

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 2094 - L2 Version 002
Chandra X-Ray Center

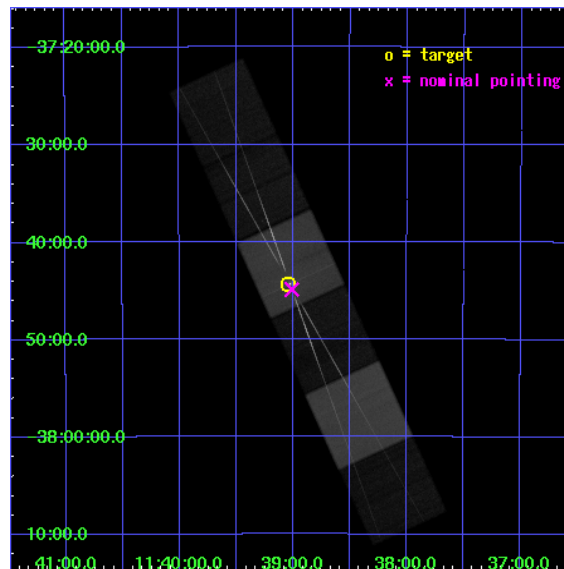
L2 Processing Date : Jan 27 2007

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1 Front

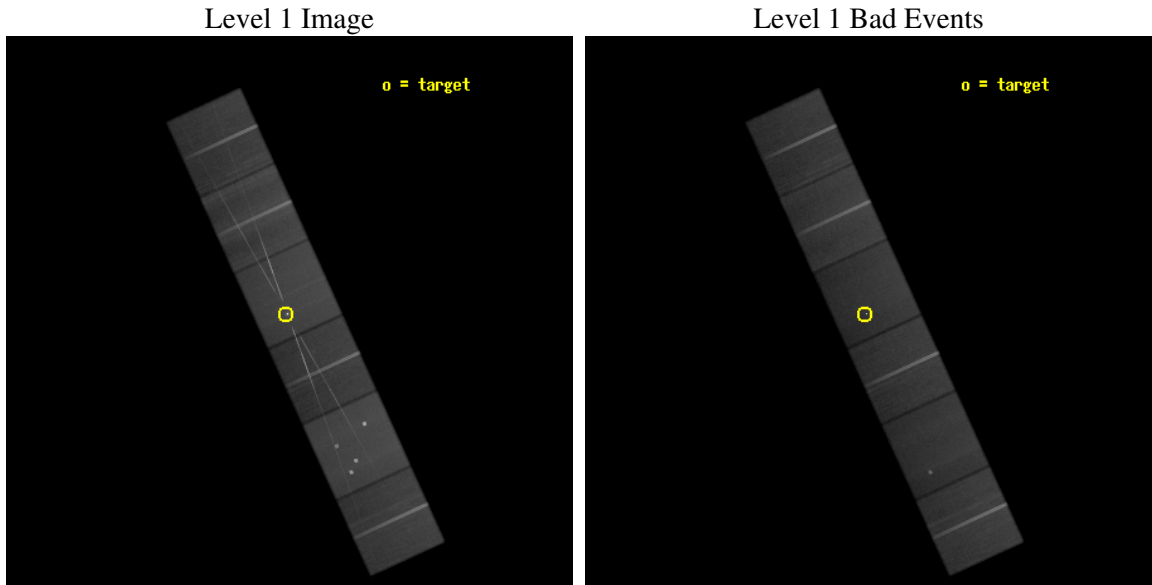
seq_num	700284
obs_id	2094
title	DETERMINING THE NATURE OF THE VARIABLE ABSORPTION IN NGC 3783 WITH CHANDRA/HST
observer	Dr. Ian George
object	NGC 3783
dtcycle	0
cycle	P
ra_targ	174.76
dec_targ	-37.74
ra_nom	174.7529423598
dec_nom	-37.74801860964
roll_nom	245.43167202711
revision	3
ontime	168307.20015675
livetime	166175.99304593
ontime4	168303.95922641
ontime5	168307.20015675
ontime6	168297.477276
ontime7	168307.20015675
ontime8	168294.23636557
ontime9	168297.47729594
l2events	1847632



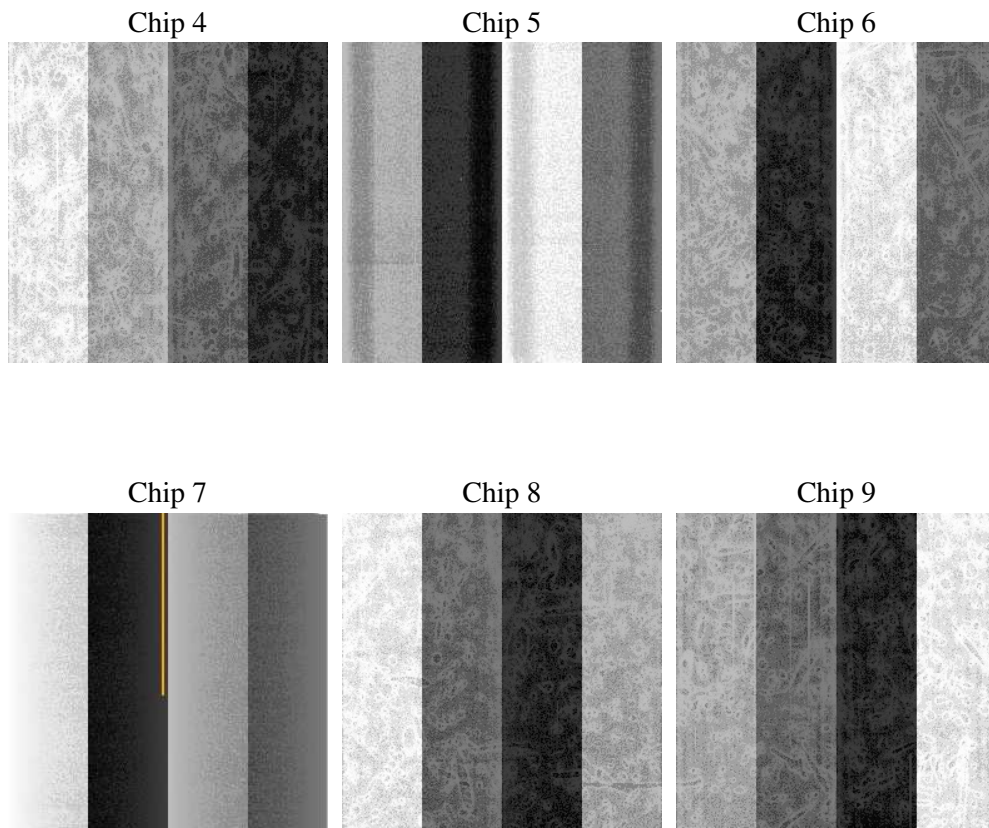
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldbver	3.2.4
date	2006-12-11T22:41:31
revision	2

sched_exp_time	168365.829000
ontime	168307.20015675
ontime4	168303.95922641
ontime5	168307.20015675
ontime6	168297.477276
ontime7	168307.20015675
ontime8	168294.23636557
ontime9	168297.47729594
l1events	8121545

2.1.4 Events

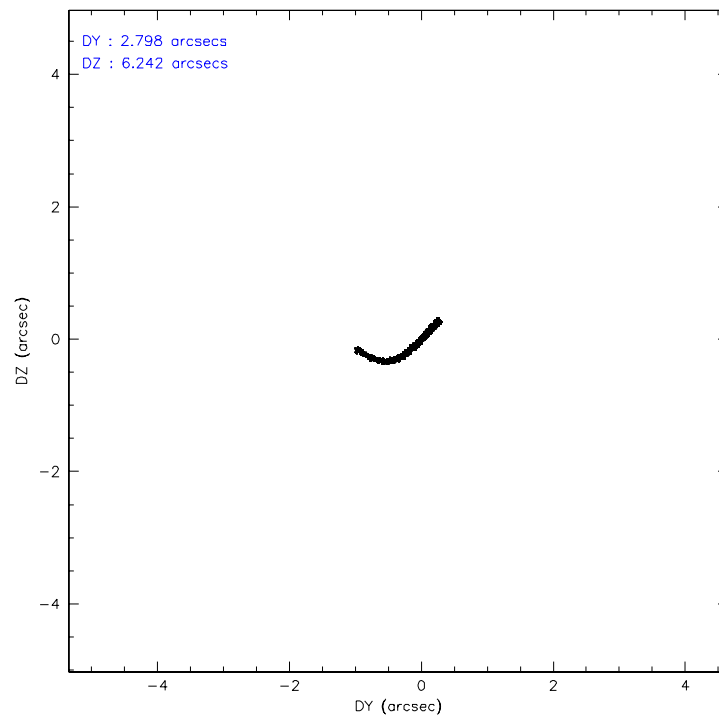
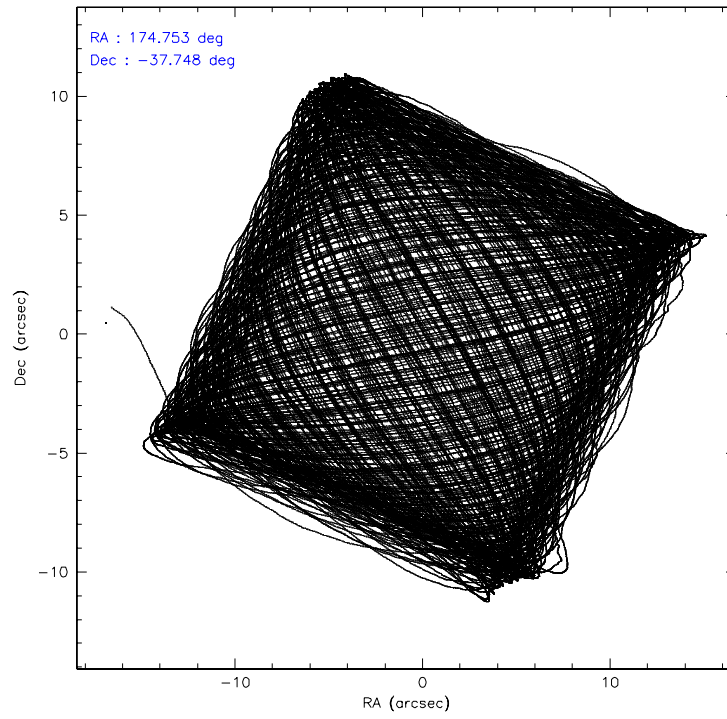
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	1239822	1606691	1203900	1550238	1420384	1100510
rejected events	1107177	865195	997957	893666	1111513	967357
rejected %	89%	53%	82%	57%	78%	87%

