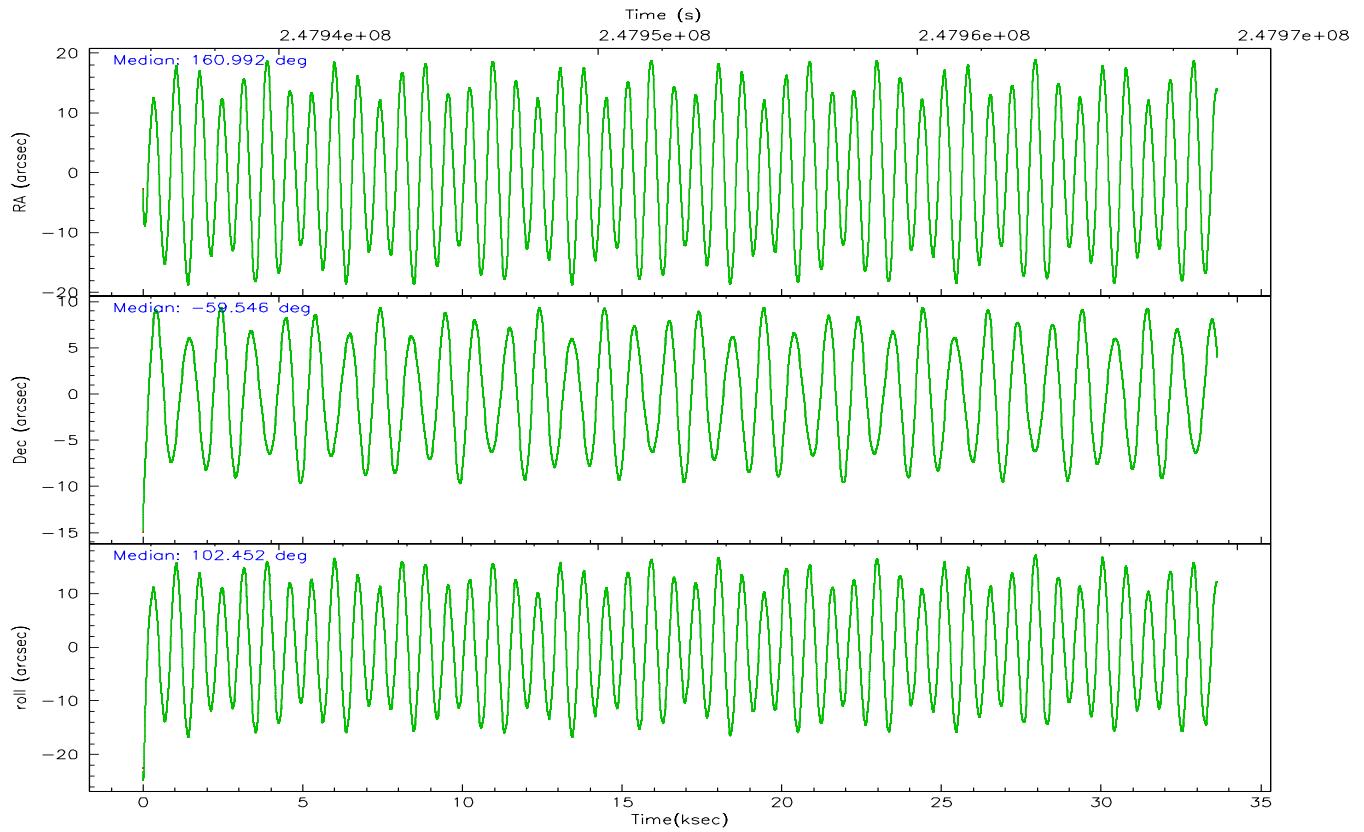
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	309879	412958	278672	381888	356095	280381	grade 0 events	21483	16241	16787	10667	31999	19522
rejected events	269203	229226	241482	229238	271779	240288	6%	3%	6%	2%	8%	6%	
rejected %	86%	55%	86%	60%	76%	85%	grade 1 events	315	550	149	230	268	205
							0%	0%	0%	0%	0%	0%	
							grade 2 events	7323	57059	7295	38819	17554	7262
							2%	13%	2%	10%	4%	2%	
							grade 3 events	3455	4046	3223	8125	8164	3505
							1%	0%	1%	2%	2%	1%	
							grade 4 events	3311	3887	3262	7894	7627	3341
							1%	0%	1%	2%	2%	1%	
							grade 5 events	12116	19522	12754	23698	16743	13557
							3%	4%	4%	6%	4%	4%	
							grade 6 events	5296	103475	6822	87887	19506	6662
							1%	25%	2%	23%	5%	2%	
							grade 7 events	256580	208178	228380	204568	254234	226327
							82%	50%	81%	53%	71%	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	HETG	HETG	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	161.029106	160.9922834911153	Alternating exposures requested	N	N
Pointing Dec	-59.565754	-59.54593042094997	Primary exposure time	0.000000	3.2
Pointing Roll	102.334079	102.4589492963557			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	247935878.184000	247934693.69419			
Observation start date	2005-11-09T15:03:34	2005-11-09T14:44:53			
Observation end time	247969378.184000	247970318.08333			
Observation end date	2005-11-10T00:21:54	2005-11-10T00:38:38			
Read mode	TIMED	TIMED			

