

V&V Reference Report

L2 ASCDS Version : 7.6.8.1

Observation 4430 - L2 Version 001
Chandra X-Ray Center

L2 Processing Date : Aug 10 2006

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1 Front

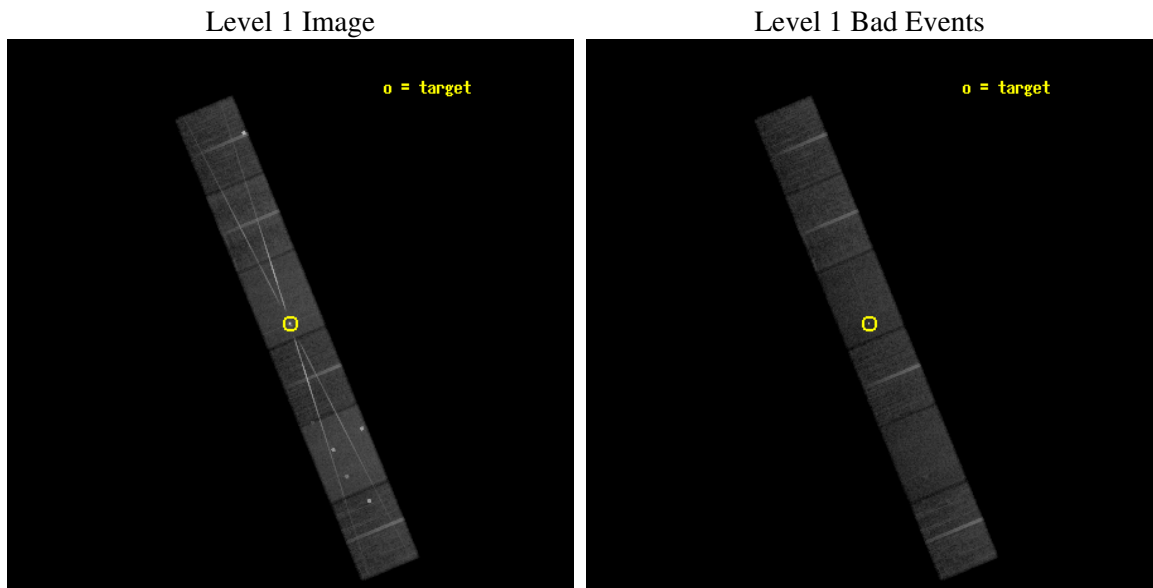
seq_num	790087
obs_id	4430
title	AO4 CALIBRATION OBSERVATIONS OF 3C273
observer	Dr. CXC Calibration
object	3C273
dtcycle	0
cycle	P
ra_targ	187.277917
dec_targ	2.052389
ra_nom	187.27694593126
dec_nom	2.0544047630348
roll_nom	247.63646602617
revision	2
ontime	27600.0
livetime	27154.236060825
ontime4	27600.0
ontime5	27600.0
ontime6	27600.0
ontime7	27600.0
ontime8	27600.0
ontime9	27600.0
l2events	309499



2 OBI

2.1 OBI

2.1.1 Images

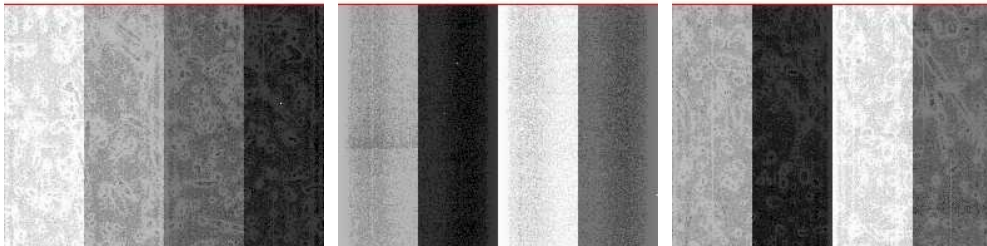


2.1.2 Bias

Chip 4

Chip 5

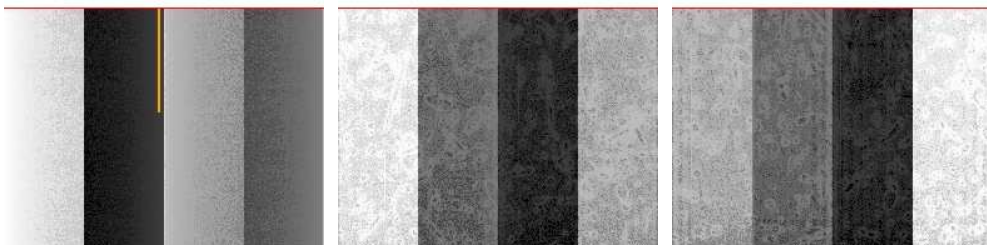
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.8.1
caldbver	3.2.2
date	2006-08-10T13:27:22
revision	2

sched_exp_time	27459.000000
ontime	28205.20321101
ontime4	28118.807851017
ontime5	28205.20321101
ontime6	28126.430971026
ontime7	28205.20321101
ontime8	28136.59513101
ontime9	28131.513051003
l1events	1082382

2.1.4 Events

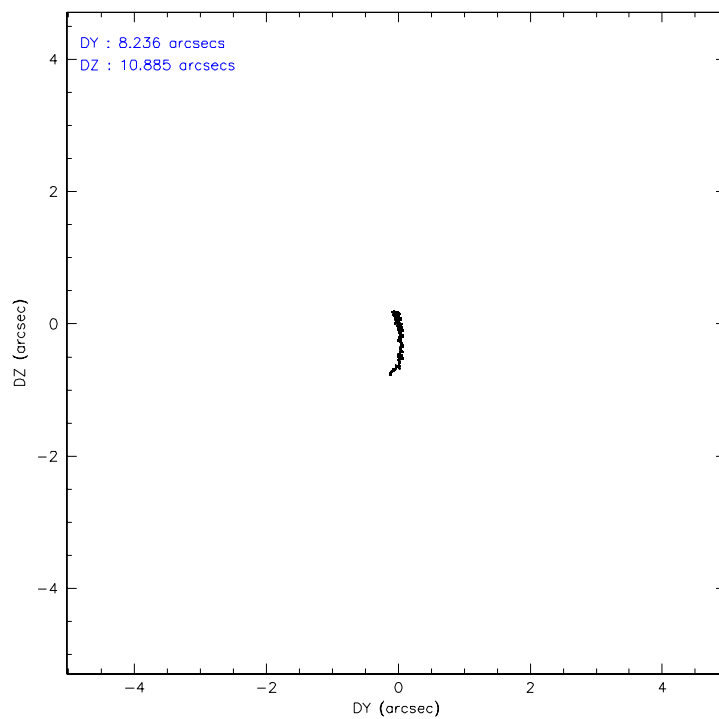
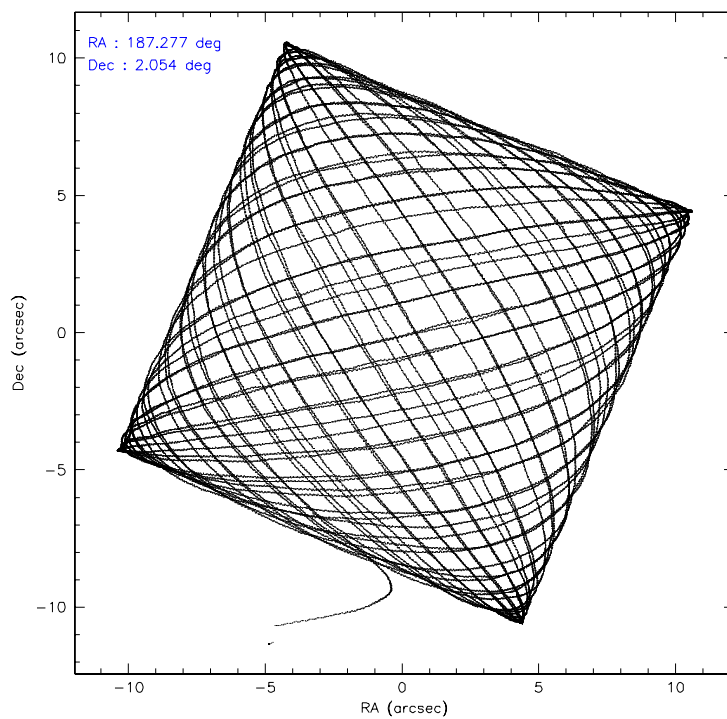
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	151948	213286	169245	221214	183224	143465
rejected events	127313	108669	115585	114870	130423	113298
rejected %	83%	50%	68%	51%	71%	78%

