

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 2531 - L2 Version 001
Chandra X-Ray Center

L2 Processing Date : Sep 26 2006

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1 Front

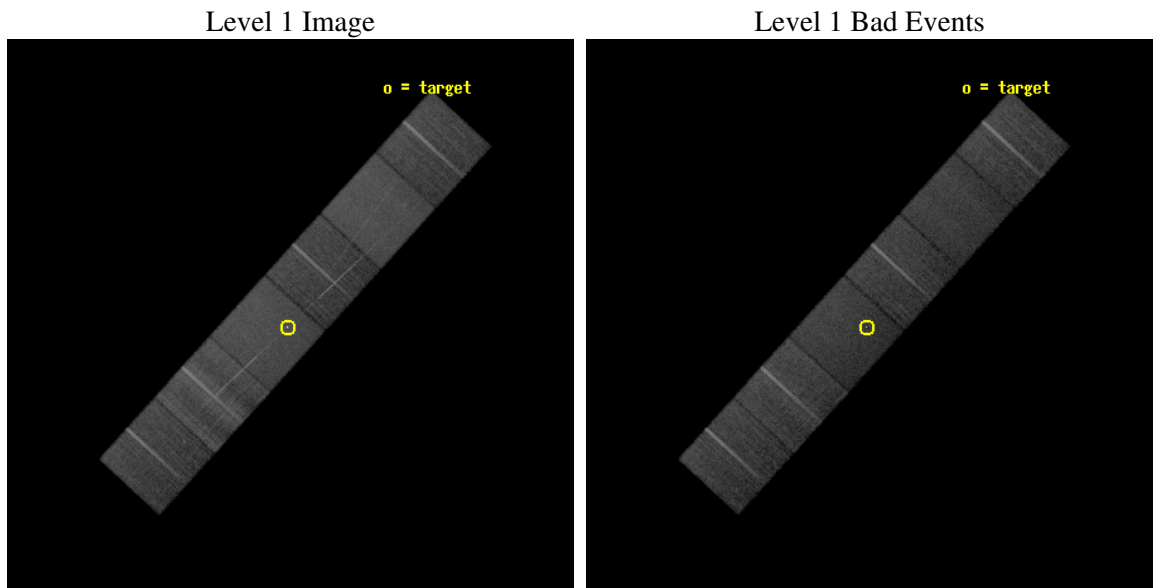
seq_num	200139
obs_id	2531
title	HETGS SPECTROSCOPY OF THE LONG-PERIOD ACTIVE BINARY, IM PEGASI.
observer	Dr. David Huenemoerder
object	IM PEG
dtcycle	0
cycle	P
ra_targ	343.259583
dec_targ	16.841194
ra_nom	343.25416551341
dec_nom	16.8493931406
roll_nom	132.37310851978
revision	2
ontime	24169.599909961
livetime	23863.549882715
ontime4	24169.599909961
ontime5	24169.599909961
ontime6	24169.599909961
ontime7	24169.599909961
ontime8	24163.117919594
ontime9	24166.358959615
l2events	273084



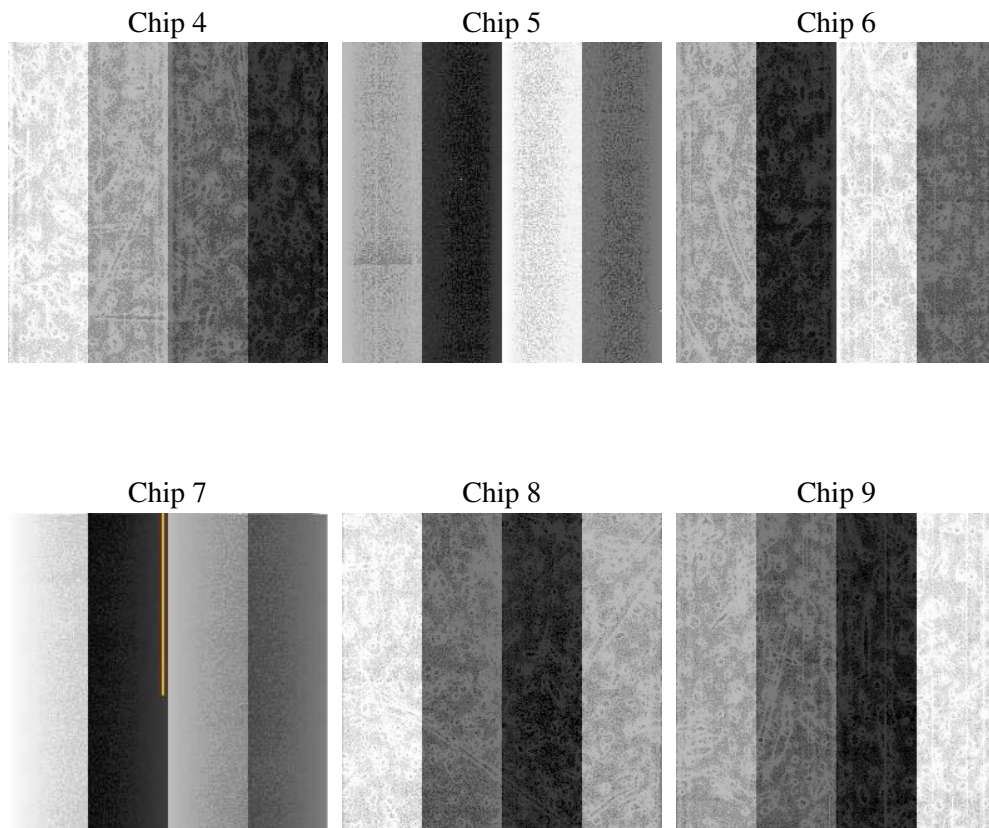
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.3
date	2006-09-26T14:12:44
revision	2

sched_exp_time	24000.000000
ontime	26096.568233132
ontime4	24796.931747556
ontime5	26099.809253216
ontime6	24894.162200302
ontime7	26096.568233132
ontime8	24881.198498428
ontime9	24868.234188944
l1events	1446749

2.1.4 Events

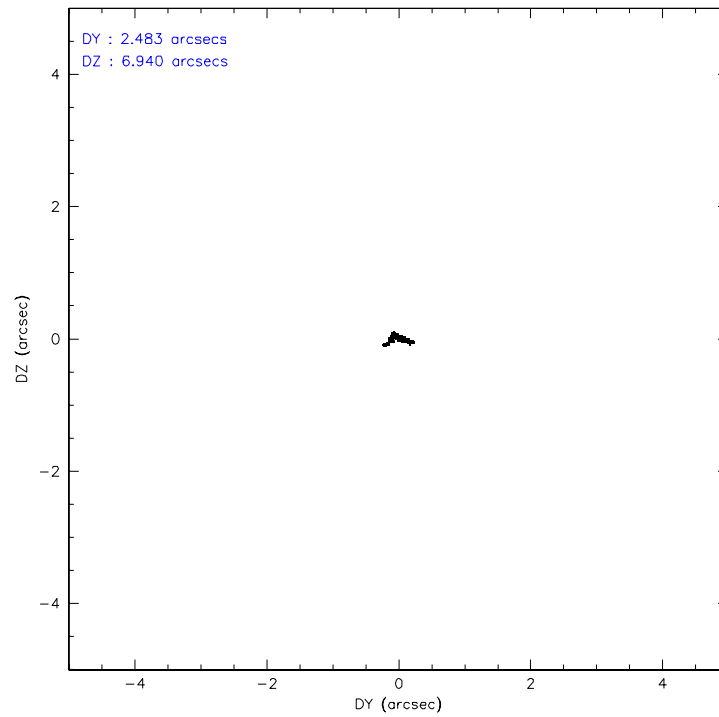
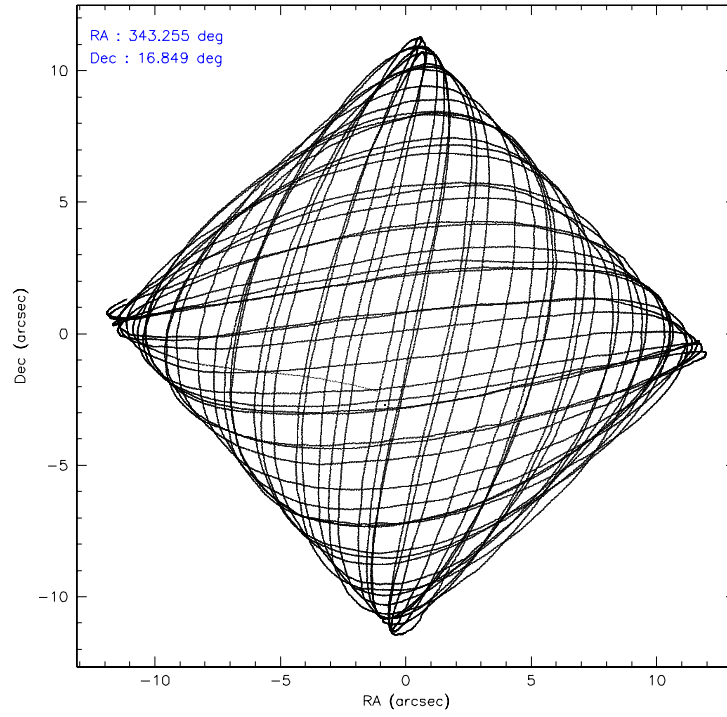
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	203148	295886	199294	295430	262206	190785
rejected events	179560	197977	172785	206253	193776	168469
rejected %	88%	66%	86%	69%	73%	88%