2.3 Aspect





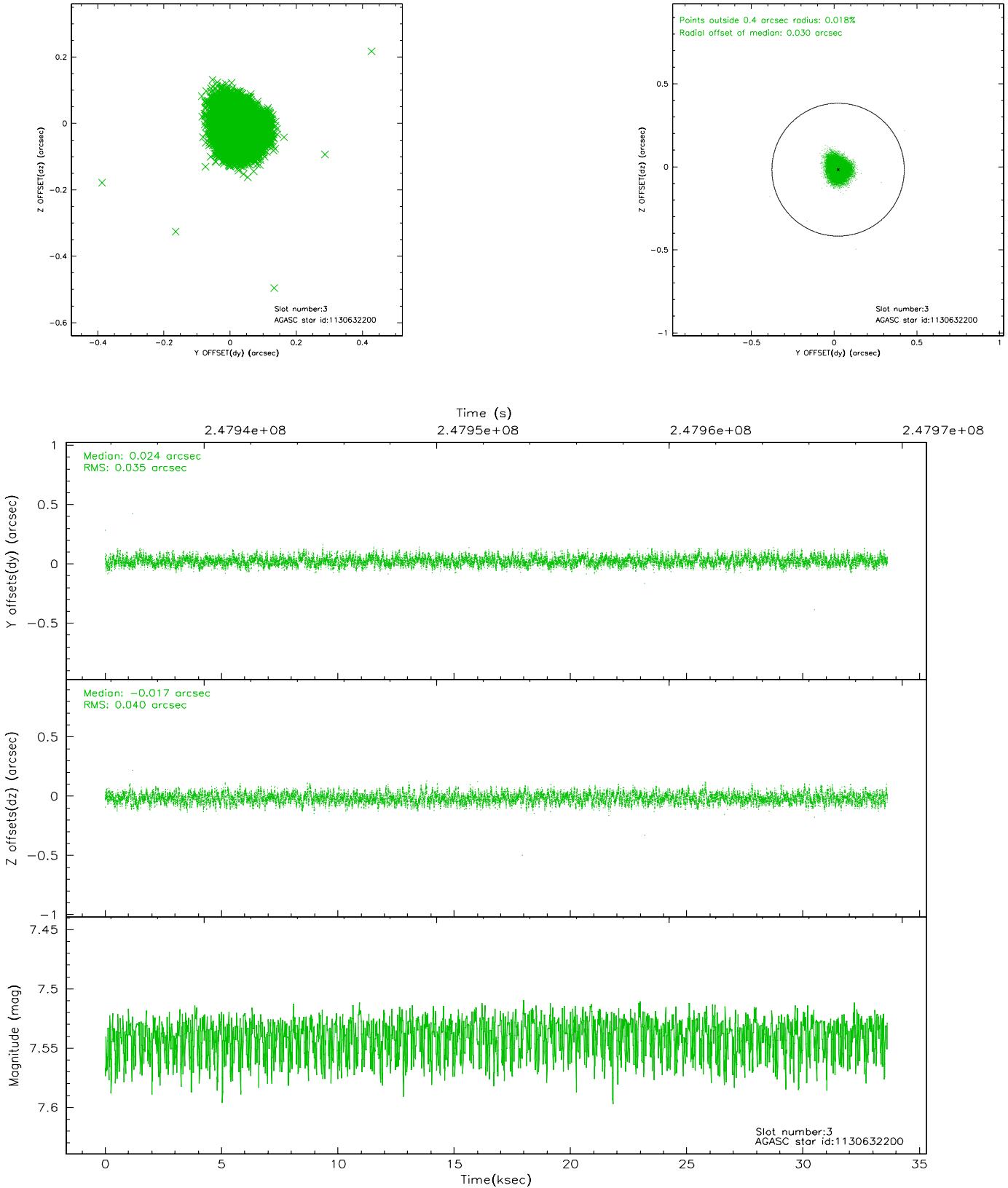
Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	8202	-0.002	-0.003	0.015	0.034	0.000000	0.000000	-760.26	-1733.32
1	FID	ACIS-S-4	7.20	8205	0.028	0.003	0.011	0.031	0.000000	0.000000	2153.03	175.12
2	FID	ACIS-S-5	7.23	8204	-0.056	0.011	0.012	0.026	0.000000	0.000000	-1813.09	168.85
3	GUIDE	1130632200	7.54	16408	0.024	-0.017	0.057	0.089	161.433843	-59.407820	395.24	-845.25
4	GUIDE	1130643264	6.65	16409	-0.111	-0.101	0.065	0.100	160.322990	-59.676912	-123.43	1340.63
5	GUIDE	1130644984	8.76	16400	-0.058	0.033	0.069	0.109	162.123834	-59.745452	-1071.71	-1797.98
6	GUIDE	1128940640	8.36	16400	0.128	0.102	0.063	0.099	159.517239	-59.074495	2294.28	2361.86
7	GUIDE	1130640672	8.29	16403	0.013	-0.018	0.074	0.118	162.096044	-59.540805	-342.78	-1917.73