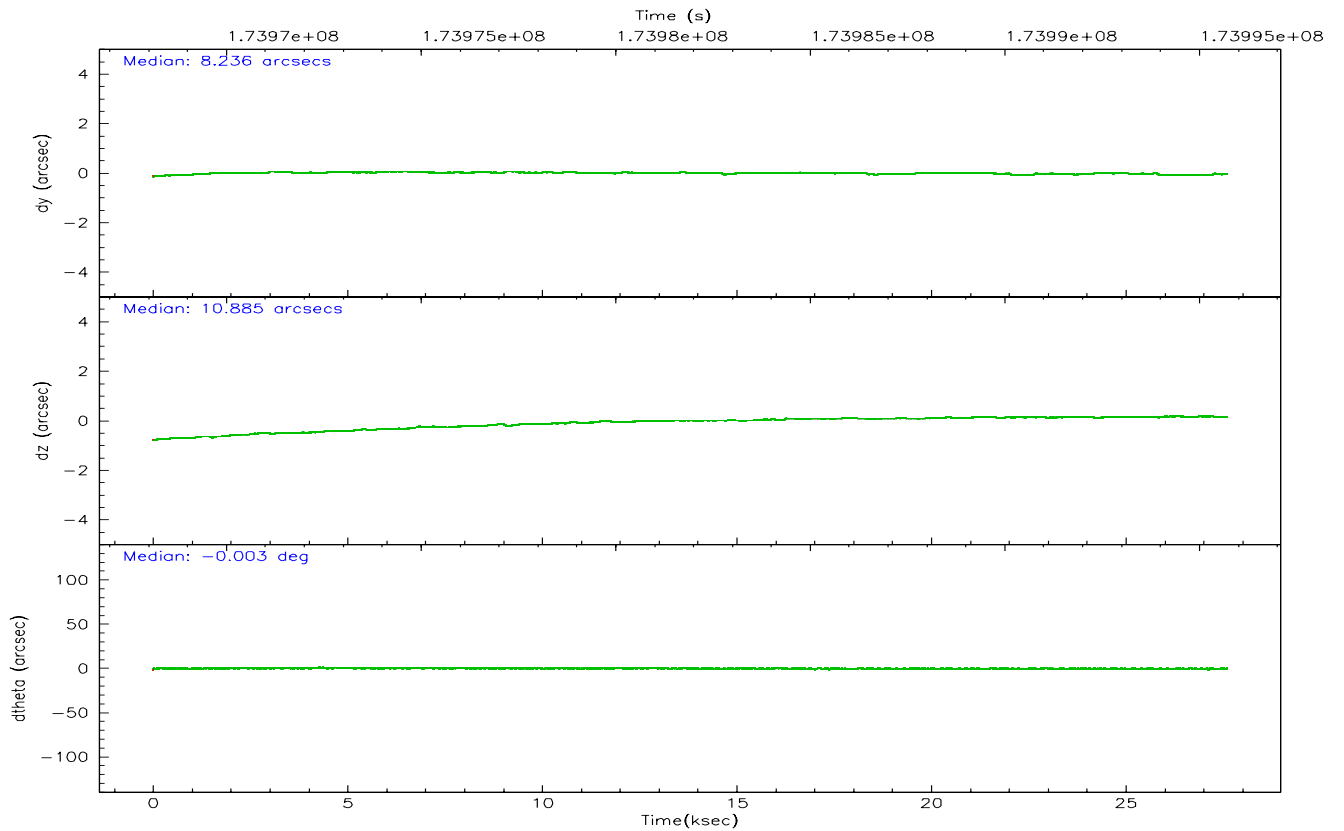
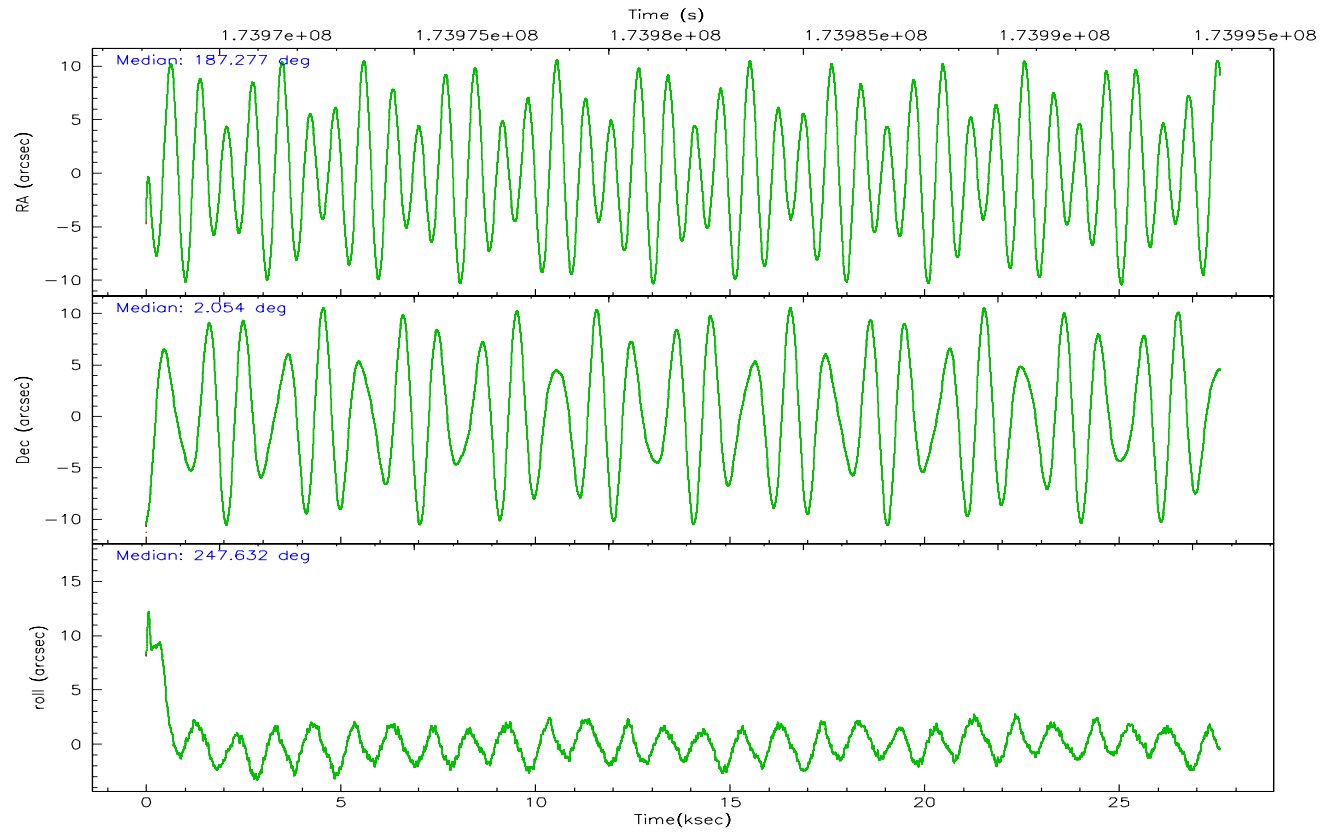
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	15357	21288	36456	12585	26978	20527
	10%	9%	21%	5%	14%	14%
grade 1 events	130	337	196	295	146	113
	0%	0%	0%	0%	0%	0%
grade 2 events	3709	29618	7486	27145	9004	3485
	2%	13%	4%	12%	4%	2%
grade 3 events	1780	3469	2952	7862	4185	1859
	1%	1%	1%	3%	2%	1%
grade 4 events	1687	3186	2939	7921	4005	1844
	1%	1%	1%	3%	2%	1%
grade 5 events	5330	9626	5914	13157	7484	6023
	3%	4%	3%	5%	4%	4%
grade 6 events	2533	49331	4270	52607	9377	3041
	1%	23%	2%	23%	5%	2%
grade 7 events	121422	96431	109032	99642	122045	106573
	79%	45%	64%	45%	66%	74%

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	CUSTOM	CUSTOM
Pointing RA	187.272955	187.2769459312606	Subarray start row	1	1
Pointing Dec	2.081329	2.054404763034804	Subarray row count	774	774
Pointing Roll	247.479989	247.6364660261713	Alternating exposures requested	N	N
Window start time	170812864.184000	170812864.184000	Primary exposure time	0.000000	2.5
Window stop time	175910464.184000	175910464.184000			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-187.132523	-187.1254020033014			
SIM translation stage offset (mm)	-3	-3.007120579706367			
Observation start time	173968253.184000	173967002.45081			
Observation start date	2003-07-07T12:29:49	2003-07-07T12:10:02			
Observation end time	173995712.184000	173996176.00205			
Observation end date	2003-07-07T20:07:28	2003-07-07T20:16:16			
Read mode	TIMED	TIMED			

