

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 2583 - L2 Version 001
Chandra X-Ray Center

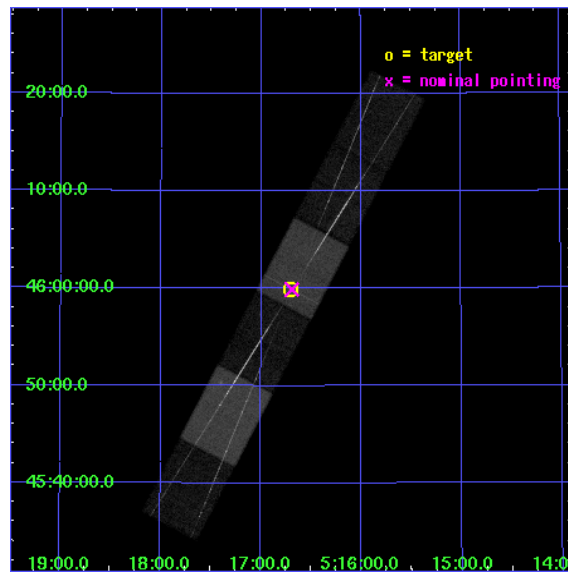
L2 Processing Date : Sep 14 2006

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1 Front

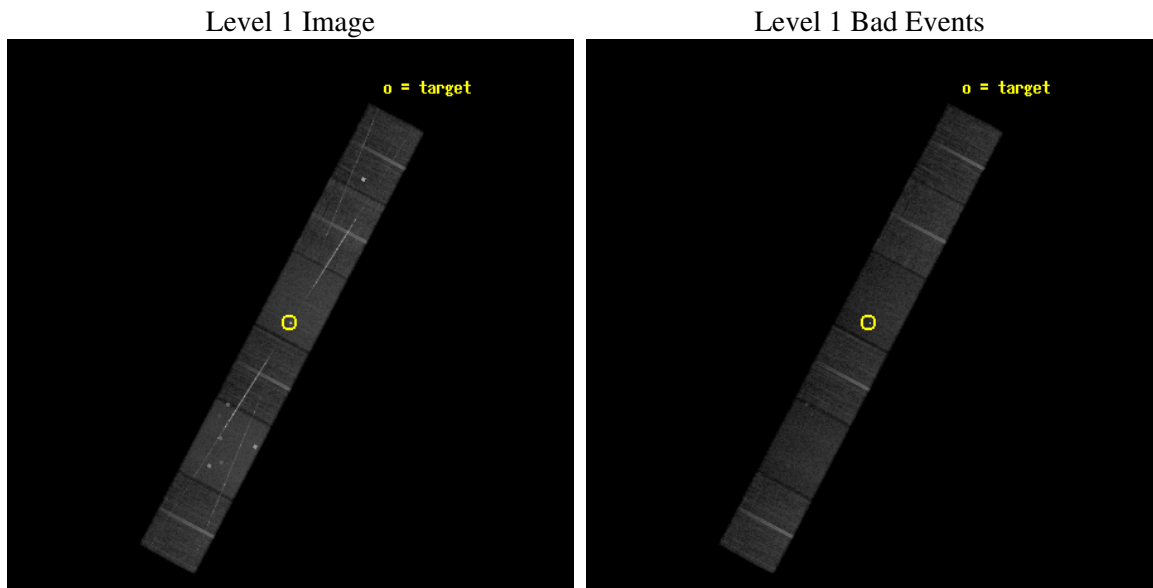
seq_num	290139
obs_id	2583
title	AO3 CALIBRATION OBSERVATIONS OF CAPELLA
observer	Dr. CXC Calibration
object	CAPELLA
dtcycle	0
cycle	P
ra_targ	79.17625
dec_targ	45.997889
ra_nom	79.173100684605
dec_nom	45.998399520854
roll_nom	297.74672016482
revision	2
ontime	28056.720917851
livetime	27603.580539711
ontime4	28059.262007713
ontime5	28054.179957628
ontime6	28059.262057602
ontime7	28056.720917851
ontime8	28059.262177229
ontime9	28064.344057828
l2events	285424



2 OBI

2.1 OBI

2.1.1 Images

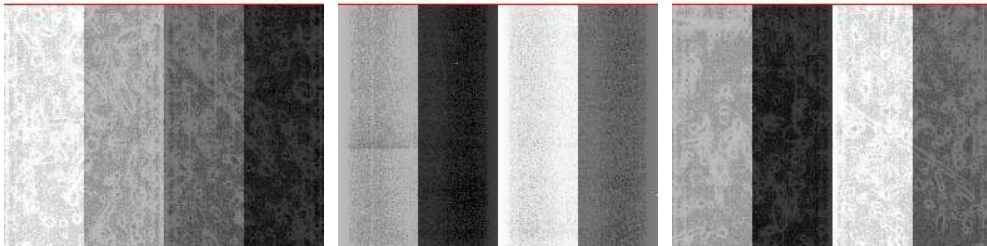


2.1.2 Bias

Chip 4

Chip 5

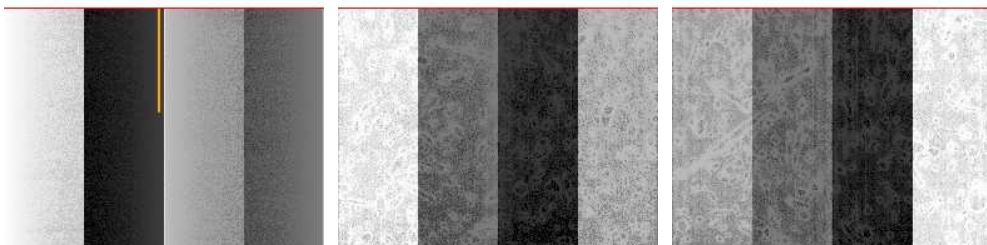
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.3
date	2006-09-14T20:04:42
revision	2

sched_exp_time	28000.000000
ontime	28060.340903759
ontime4	28062.881993622
ontime5	28057.799943537
ontime6	28062.882043511
ontime7	28060.340903759
ontime8	28062.882163137
ontime9	28067.964043736
l1events	1090878

2.1.4 Events

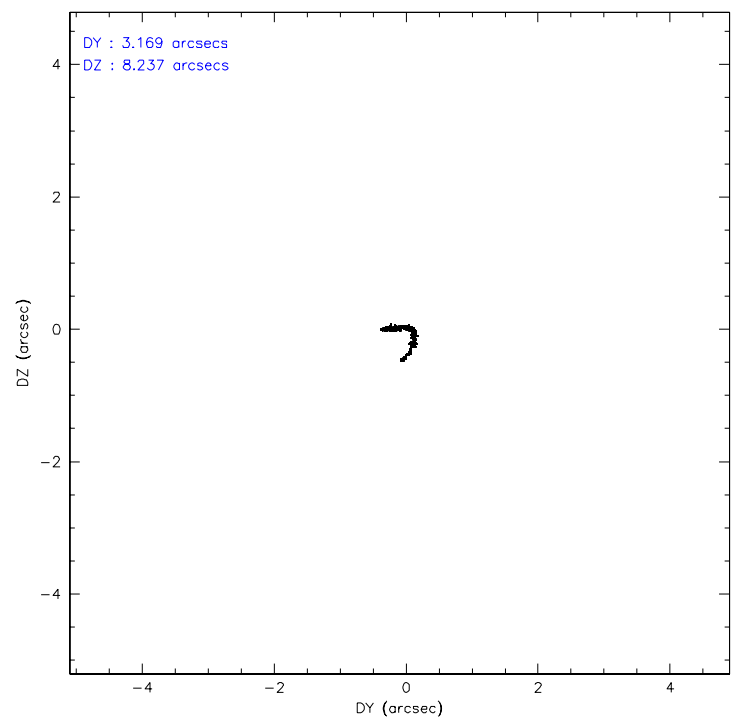
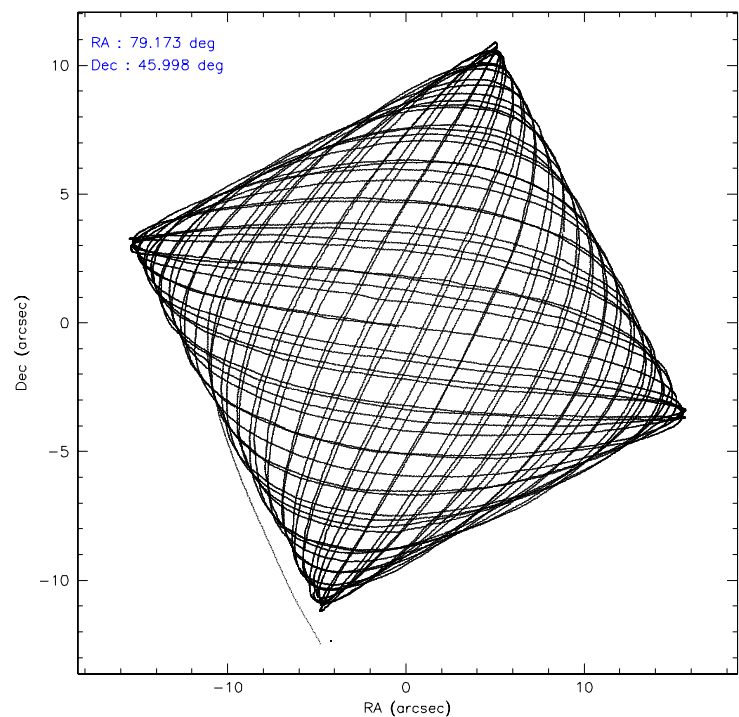
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	158510	222999	158825	200144	197235	153165
rejected events	136913	109012	123613	116888	139425	121690
rejected %	86%	48%	77%	58%	70%	79%