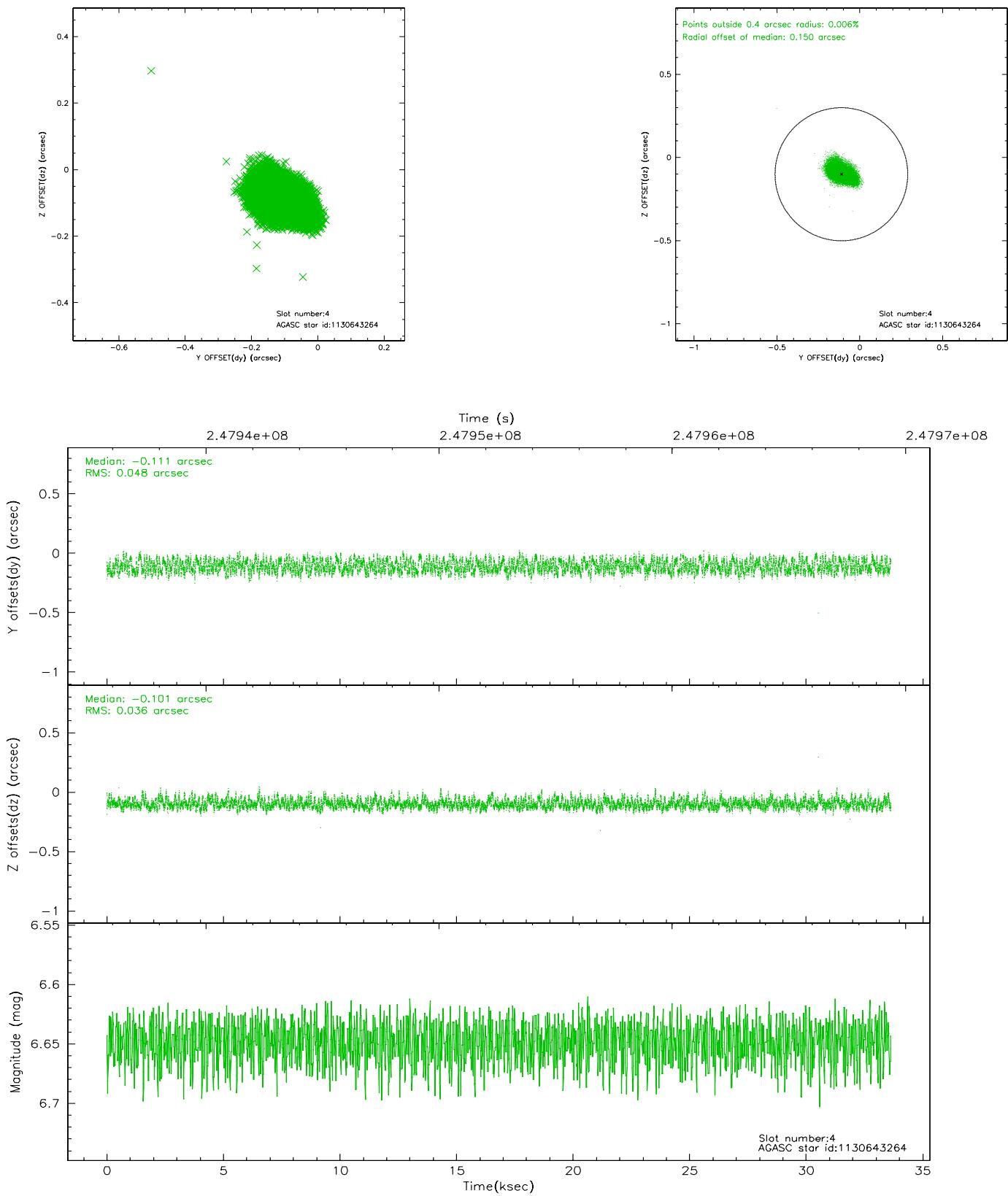
∞

2.4 Star Slots

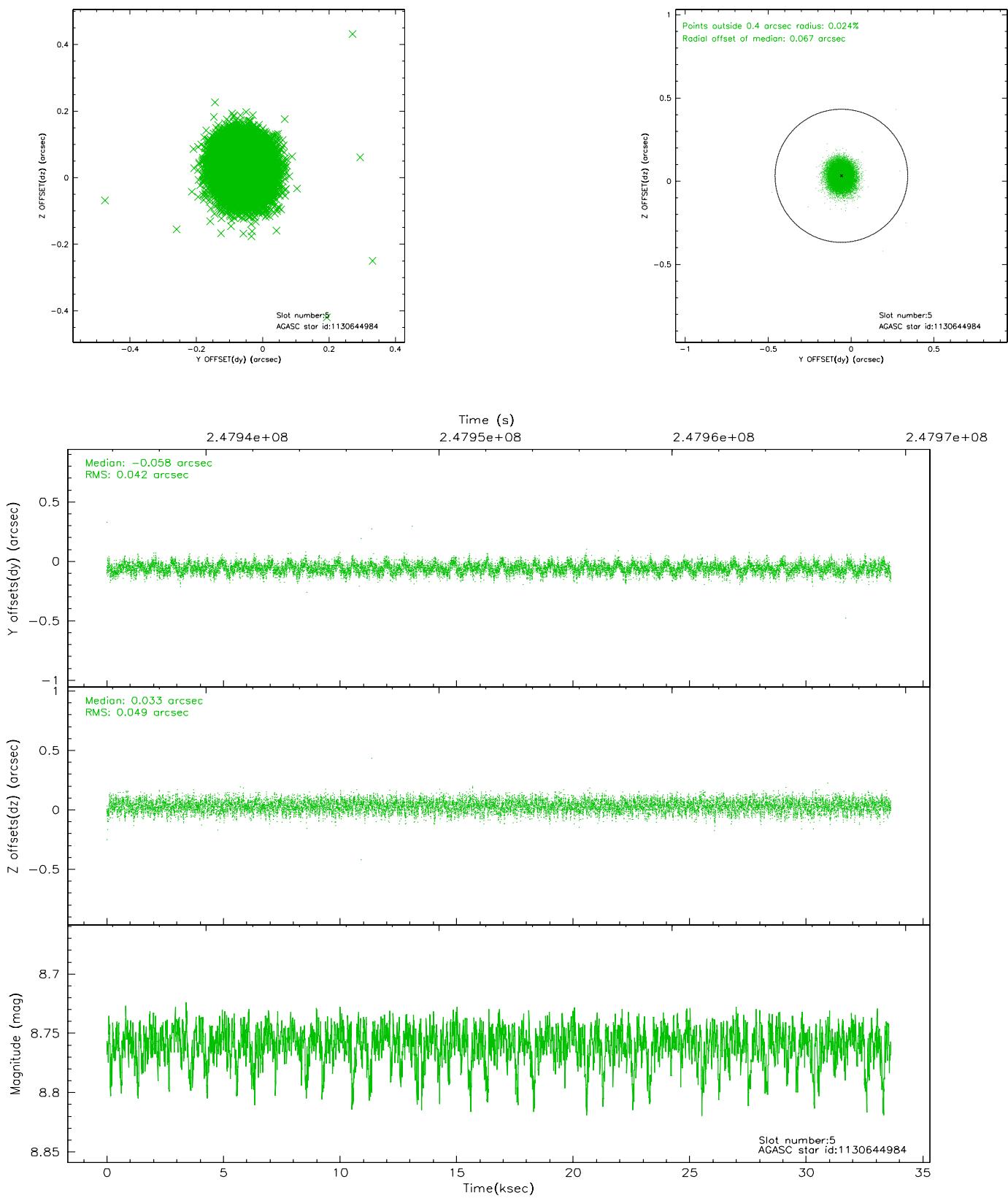
2.4.1 Slot 3