2.3 Aspect



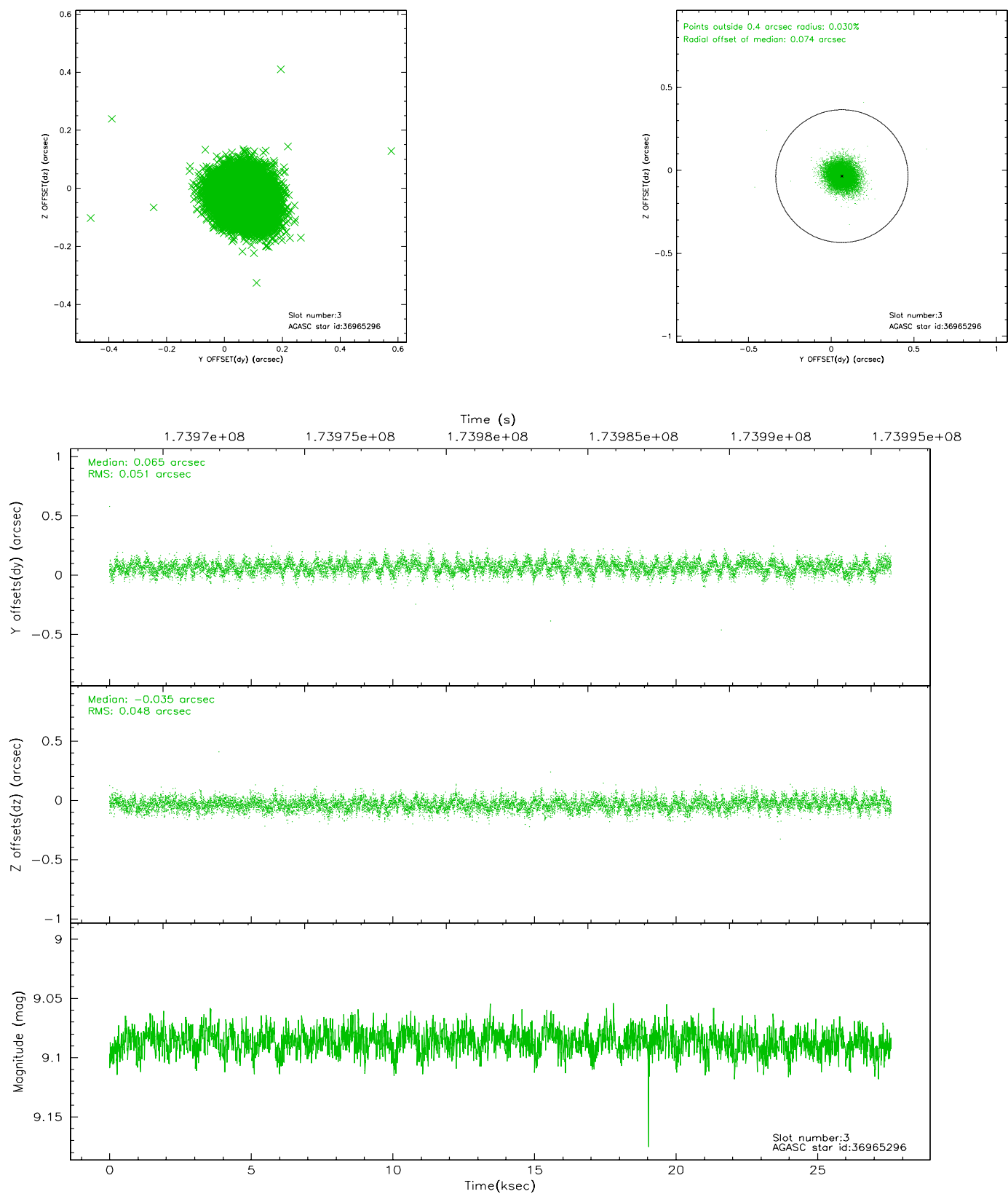


Slot Statistics

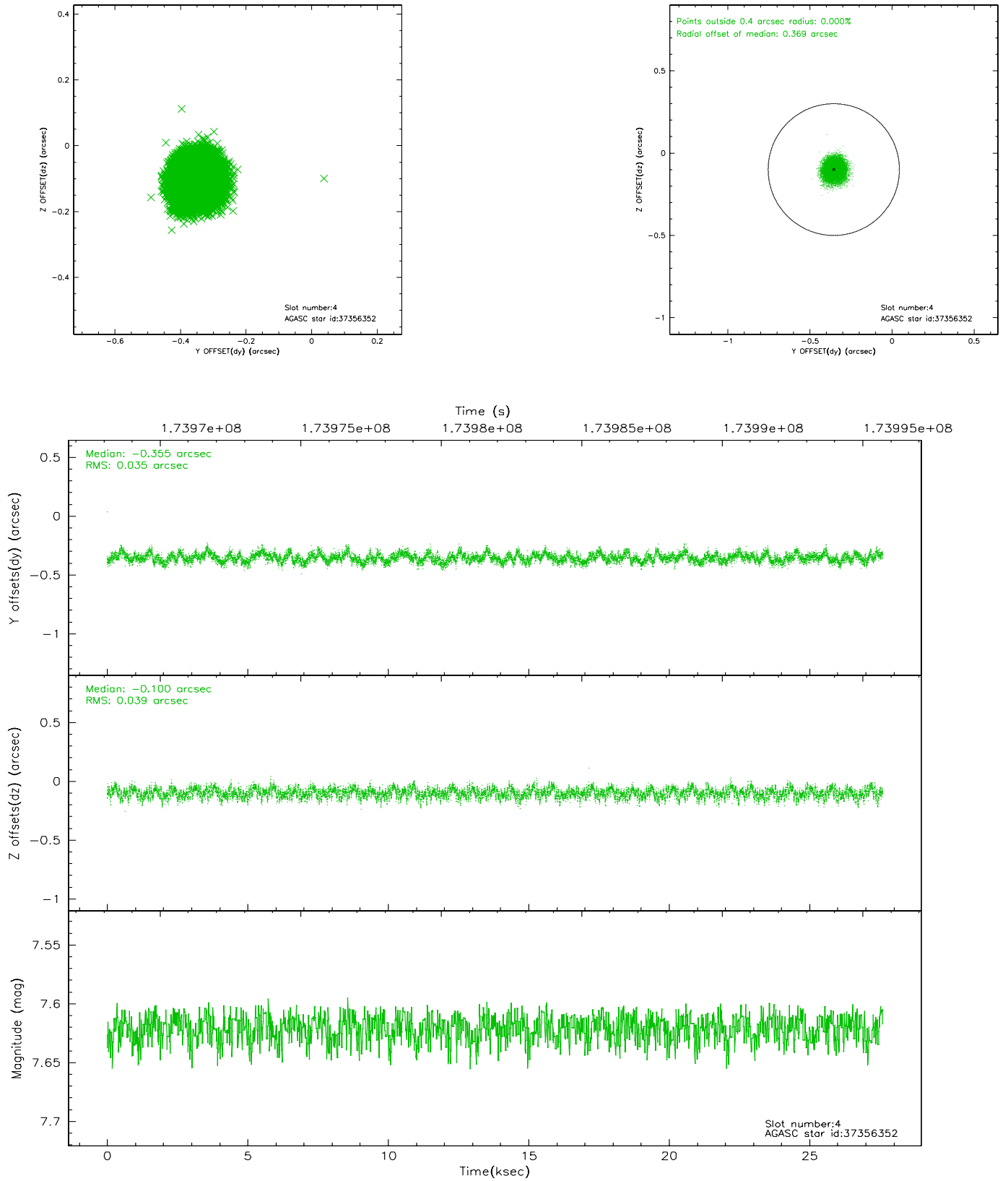
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	6734	-0.014	-0.046	0.007	0.013	0.000000	0.000000	-760.84	-1794.18
1	FID	ACIS-S-4	7.18	6734	0.027	0.019	0.005	0.009	0.000000	0.000000	2152.45	114.23
2	FID	ACIS-S-5	7.23	6734	-0.044	0.035	0.007	0.012	0.000000	0.000000	-1813.58	108.06
3	GUIDE	36965296	9.09	13463	0.065	-0.035	0.074	0.121	186.926292	1.837429	1289.08	-815.87
4	GUIDE	37356352	7.62	13467	-0.355	-0.100	0.056	0.089	187.433784	2.618460	-2007.78	-206.53
5	GUIDE	37883040	10.03	13460	0.267	0.317	0.146	0.247	187.575516	1.280402	2246.63	2110.96
6	GUIDE	36965896	9.70	13459	0.033	-0.113	0.160	0.243	187.153754	1.617178	1708.23	244.06
7	GUIDE	36963696	9.87	13458	-0.015	-0.069	0.101	0.165	186.971396	1.870472	1117.10	-711.42