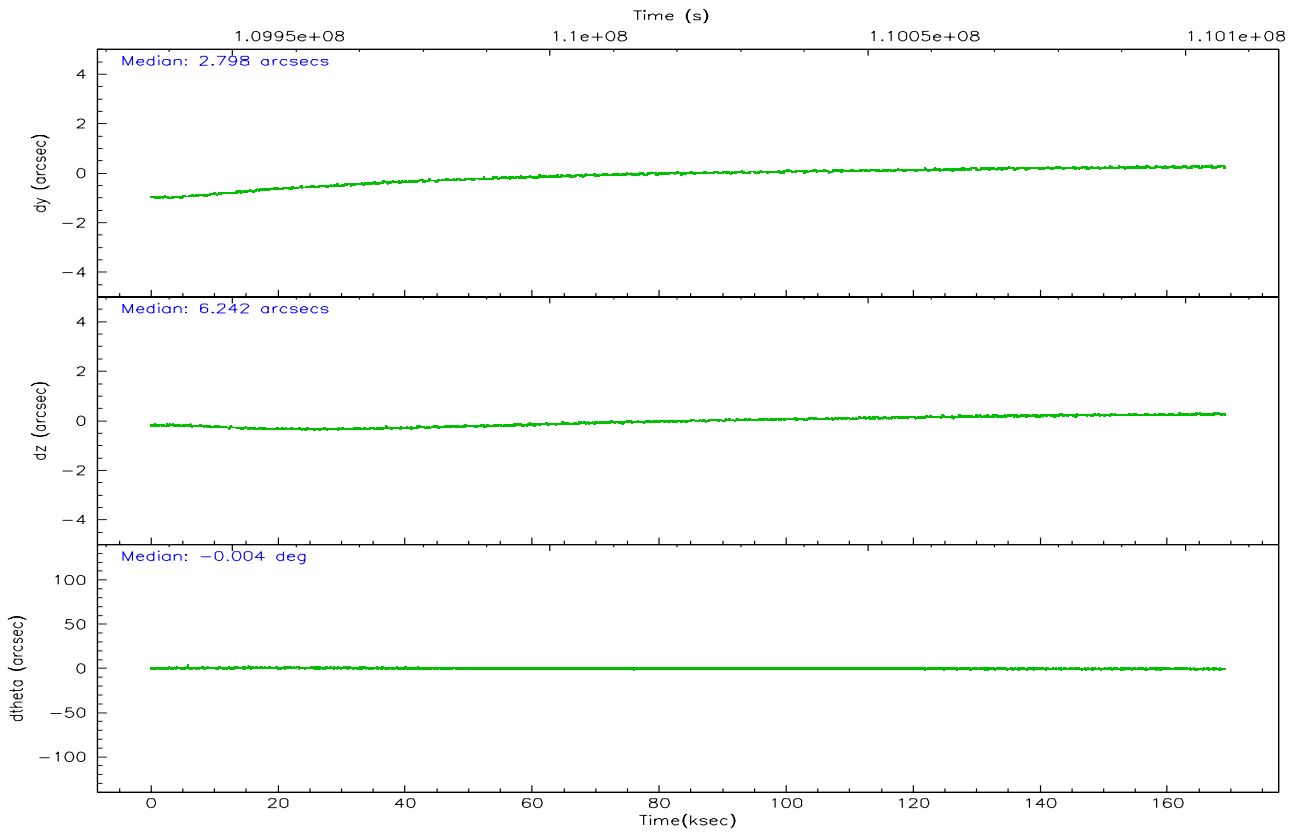
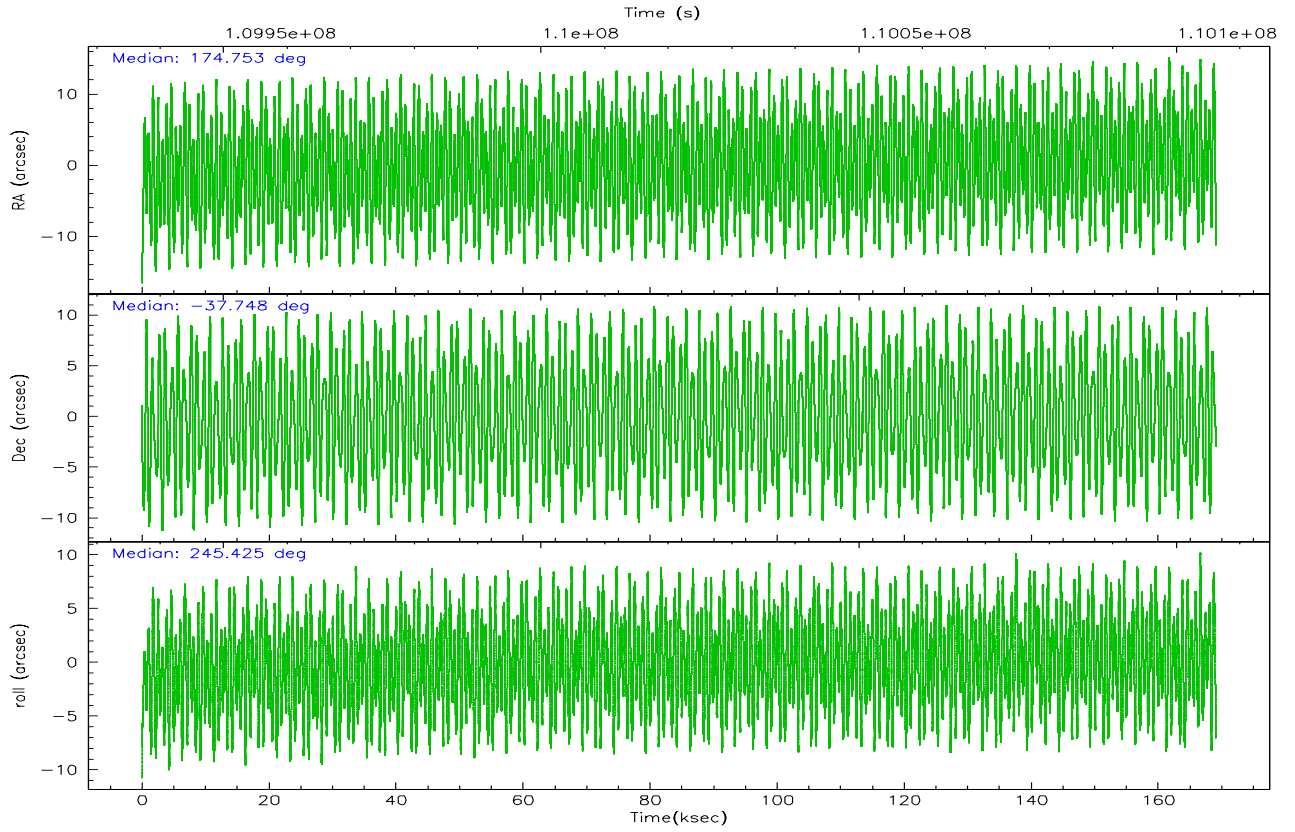
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	53885	103454	112368	51318	114668	55416
	4%	6%	9%	3%	8%	5%
grade 1 events	599	1228	790	1805	916	442
	0%	0%	0%	0%	0%	0%
grade 2 events	31602	219128	34520	161465	62803	26684
	2%	13%	2%	10%	4%	2%
grade 3 events	12334	16901	15877	40320	30298	13044
	0%	1%	1%	2%	2%	1%
grade 4 events	11846	15911	15379	39199	28488	12507
	0%	0%	1%	2%	2%	1%
grade 5 events	39474	77765	47541	103159	59482	47466
	3%	4%	3%	6%	4%	4%
grade 6 events	22984	386129	27810	364305	72621	25510
	1%	24%	2%	23%	5%	2%
grade 7 events	1067098	786175	949615	788667	1051108	91944
	86%	48%	78%	50%	74%	83%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	174.749318	174.7529423598029	Subarray requested	NONE	NONE
Pointing Dec	-37.720886	-37.74801860963983	Alternating exposures requested	N	N
Pointing Roll	245.272826	245.4316720271144	Primary exposure time	0.000000	3.2
Window start time	109856092.184000	109856092.184000			
Window stop time	110185136.184000	110185136.184000			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-187.132523	-187.1228876879999			
SIM translation stage offset (mm)	-3	-3.009634895007935			
Observation start time	109937916.184000	109936662.79121			
Observation start date	2001-06-26T10:17:32	2001-06-26T09:57:42			
Observation end time	110106282.184000	110106596.52284			
Observation end date	2001-06-28T09:03:38	2001-06-28T09:09:56			
Read mode	TIMED	TIMED			

