

V&V Reference Report

L2 ASCDS Version : 7.6.10

Observation 638 - L2 Version 002
Chandra X-Ray Center

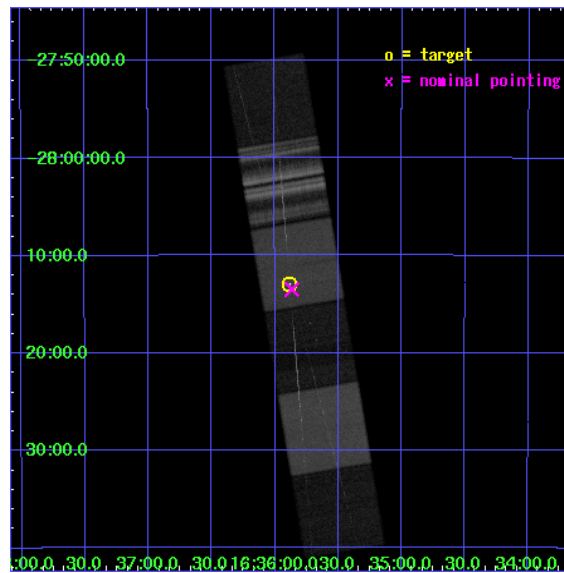
L2 Processing Date : Jun 8 2007

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
3	Gratings	17
3.1	HEG Arm	17
3.2	MEG Arm	19
A	Summary	21
A.1	Status	21
A.2	Comments	21

1 Front

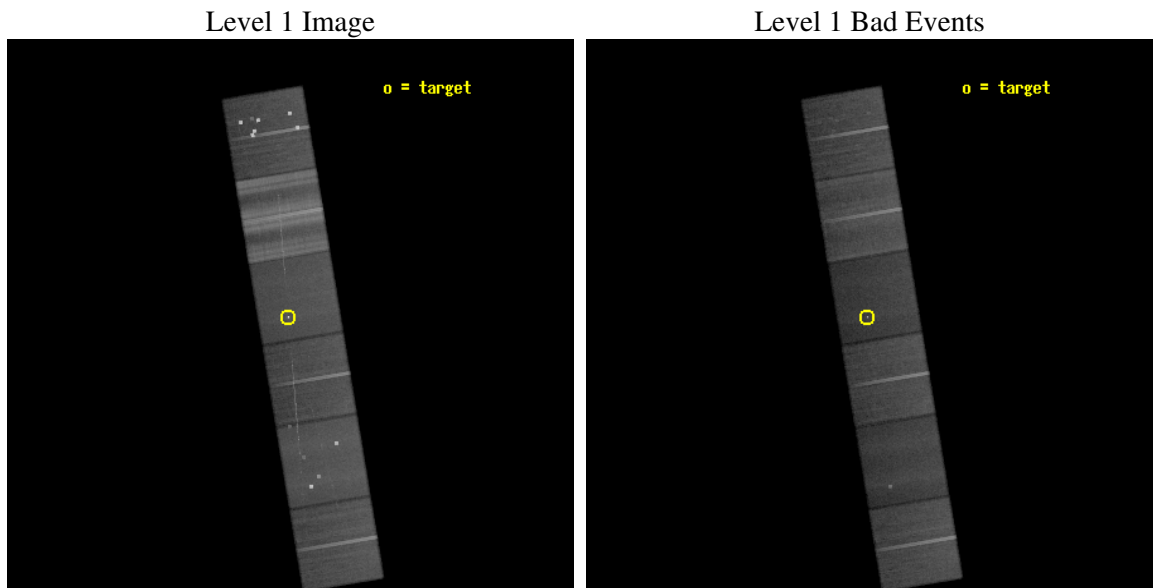
seq_num	200063
obs_id	638
title	ARE B STAR X-RAY SOURCES WIND-CORONAL HYBRIDS?
observer	Prof. David Cohen
object	TAU SCO
dtcycle	0
cycle	P
ra_targ	248.970417
dec_targ	-28.215694
ra_nom	248.96657571608
dec_nom	-28.224992086962
roll_nom	260.45281097975
revision	3
ontime	59935.836115196
livetime	59176.892469278
ontime4	59932.595154956
ontime5	59939.077105358
ontime6	59939.077075437
ontime7	59935.836115196
ontime8	59935.836145148
ontime9	59935.836115211
l2events	778633



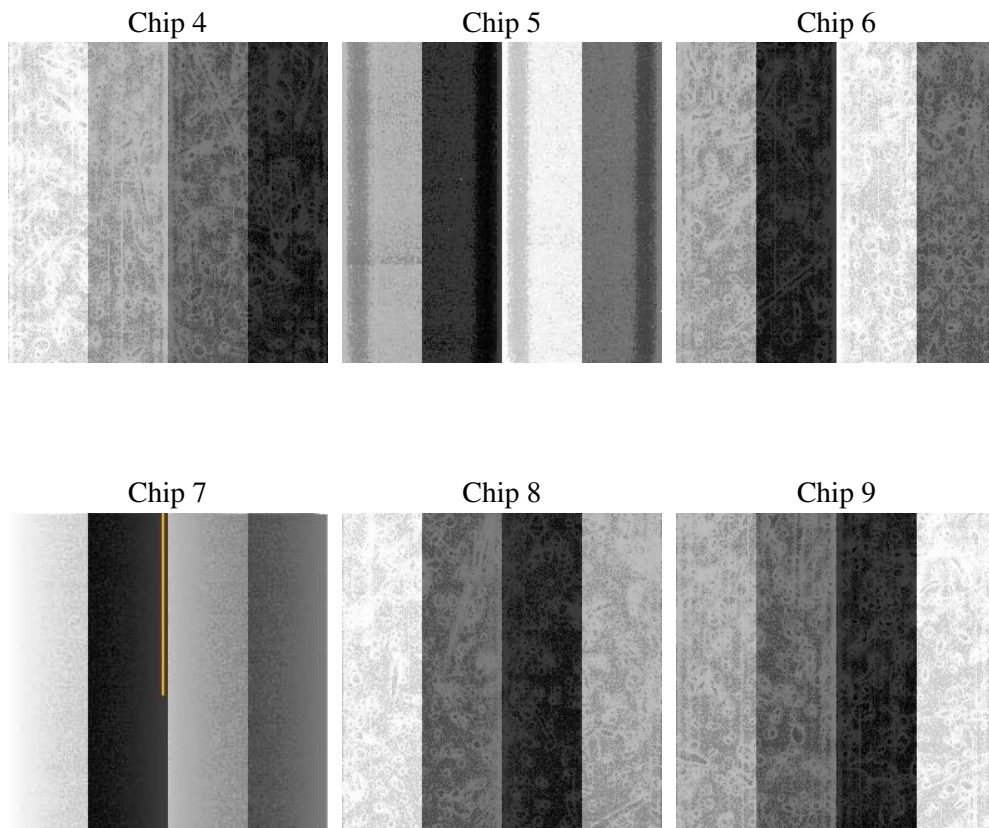
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0
ascdsver	7.6.10
caldsver	3.4.0
date	2007-06-08T08:34:54
revision	3

sched_exp_time	60000.000000
ontime	59935.836115196
ontime4	59932.595154956
ontime5	59939.077105358
ontime6	59939.077075437
ontime7	59935.836115196
ontime8	59935.836145148
ontime9	59935.836115211
l1events	3330303