2.4 Star Slots

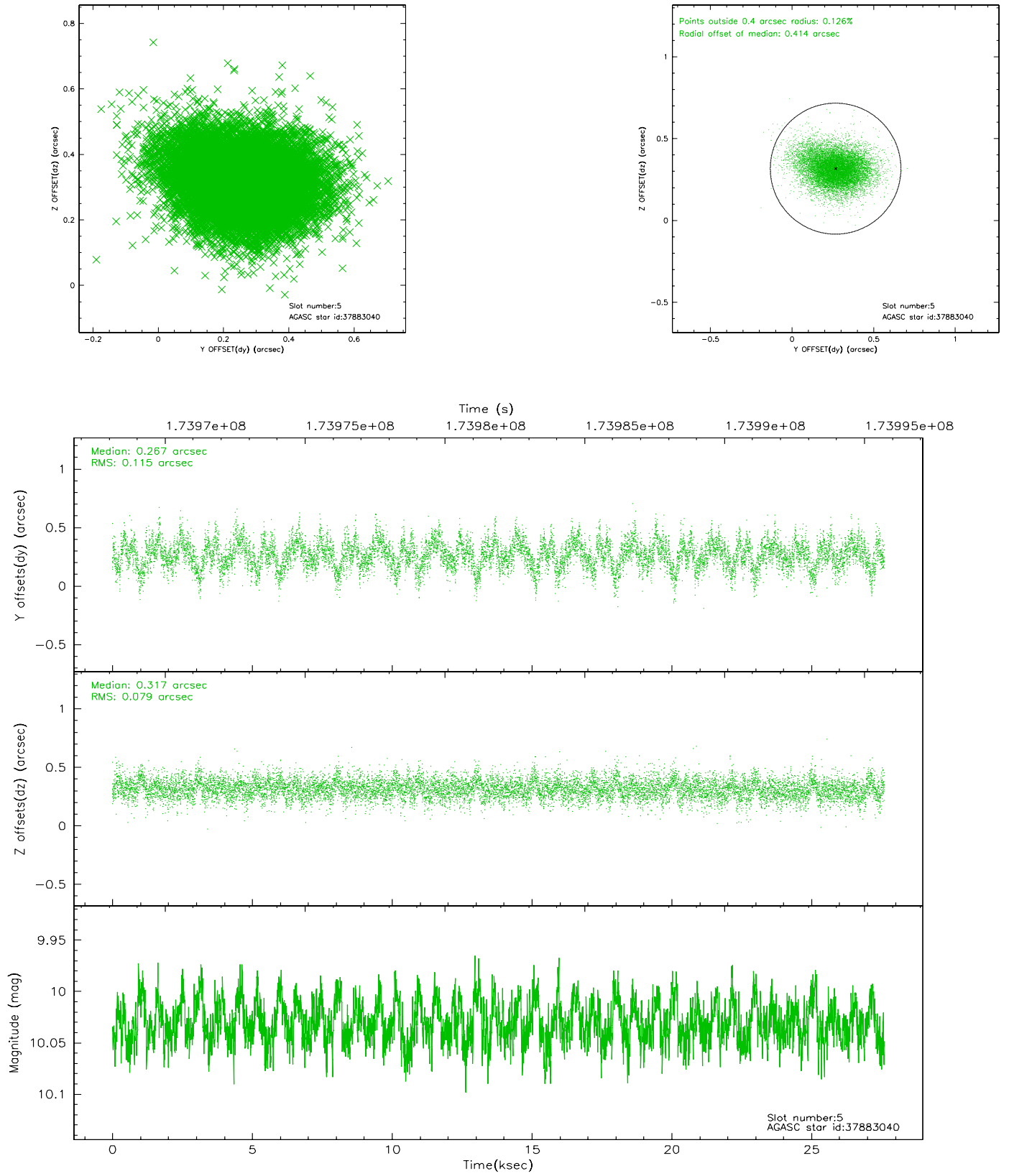
2.4.1 Slot 3



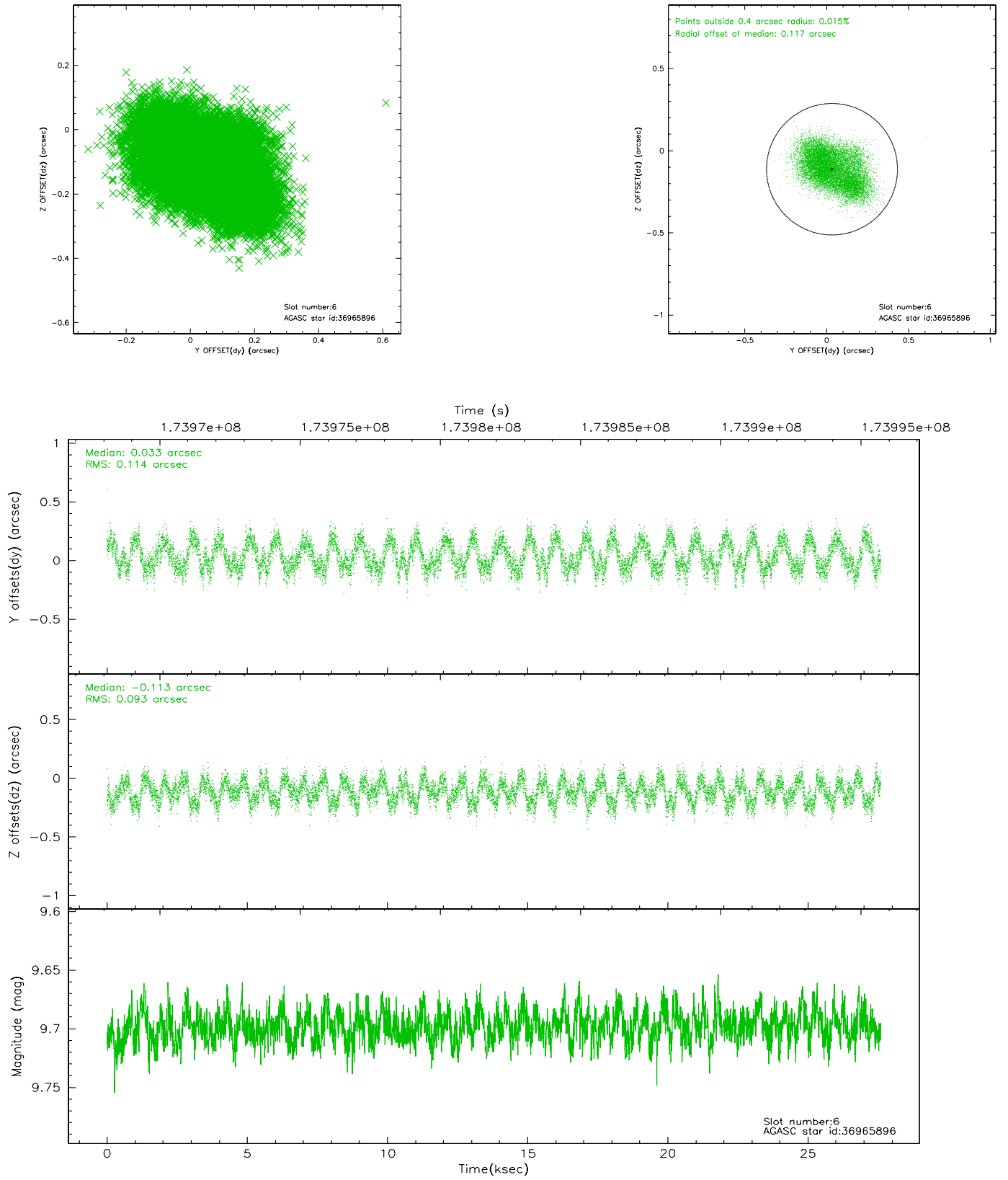
2.4.2 Slot 4



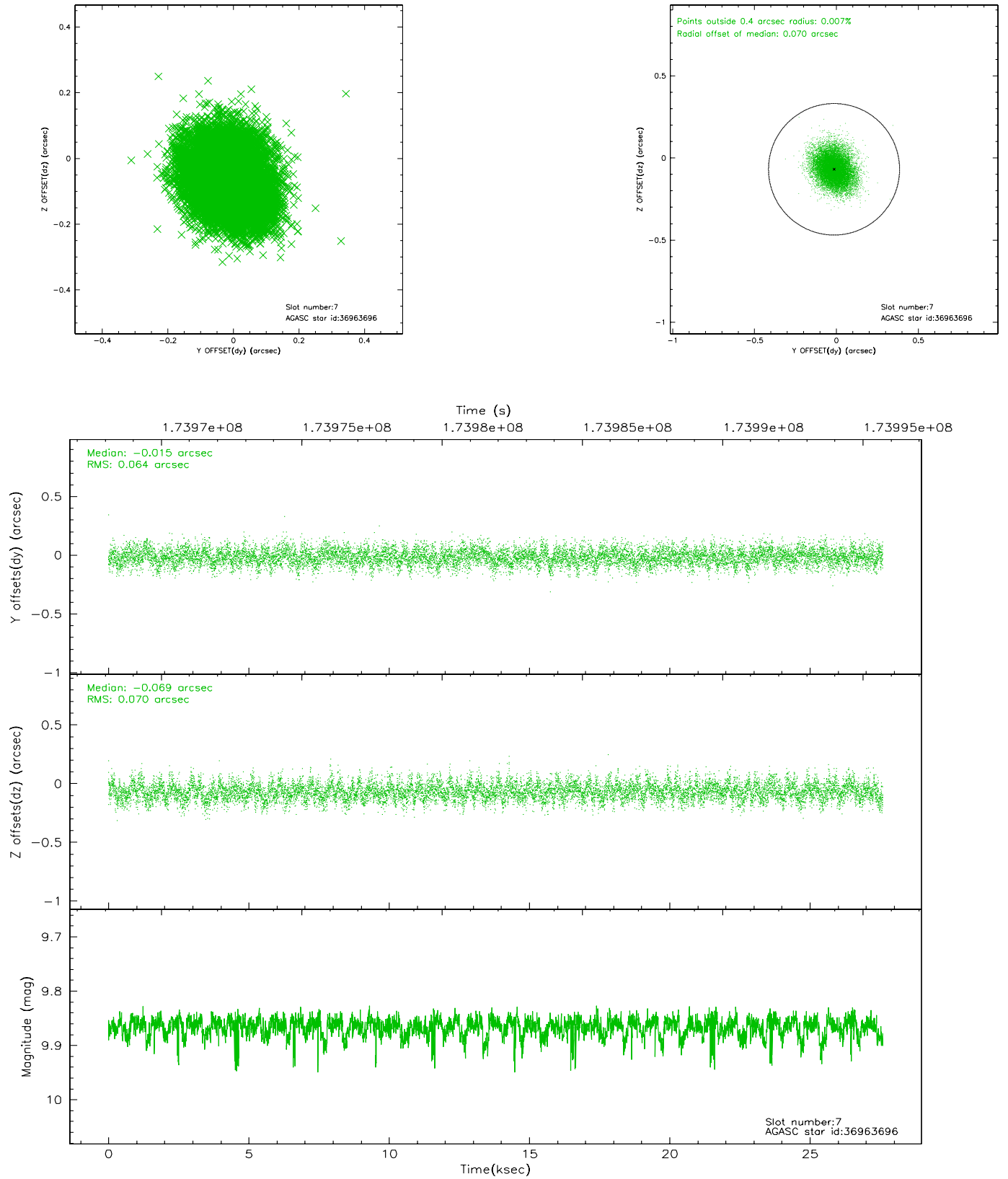
2.4.3 Slot 5



2.4.4 Slot 6

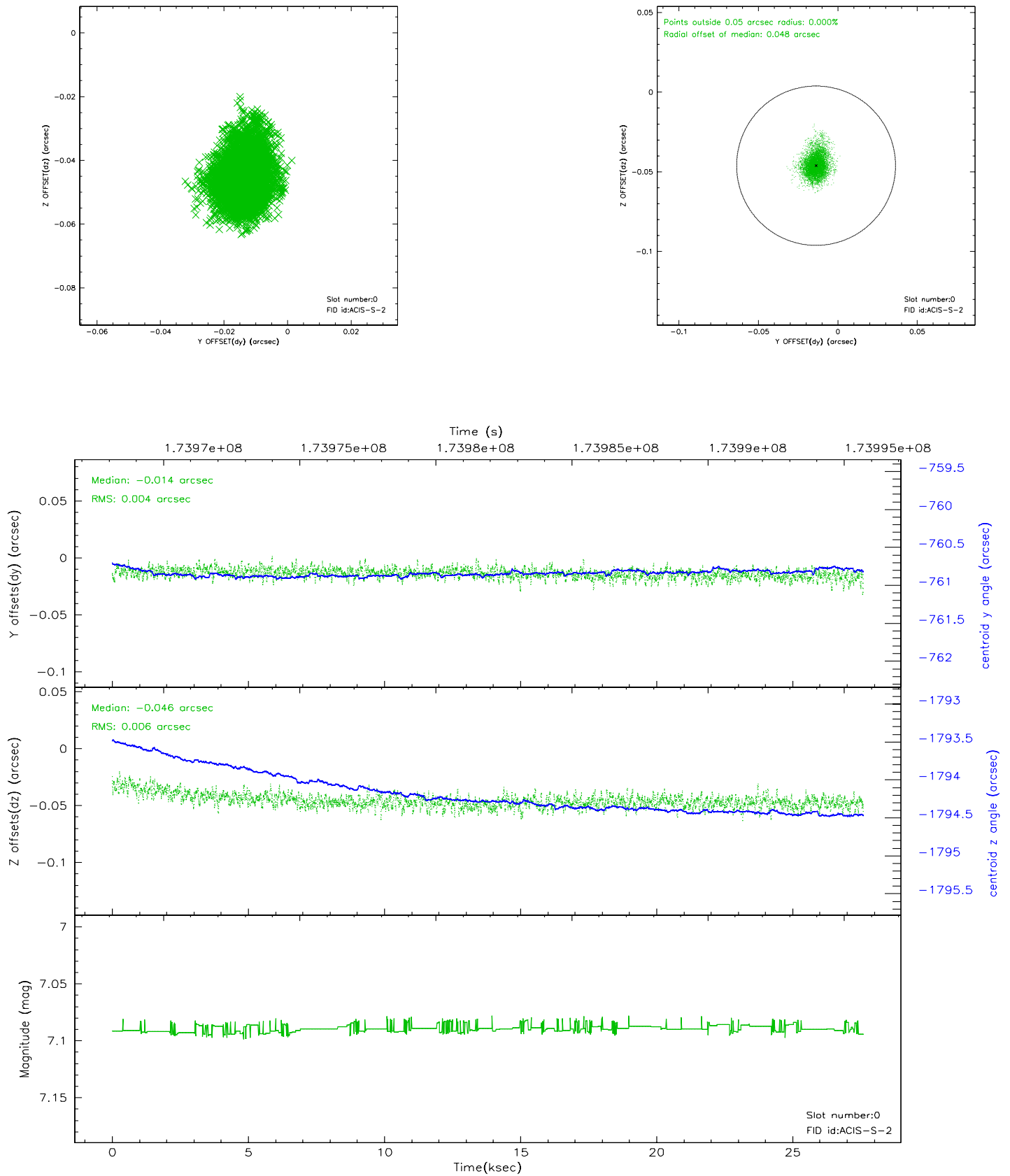