2.3 Aspect



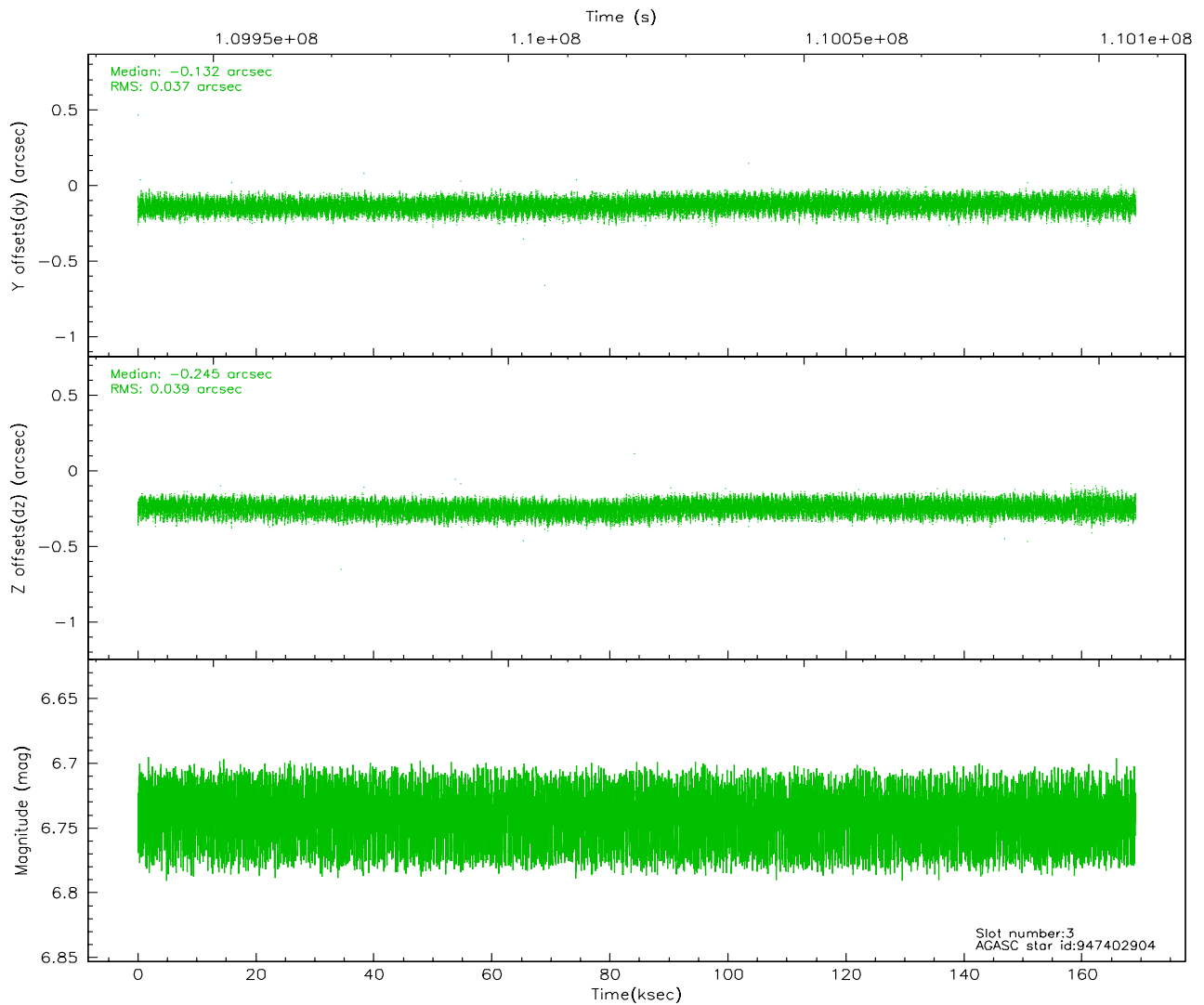
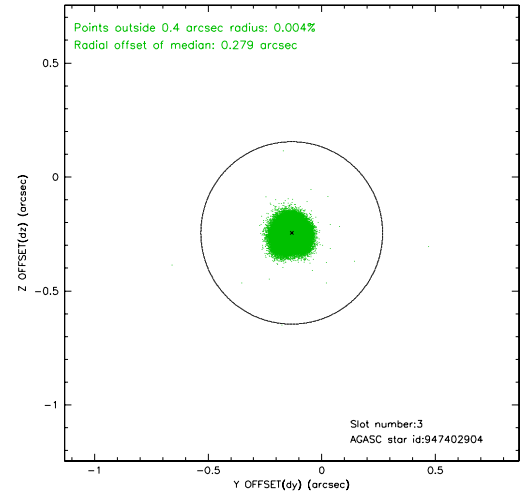
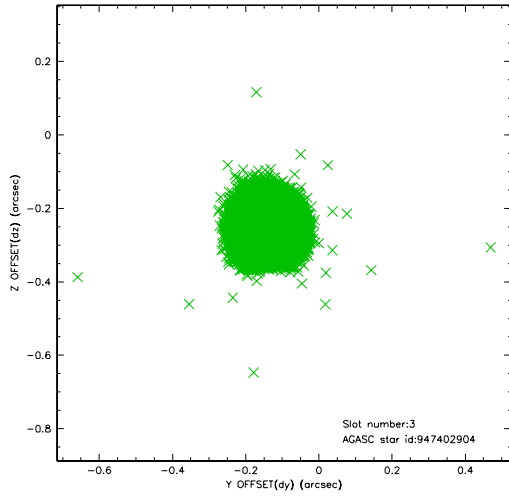


Slot Statistics

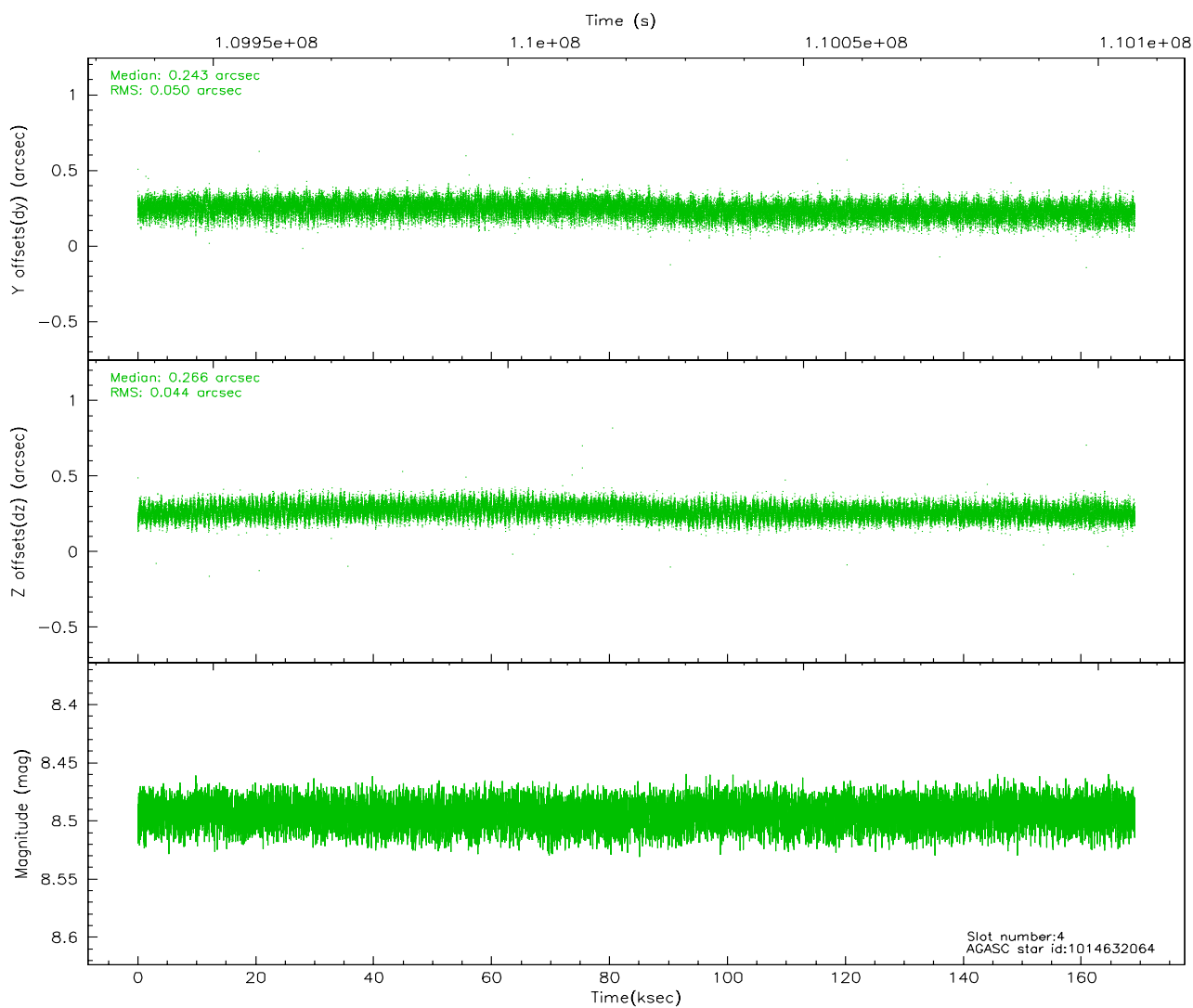
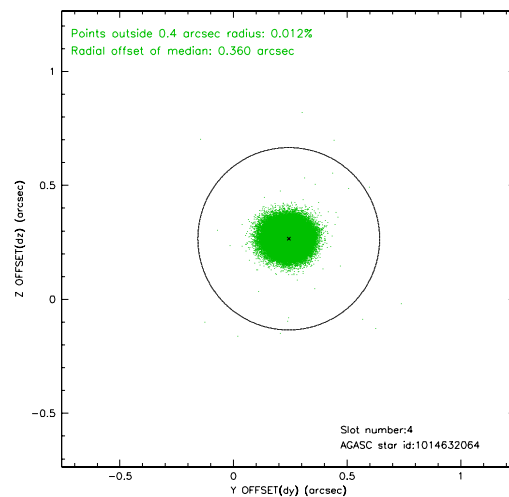
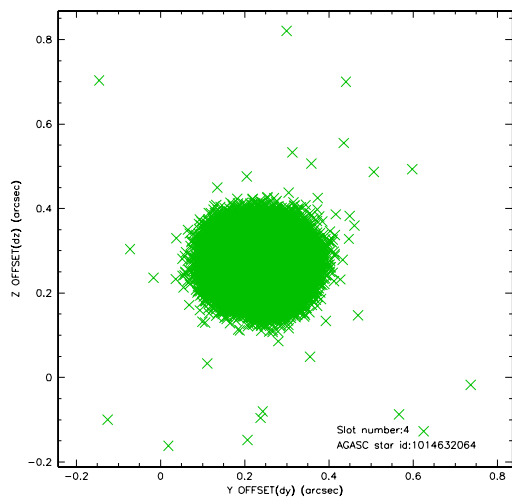
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	41245	-0.013	-0.029	0.011	0.017	0.000000	0.000000	-755.13	-1789.52
1	FID	ACIS-S-4	7.19	41240	-0.062	0.014	0.010	0.019	0.000000	0.000000	2158.16	119.10
2	FID	ACIS-S-5	7.23	41247	0.043	0.024	0.009	0.016	0.000000	0.000000	-1808.05	112.67
3	GUIDE	947402904	6.74	82487	-0.132	-0.245	0.058	0.091	174.169681	-37.237184	-881.42	-2235.22
4	GUIDE	1014632064	8.49	82475	0.243	0.266	0.071	0.112	175.171132	-38.575856	2302.17	2367.96
5	GUIDE	947388944	9.16	82439	-0.113	-0.057	0.105	0.163	173.946026	-37.468256	143.72	-2460.76
6	GUIDE	947520080	9.03	82463	-0.193	0.062	0.096	0.148	175.691602	-37.398197	-2170.07	1967.72
7	GUIDE	1014497968	9.98	82425	0.193	-0.025	0.128	0.207	174.377296	-37.990619	1326.23	-551.13