2.1.4 Events

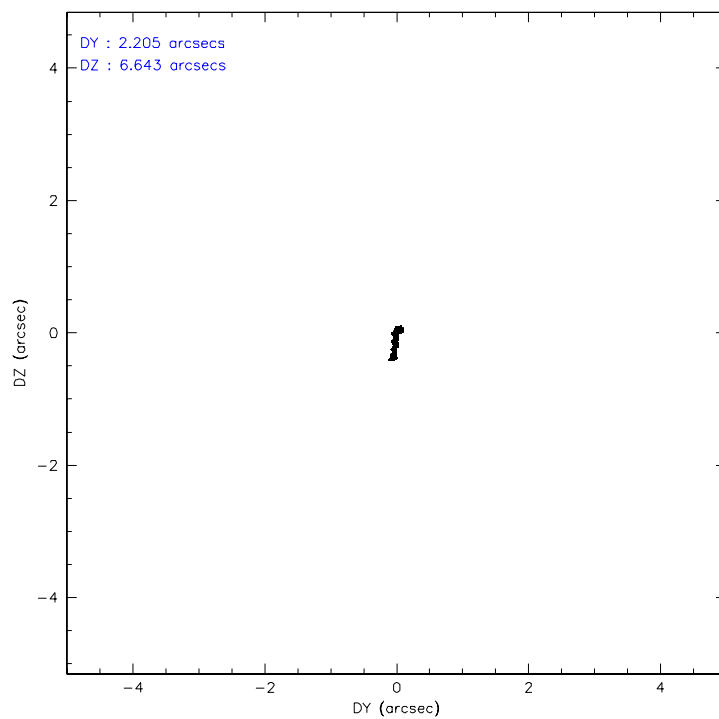
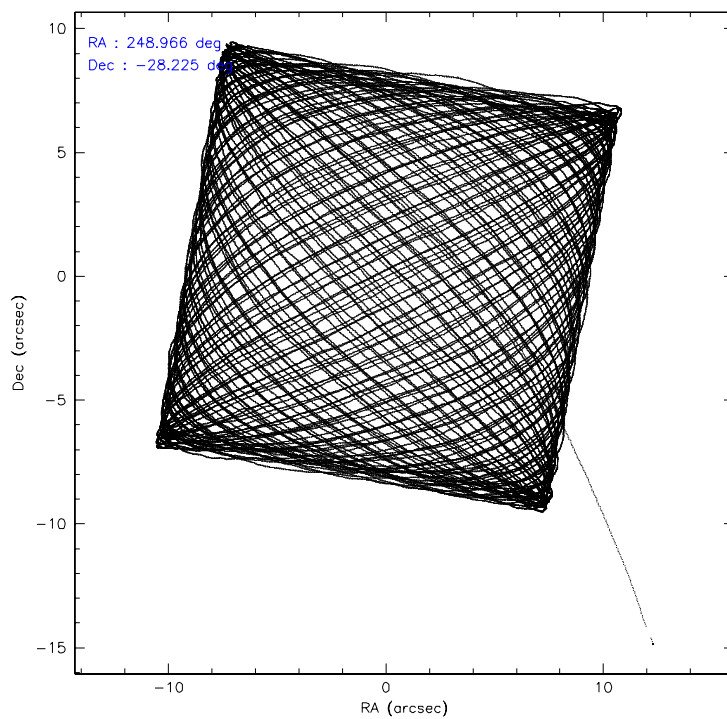
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	479105	541729	442930	465474	868678	532387
rejected events	407792	277206	381692	261189	445782	369129
rejected %	85%	51%	86%	56%	51%	69%

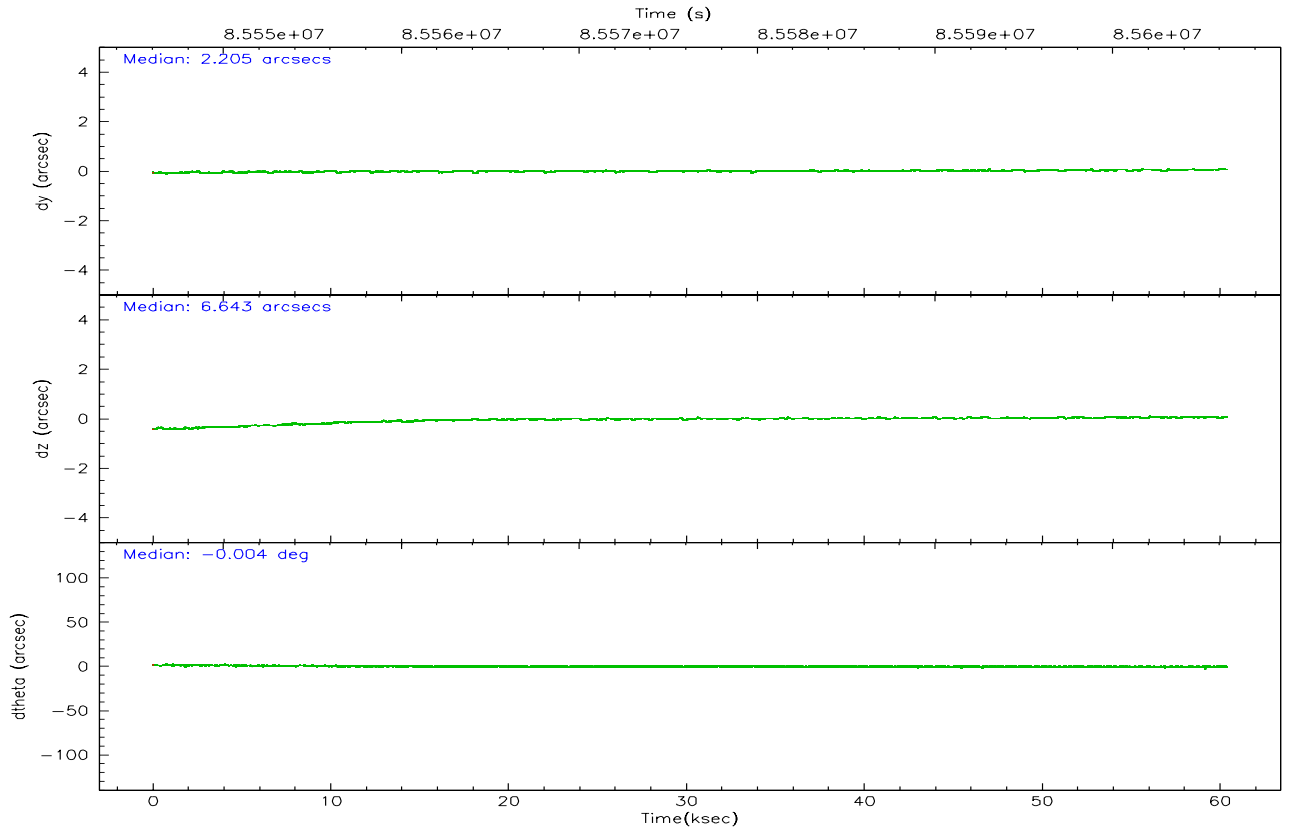
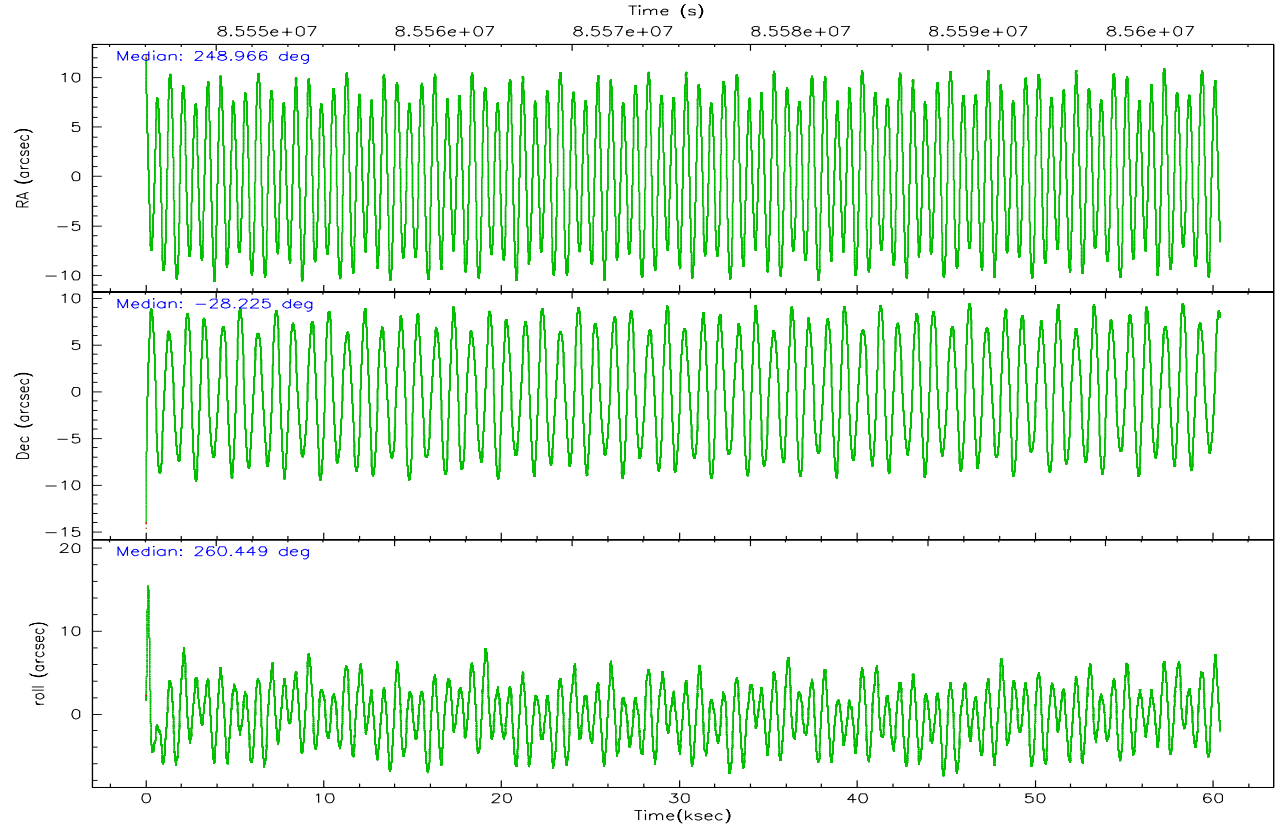
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	29875	44555	27477	21717	135447	93923
	6%	8%	6%	4%	15%	17%
grade 1 events	308	2385	250	850	1120	502
	0%	0%	0%	0%	0%	0%
grade 2 events	21150	79344	14377	42953	58708	49473
	4%	14%	3%	9%	6%	9%
grade 3 events	4391	12335	4444	19363	75880	4467
	0%	2%	1%	4%	8%	0%
grade 4 events	4723	12244	4494	19506	67100	4440
	0%	2%	1%	4%	7%	0%
grade 5 events	12520	38956	14318	44401	22280	15265
	2%	7%	3%	9%	2%	2%
grade 6 events	11183	116070	10449	100764	85789	10976
	2%	21%	2%	21%	9%	2%
grade 7 events	394955	235840	367121	215920	422354	353341
	82%	43%	82%	46%	48%	66%