2.4.5 Slot 7

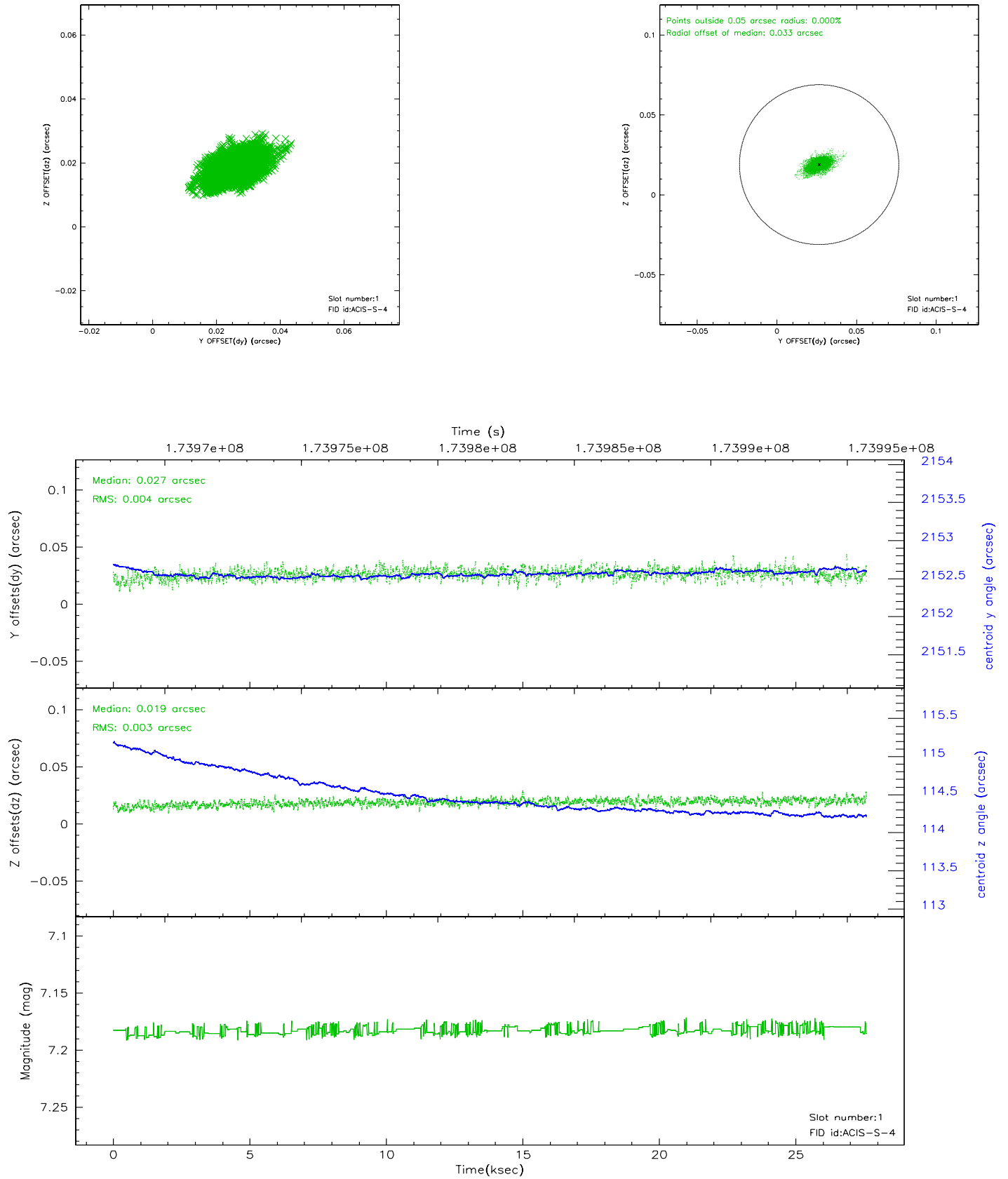


2.5 FID Slots

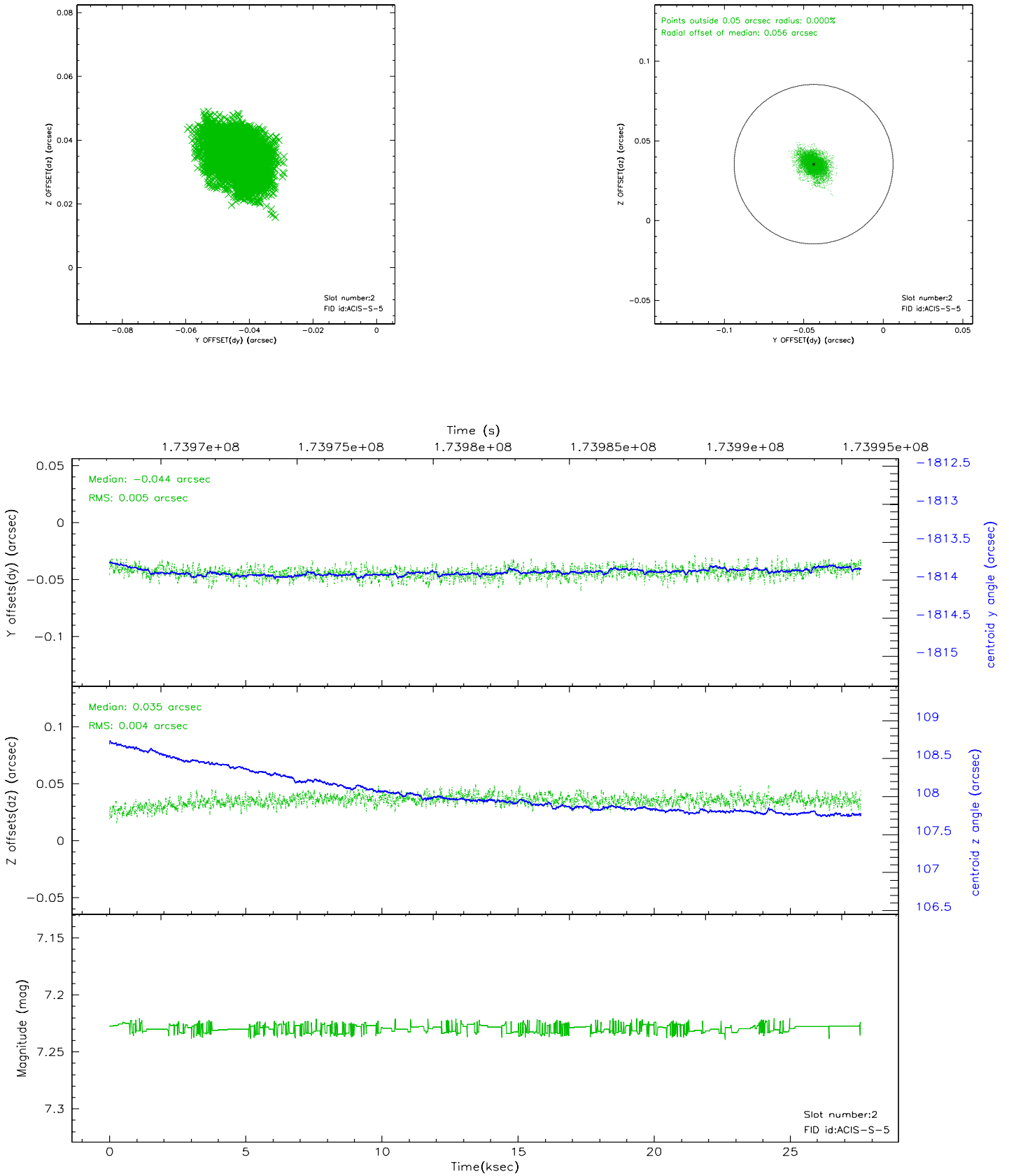
2.5.1 Slot 0



2.5.2 Slot 1

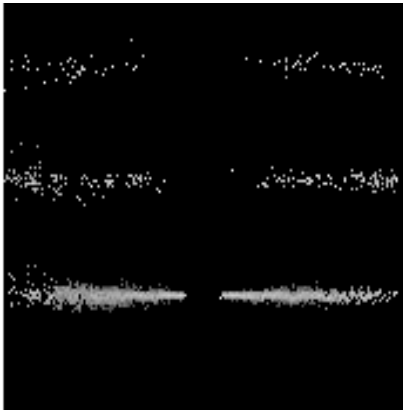


2.5.3 Slot 2

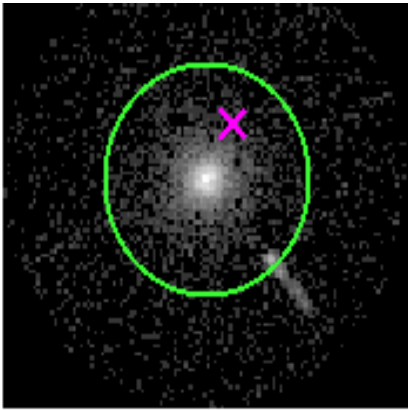