2.4 Star Slots

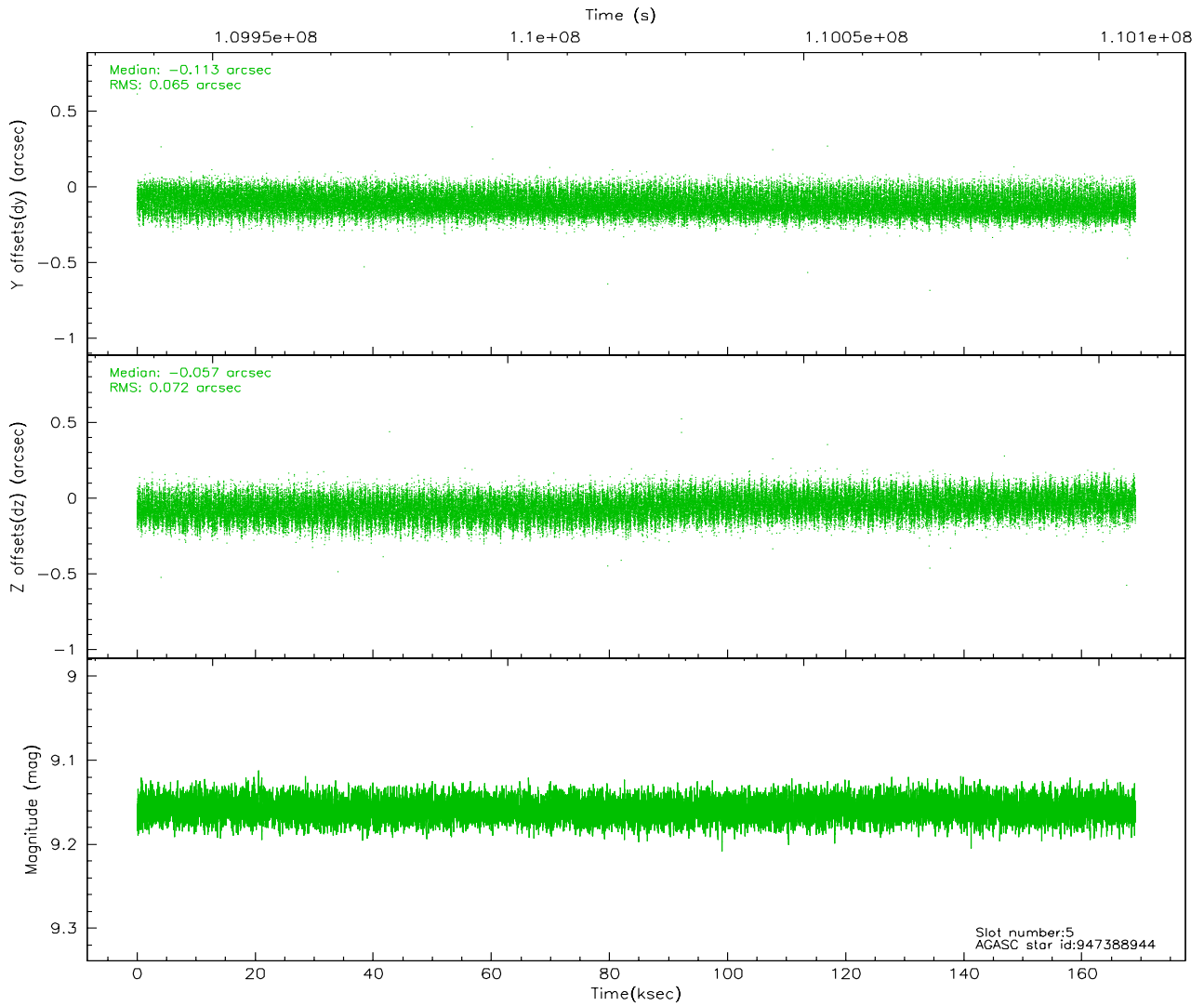
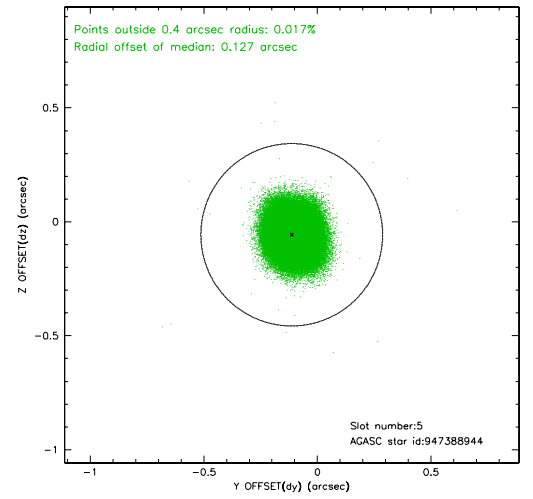
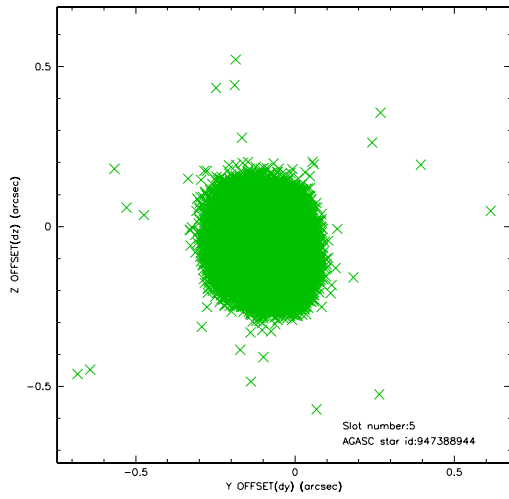
2.4.1 Slot 3



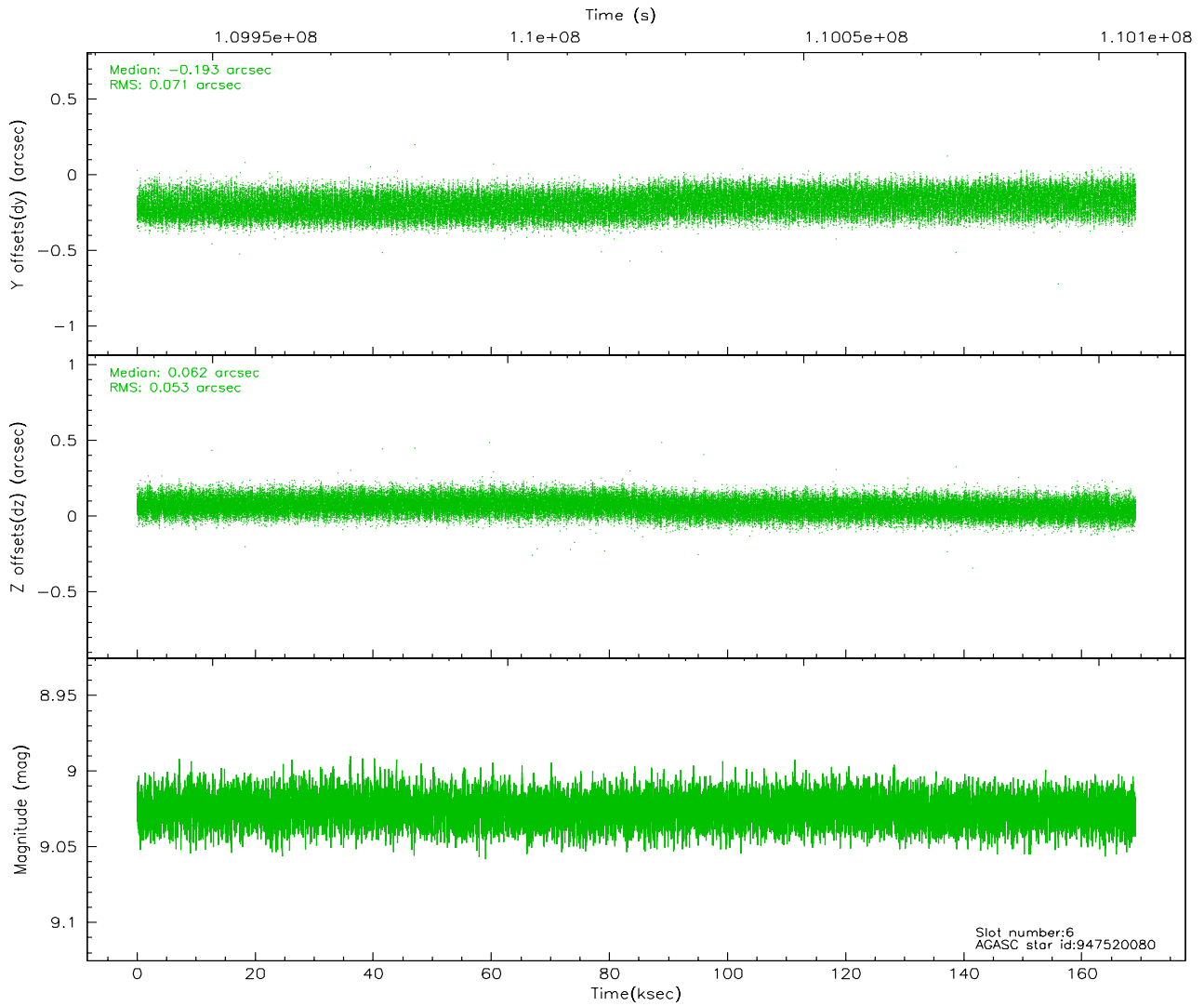
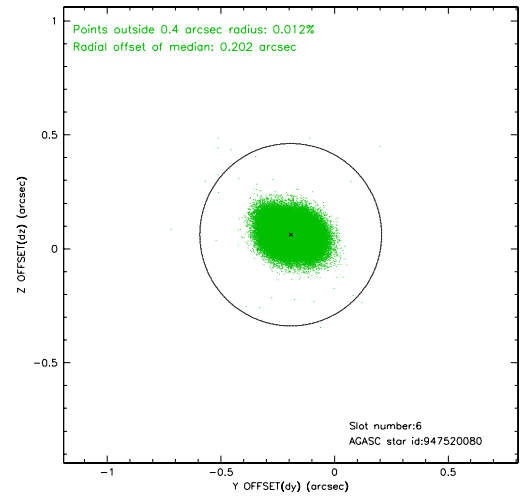
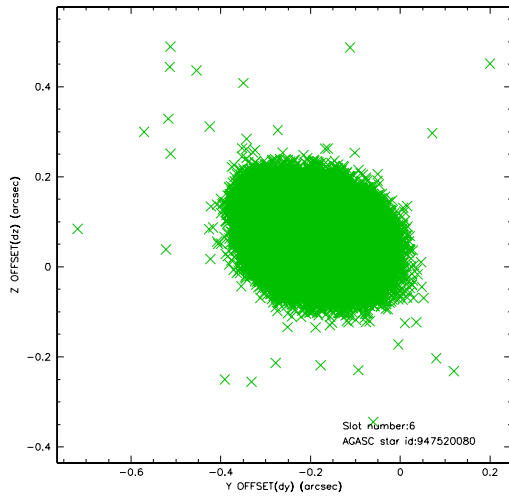
2.4.2 Slot 4