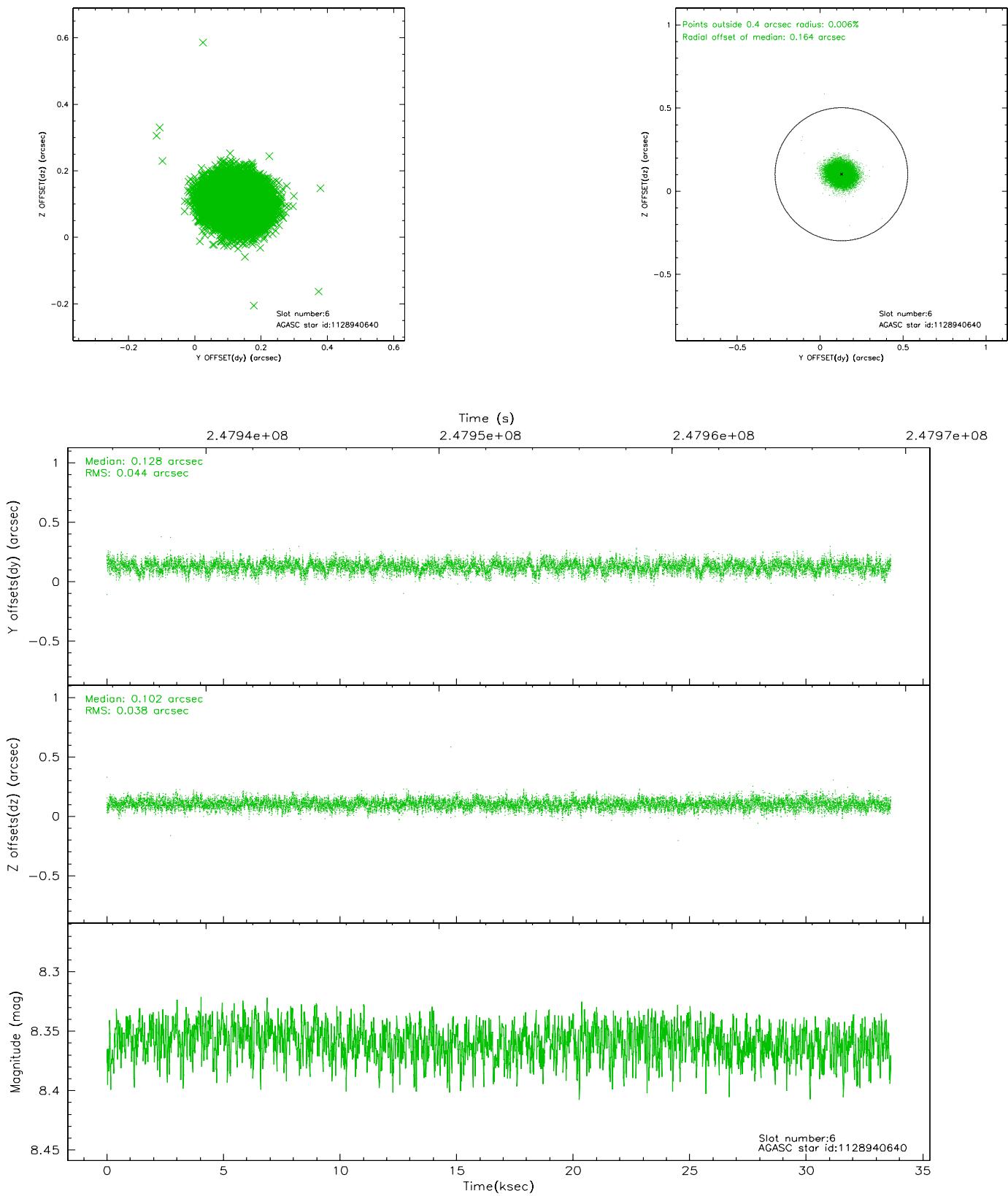
2.4.2 Slot 4



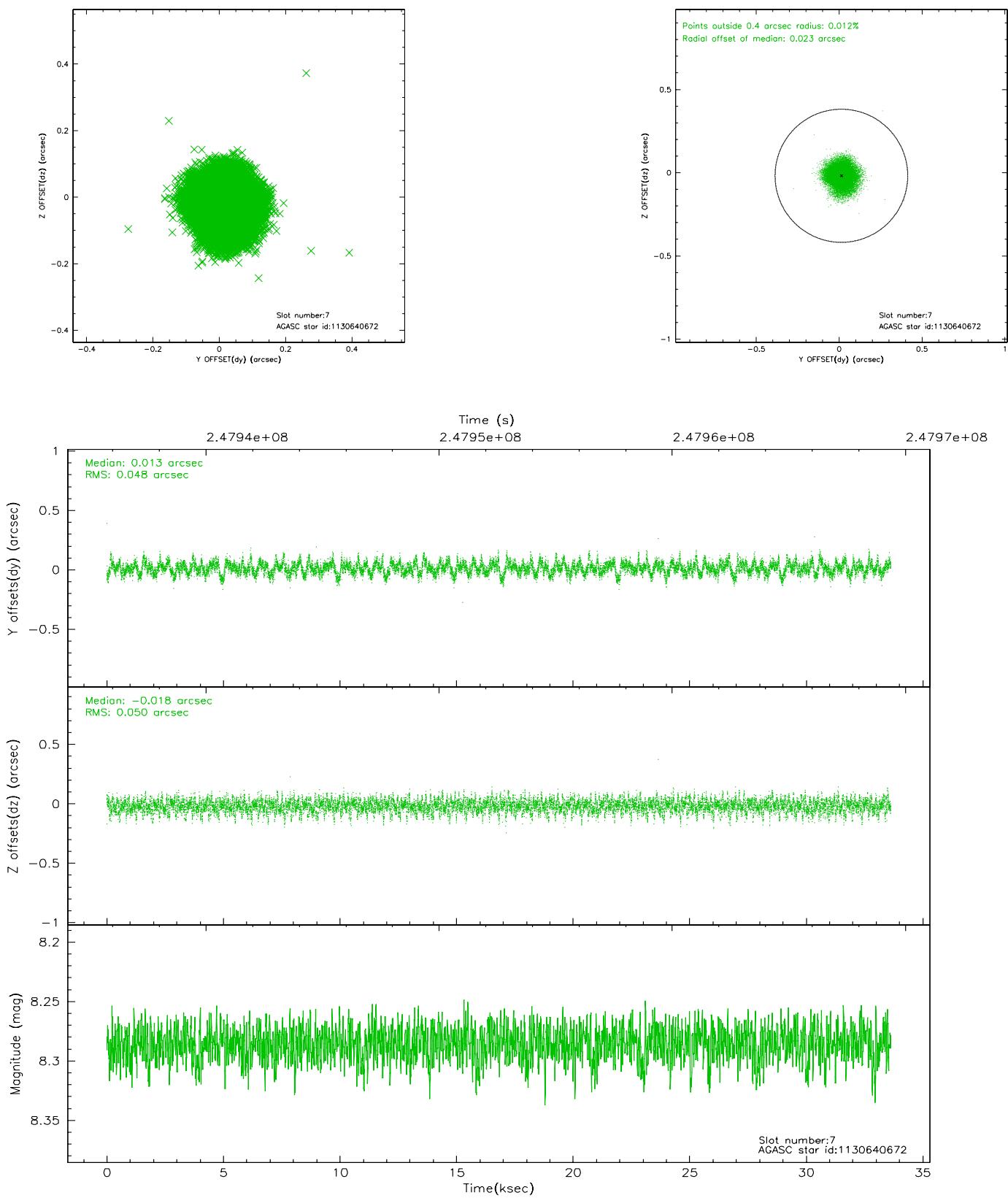
2.4.3 Slot 5