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	248.955536	248.9665757160766	Subarray requested	NONE	NONE
Pointing Dec	-28.199419	-28.22499208696211	Alternating exposures requested	N	N
Pointing Roll	260.290962	260.4528109797515	Primary exposure time	3.200000	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	85546444.184000	85545371.841379			
Observation start date	2000-09-17T02:53:00	2000-09-17T02:36:11			
Observation end time	85606444.184000	85608132.59374			
Observation end date	2000-09-17T19:33:00	2000-09-17T20:02:12			
Read mode	TIMED	TIMED			

2.3 Aspect



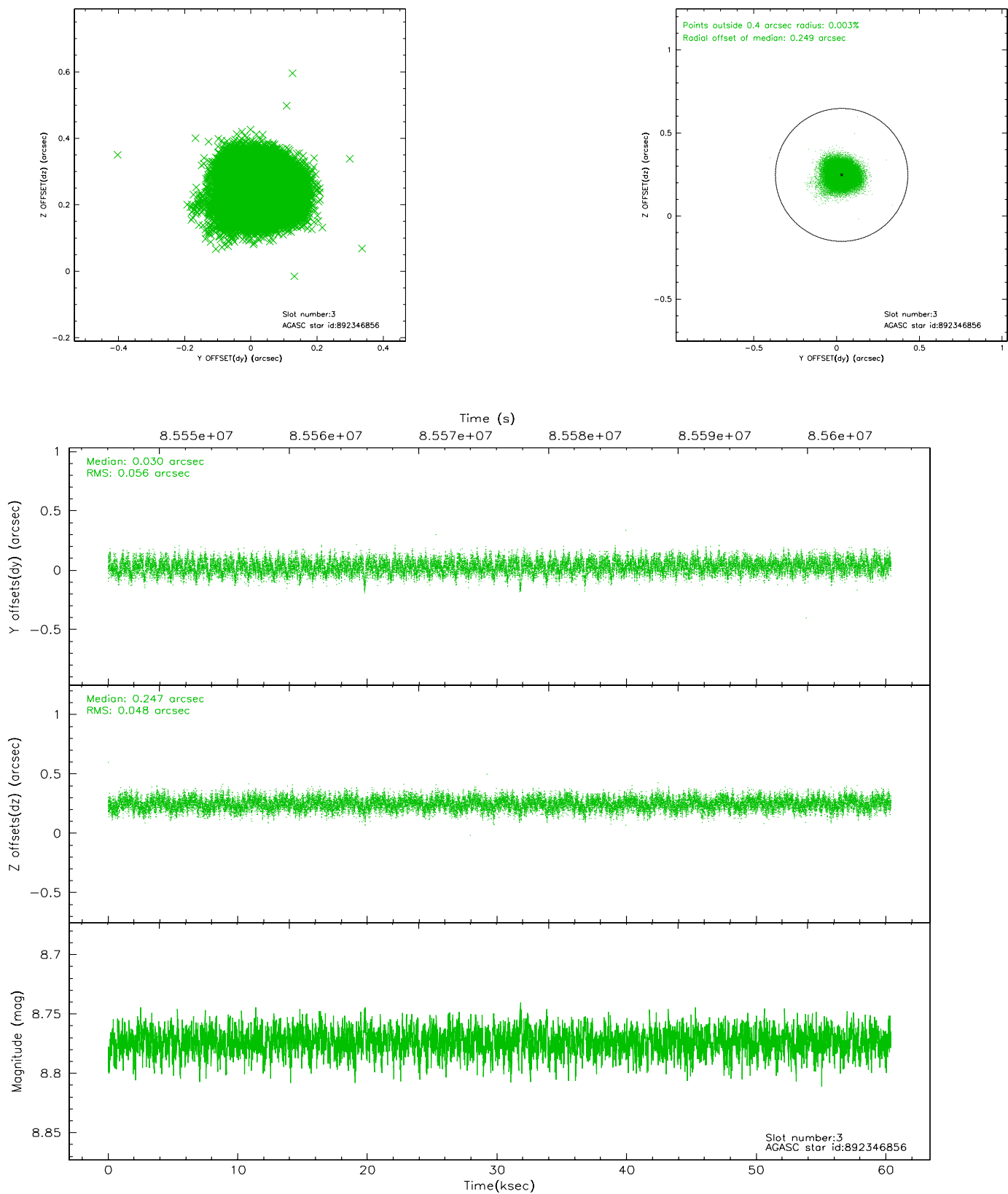


Slot Statistics

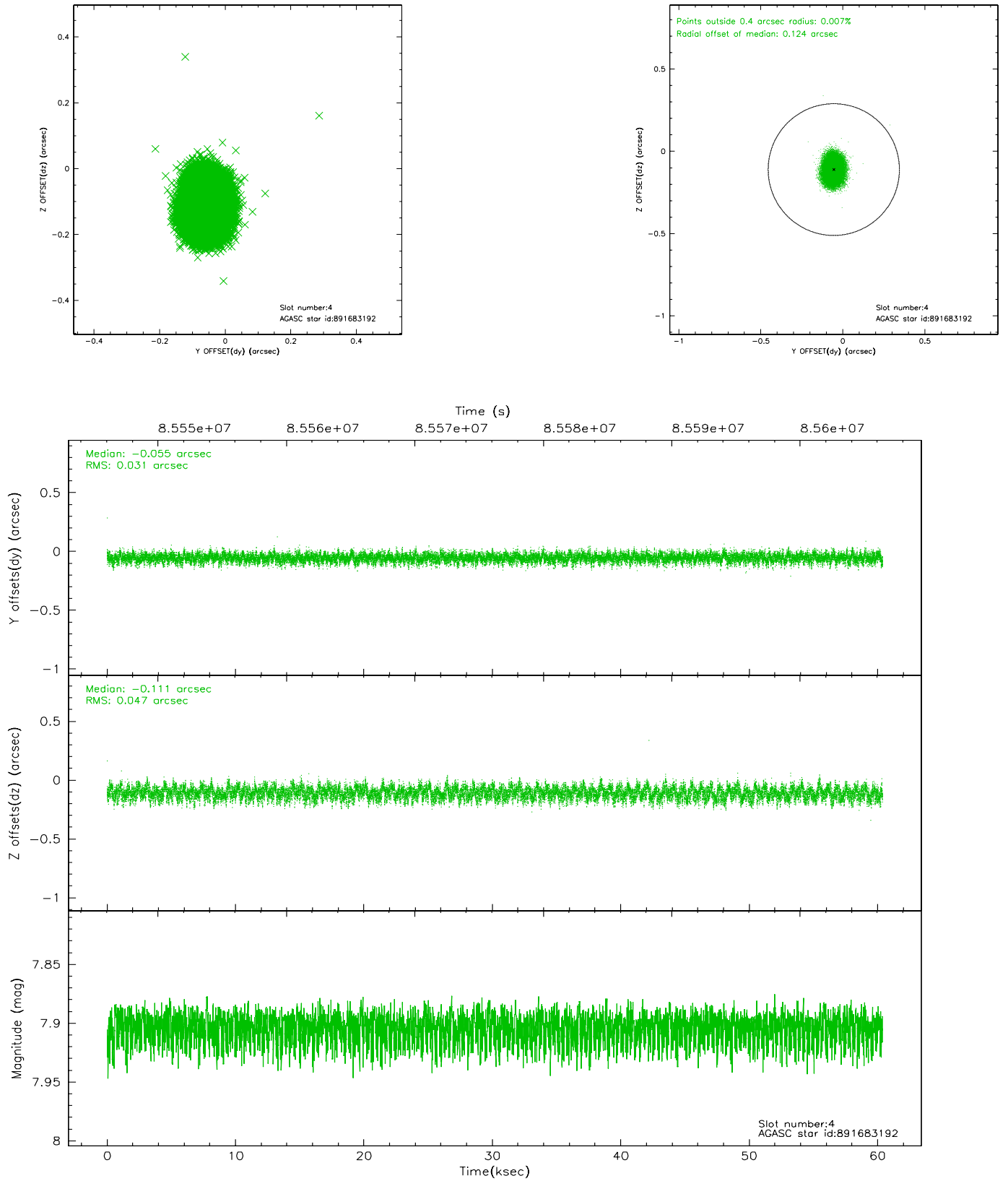
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	14730	-0.024	-0.034	0.007	0.012	0.000000	0.000000	-754.66	-1789.91
1	FID	ACIS-S-4	7.19	14729	-0.053	0.020	0.005	0.009	0.000000	0.000000	2158.62	118.64
2	FID	ACIS-S-5	7.23	14731	0.046	0.022	0.007	0.011	0.000000	0.000000	-1807.47	112.29
3	GUIDE	892346856	8.77	29353	0.030	0.247	0.079	0.125	249.406645	-28.615766	1240.13	1659.45
4	GUIDE	891683192	7.90	29461	-0.055	-0.111	0.060	0.097	248.306807	-28.115350	55.22	-2079.83
5	GUIDE	892209072	8.85	29451	0.155	-0.083	0.068	0.111	249.010790	-28.359027	537.60	269.98
6	GUIDE	891696968	8.14	29385	-0.133	-0.090	0.052	0.083	248.659799	-27.735271	-1486.43	-1210.00
7	GUIDE	891830608	9.83	29431	0.005	0.037	0.099	0.161	249.196933	-28.121496	-404.57	708.86