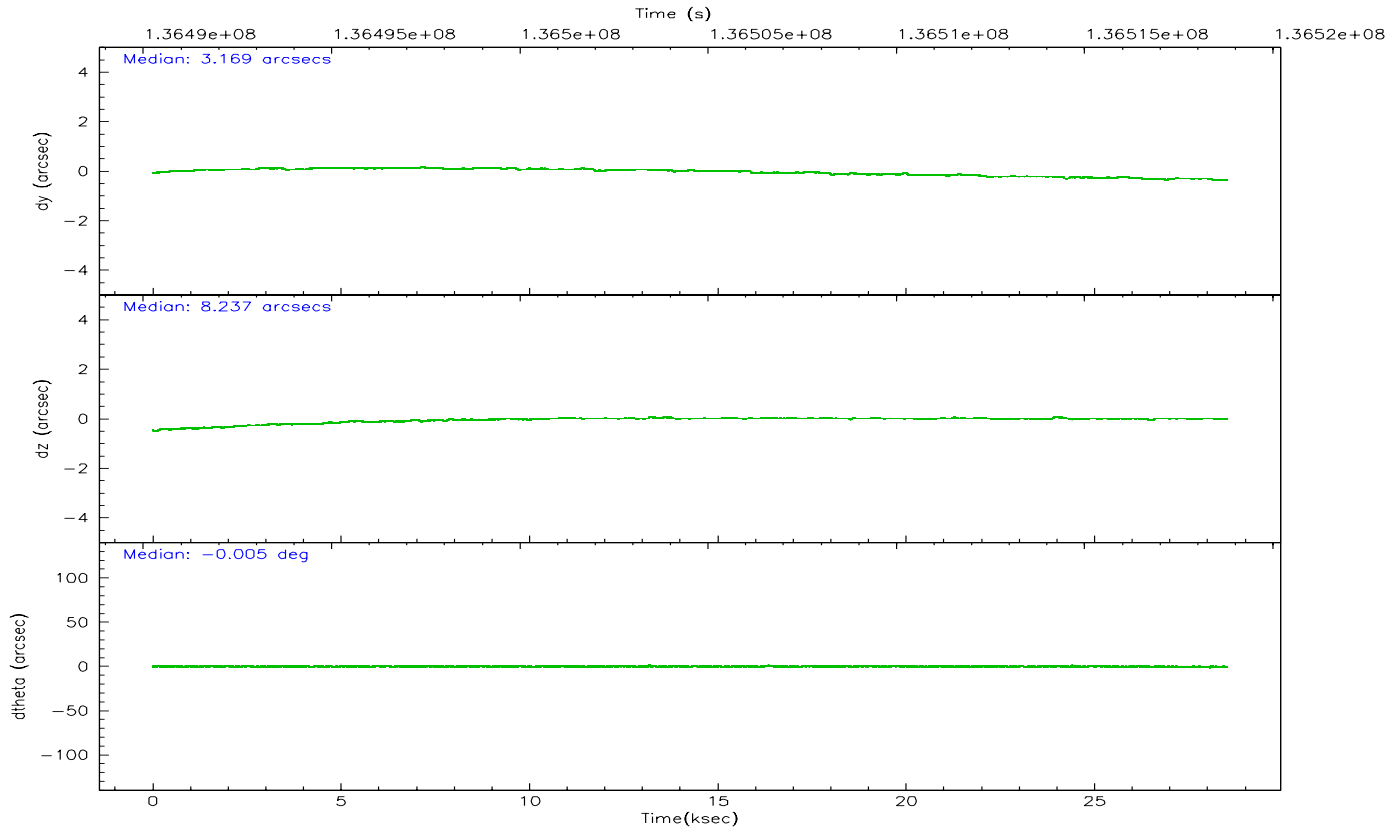
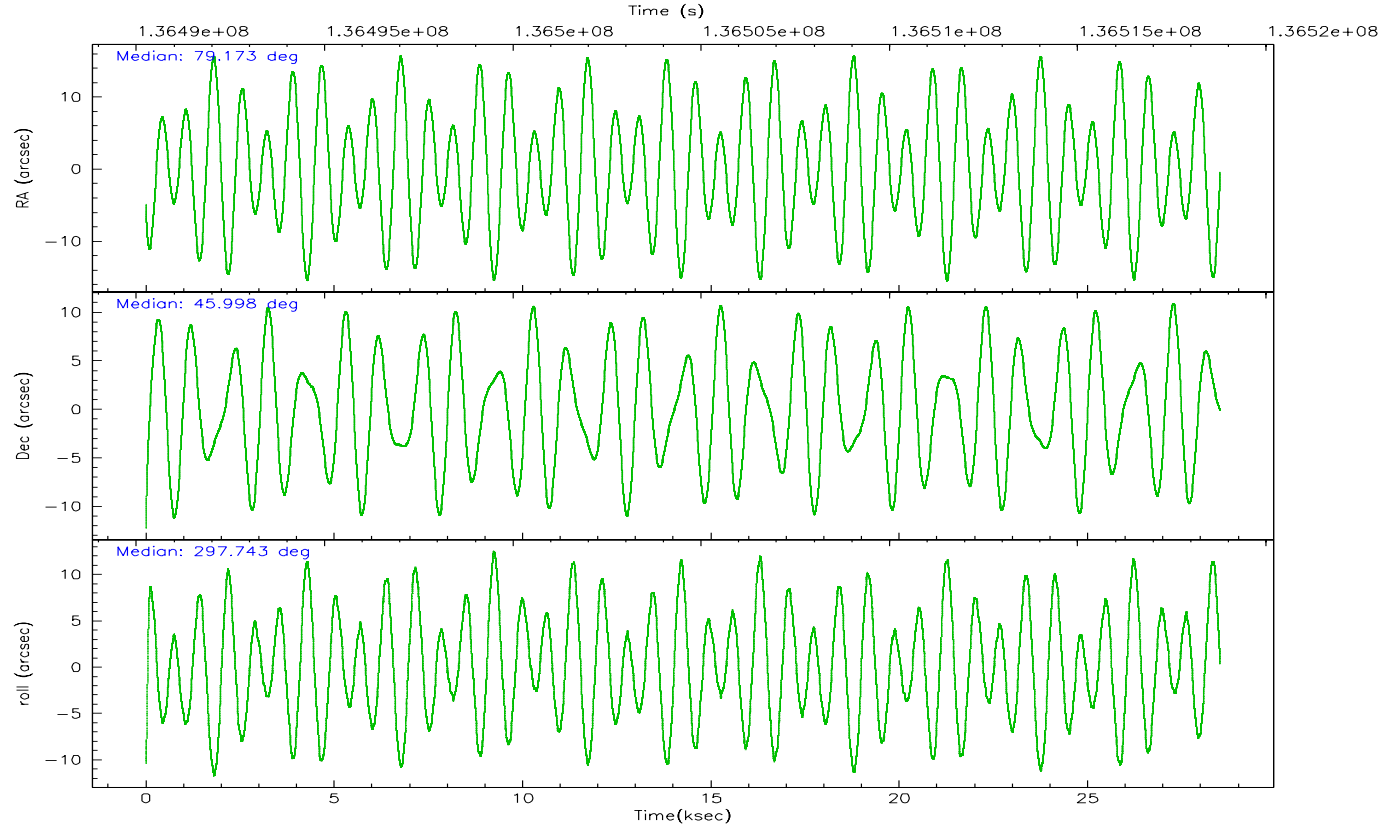
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	10495	22415	22568	7171	30254	18145
	6%	10%	14%	3%	15%	11%
grade 1 events	66	422	140	290	182	65
	0%	0%	0%	0%	0%	0%
grade 2 events	4558	32575	4844	20040	9176	6216
	2%	14%	3%	10%	4%	4%
grade 3 events	1780	4184	2308	5514	4529	1948
	1%	1%	1%	2%	2%	1%
grade 4 events	1756	4147	2083	5336	4142	1831
	1%	1%	1%	2%	2%	1%
grade 5 events	4977	10369	5788	13497	7599	5897
	3%	4%	3%	6%	3%	3%
grade 6 events	3009	50696	3418	45200	9713	3338
	1%	22%	2%	22%	4%	2%
grade 7 events	131869	98191	117676	103096	131640	115725
	83%	44%	74%	51%	66%	75%