3 Gratings

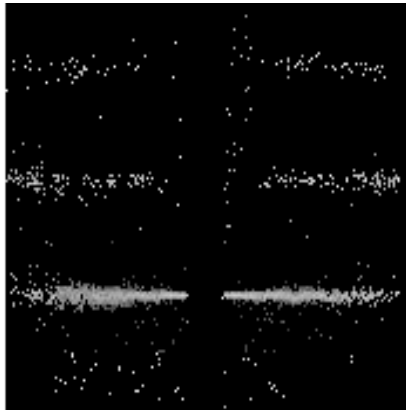
3.1 HEG Arm



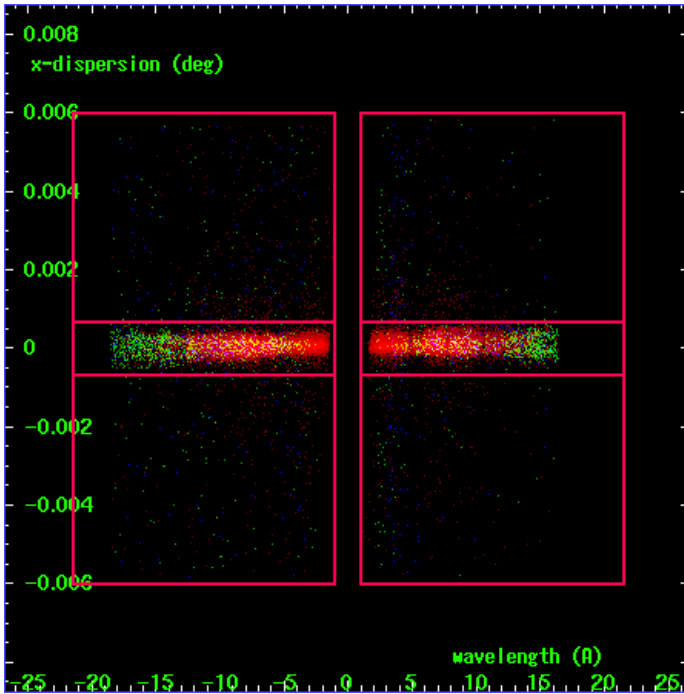
HEG Order Sort 123



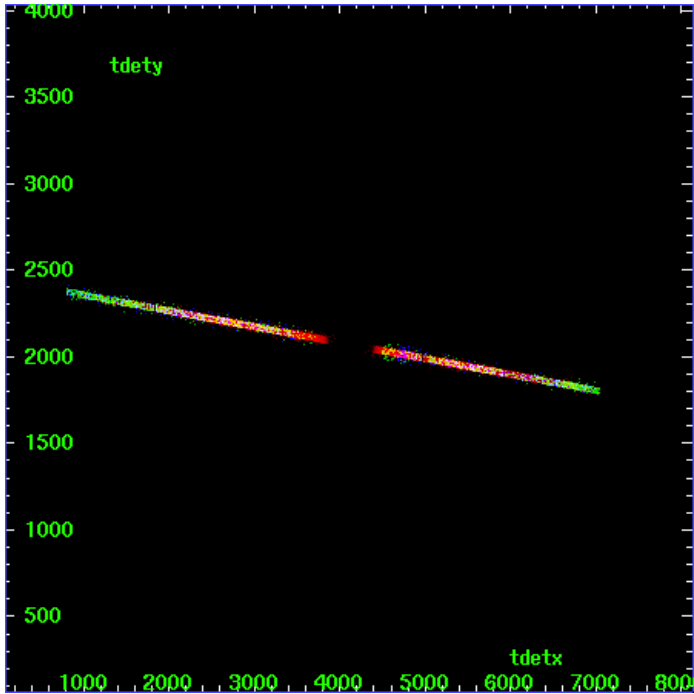
HEG Zero Order



HEG Order Sort ALL