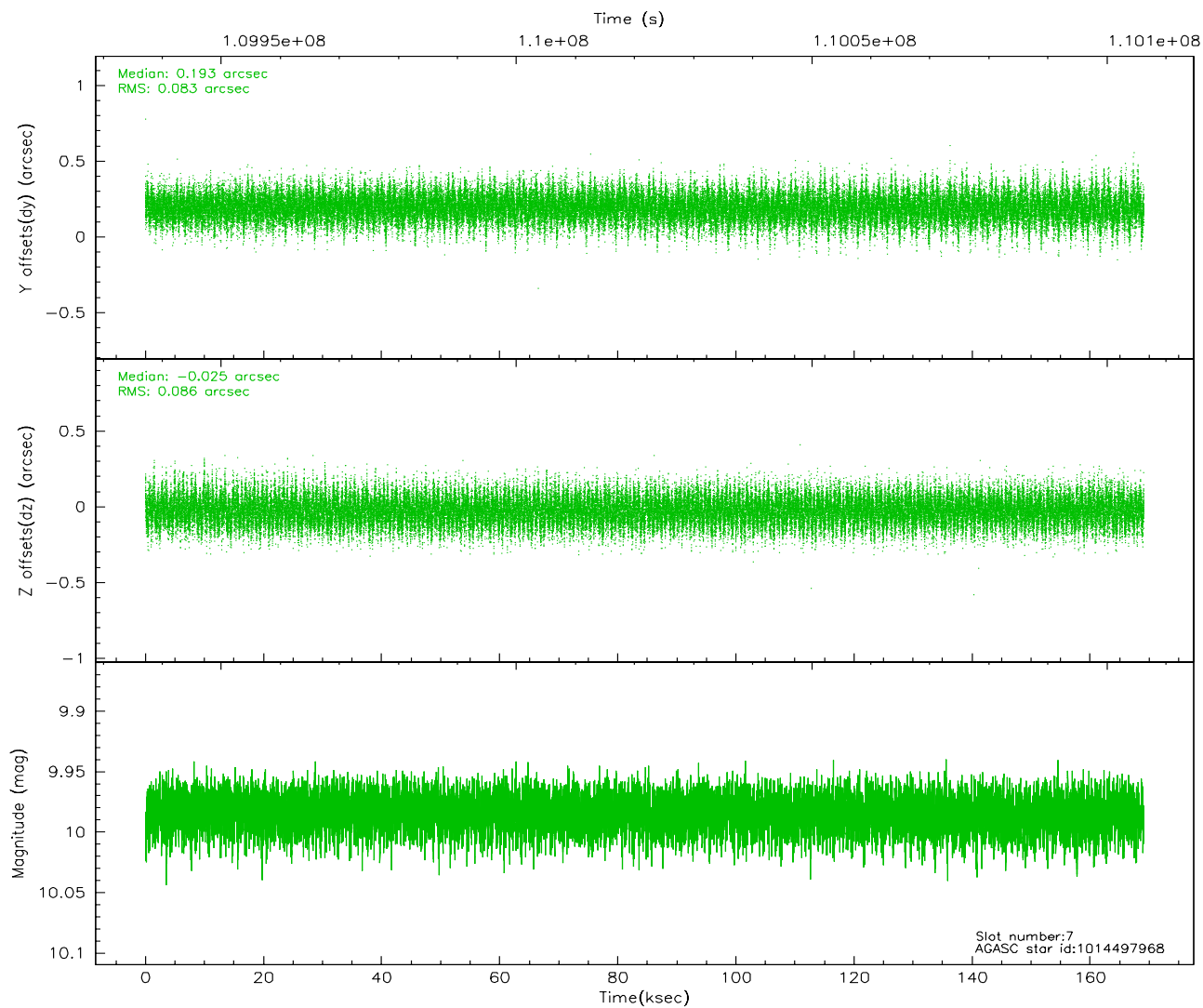
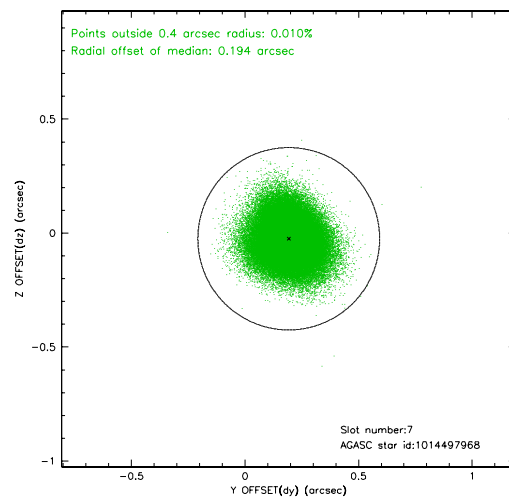
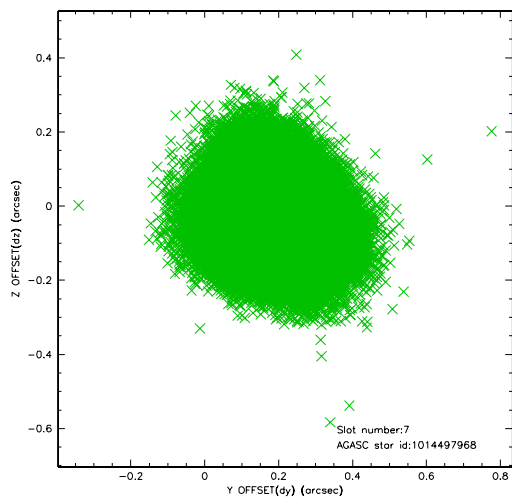
2.4.3 Slot 5



2.4.4 Slot 6

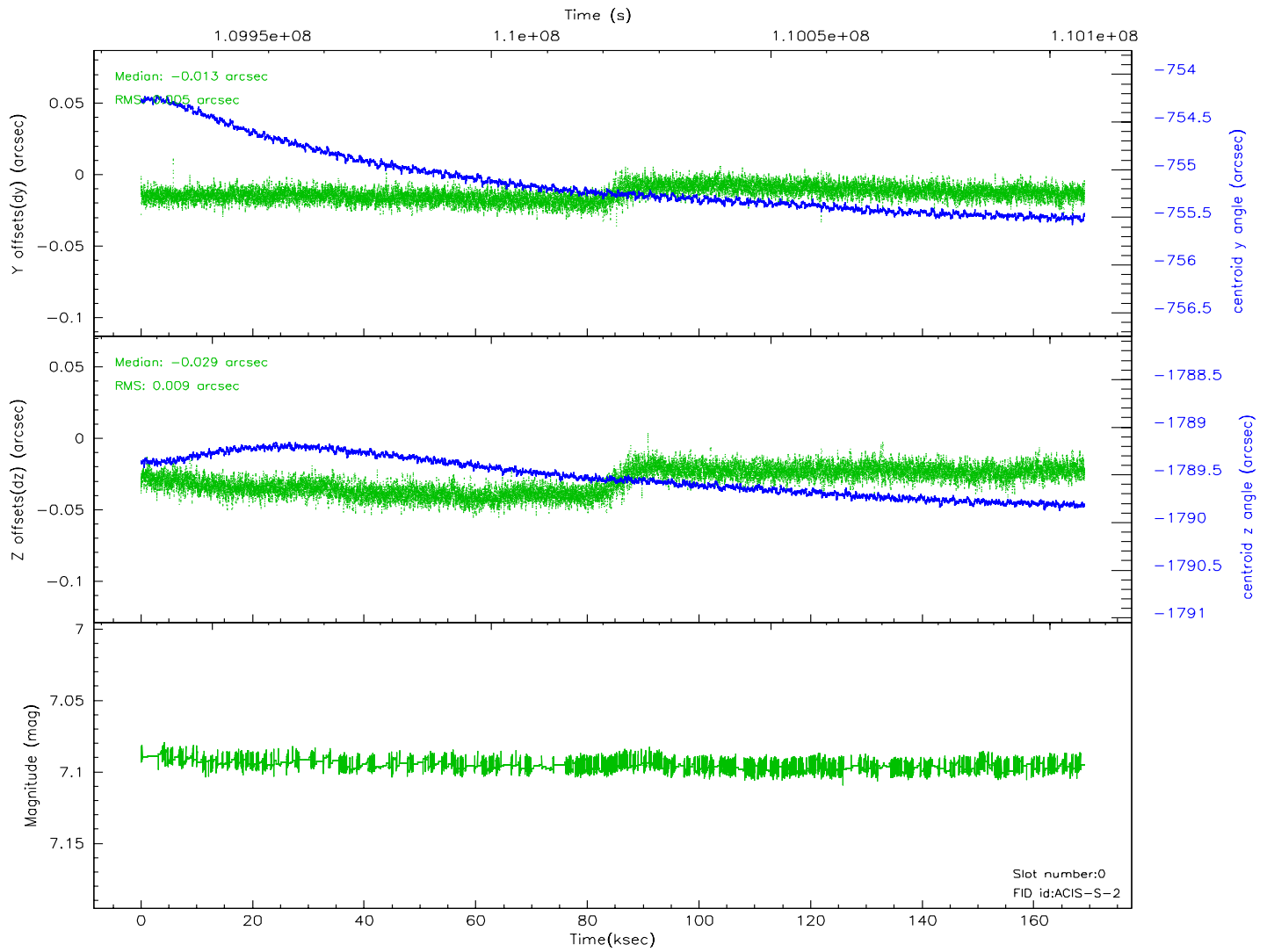
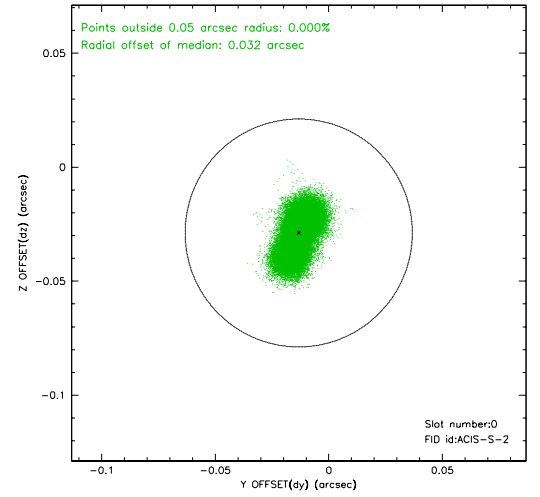
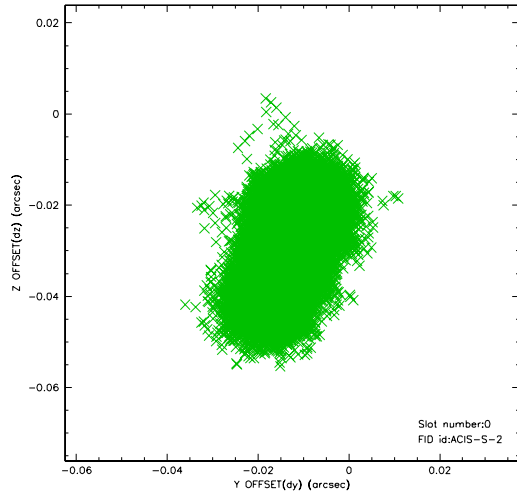