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	79.139700	79.17310068460479	Subarray requested	CUSTOM	CUSTOM
Pointing Dec	46.012643	45.99839952085433	Subarray start row	1	1
Pointing Roll	297.614131	297.7467201648182	Subarray row count	774	774
Window start time	134006464.184000	134006464.184000	Alternating exposures requested	N	N
Window stop time	139190464.184000	139190464.184000	Primary exposure time	0.000000	2.5
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	136490777.184000	136489644.52672			
Observation start date	2002-04-29T18:05:13	2002-04-29T17:47:24			
Observation end time	136518777.184000	136519439.74043			
Observation end date	2002-04-30T01:51:53	2002-04-30T02:03:59			
Read mode	TIMED	TIMED			

2.3 Aspect



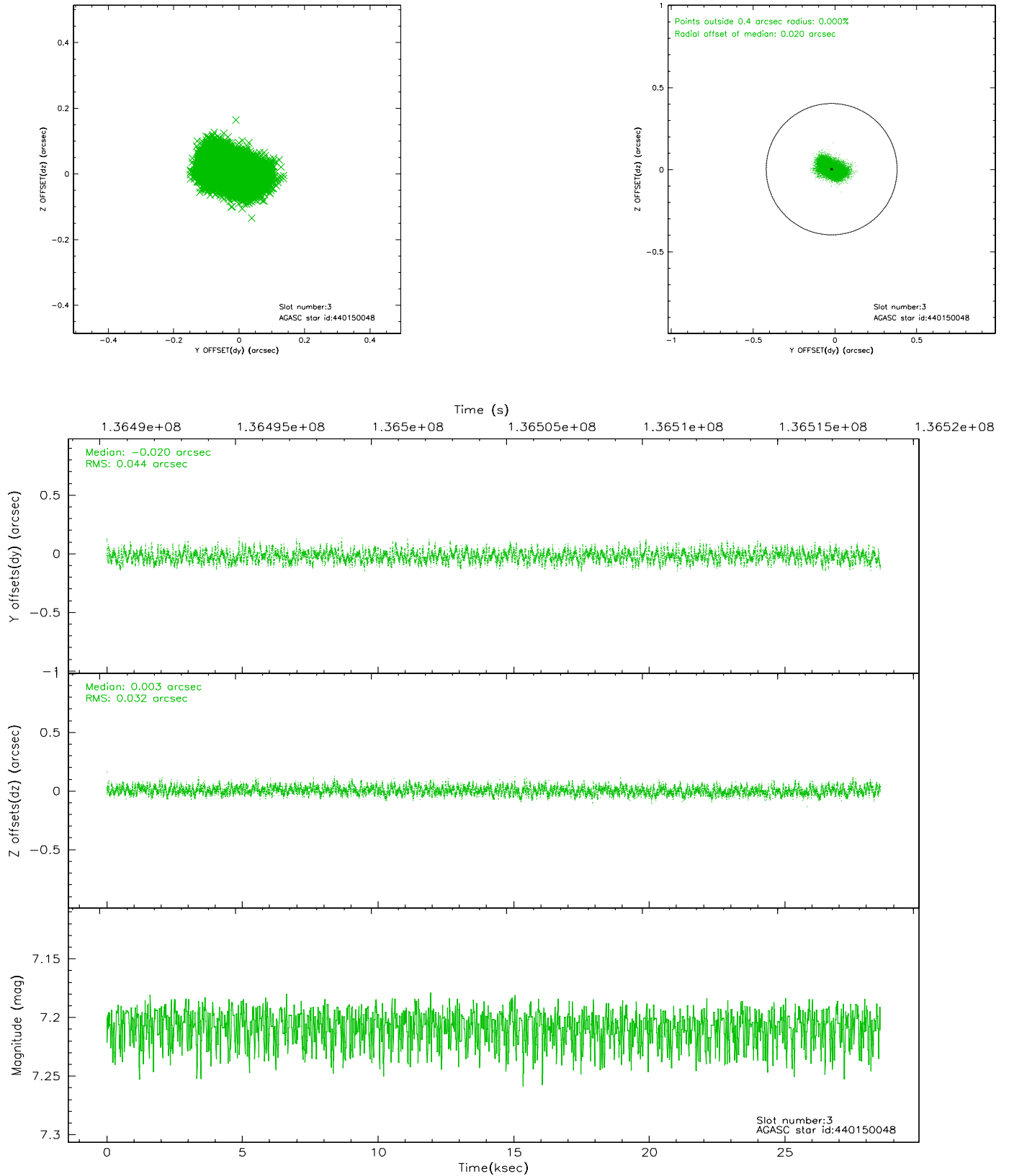


Slot Statistics

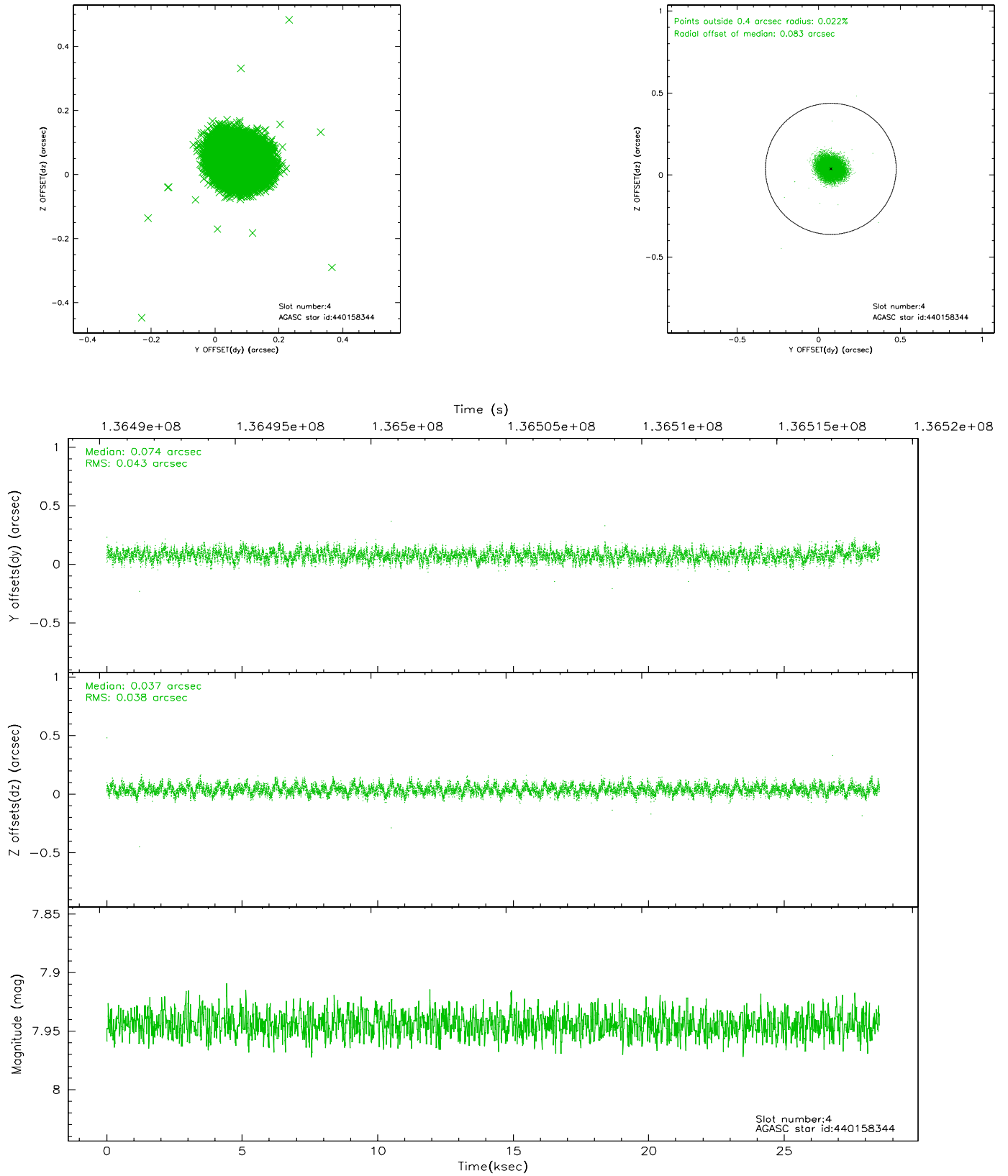
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	6933	-0.041	0.005	0.008	0.015	0.000000	0.000000	-755.56	-1791.48
1	FID	ACIS-S-4	7.20	6928	-0.035	0.018	0.011	0.019	0.000000	0.000000	2157.63	116.99
2	FID	ACIS-S-5	7.23	6931	0.046	-0.015	0.009	0.015	0.000000	0.000000	-1808.25	110.62
3	GUIDE	440150048	7.21	13871	-0.020	0.003	0.059	0.095	79.112838	46.416060	-1318.16	613.90
4	GUIDE	440158344	7.94	13875	0.074	0.037	0.061	0.096	79.344888	45.394991	2209.97	-570.64
5	GUIDE	440149808	8.42	13875	-0.011	-0.092	0.074	0.122	78.873930	46.405955	-1561.58	71.87
6	GUIDE	438450792	8.81	13874	-0.023	0.109	0.075	0.124	78.654240	46.382628	-1742.40	-449.41
7	GUIDE	438460832	8.97	13870	-0.023	-0.056	0.091	0.145	78.414614	45.554782	605.76	-2379.96