2.4 Star Slots

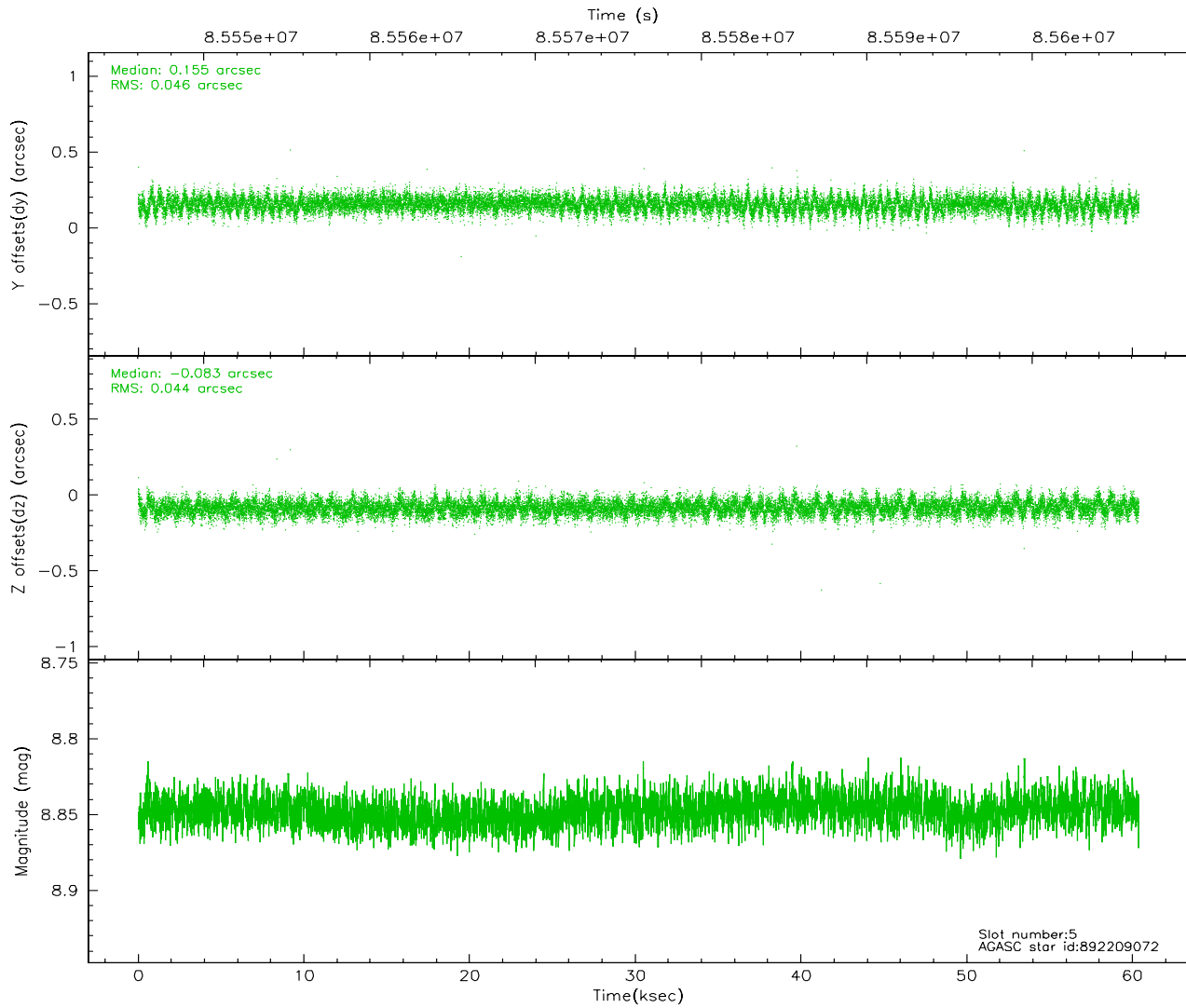
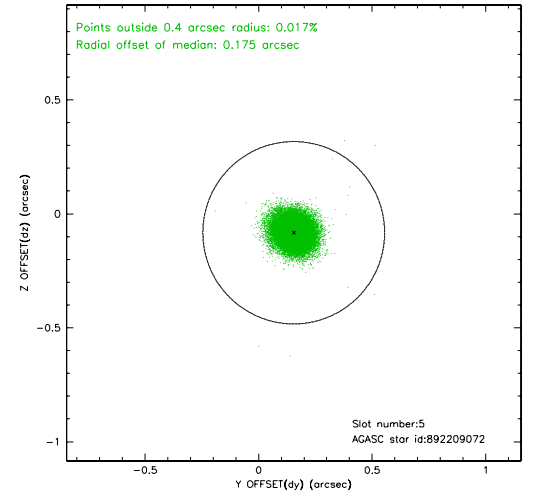
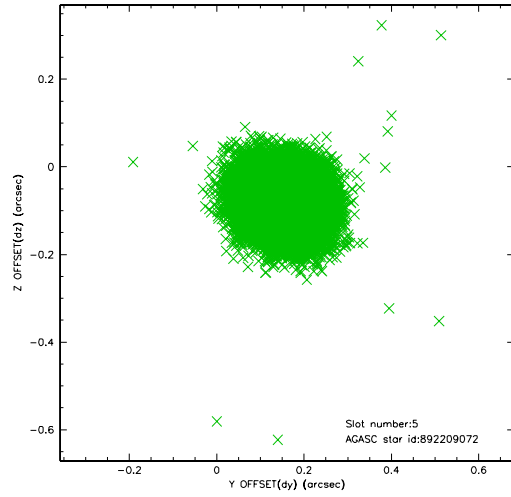
2.4.1 Slot 3