2.4.4 Slot 6

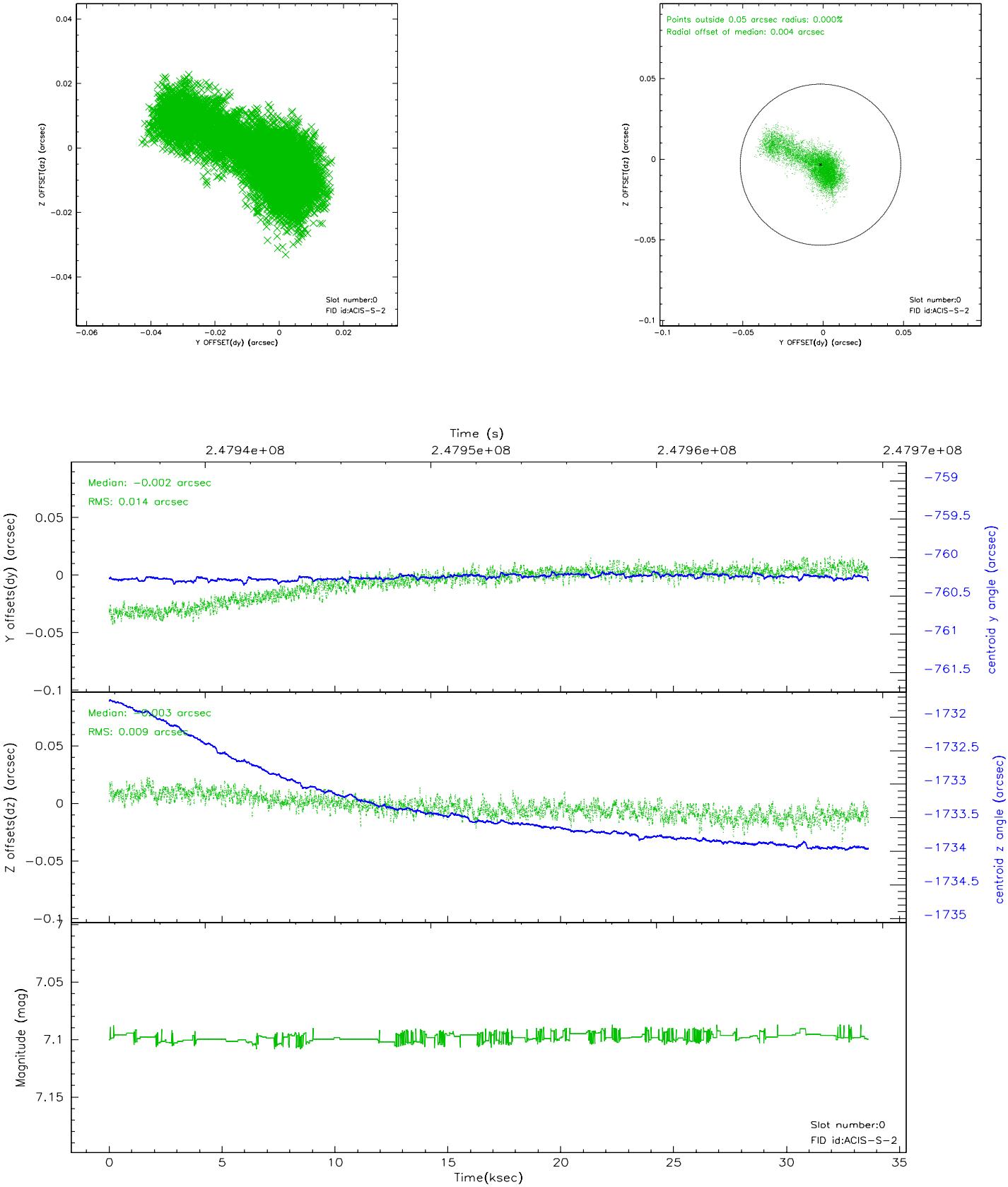


2.4.5 Slot 7

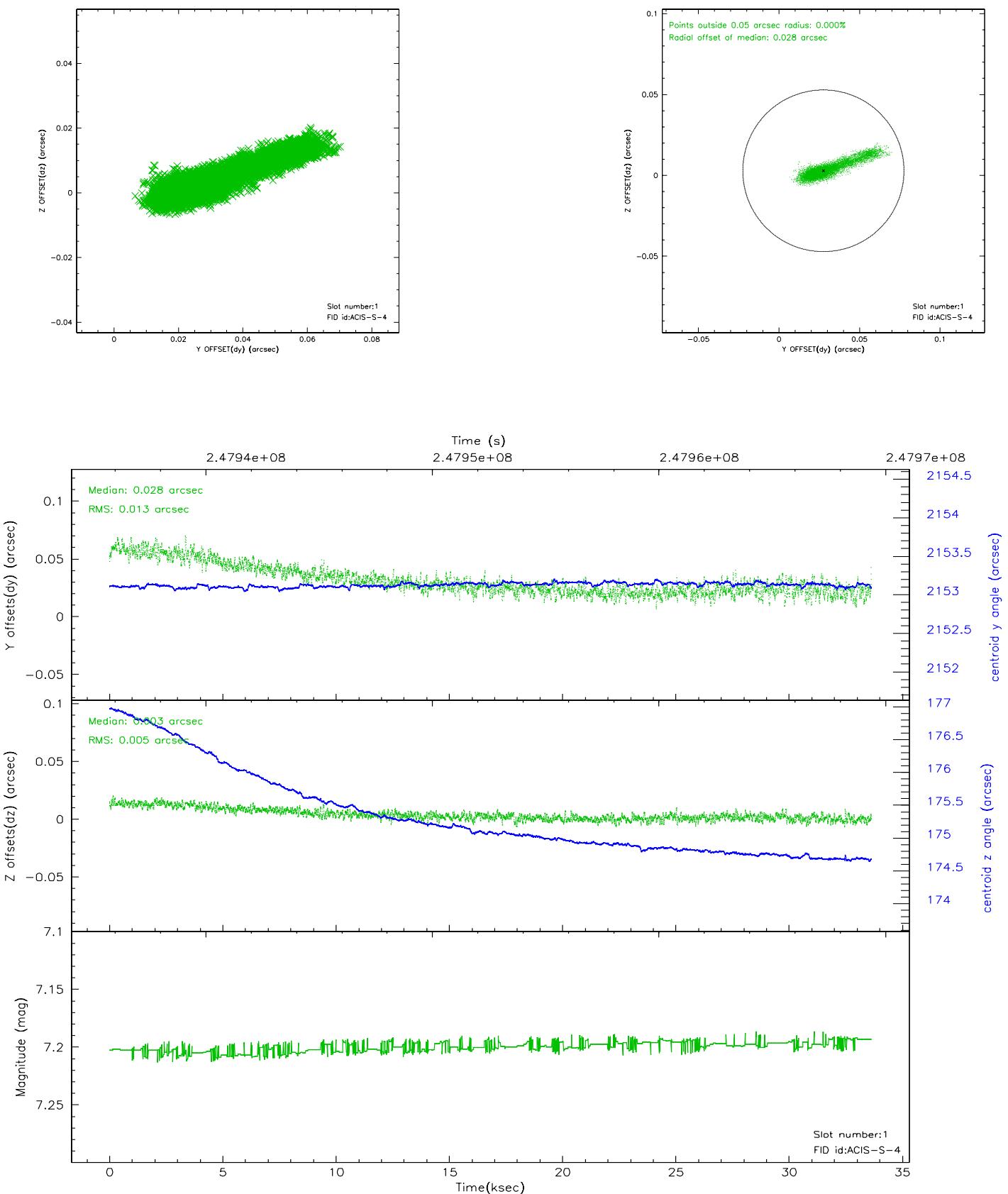