2.4 Star Slots

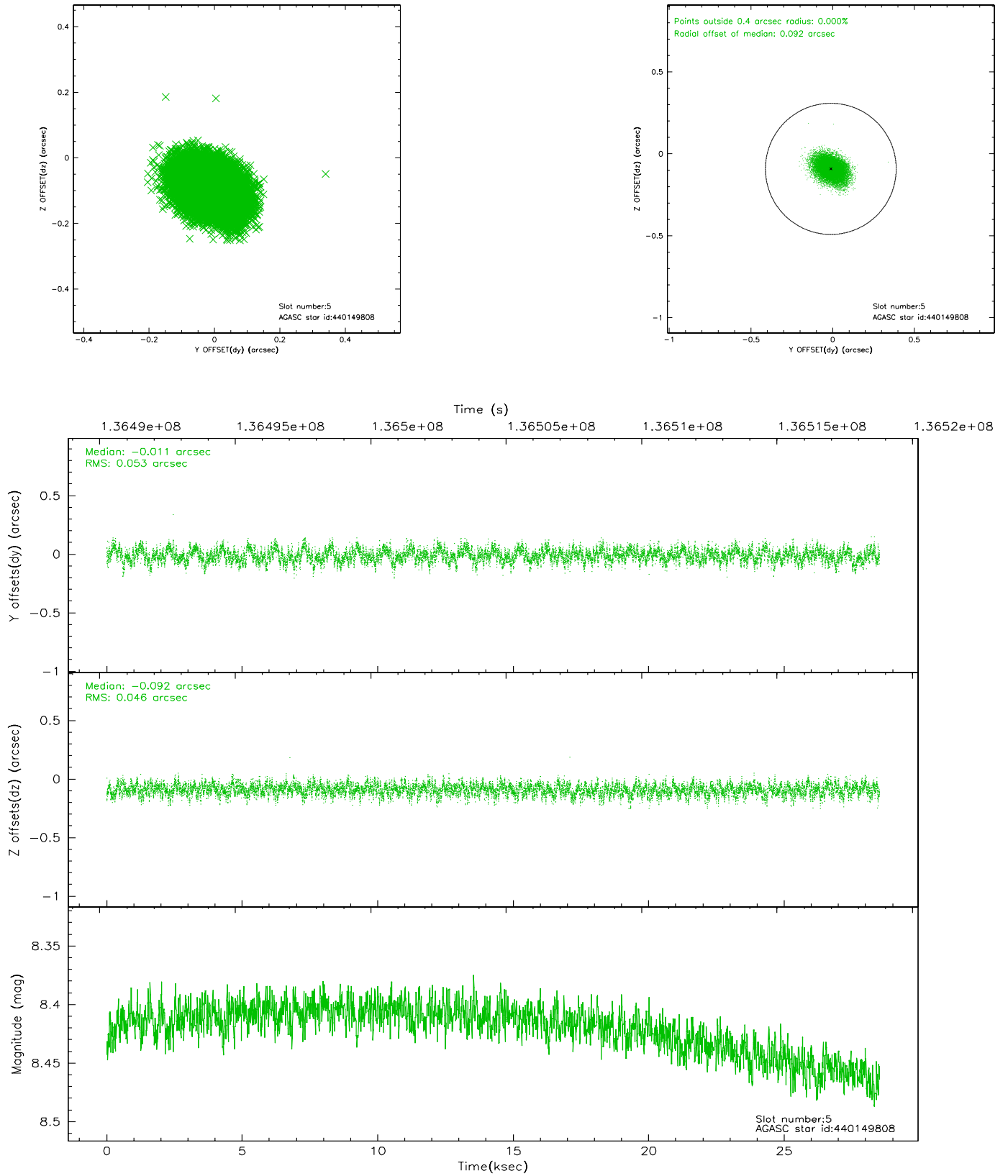
2.4.1 Slot 3



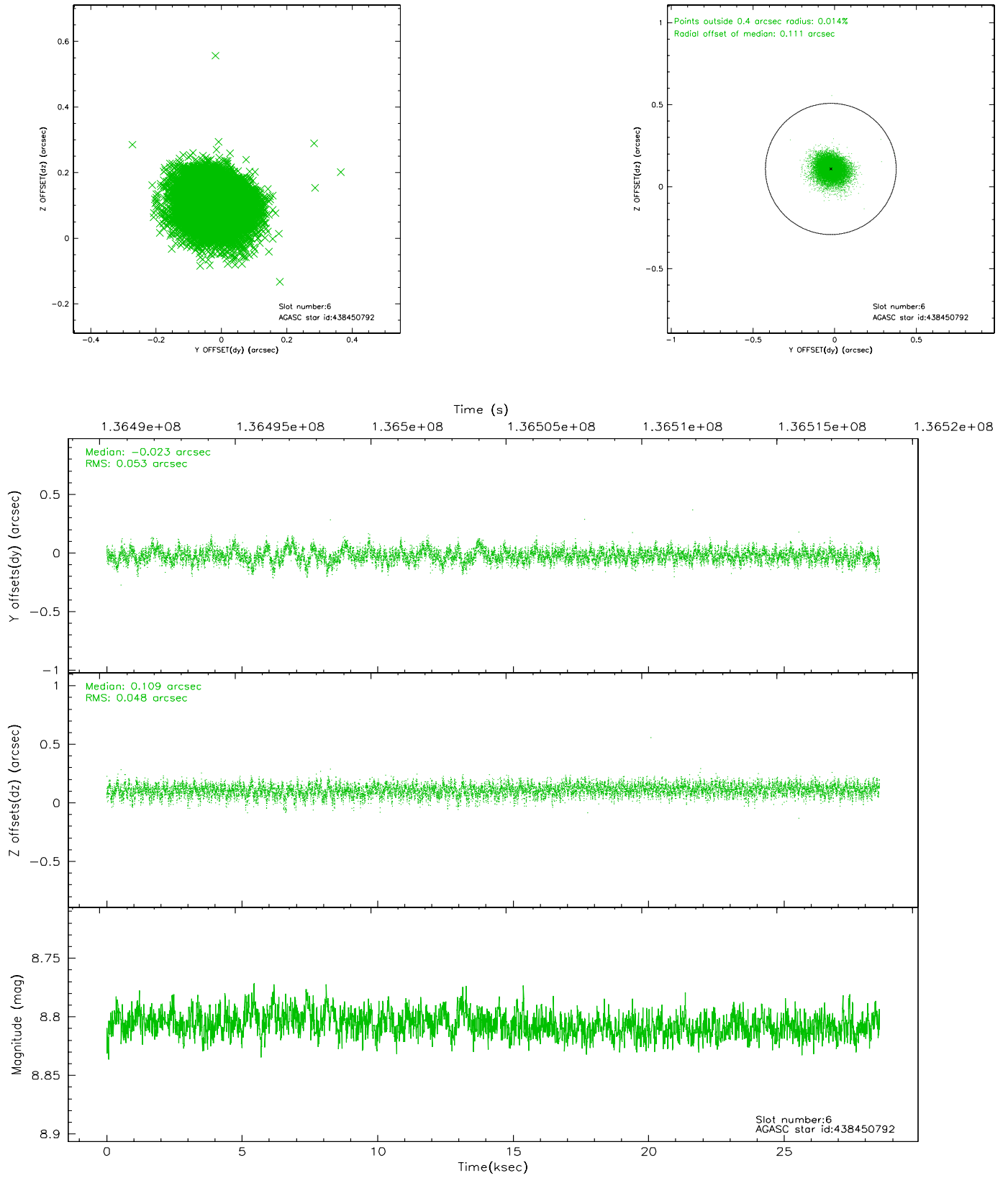
2.4.2 Slot 4



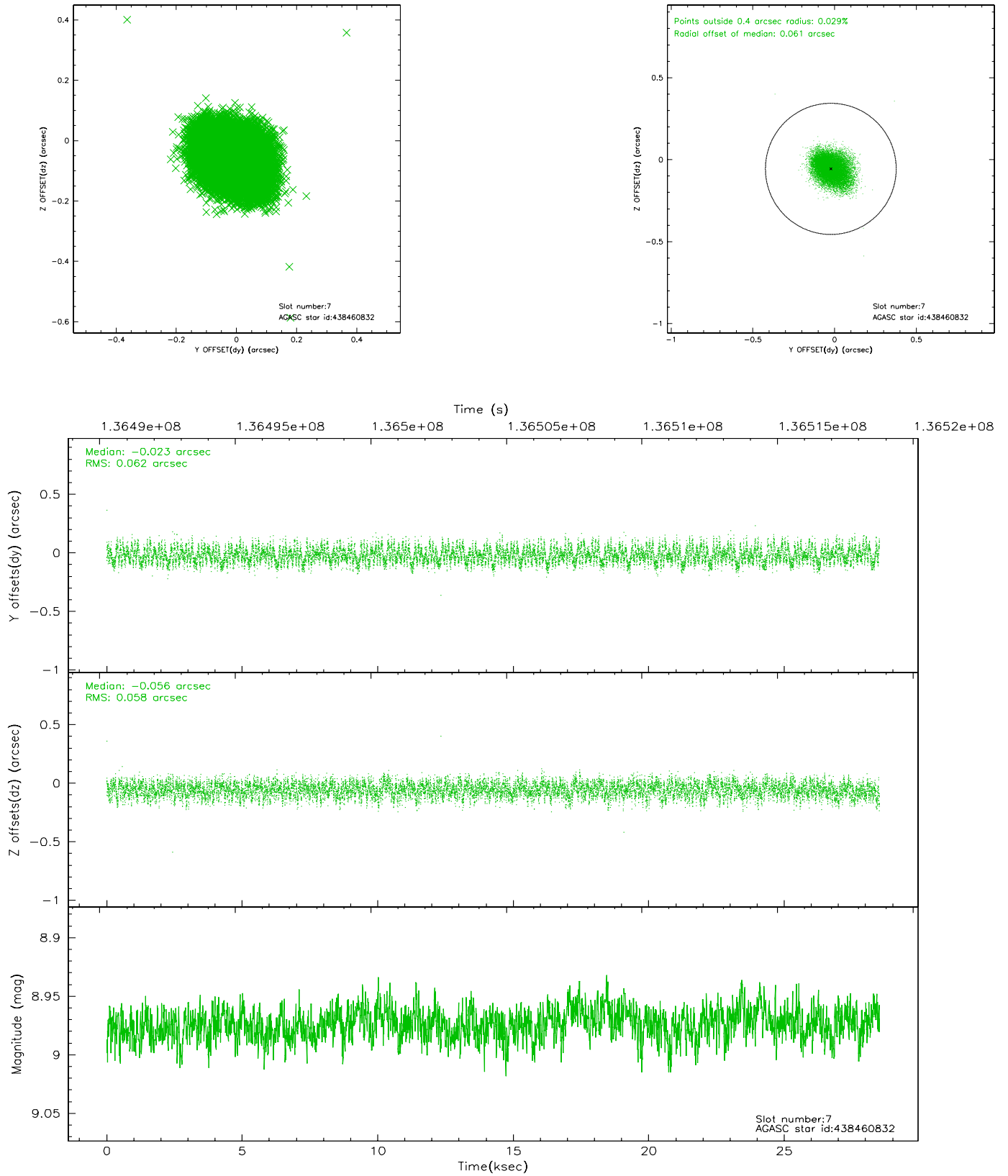
2.4.3 Slot 5



2.4.4 Slot 6

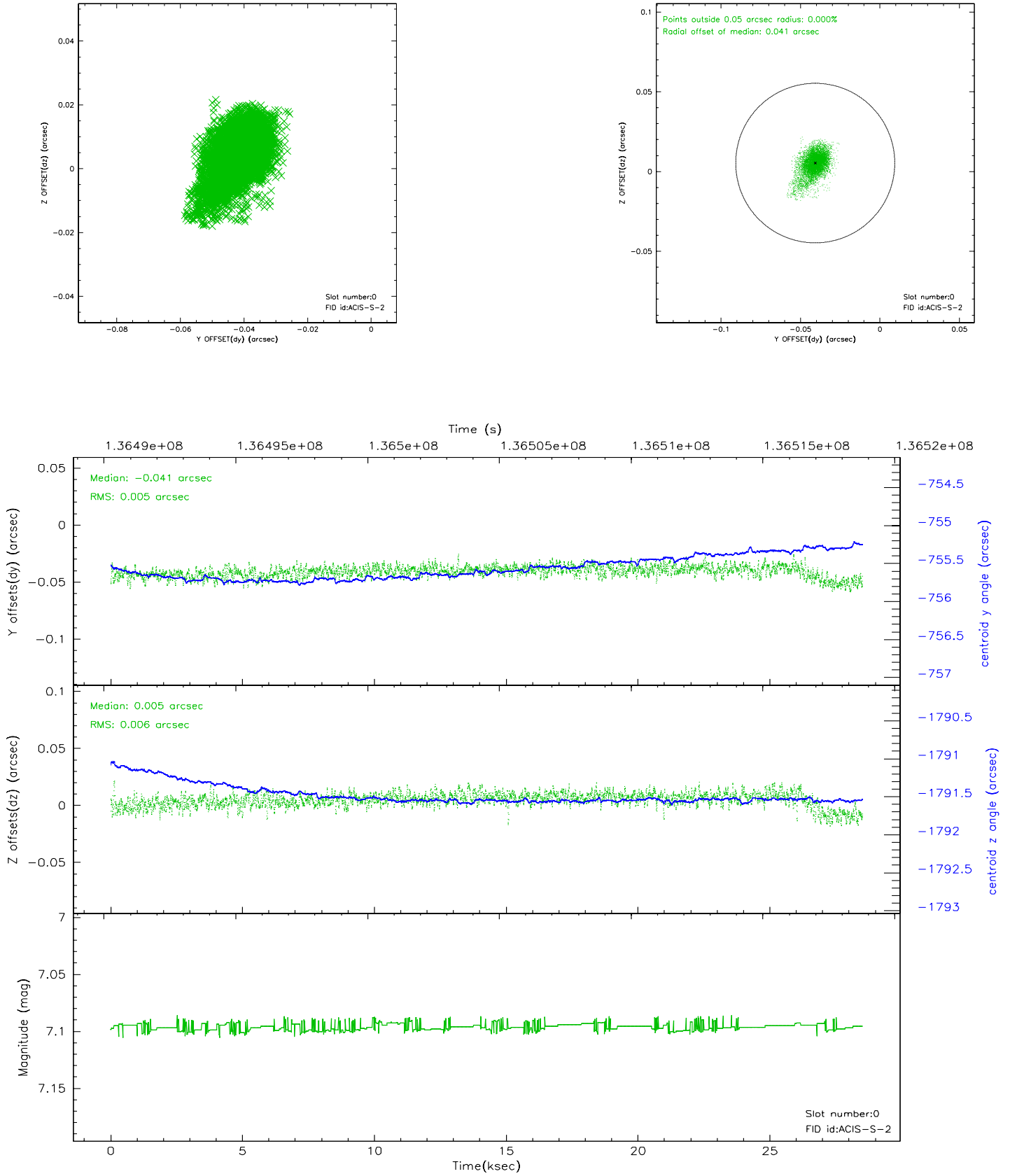