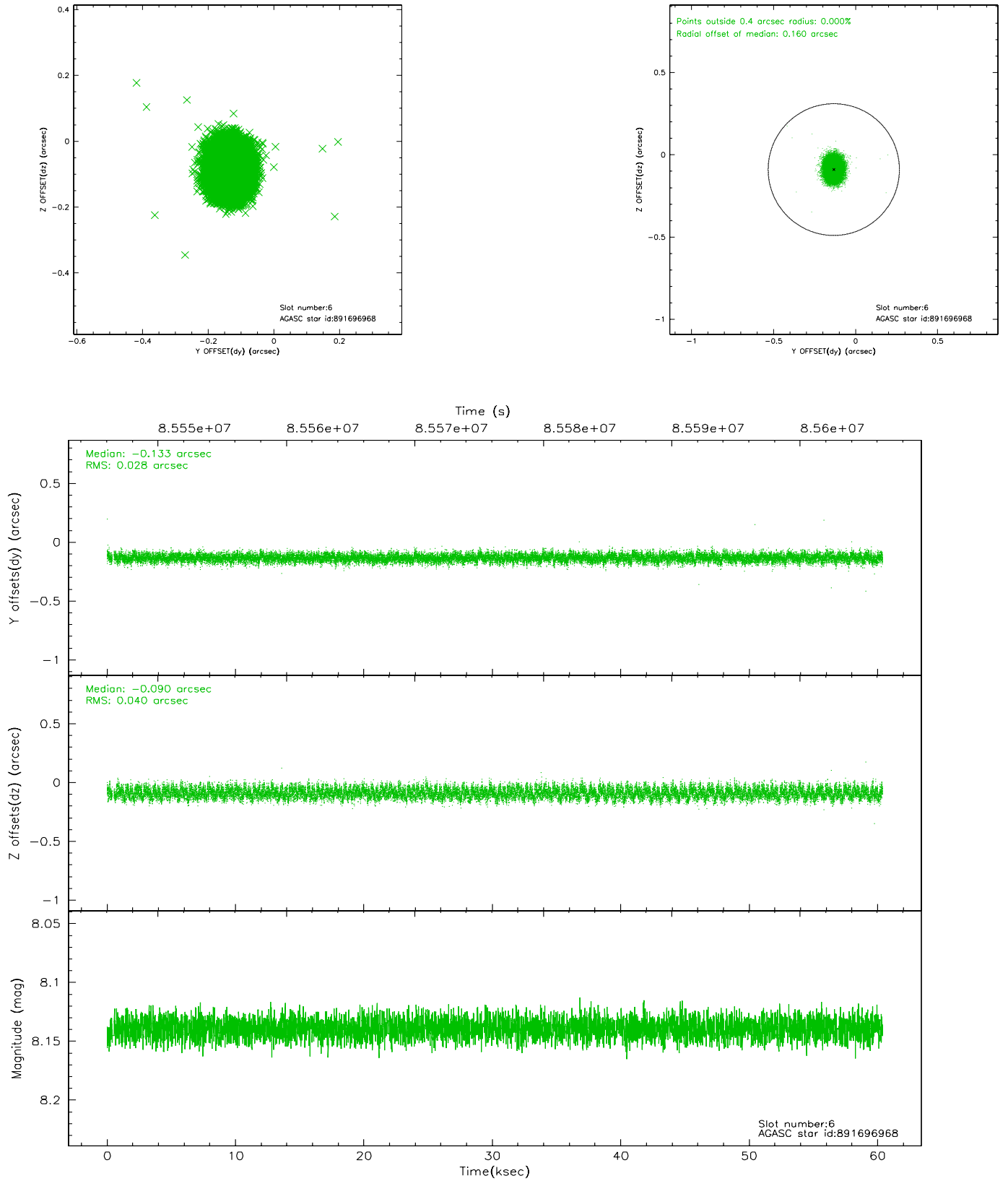
2.4.2 Slot 4



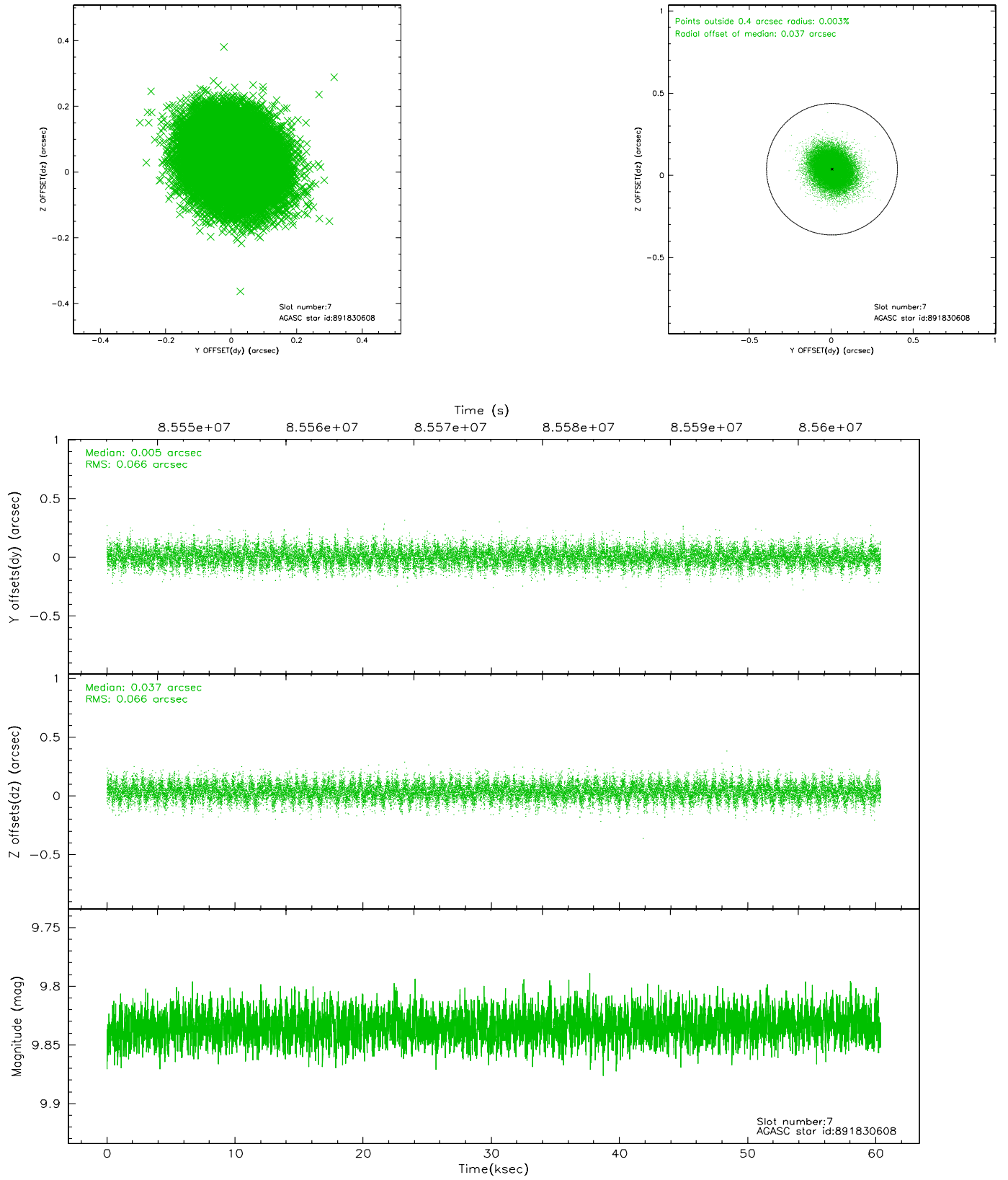
2.4.3 Slot 5



2.4.4 Slot 6

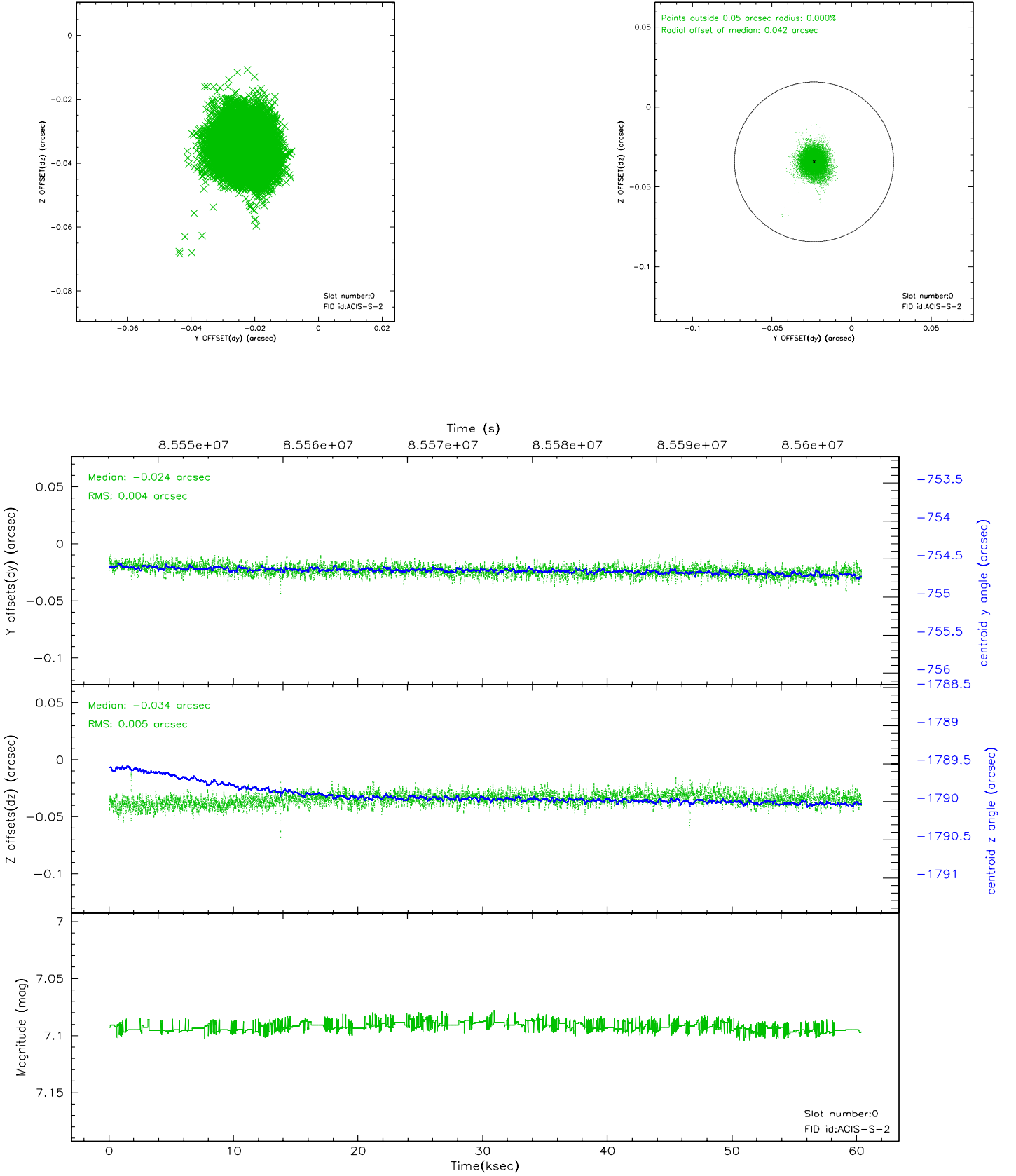