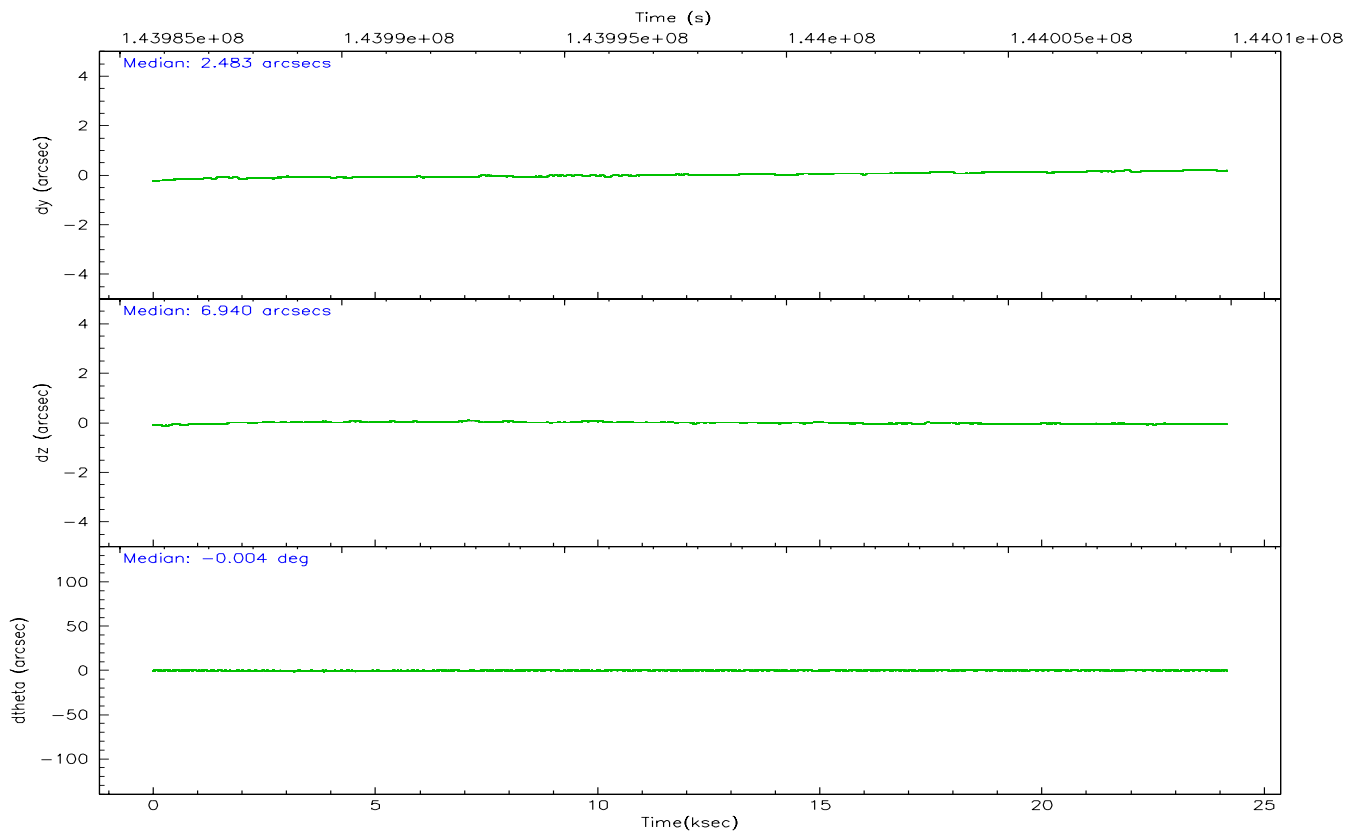
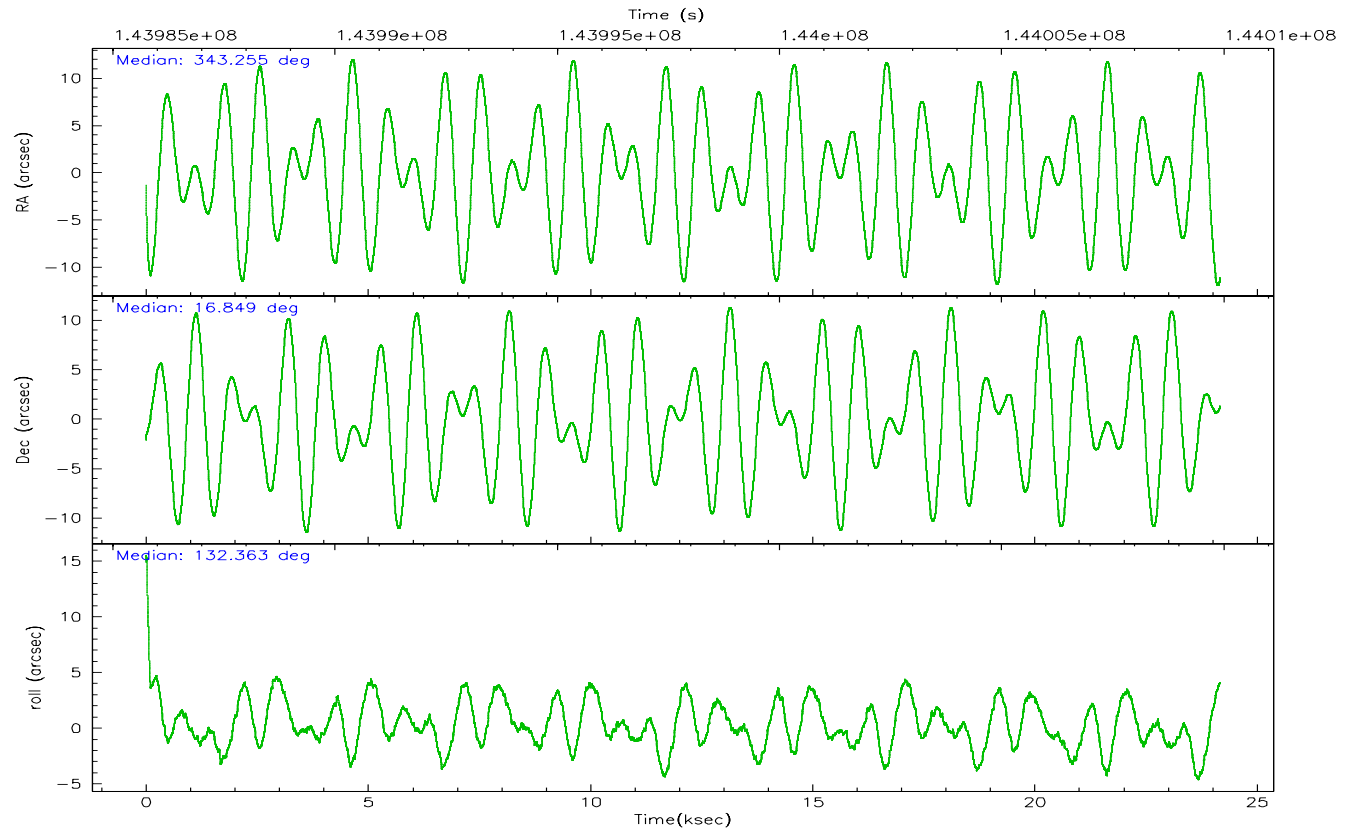
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	22550	11622	28114	19234	38059	23991
	11%	3%	14%	6%	14%	12%
grade 1 events	156	190	188	297	282	151
	0%	0%	0%	0%	0%	0%
grade 2 events	9880	60941	9878	43291	17858	9206
	4%	20%	4%	14%	6%	4%
grade 3 events	3283	4387	3799	10381	10100	3562
	1%	1%	1%	3%	3%	1%
grade 4 events	3138	4338	3690	10111	9355	3498
	1%	1%	1%	3%	3%	1%
grade 5 events	5948	12054	6967	15685	9234	7096
	2%	4%	3%	5%	3%	3%
grade 6 events	7129	78453	8622	75802	21192	8186
	3%	26%	4%	25%	8%	4%
grade 7 events	151064	123901	138036	120629	156126	135095
	74%	41%	69%	40%	59%	70%