2.4.5 Slot 7

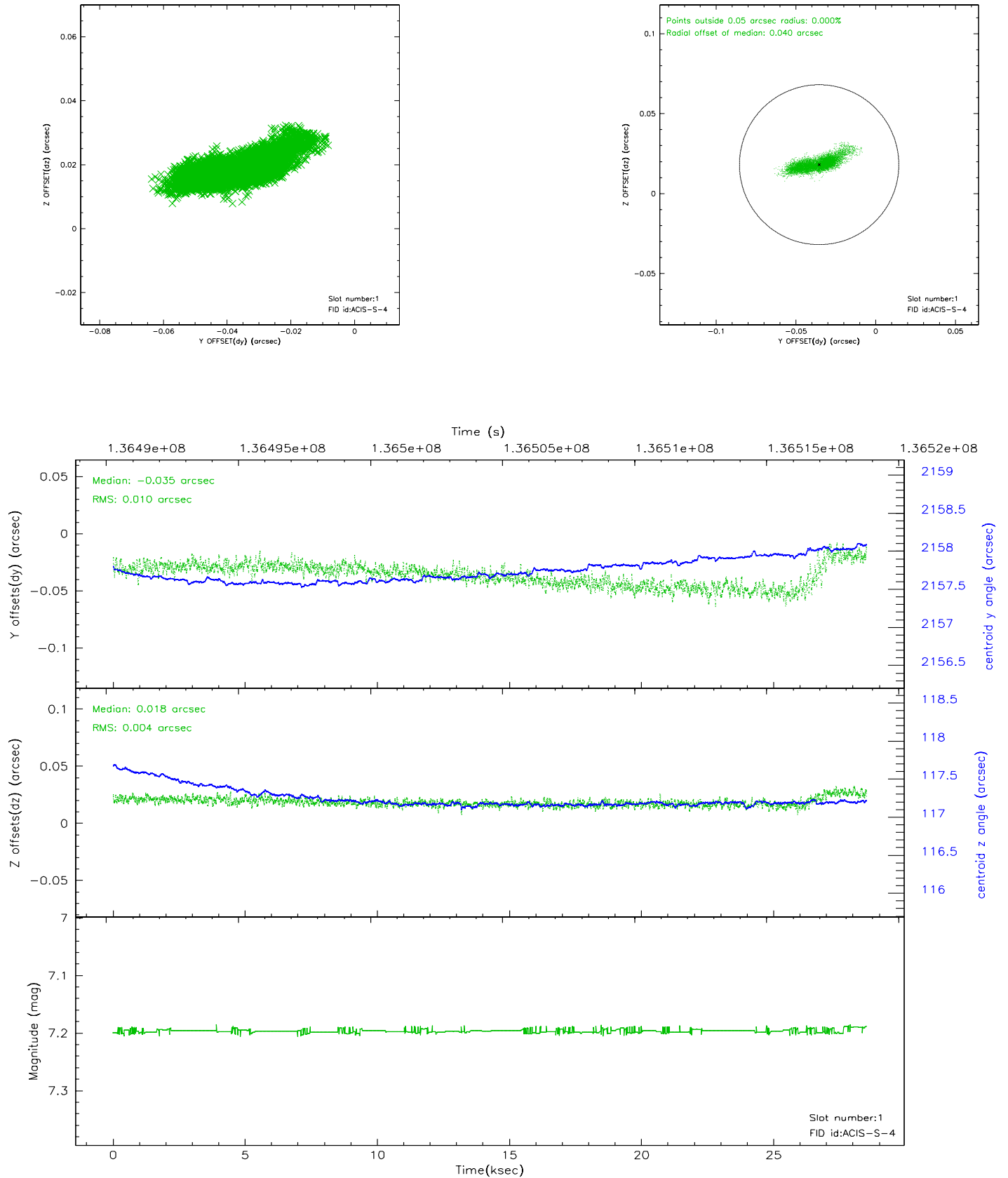


2.5 FID Slots

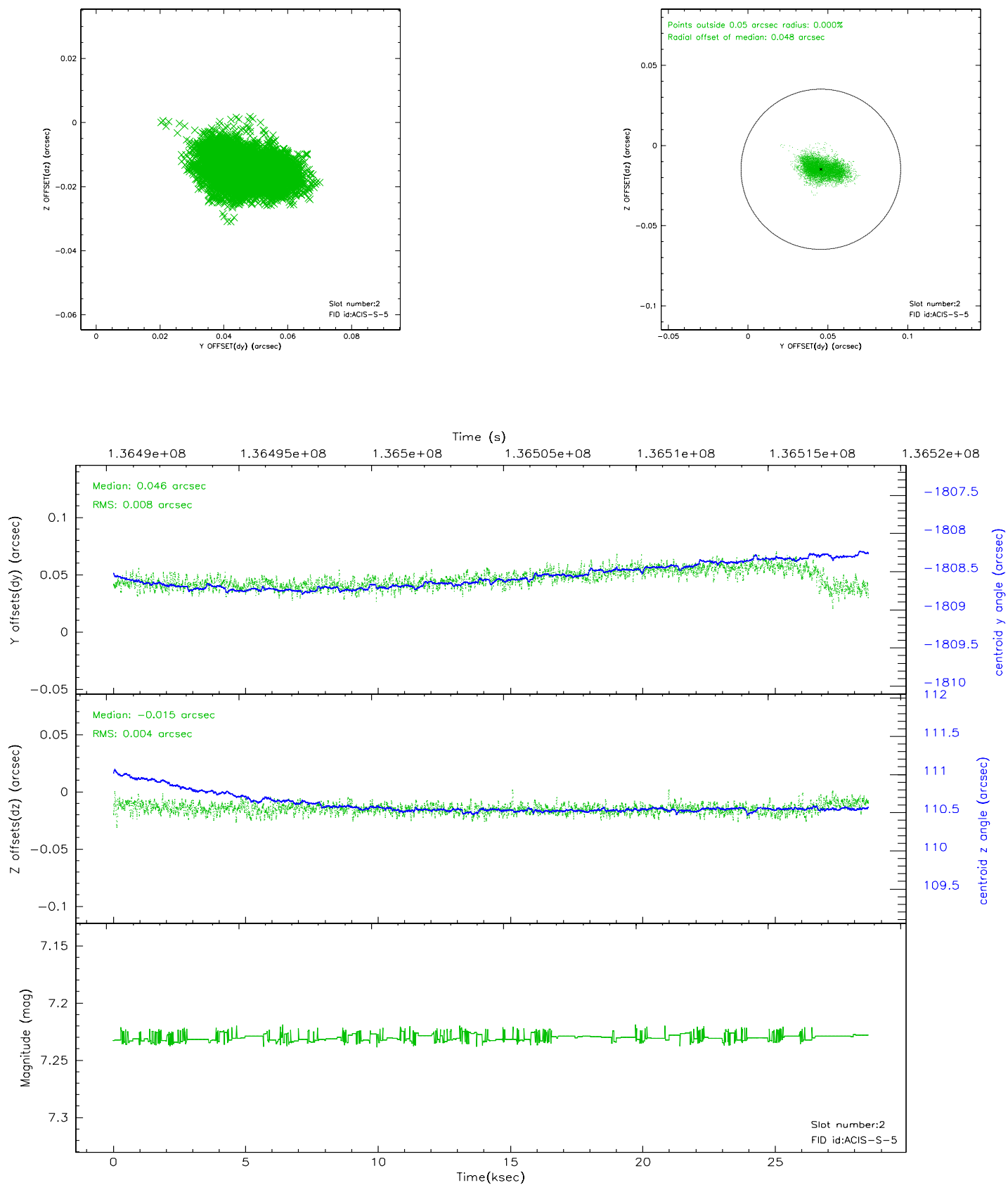
2.5.1 Slot 0



2.5.2 Slot 1

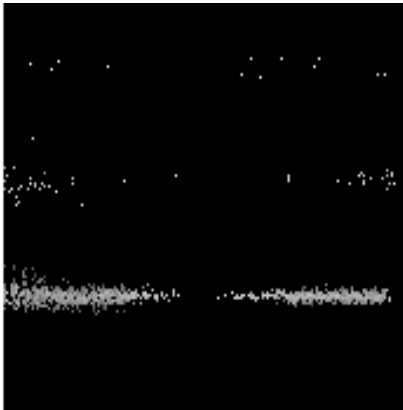


2.5.3 Slot 2

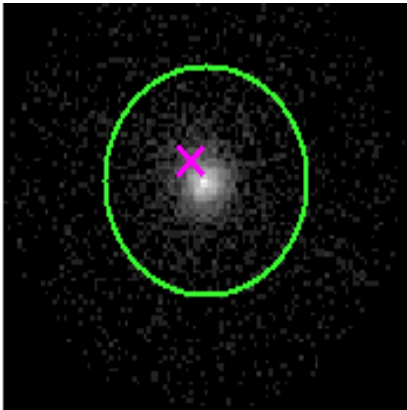