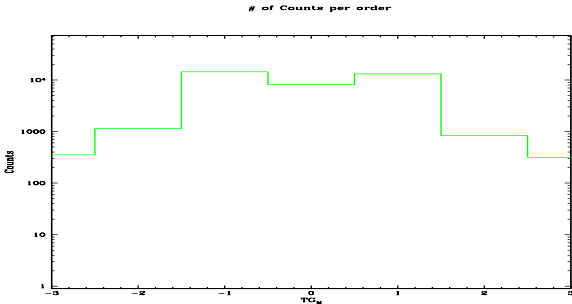


Spot Image HEG

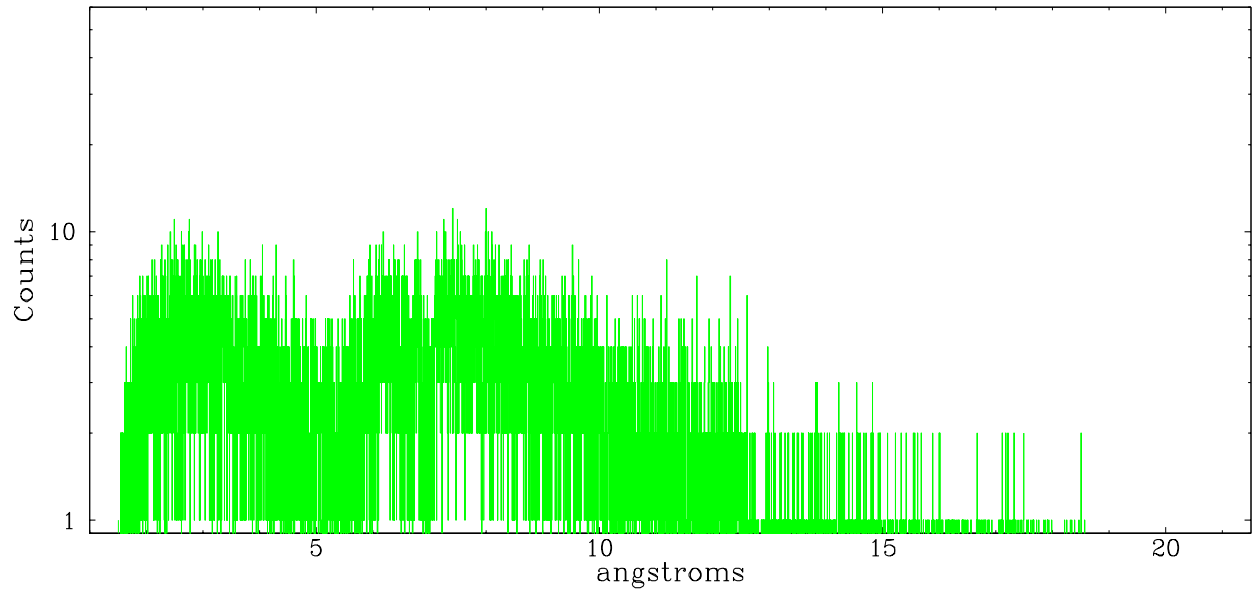


Full Detector HEG

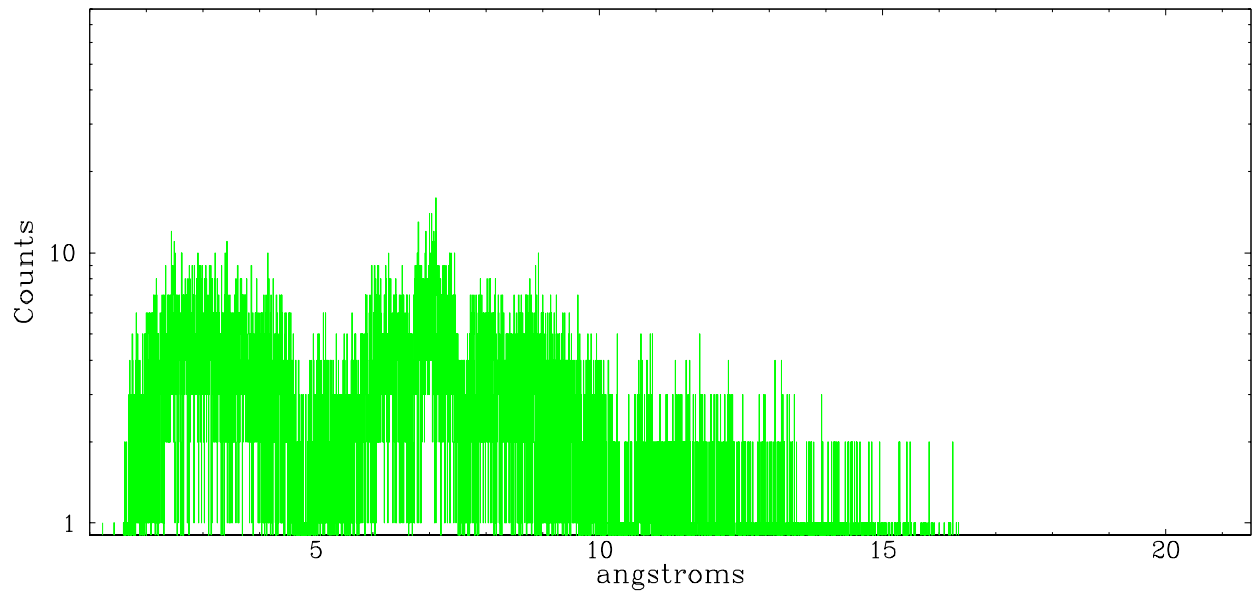
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	352	1148	14466	8109	13156	844	318