2.4.5 Slot 7

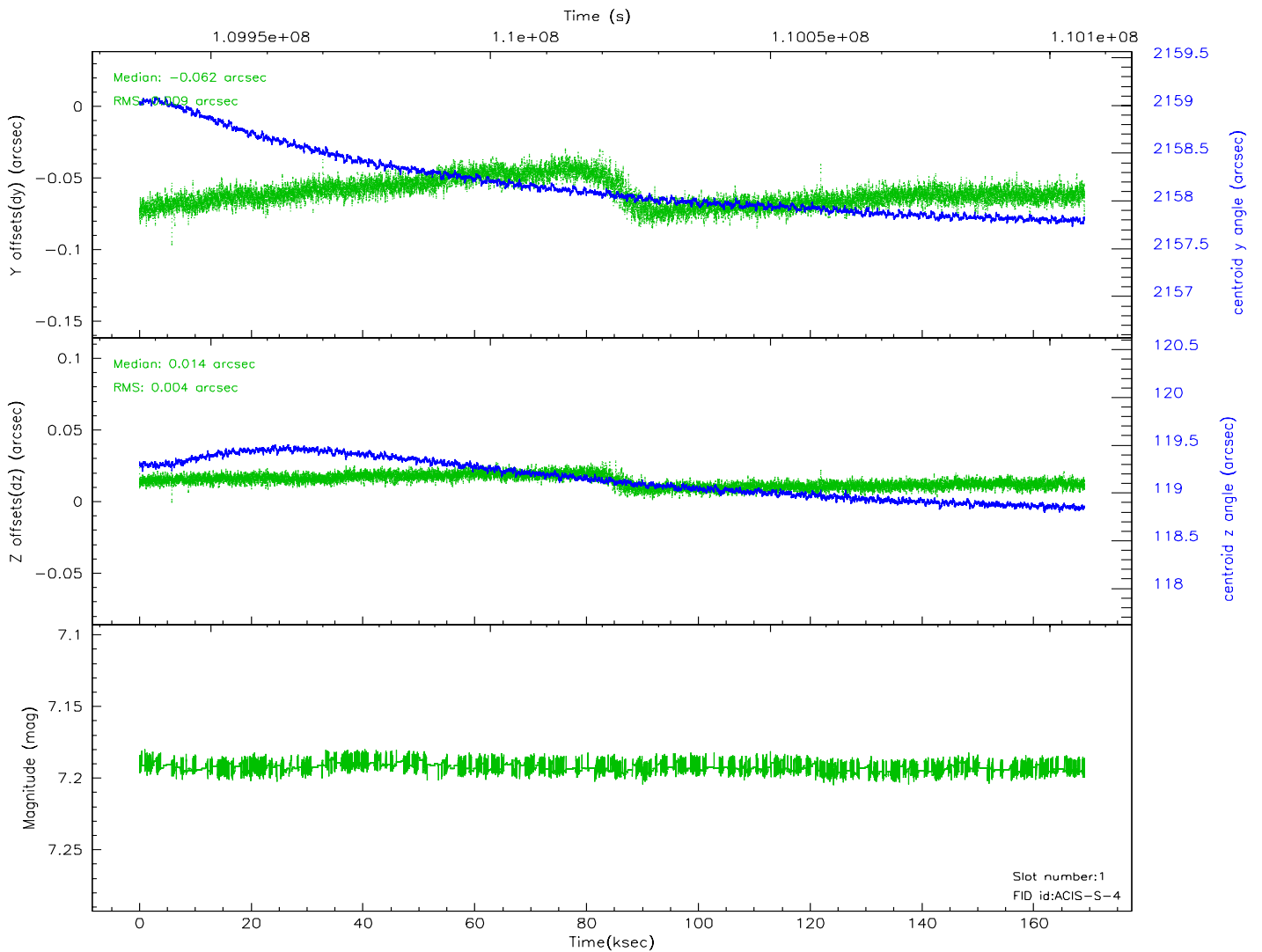
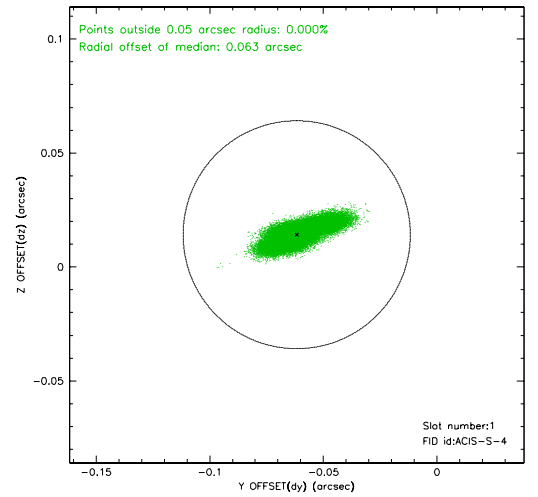
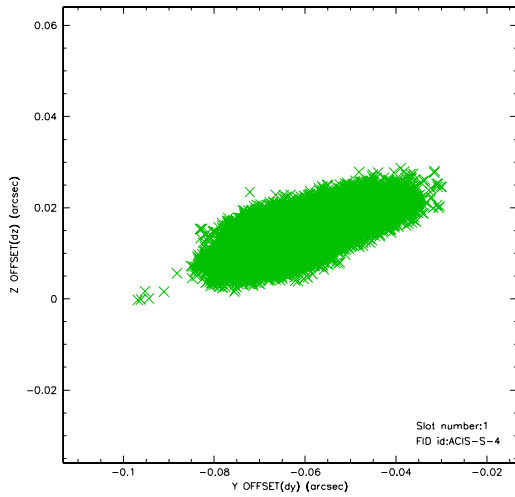


2.5 FID Slots

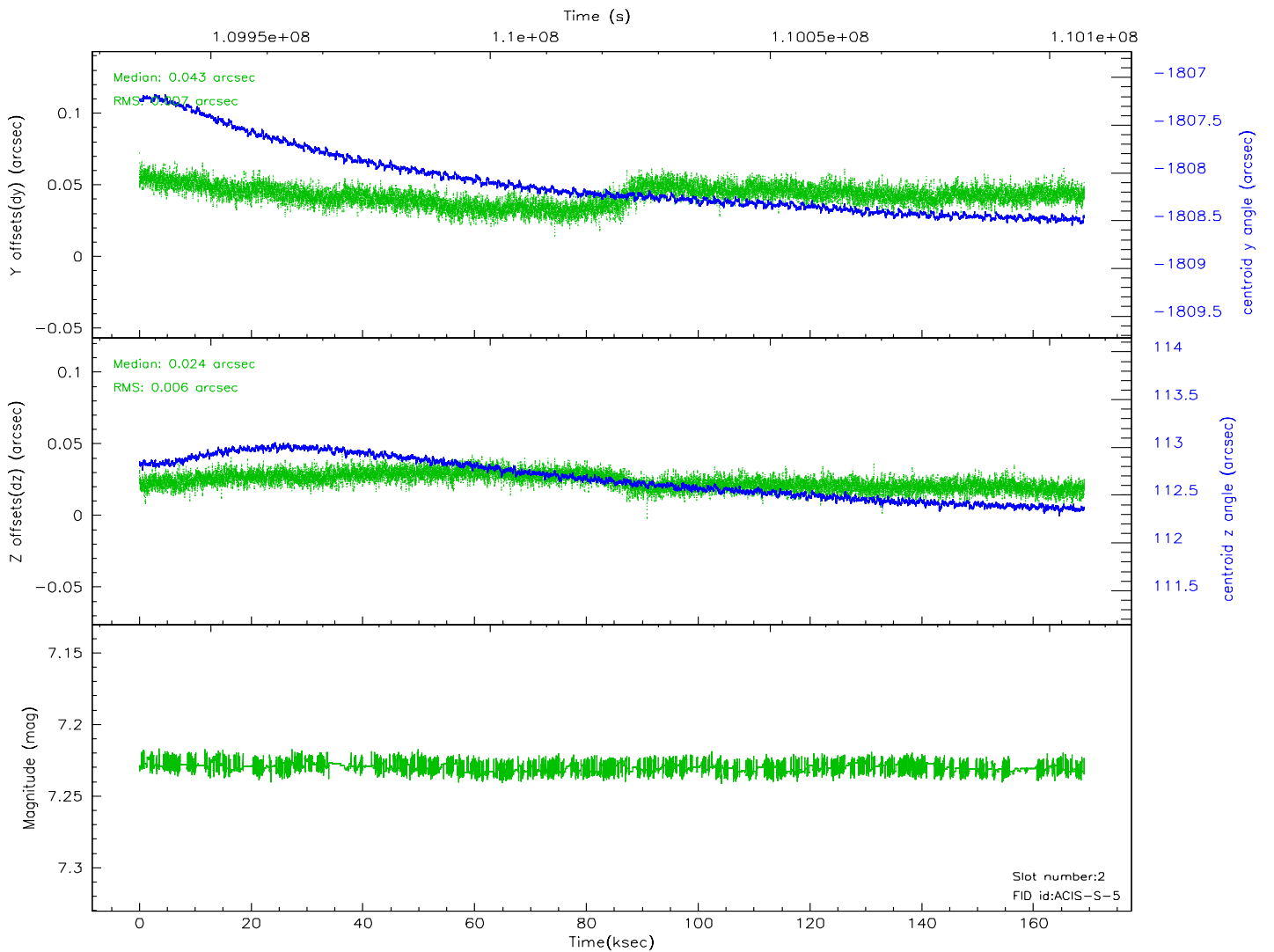
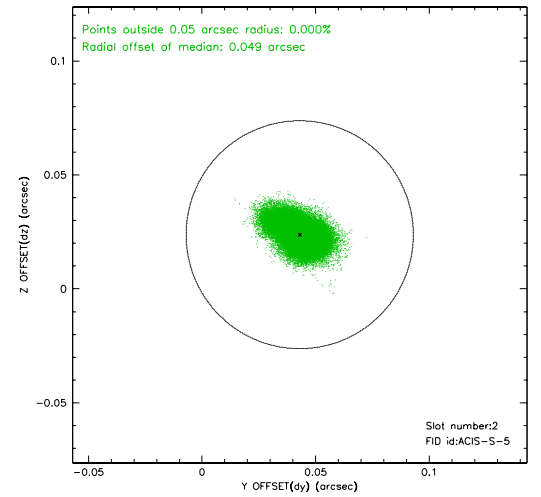
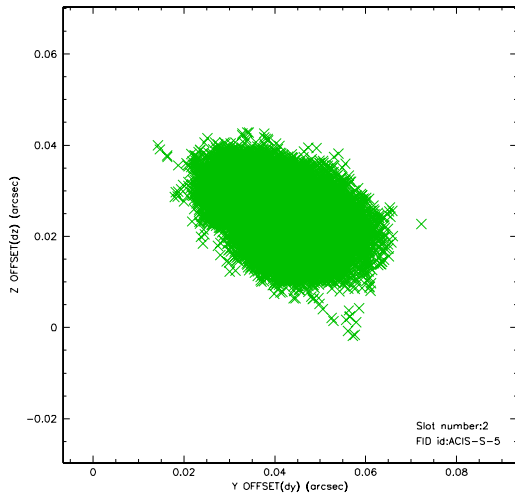
2.5.1 Slot 0