3 Gratings

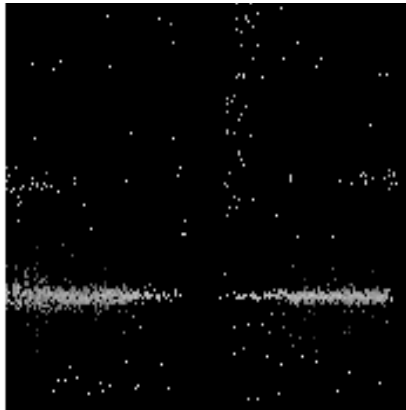
3.1 HEG Arm



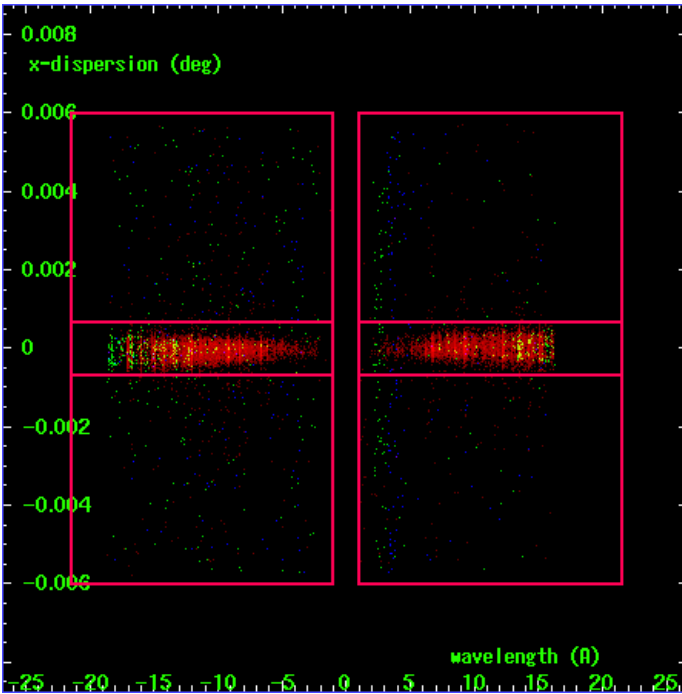
HEG Order Sort 123



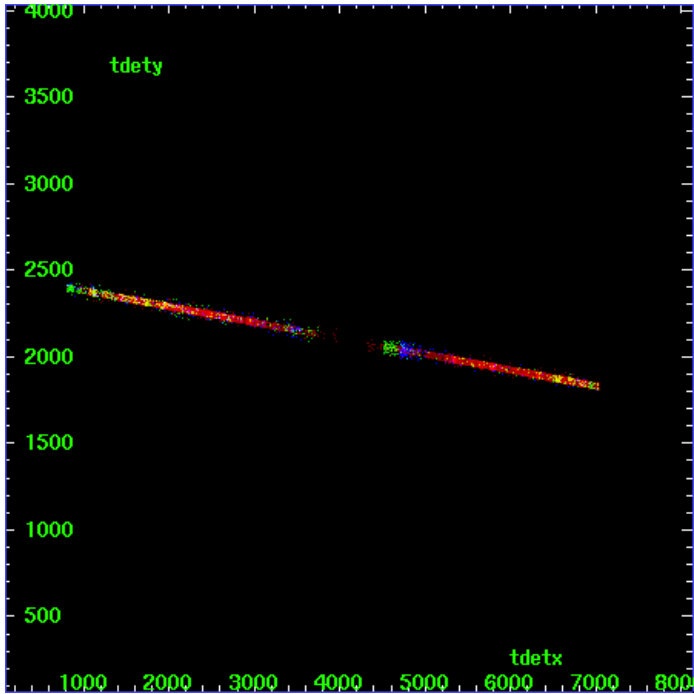
HEG Zero Order



HEG Order Sort ALL