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	343.281420	343.2541655134129	Subarray requested	NONE	NONE
Pointing Dec	16.841472	16.84939314059983	Alternating exposures requested	N	N
Pointing Roll	132.208578	132.373108519784	Primary exposure time	0.000000	3.2
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	143985912.184000	143983811.89582			
Observation start date	2002-07-25T12:04:08	2002-07-25T11:30:11			
Observation end time	144009912.184000	144010951.84693			
Observation end date	2002-07-25T18:44:08	2002-07-25T19:02:31			
Read mode	TIMED	TIMED			

2.3 Aspect



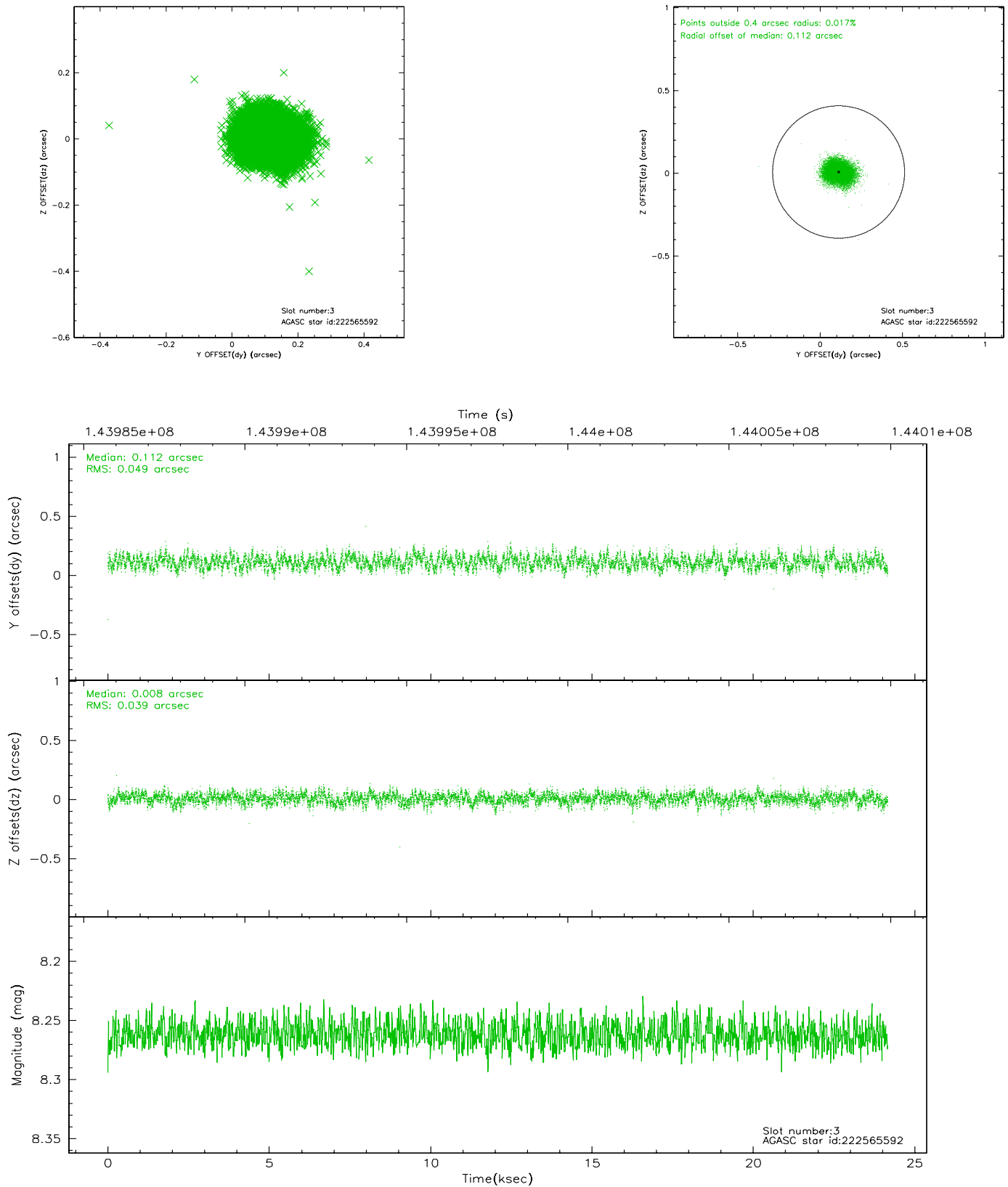


Slot Statistics

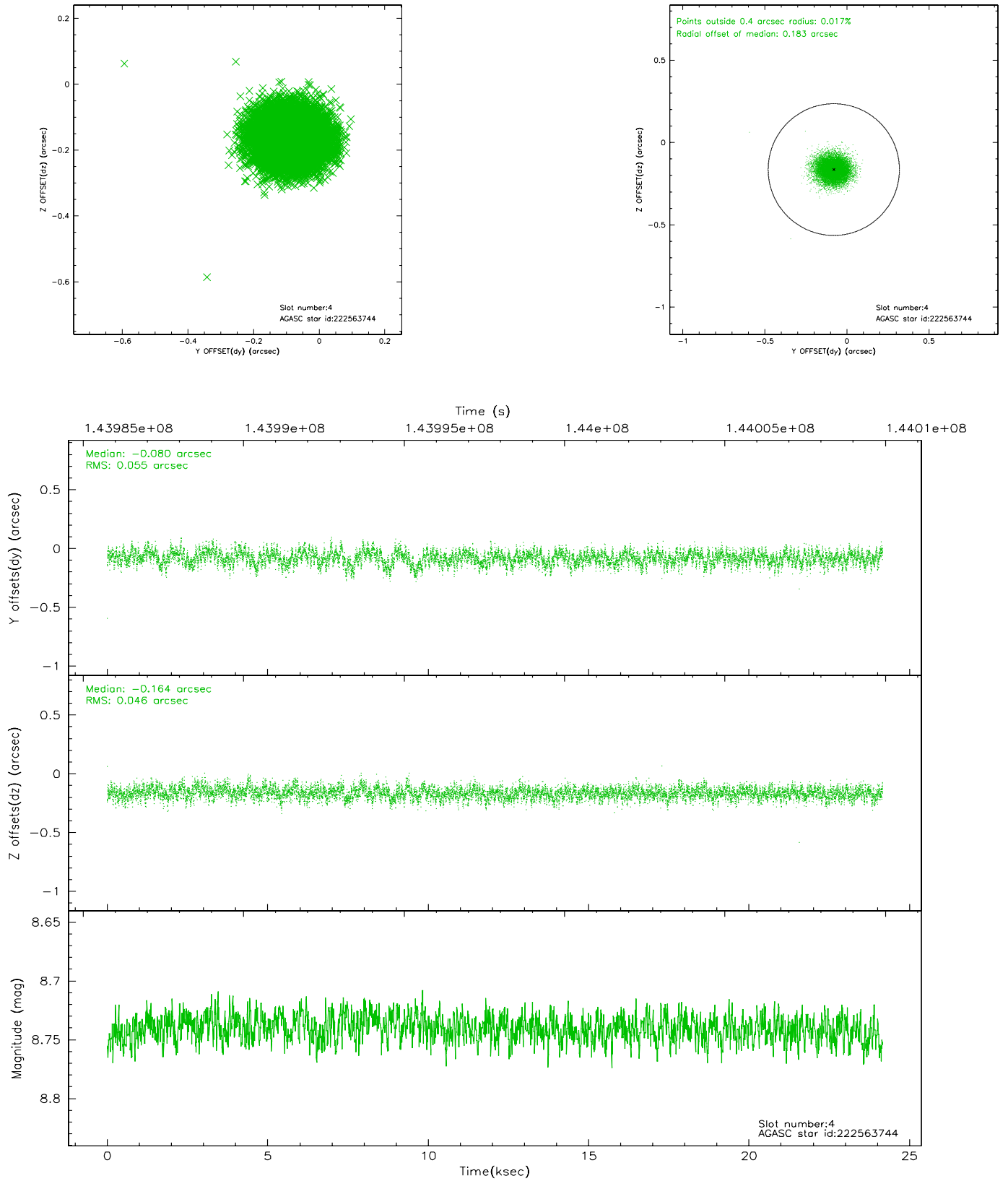
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	5896	-0.033	-0.023	0.009	0.016	0.000000	0.000000	-754.94	-1790.27
1	FID	ACIS-S-4	7.20	5897	-0.041	0.022	0.008	0.028	0.000000	0.000000	2158.26	118.14
2	FID	ACIS-S-5	7.24	5897	0.041	0.009	0.009	0.018	0.000000	0.000000	-1807.56	111.91
3	GUIDE	222565592	8.26	11791	0.112	0.008	0.067	0.105	343.291662	16.508291	-911.00	780.26
4	GUIDE	222563744	8.74	11789	-0.080	-0.164	0.076	0.124	342.392259	16.776439	1891.38	2423.77
5	GUIDE	222563736	8.83	11790	0.093	-0.133	0.078	0.122	343.076284	16.308502	-943.75	1813.99
6	GUIDE	223089808	9.10	11787	-0.169	0.291	0.097	0.154	343.220223	17.508272	1920.19	-1456.13
7	GUIDE	222571232	9.55	11782	0.046	0.004	0.115	0.182	343.021766	16.540282	-199.48	1392.21