2.4.5 Slot 7

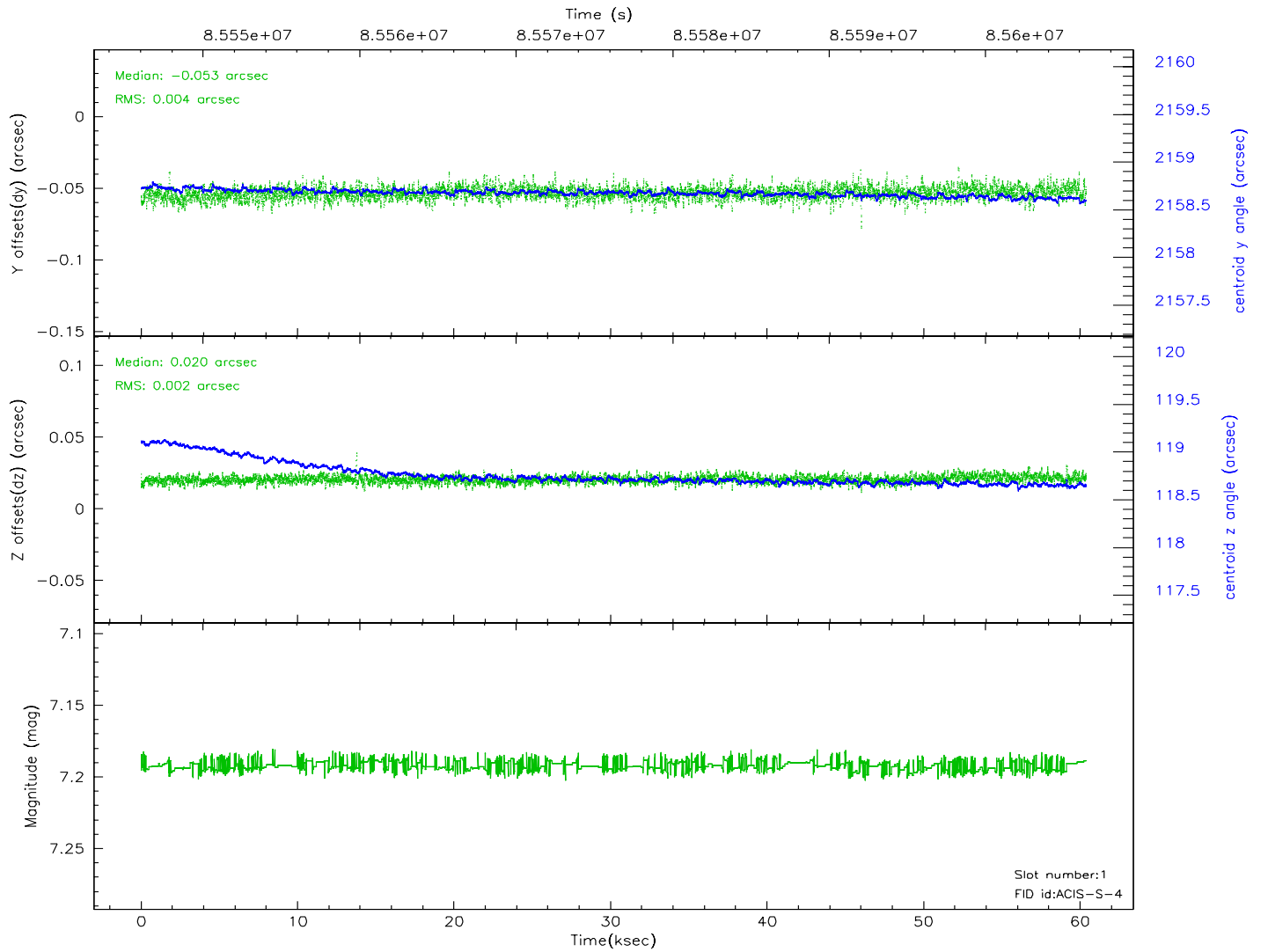
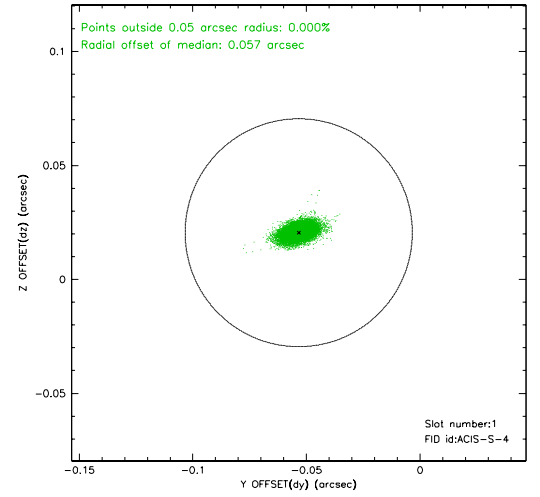
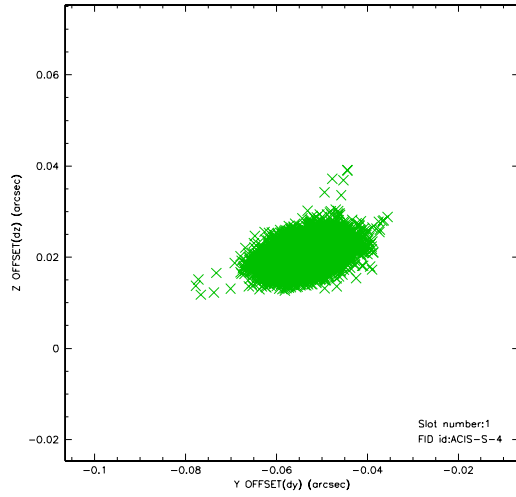