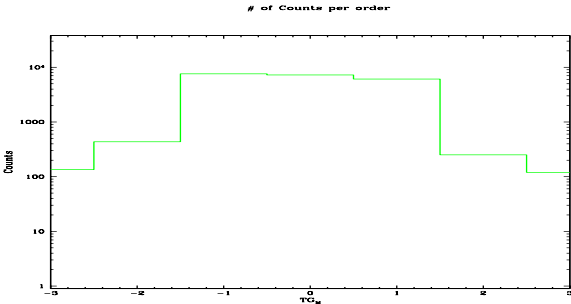


Spot Image HEG

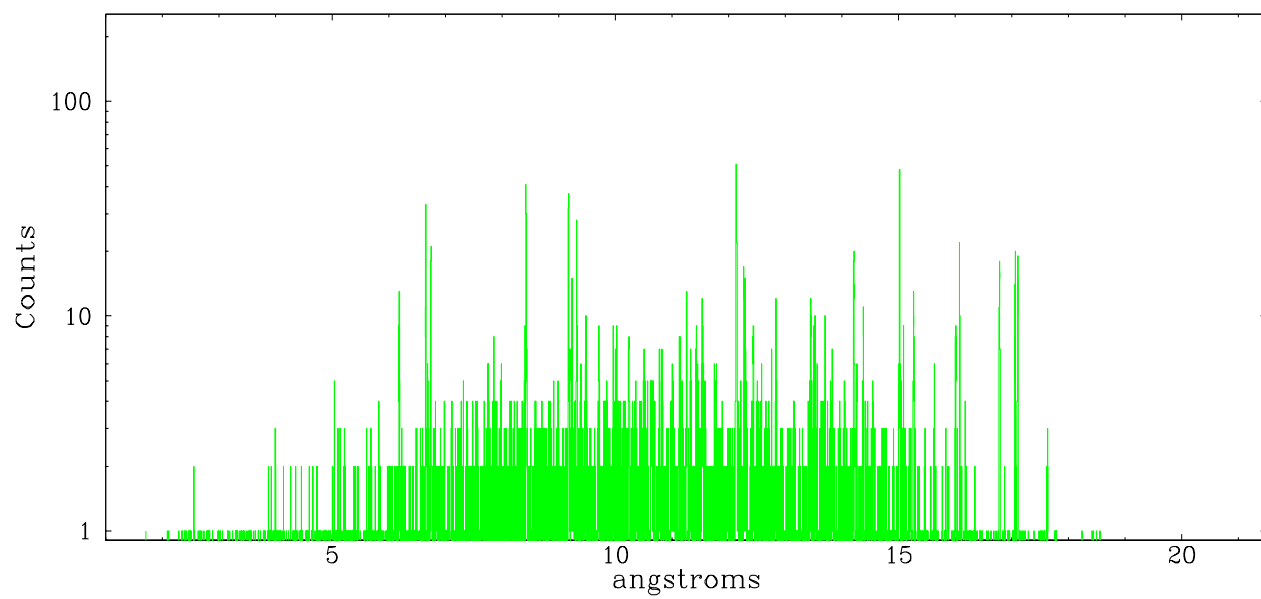


Full Detector HEG

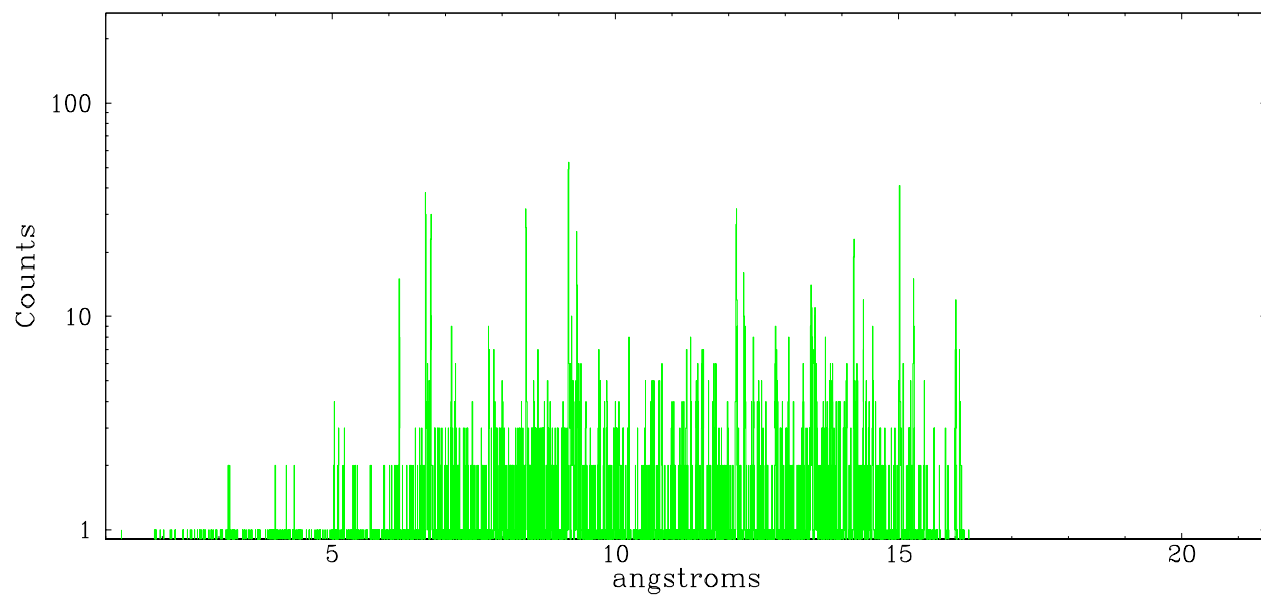
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	135	434	7568	7239	6103	251	120