2.4 Star Slots

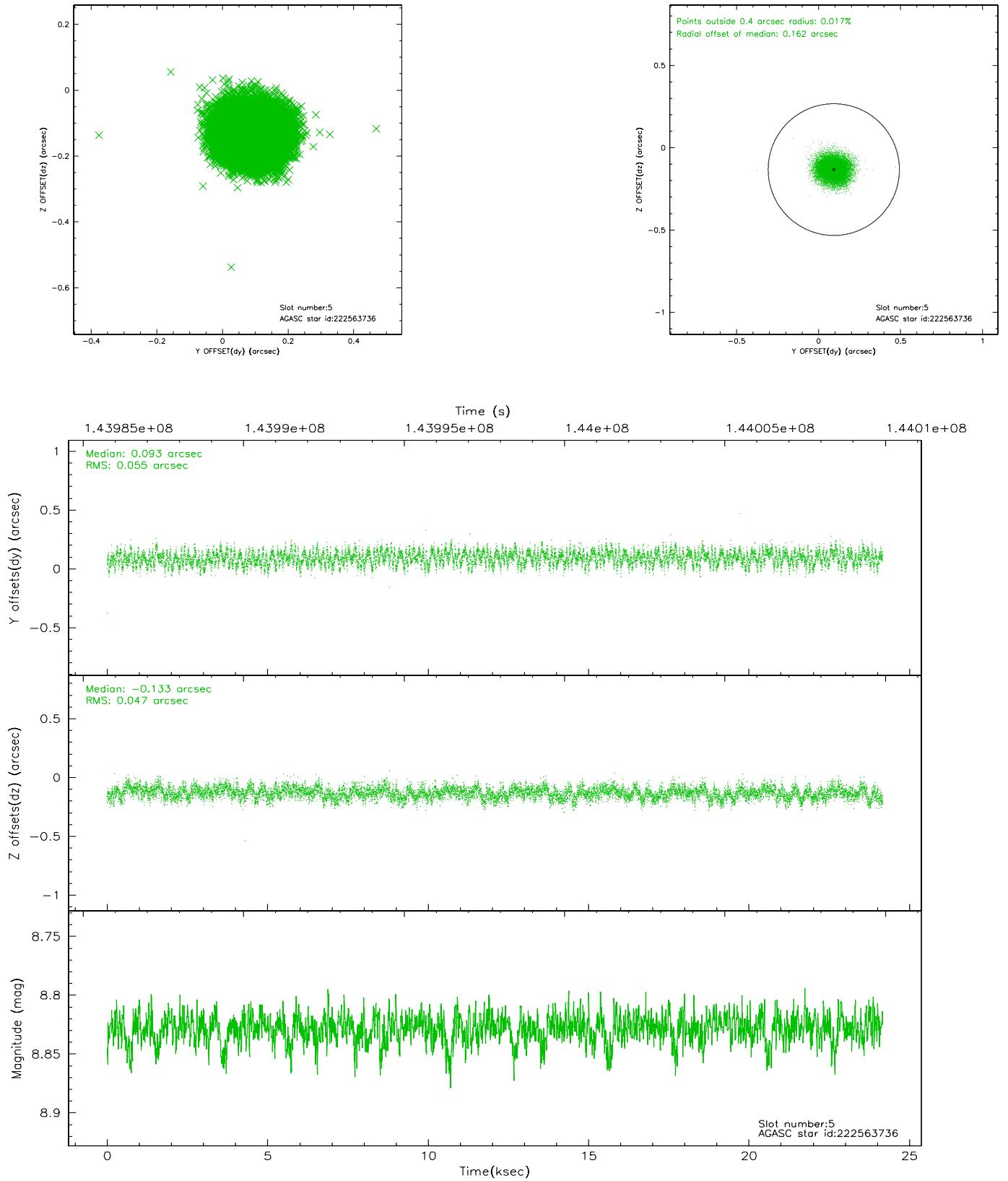
2.4.1 Slot 3



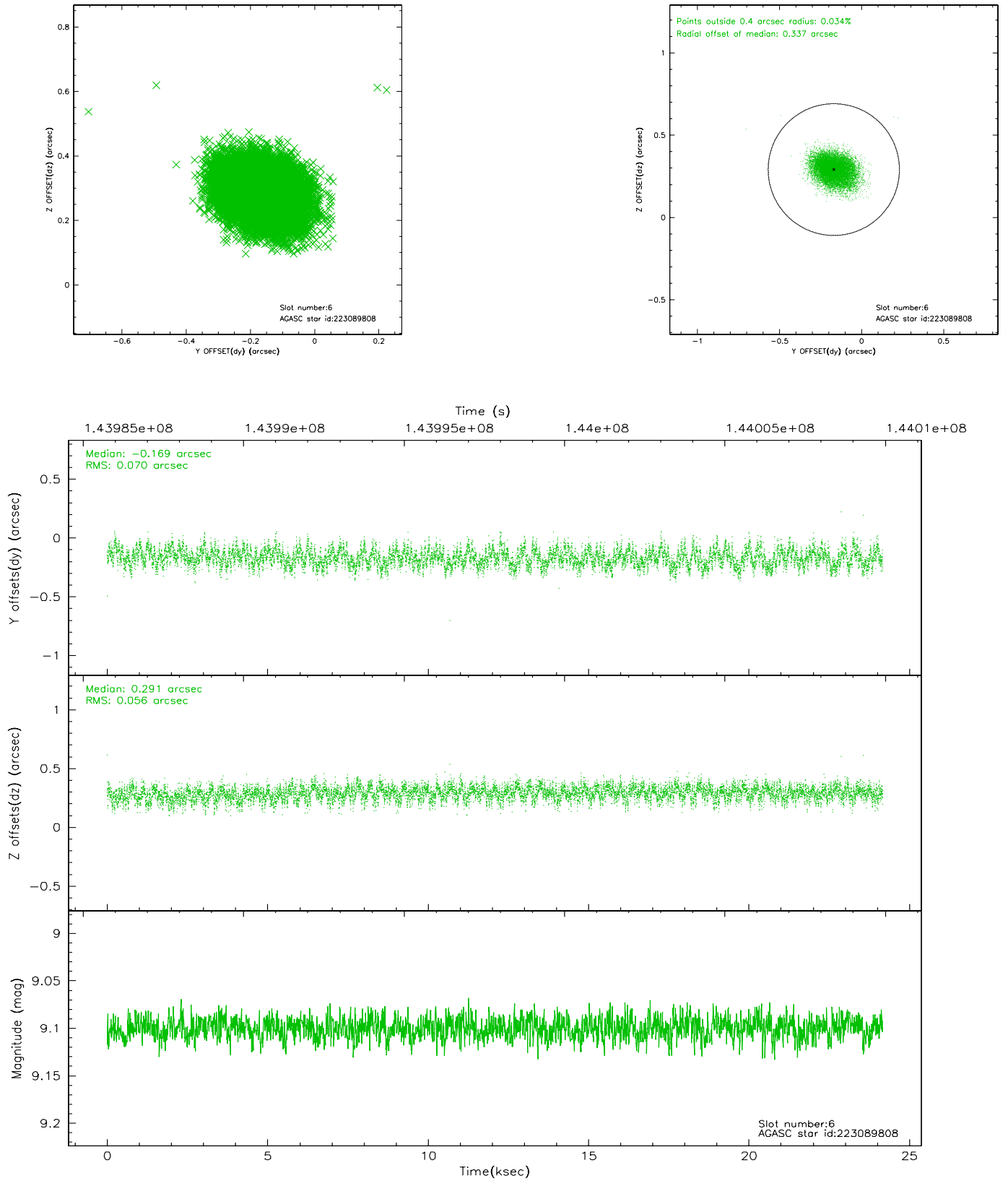
2.4.2 Slot 4



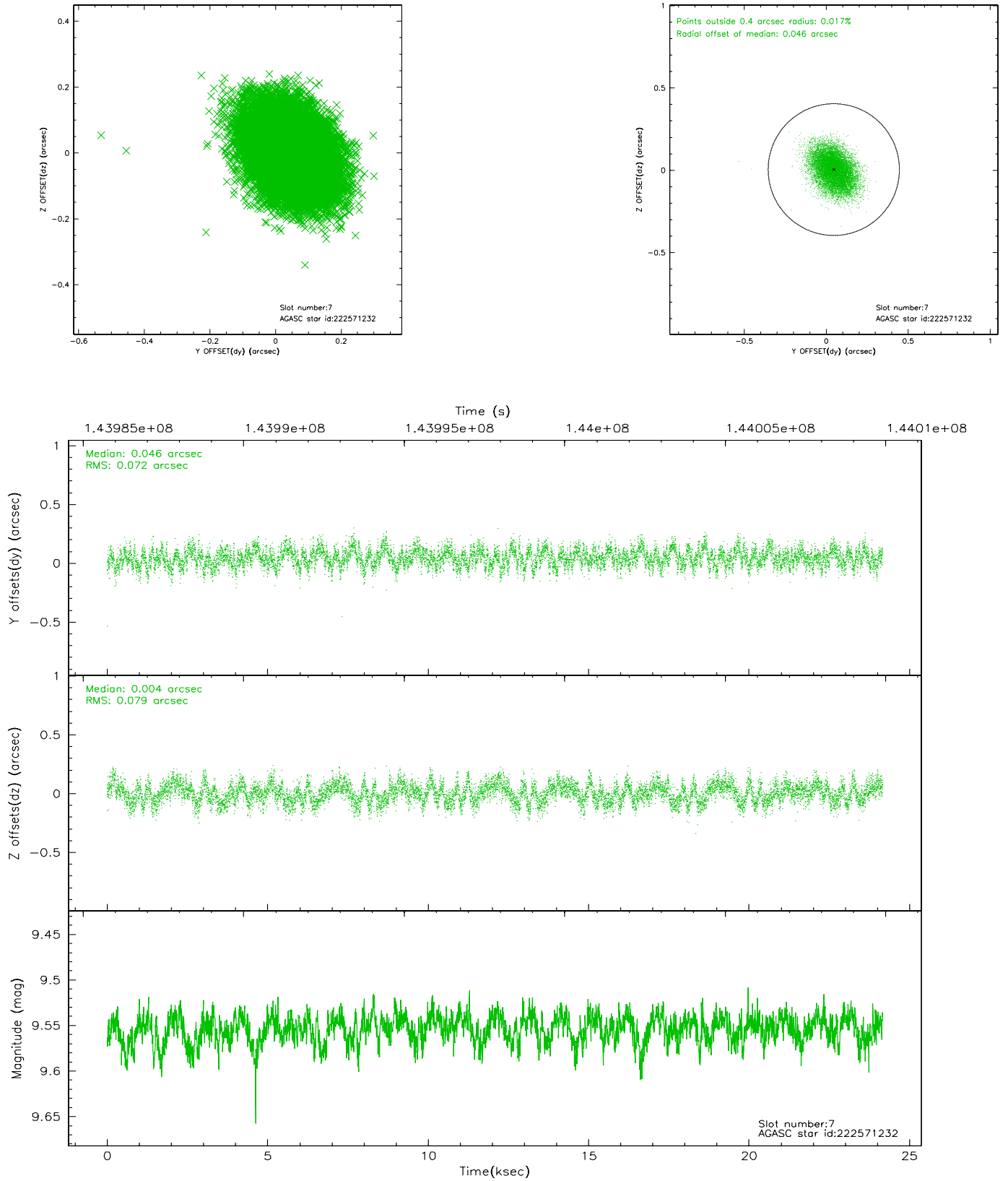
2.4.3 Slot 5



2.4.4 Slot 6

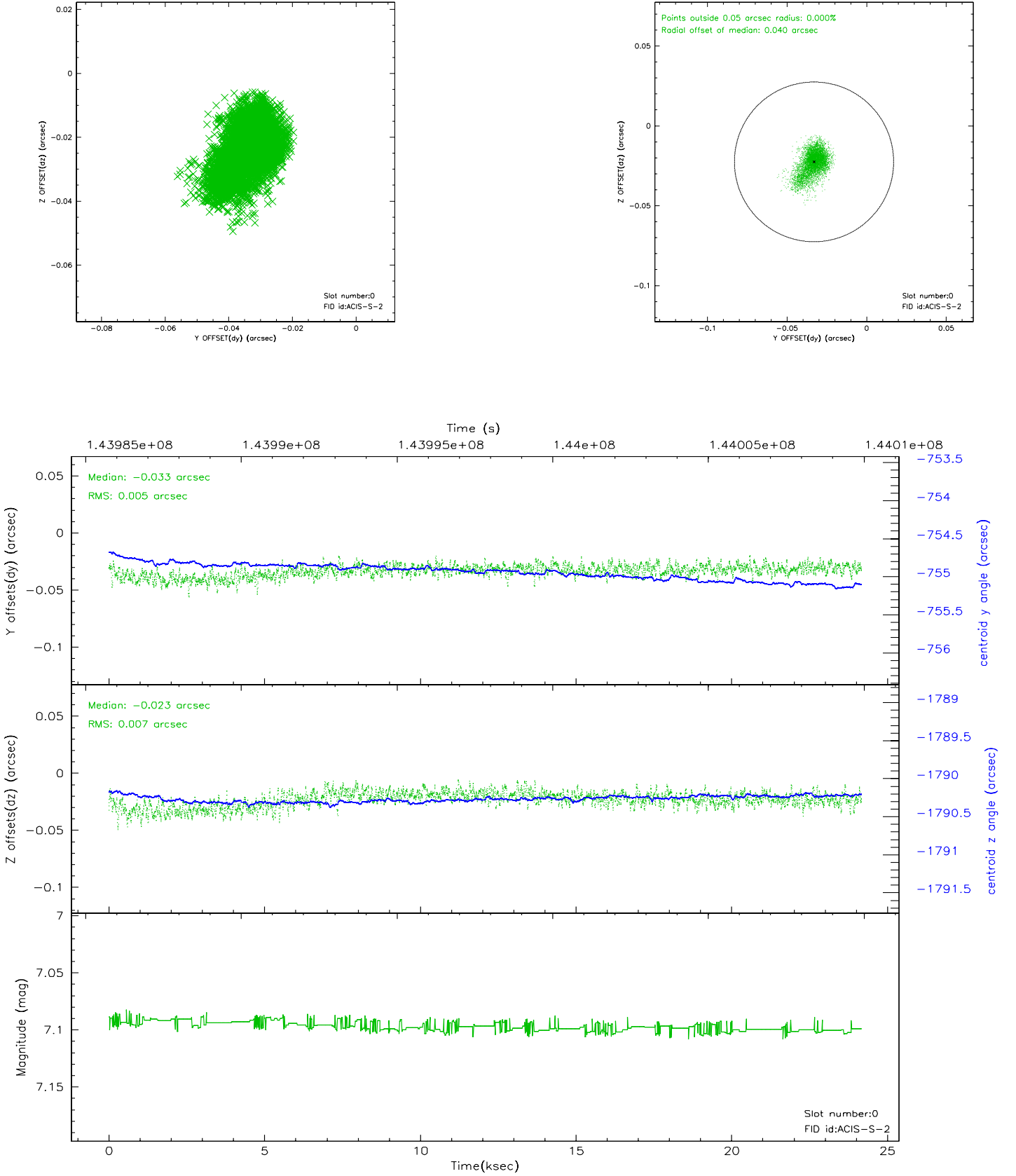