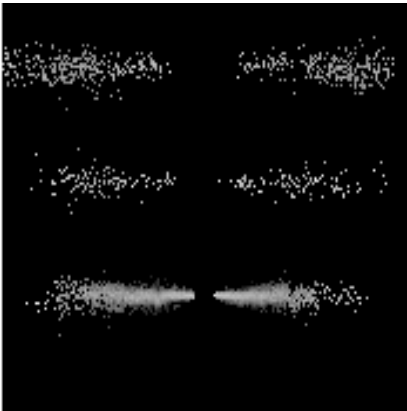
heg order -1



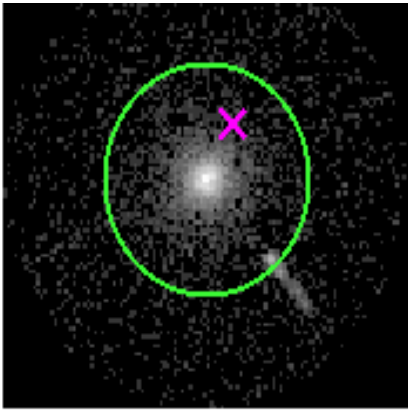
heg order +1



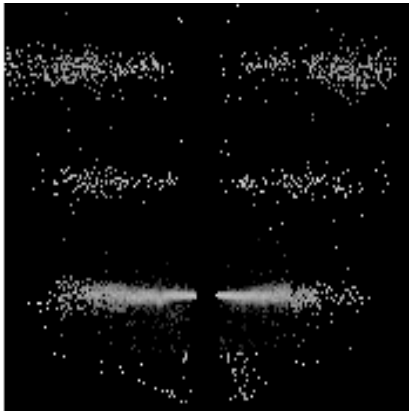
3.2 MEG Arm



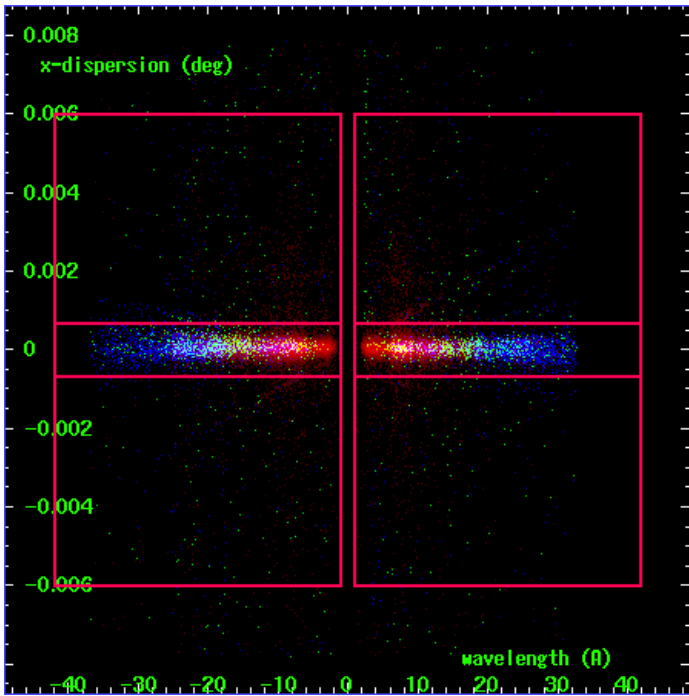
MEG Order Sort 123



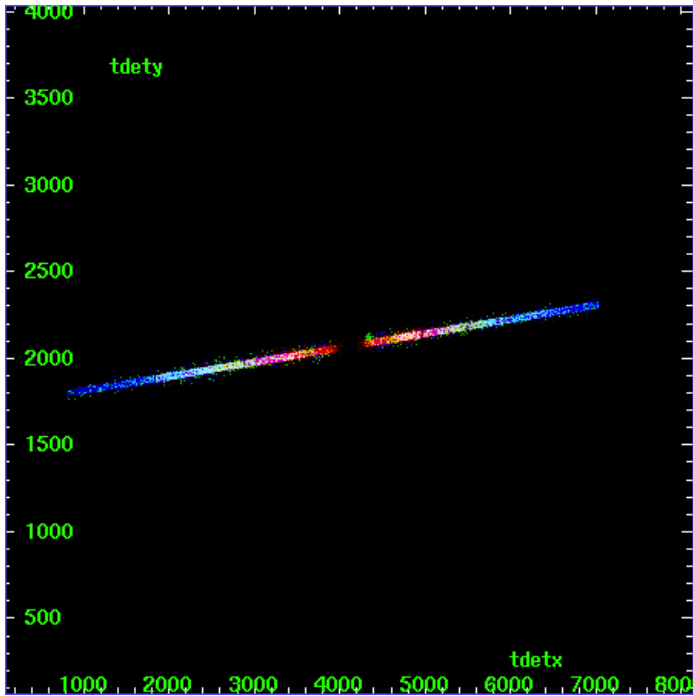
MEG Zero Order



MEG Order Sort ALL

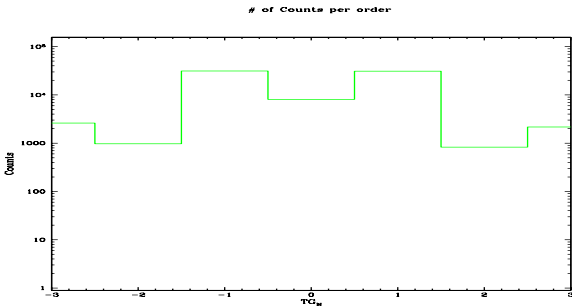


Spot Image MEG

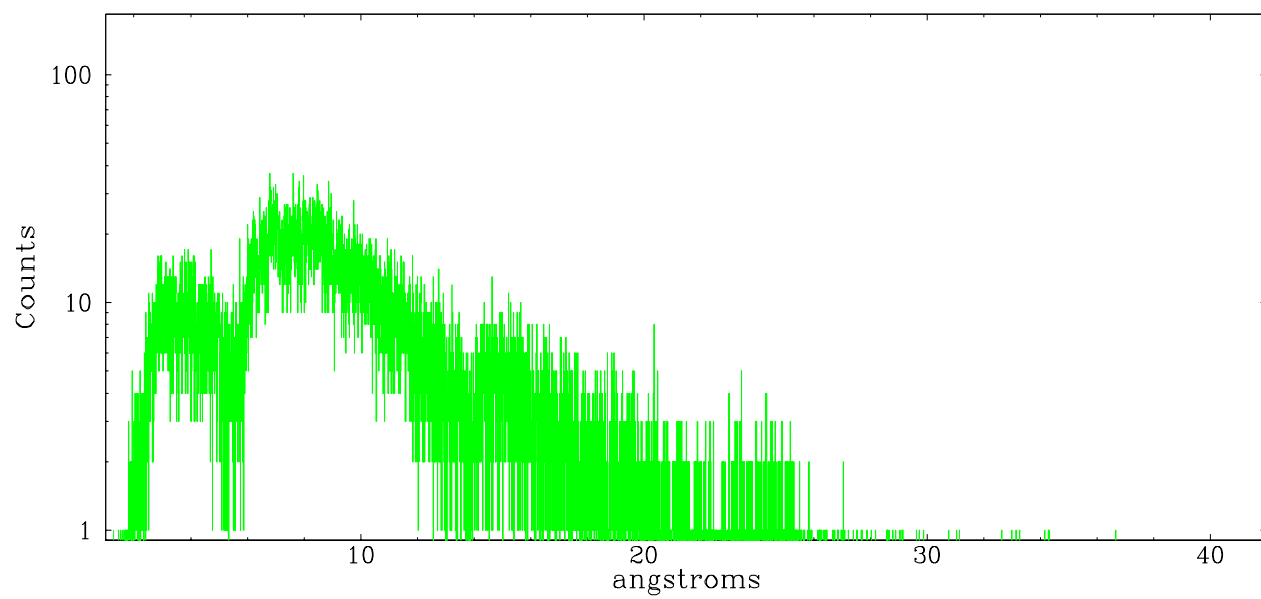


Full Detector MEG

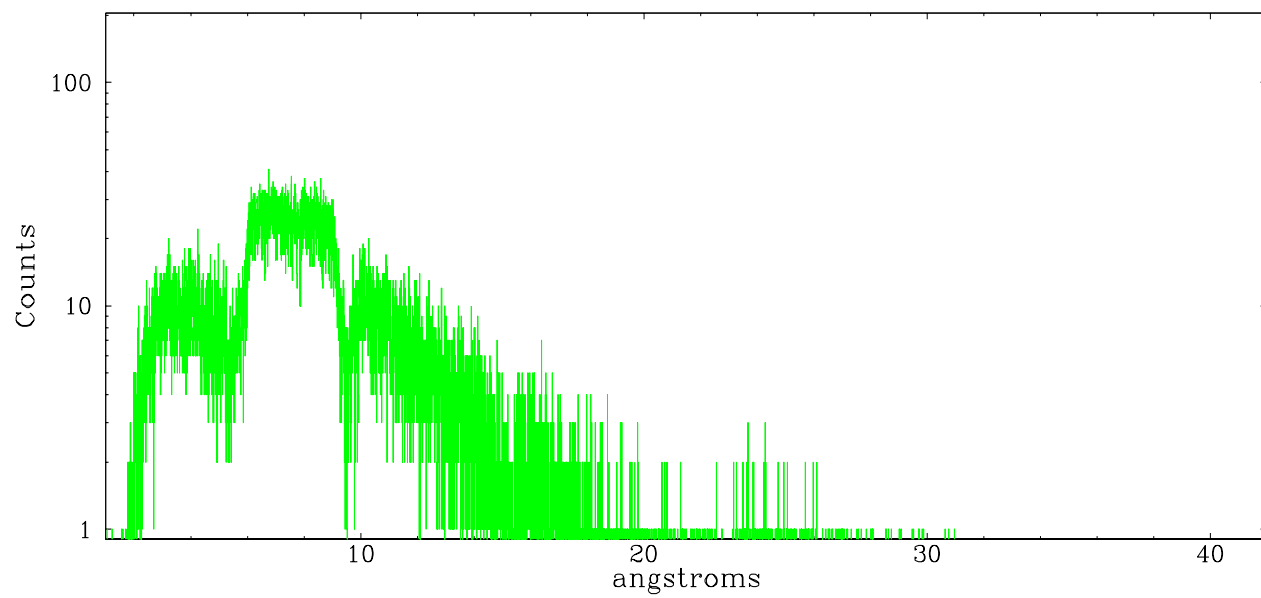
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2613	970	31206	8109	31138	829	2166



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.08.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.6

A.2 Comments

Window constraint met.