2.5 FID Slots

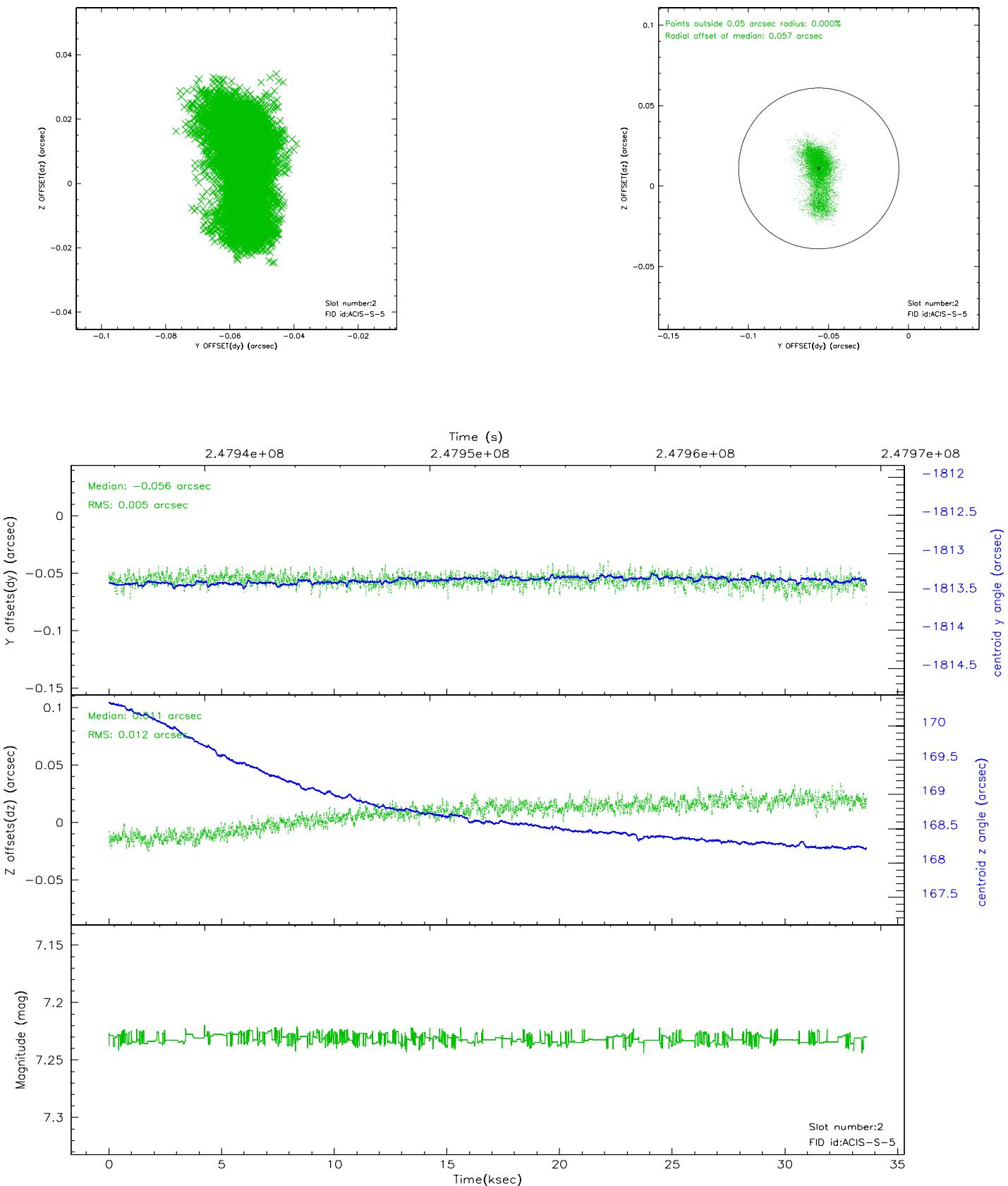
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