2.4.5 Slot 7

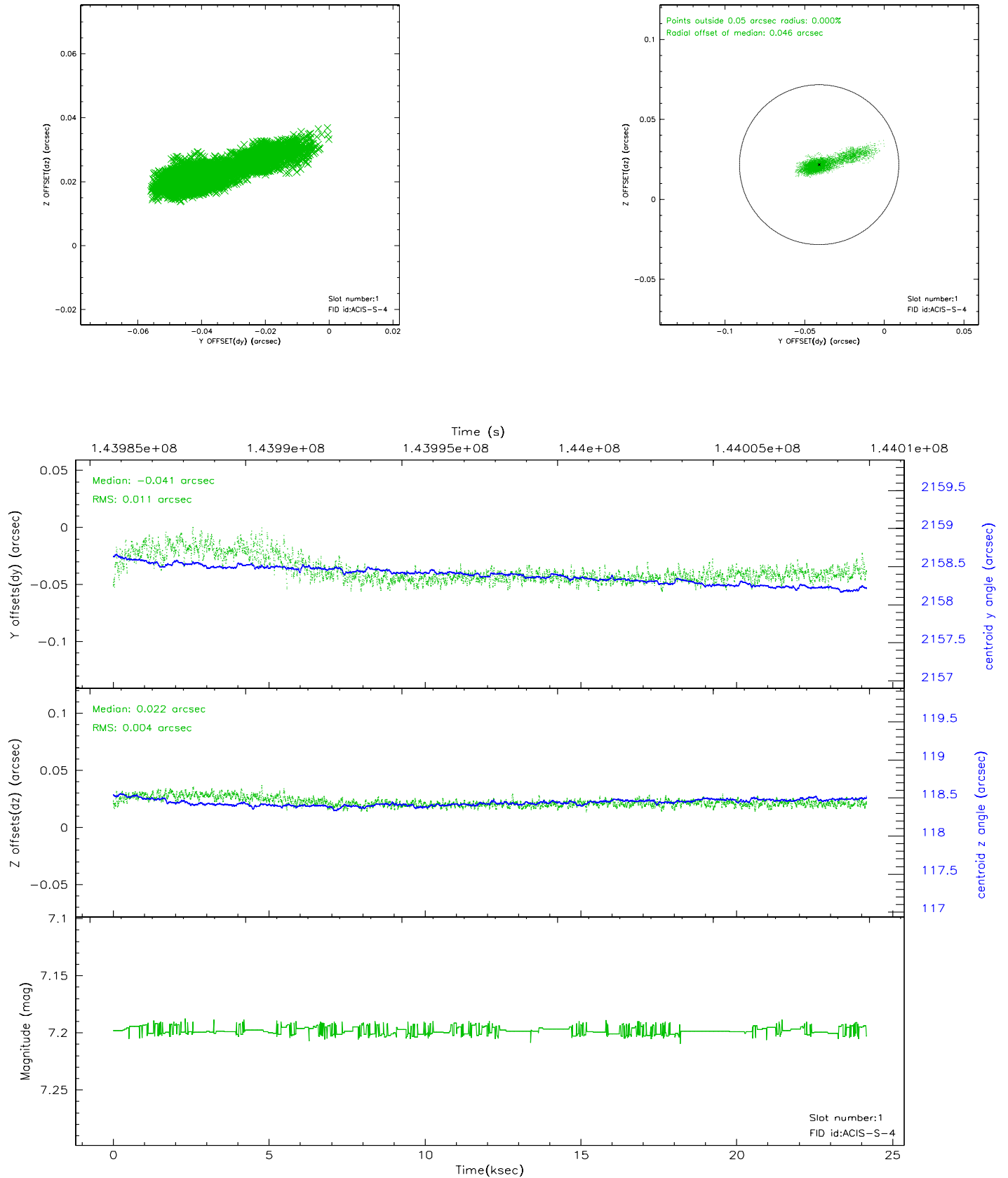


2.5 FID Slots

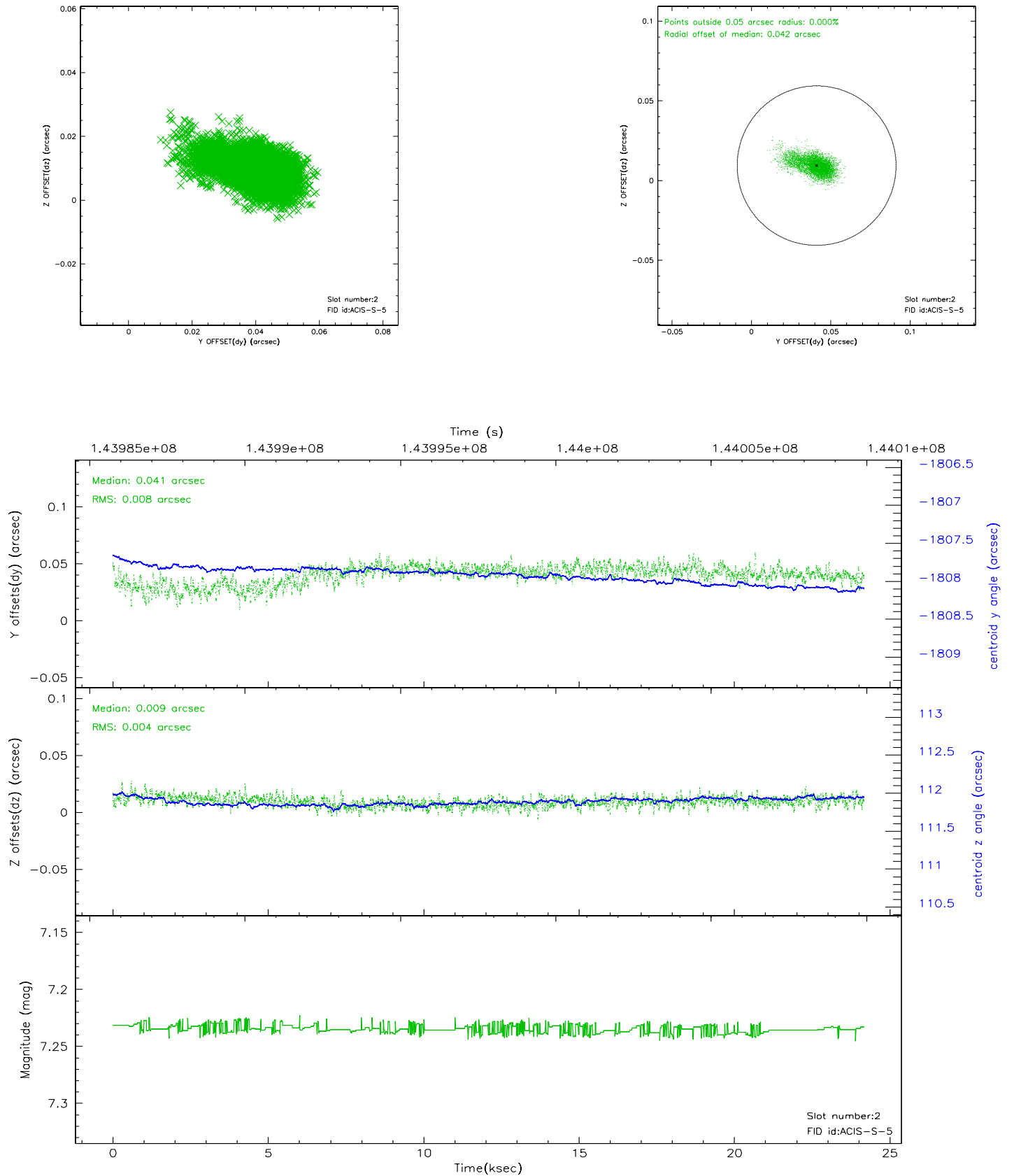
2.5.1 Slot 0



2.5.2 Slot 1

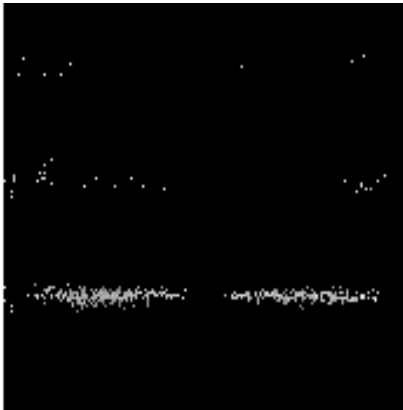


2.5.3 Slot 2



3 Gratings