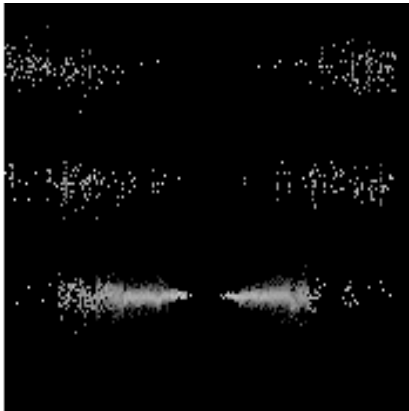
heg order -1



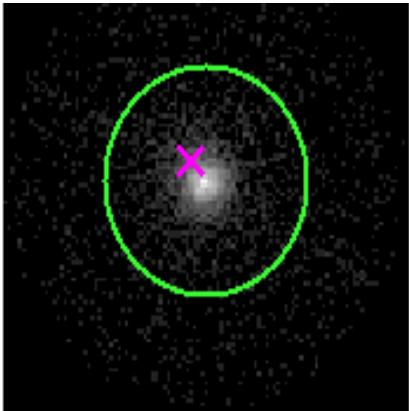
heg order +1



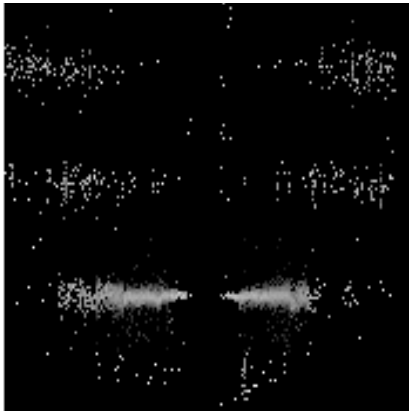
3.2 MEG Arm



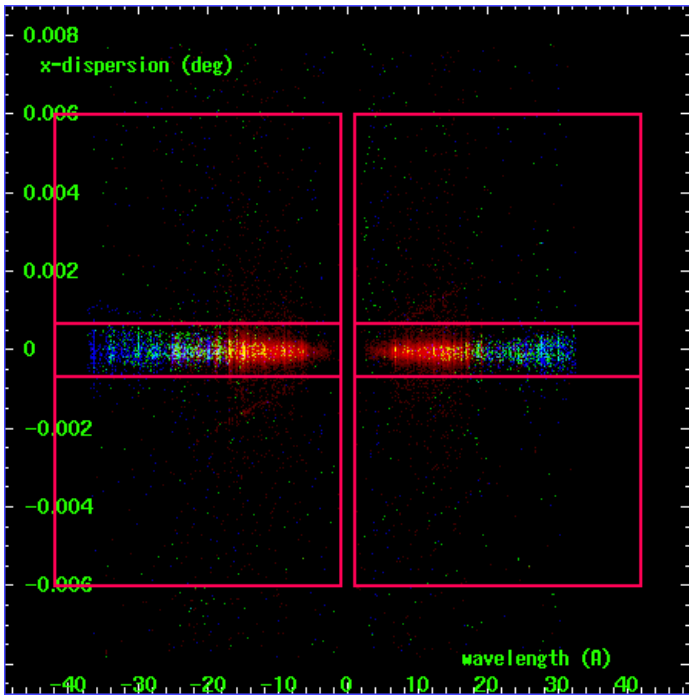
MEG Order Sort 123



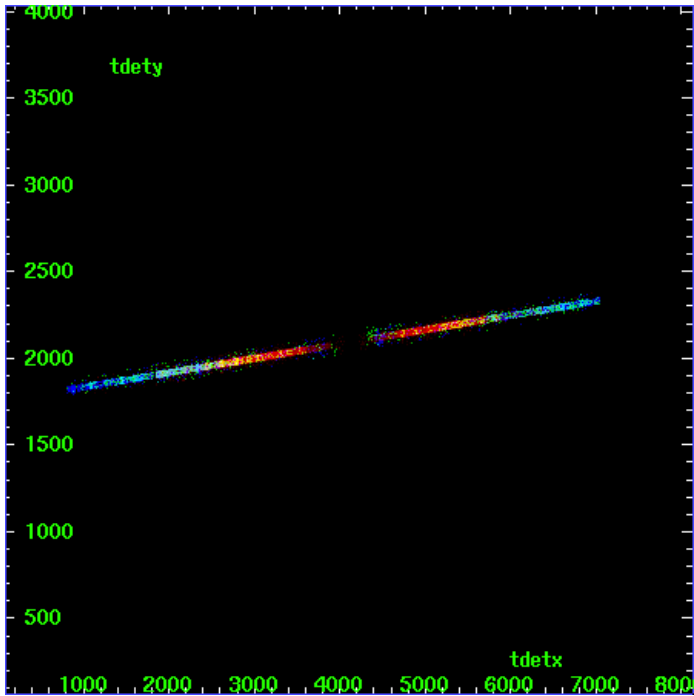
MEG Zero Order



MEG Order Sort ALL

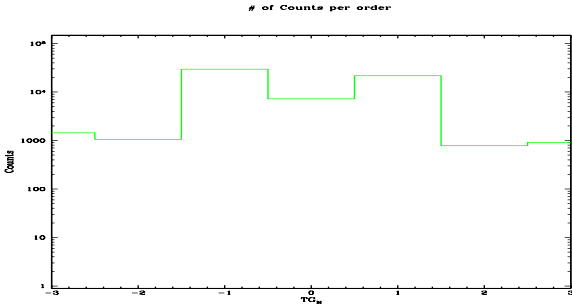


Spot Image MEG

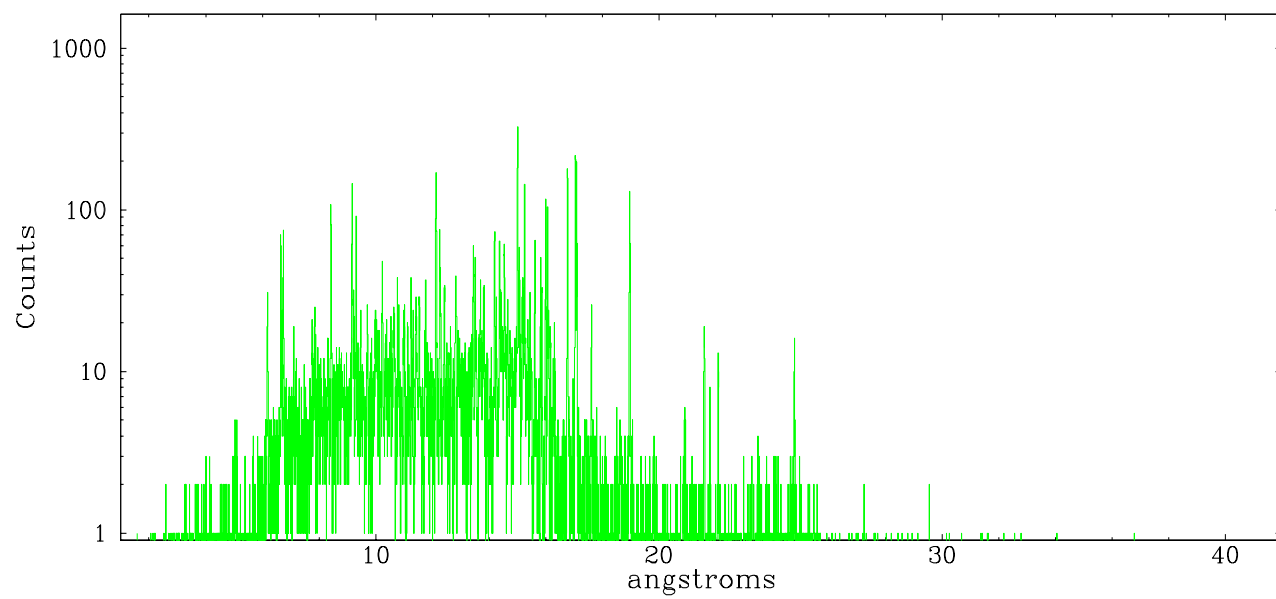


Full Detector MEG

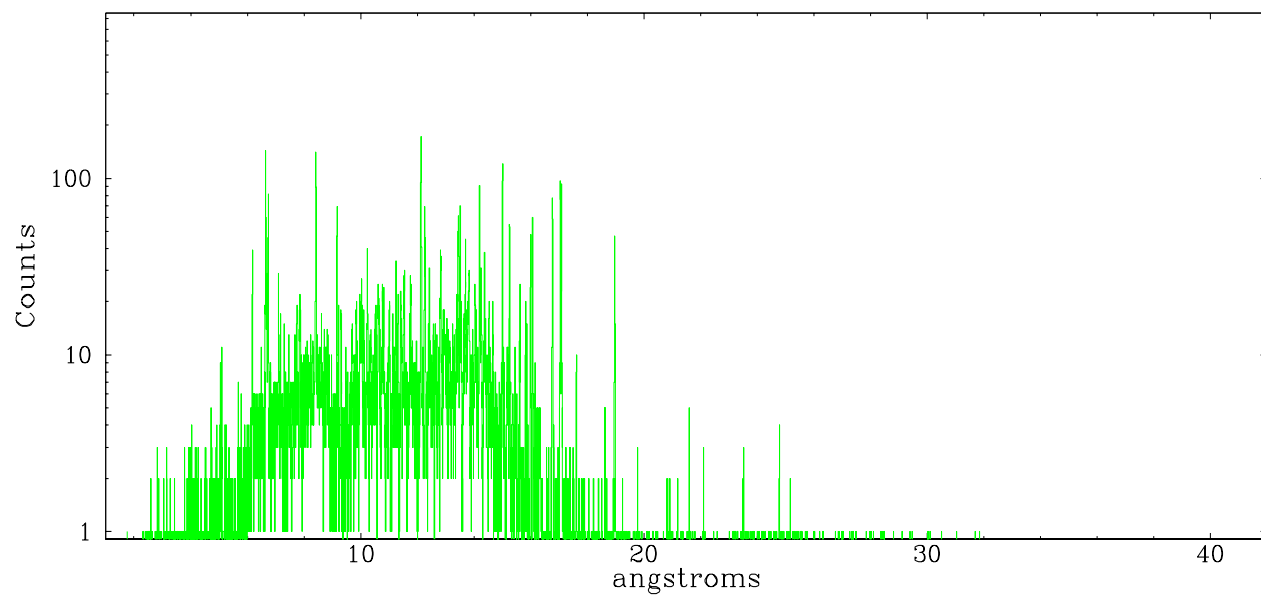
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1443	1061	29560	7239	21670	785	919



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.09.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.051

A.2 Comments

Requested coordinates are 05:16:42.30, +45:59:52.40. Coordinates for Capella are 05 16 41.3591, +45 59 52.768. The zeroth order was correctly identified by the software and the spectral data correctly extracted.