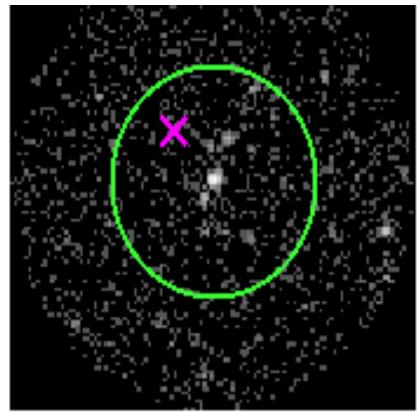


3 Gratings

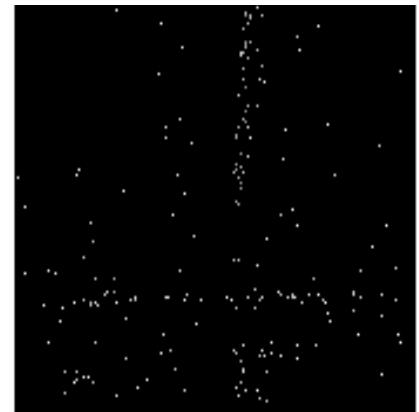
3.1 HEG Arm



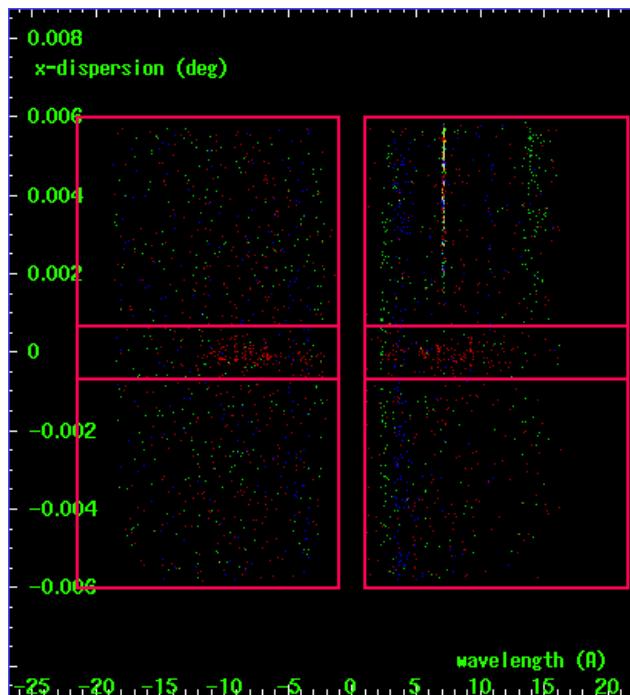
HEG Order Sort 123



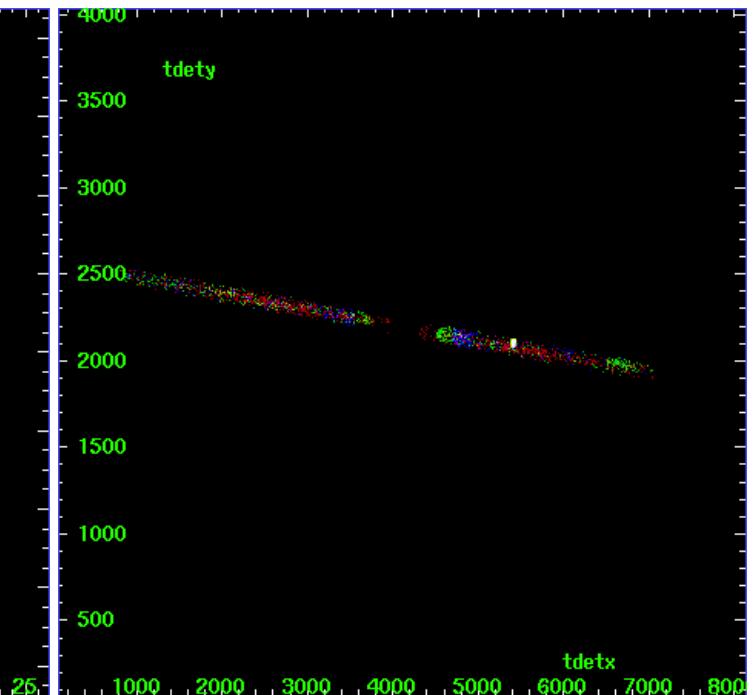
HEG Zero Order



HEG Order Sort ALL

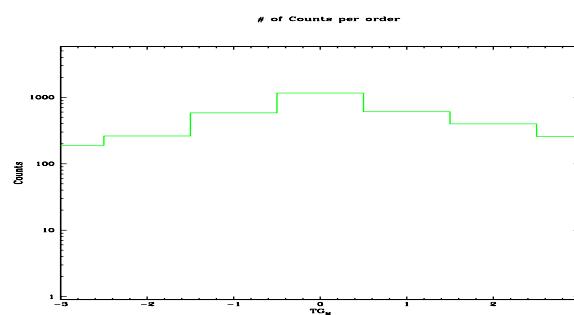


Spot Image HEG

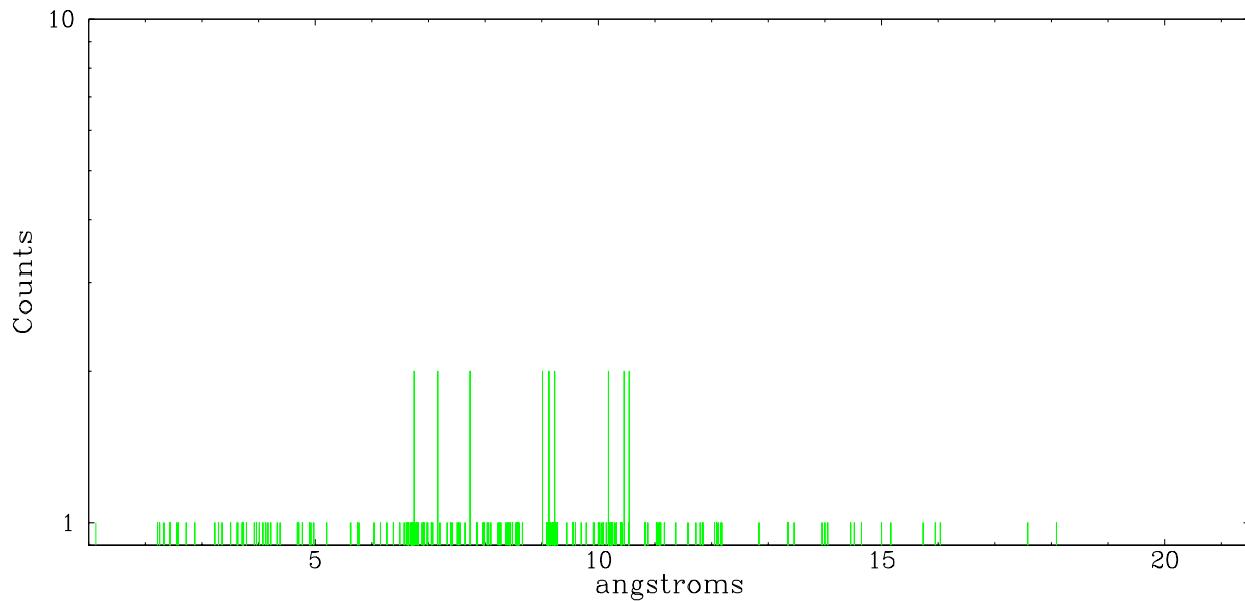


Full Detector HEG

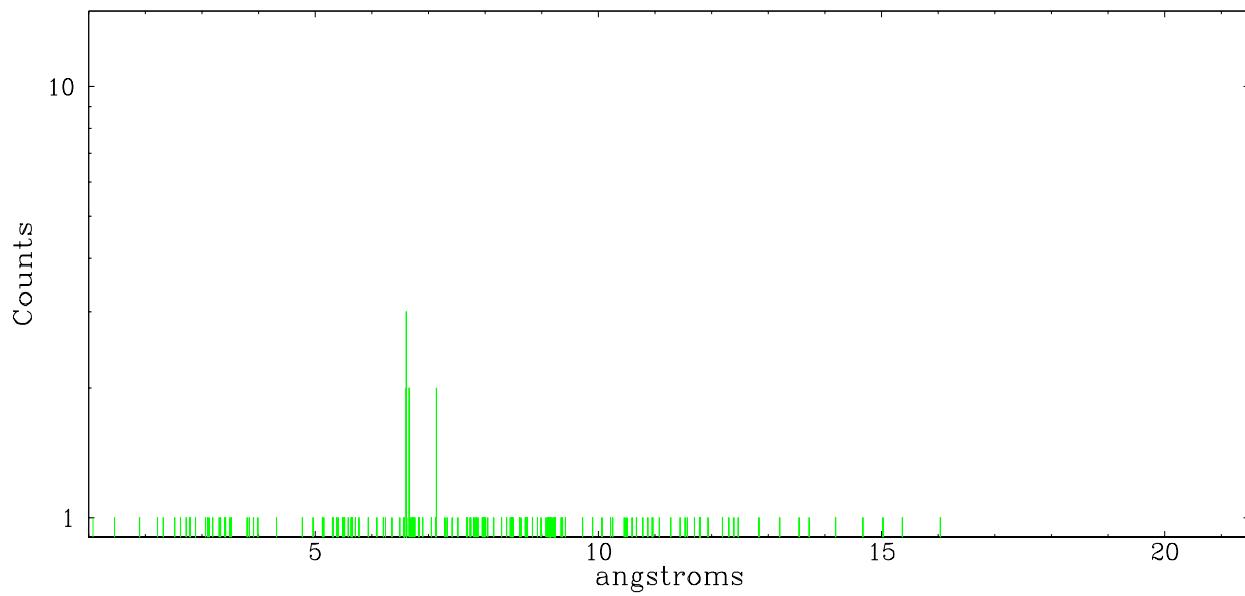
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	190	262	584	1158	609	398	257