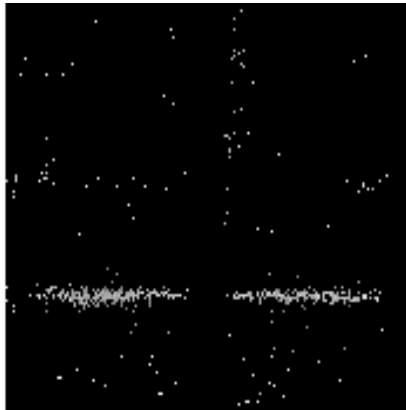
3.1 HEG Arm



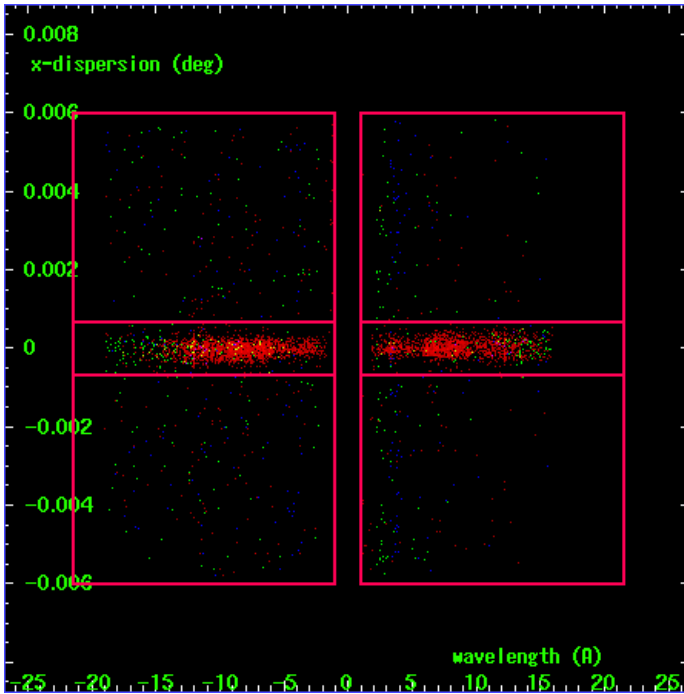
HEG Order Sort 123



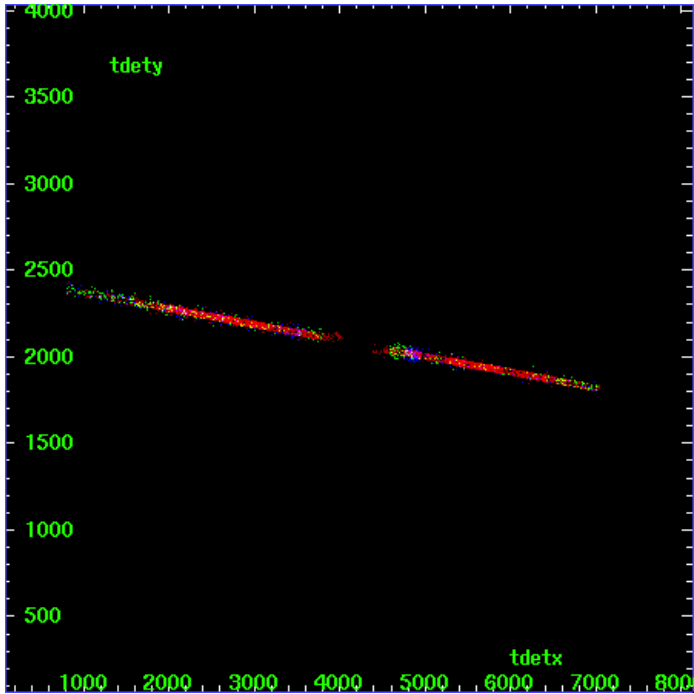
HEG Zero Order



HEG Order Sort ALL

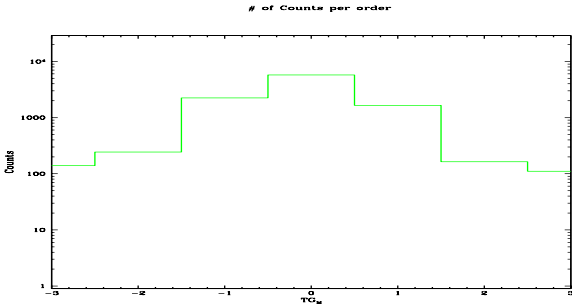