2.5.2 Slot 1

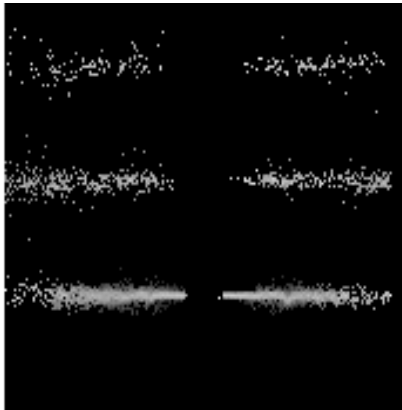


2.5.3 Slot 2

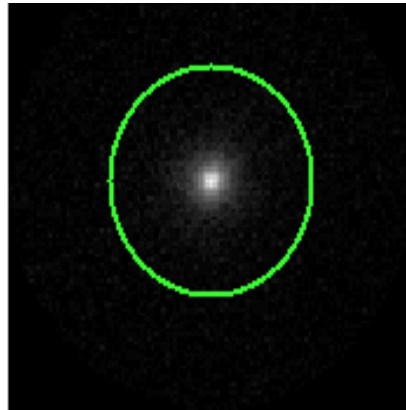


3 Gratings

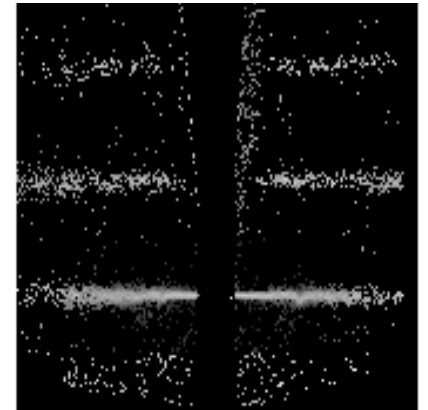
3.1 HEG Arm



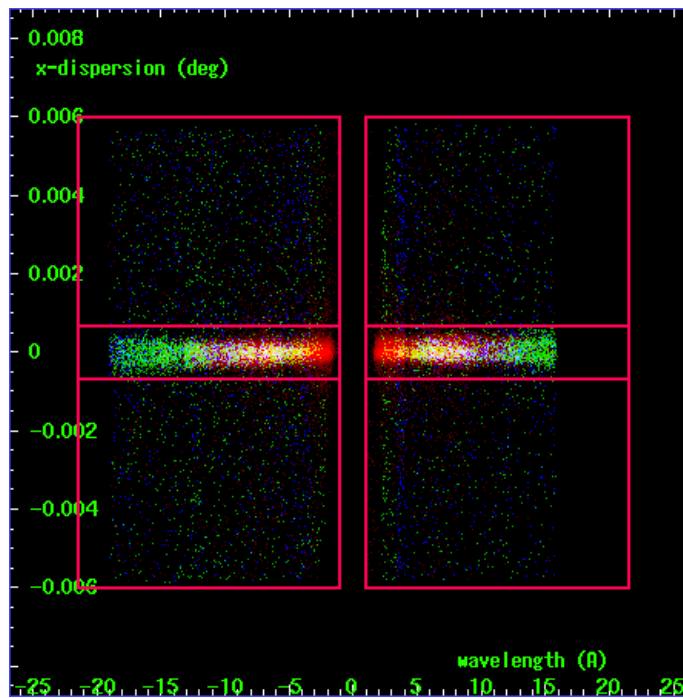
HEG Order Sort 123



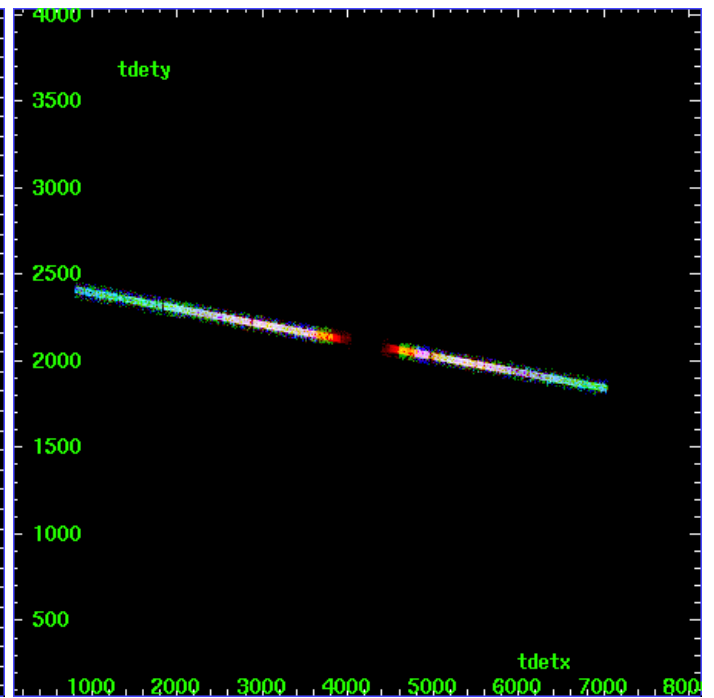
HEG Zero Order



HEG Order Sort ALL

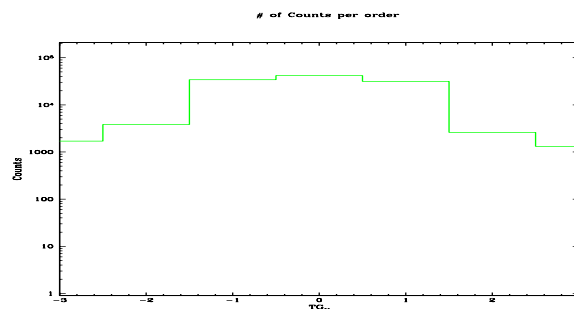


Spot Image HEG

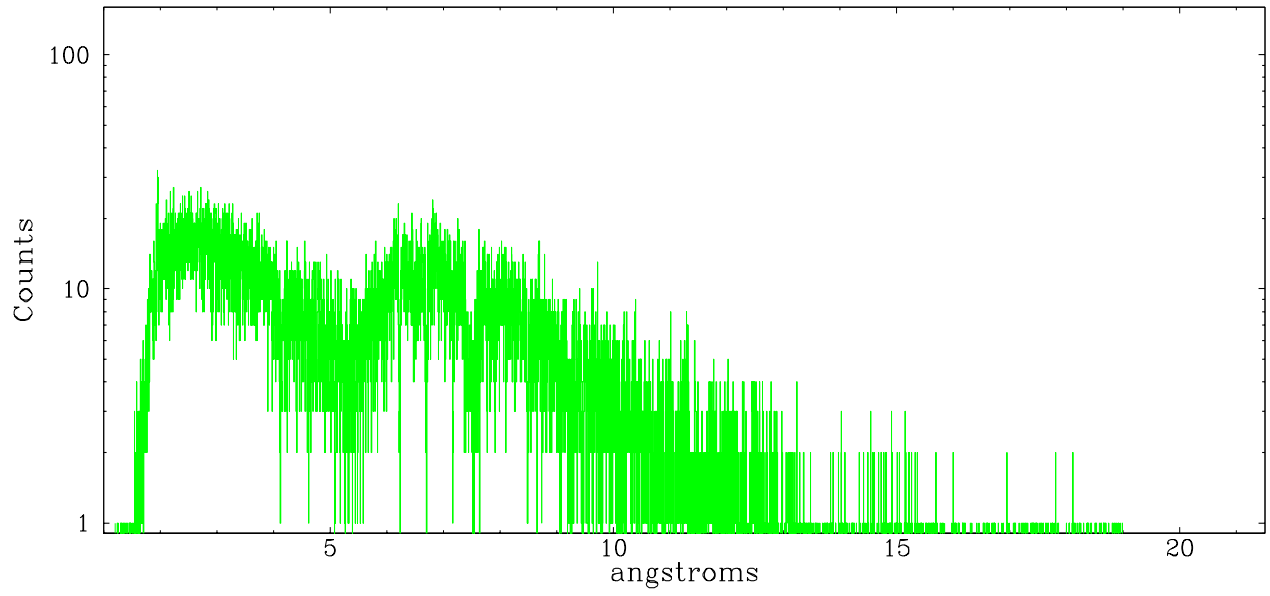


Full Detector HEG

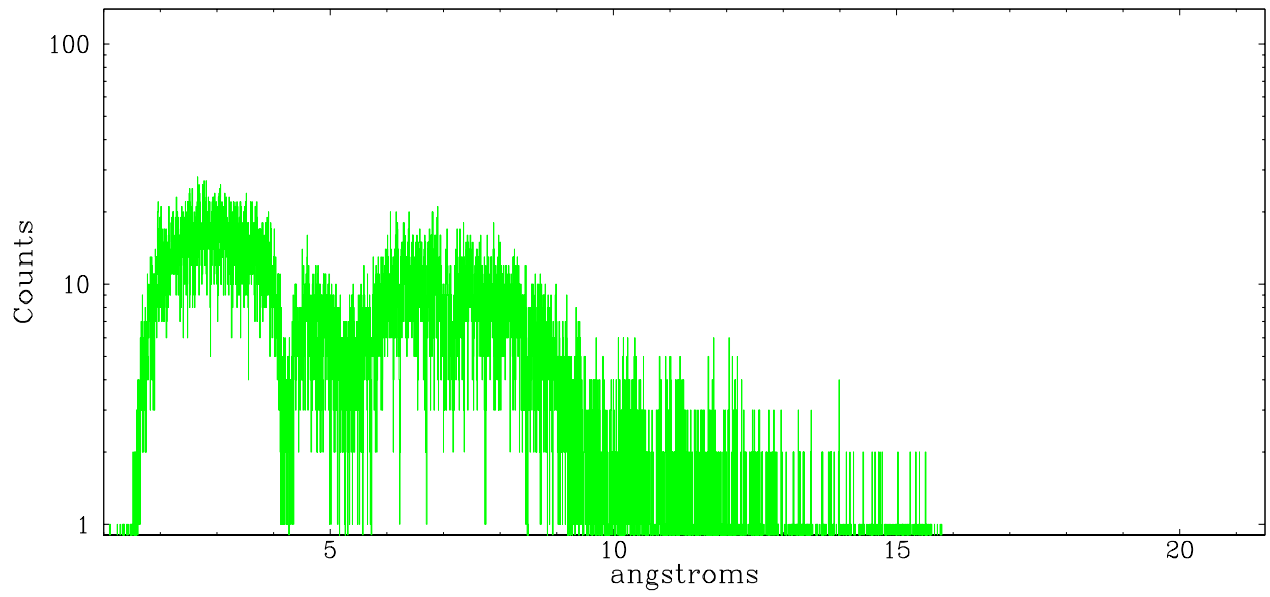
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1699	3829	34231	41824	31444	2619	1317