heg order -1



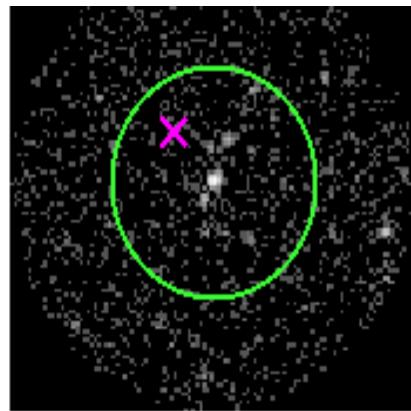
heg order +1



3.2 MEG Arm



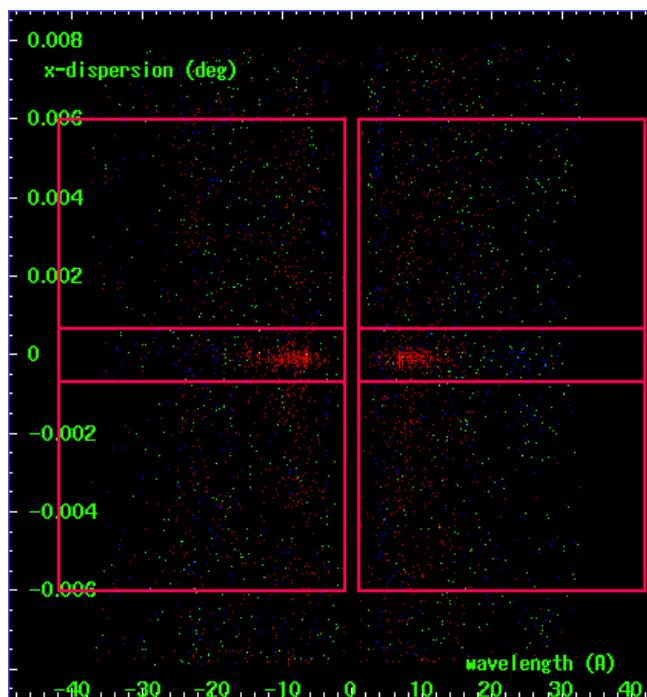
MEG Order Sort 123



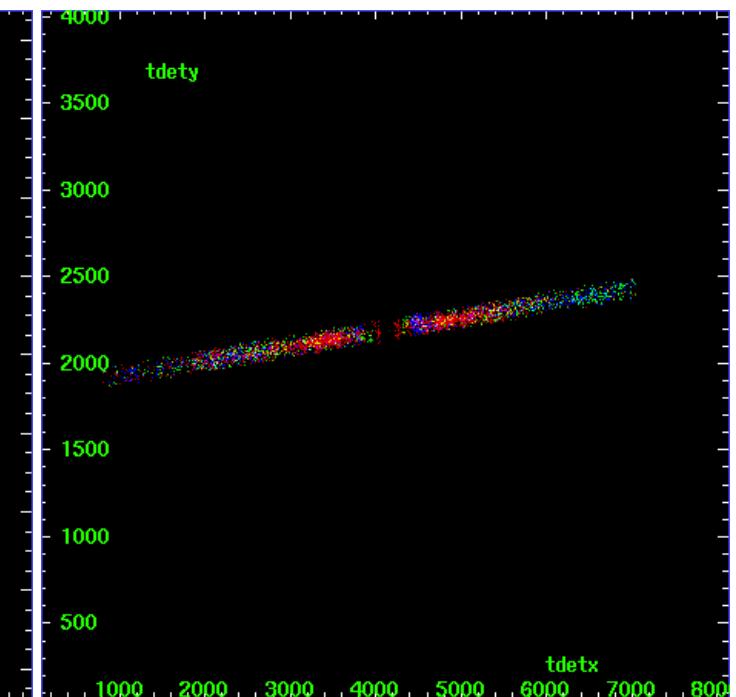
MEG Zero Order



MEG Order Sort ALL

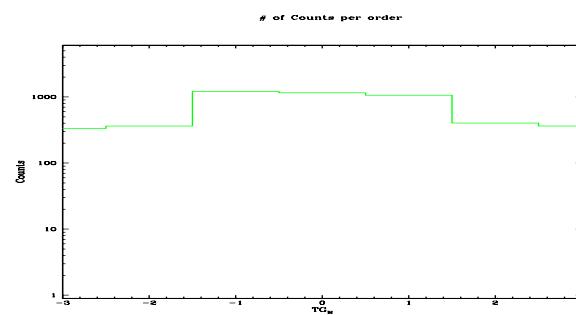


Spot Image MEG

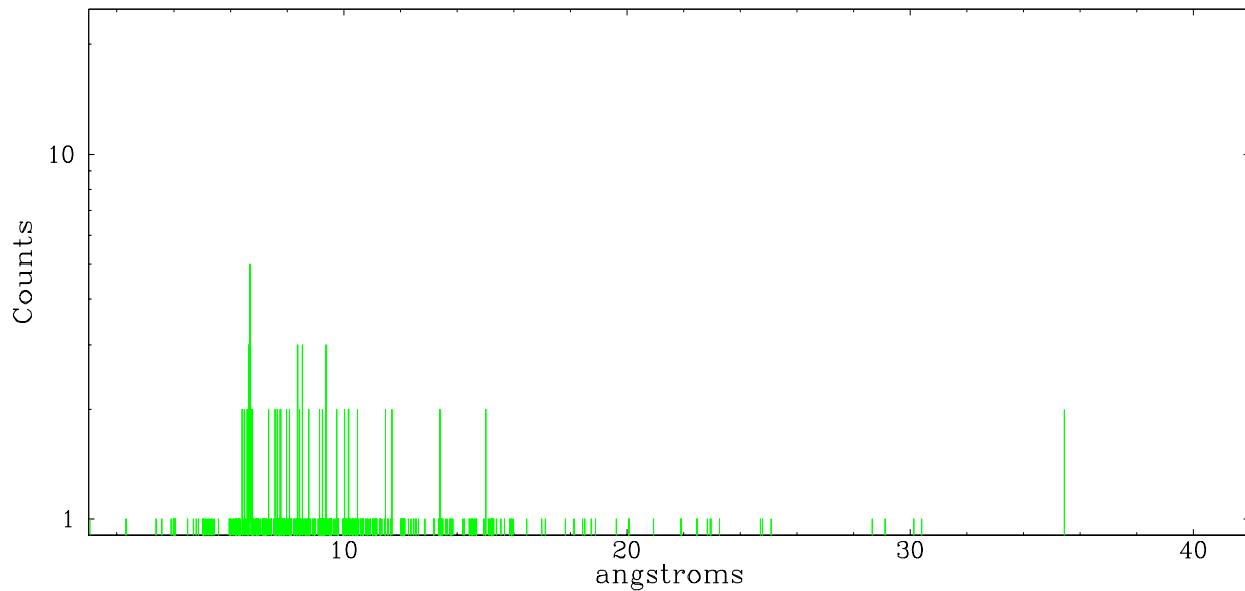


Full Detector MEG

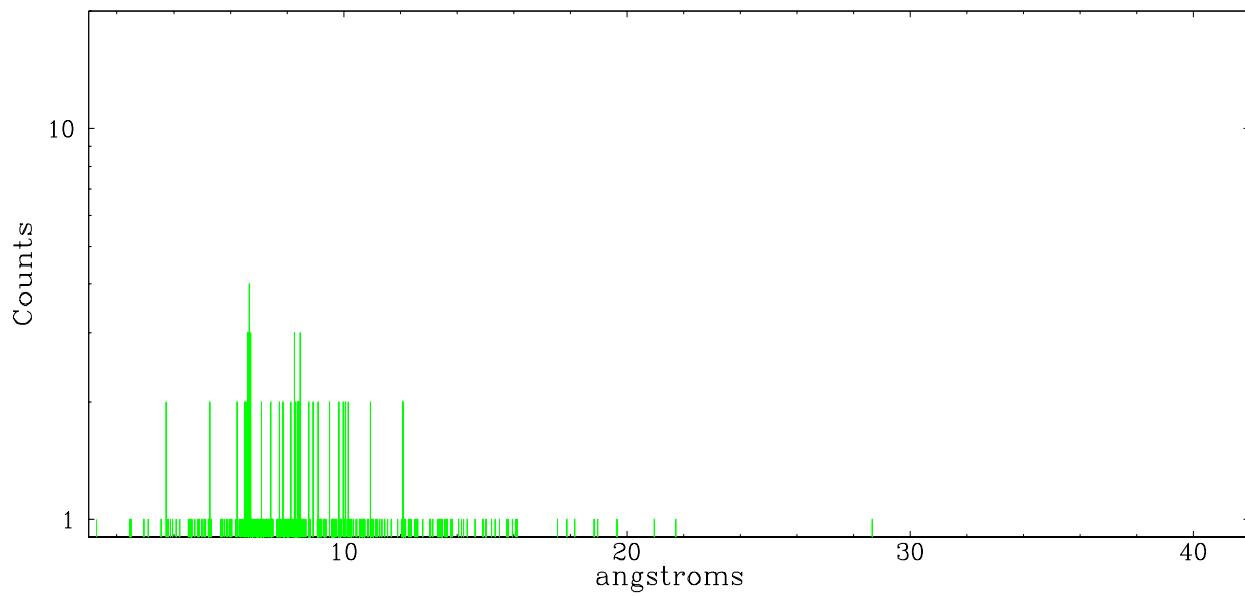
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	334	364	1210	1158	1062	402	364



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.04.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	33.62879

A.2 Comments

Several x-ray sources are included in the region defining the zeroth order and in the dispersed spectrum. Spectrum could possibly be re-extracted in CIAO to separate the sources. Serendipitous off-axis zeroth order image and dispersed spectrum of HD 93162 present. The zeroth order and the dispersed spectrum of HD 93162 lie on top of the spectral arm of the dispersed spectrum of the primary target. Analysis will be tricky because spectra for several sources are superimposed. User could possibly exploit asymmetry in plus and minus orders.