Spot Image HEG

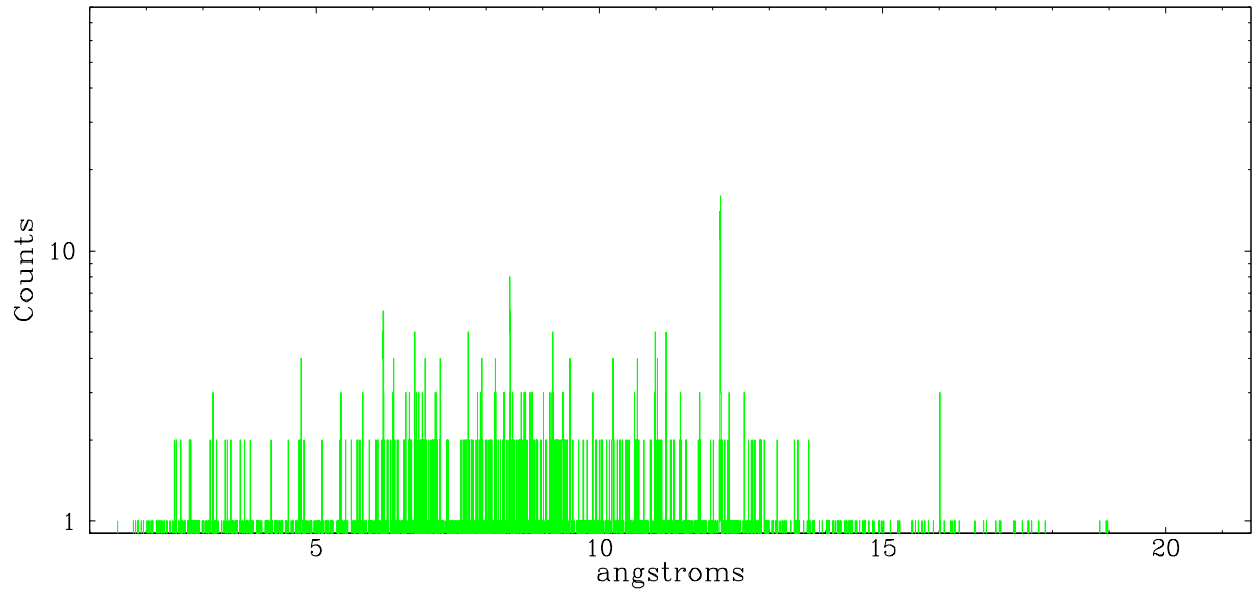


Full Detector HEG

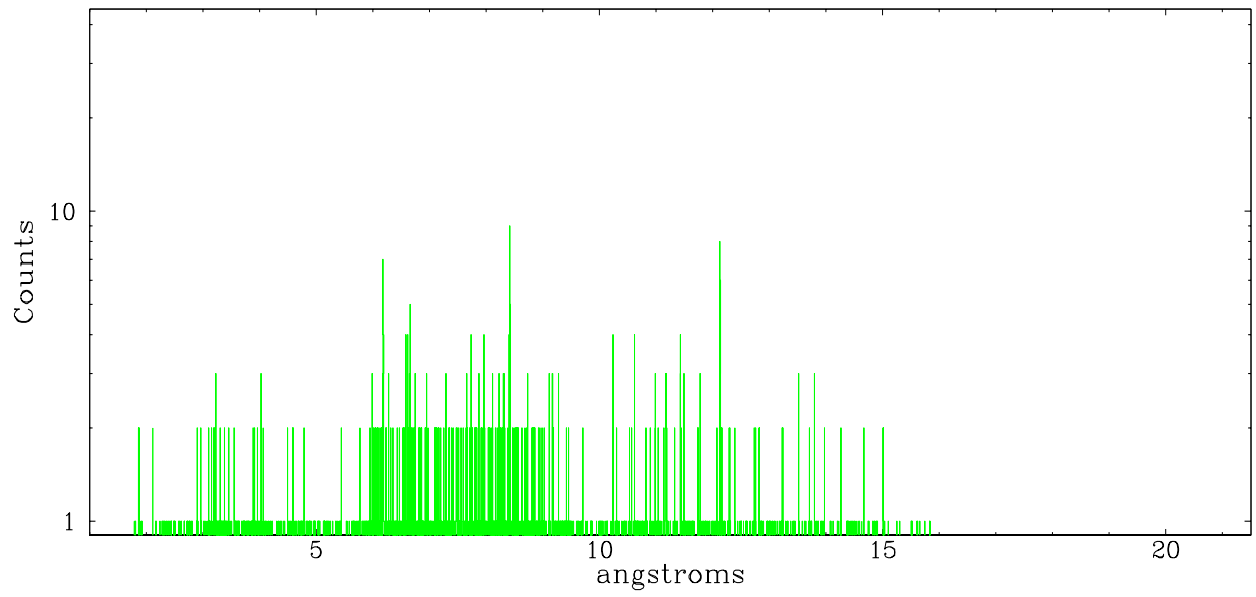
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	139	244	2235	5764	1649	164	111