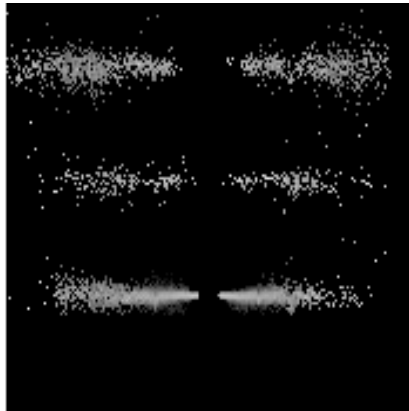
heg order -1



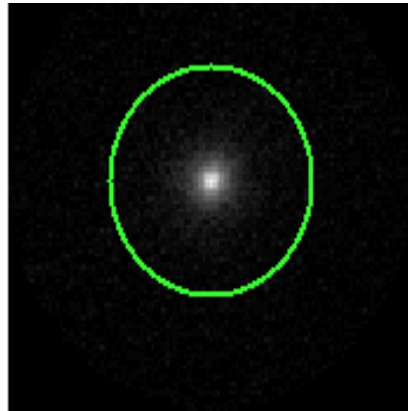
heg order +1



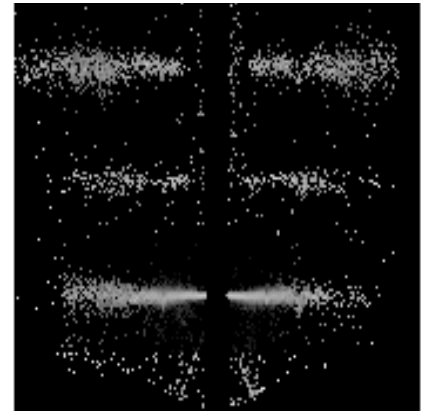
3.2 MEG Arm



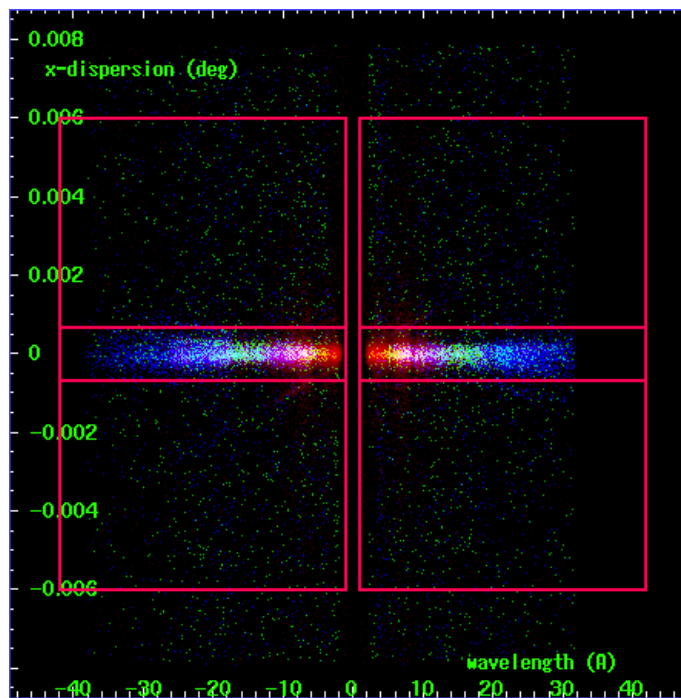
MEG Order Sort 123



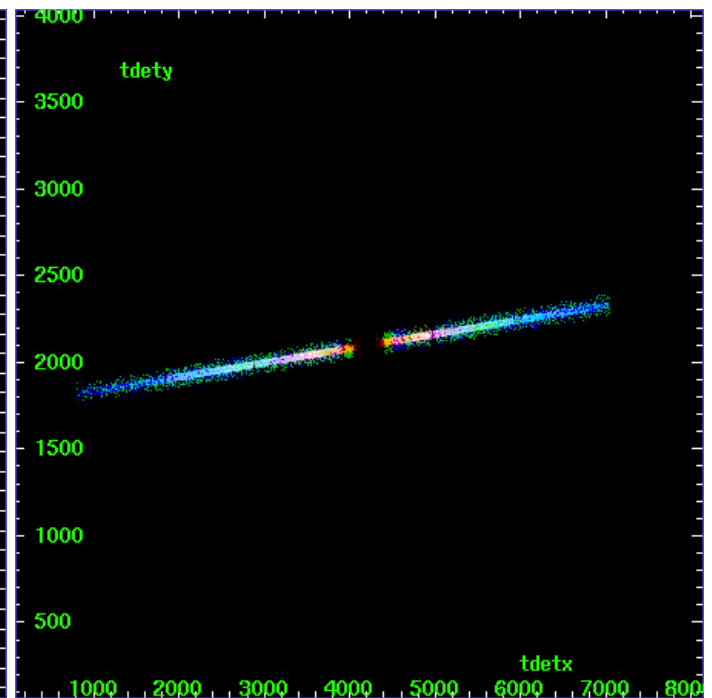
MEG Zero Order



MEG Order Sort ALL

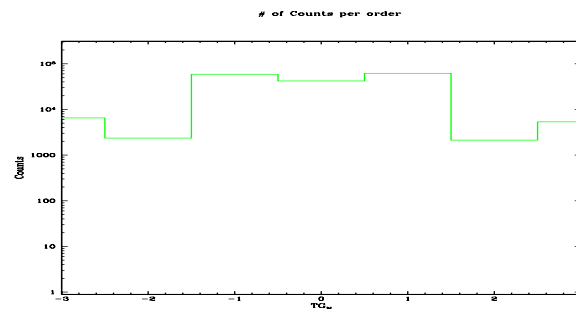


Spot Image MEG

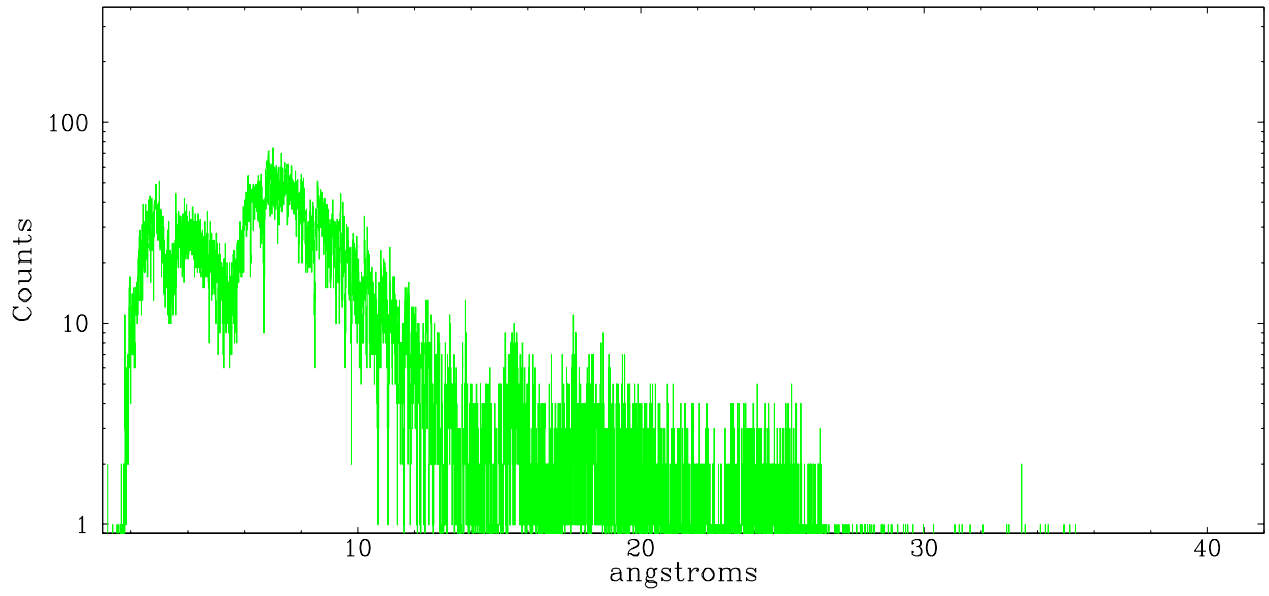


Full Detector MEG

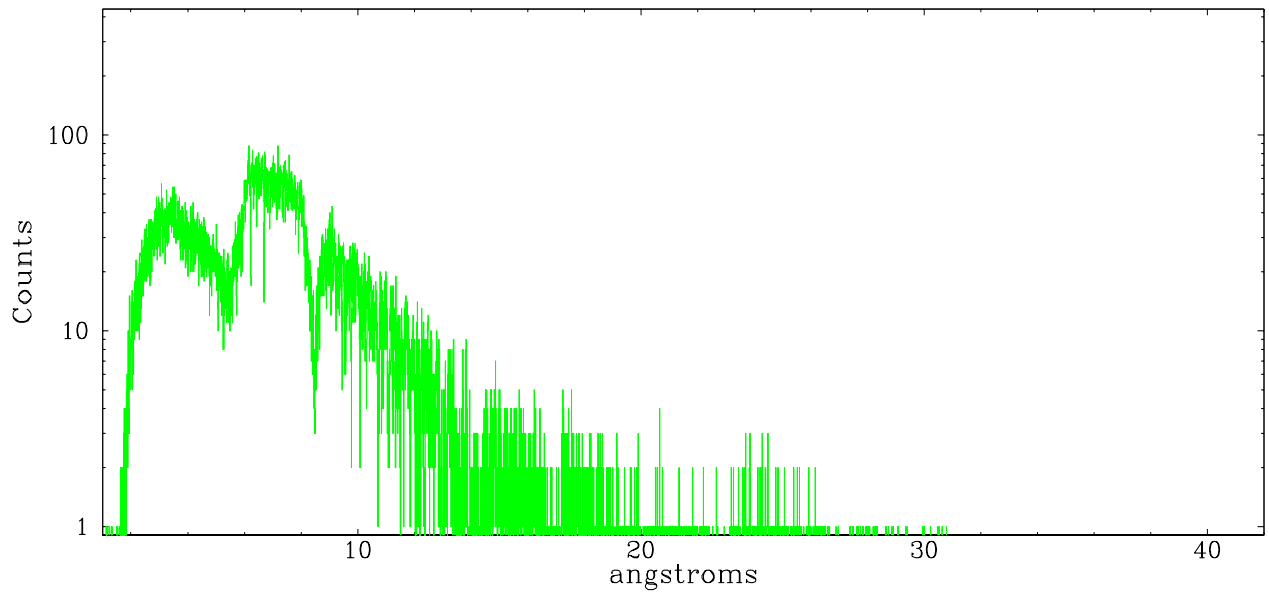
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	6505	2367	58699	41824	61881	2116	5351



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2007.03.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	168.3

A.2 Comments

Coordinated with FUSE, RXTE. ***

Standard software processing technique using the tool `tgdetect` did not give an accurate position for the zeroth order. Zeroth order position for this observation has been determined using the known angle between the readout streak and the meg spectral arm. The newly determined zeroth order coordinates of `x=4072.24; y=4165.47` (`ra=11:39:01.713`, `dec=-37:44:18.94`) have been placed in the `*src1a.fits` file, replacing the coordinates determined by `tgdetect`.