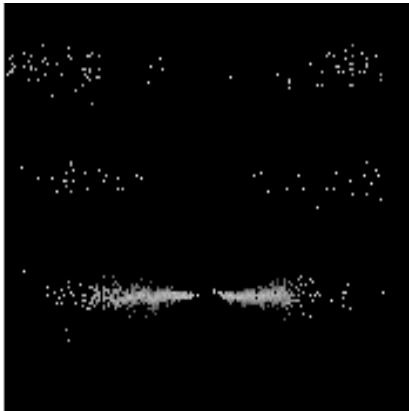
heg order -1



heg order +1



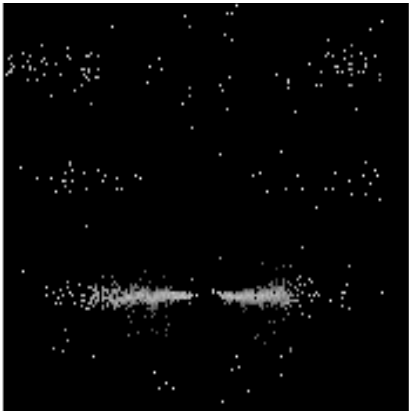
3.2 MEG Arm



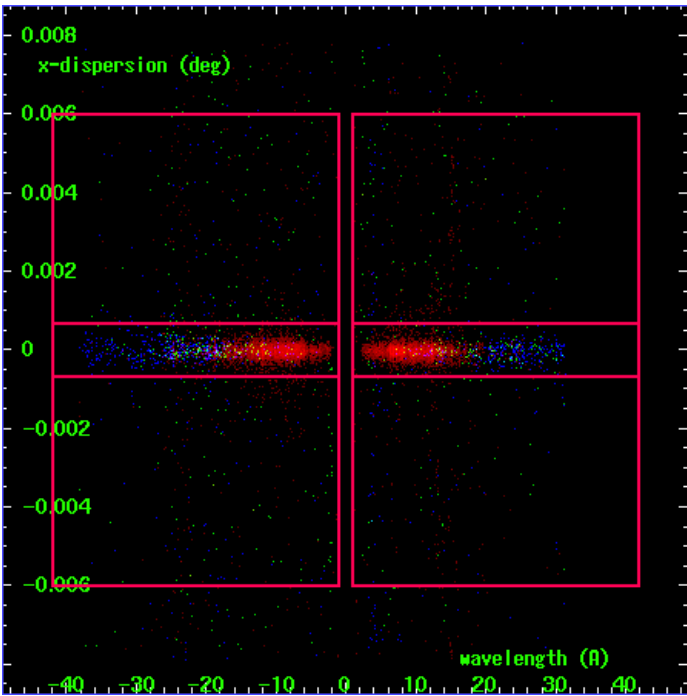
MEG Order Sort 123



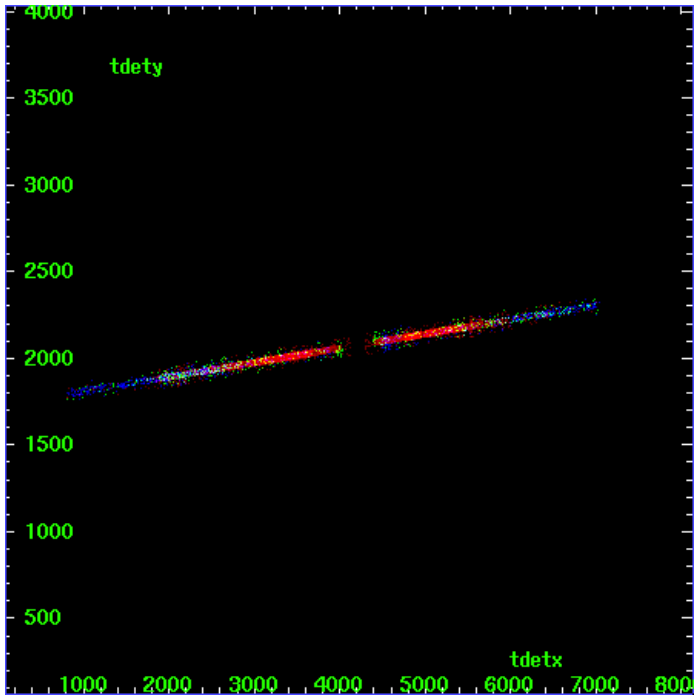
MEG Zero Order



MEG Order Sort ALL

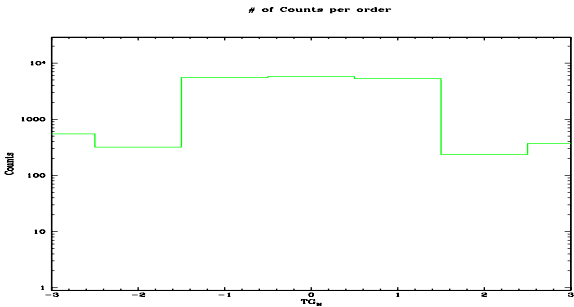


Spot Image MEG

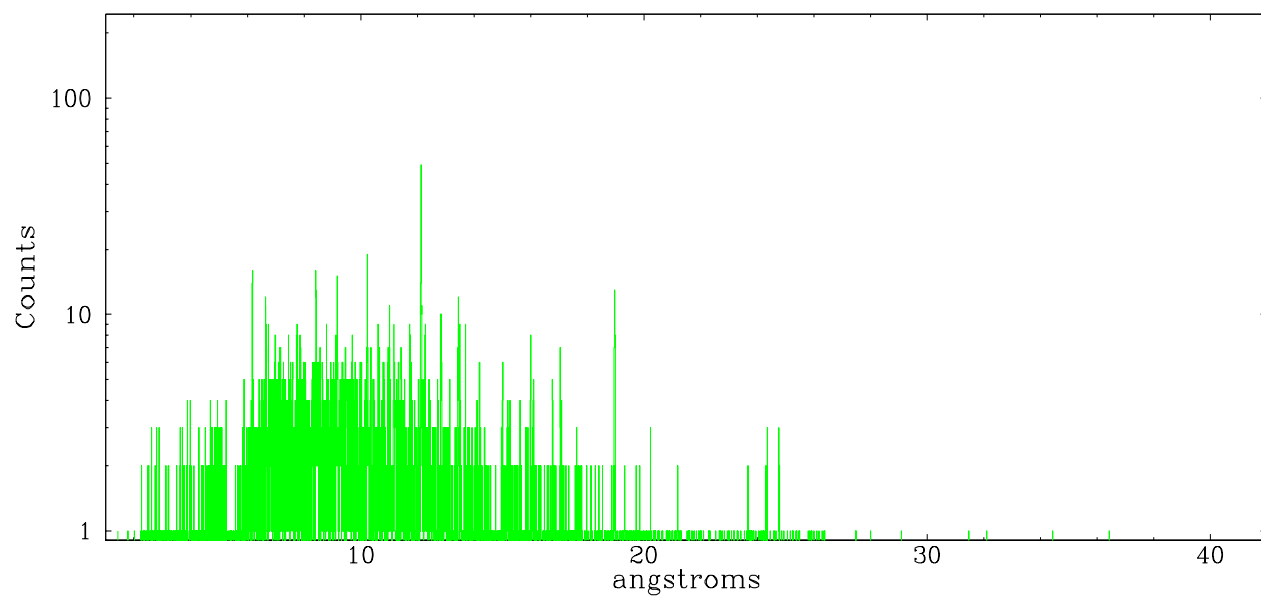


Full Detector MEG

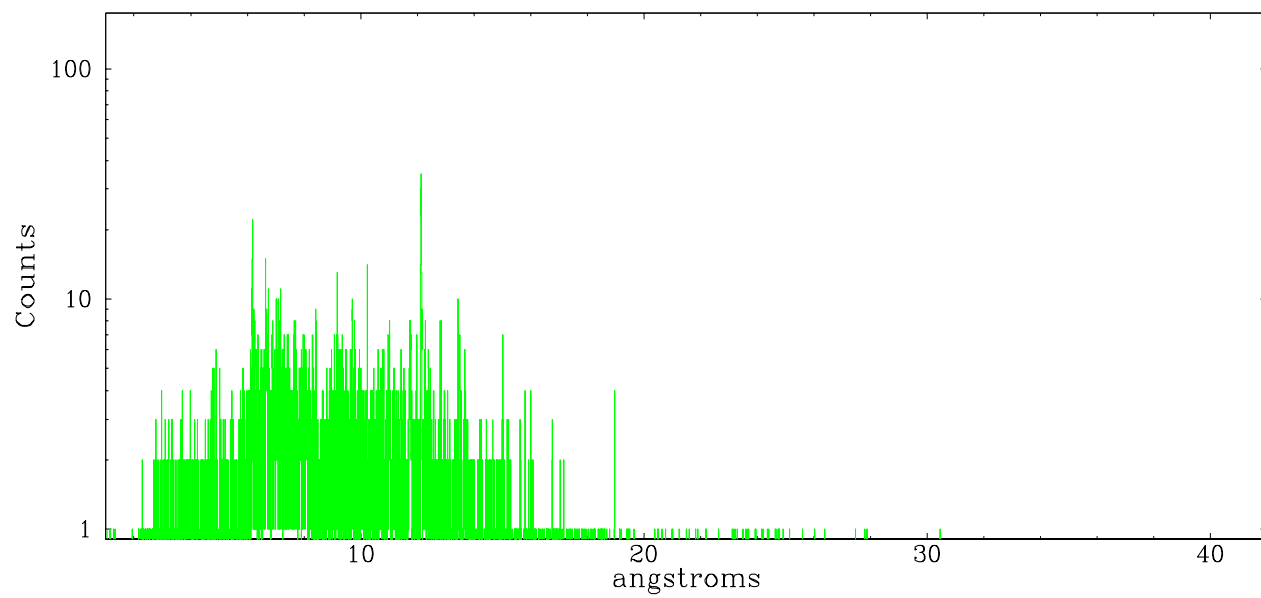
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	550	319	5530	5764	5289	237	372



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.09.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.169

A.2 Comments