2.5 FID Slots

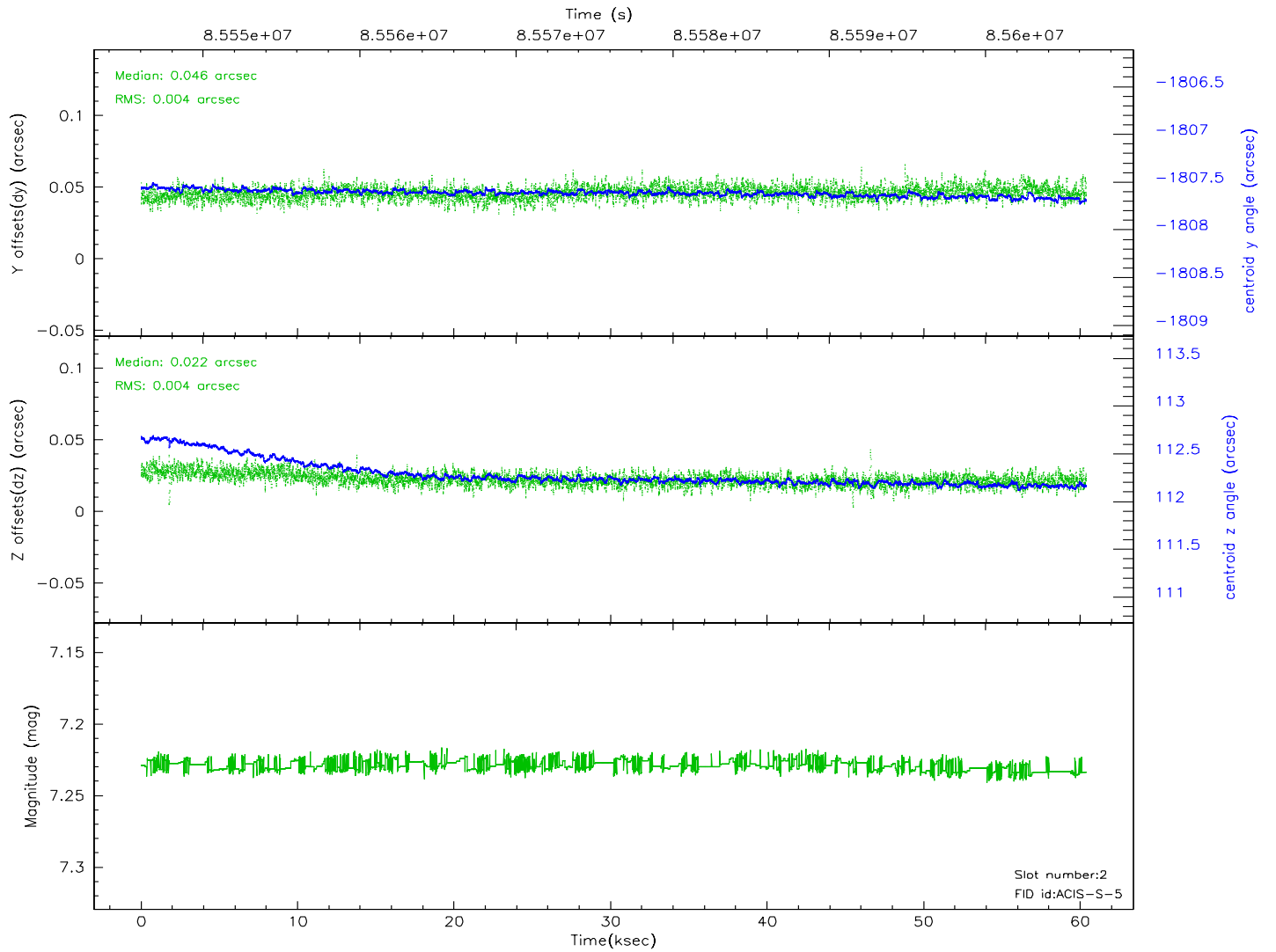
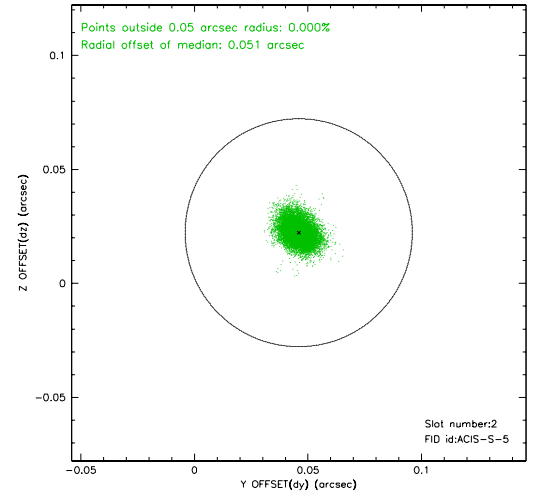
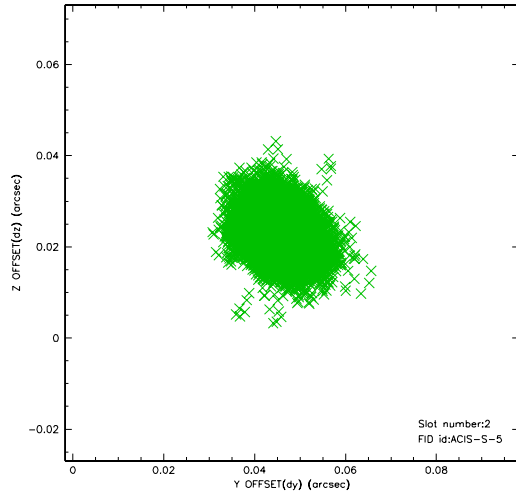
2.5.1 Slot 0



2.5.2 Slot 1

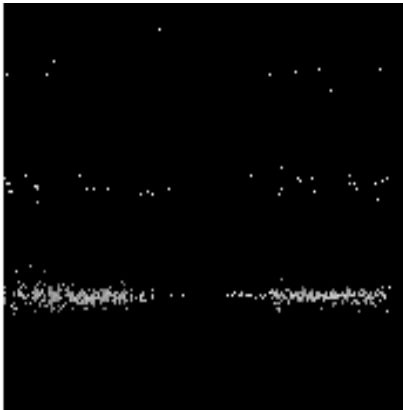


2.5.3 Slot 2



3 Gratings

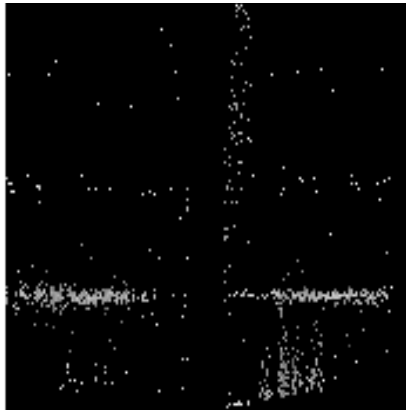
3.1 HEG Arm



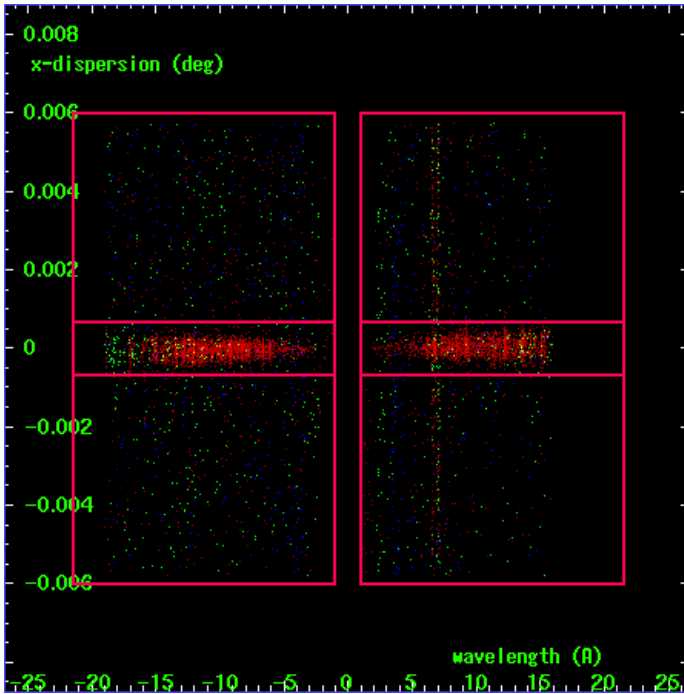
HEG Order Sort 123



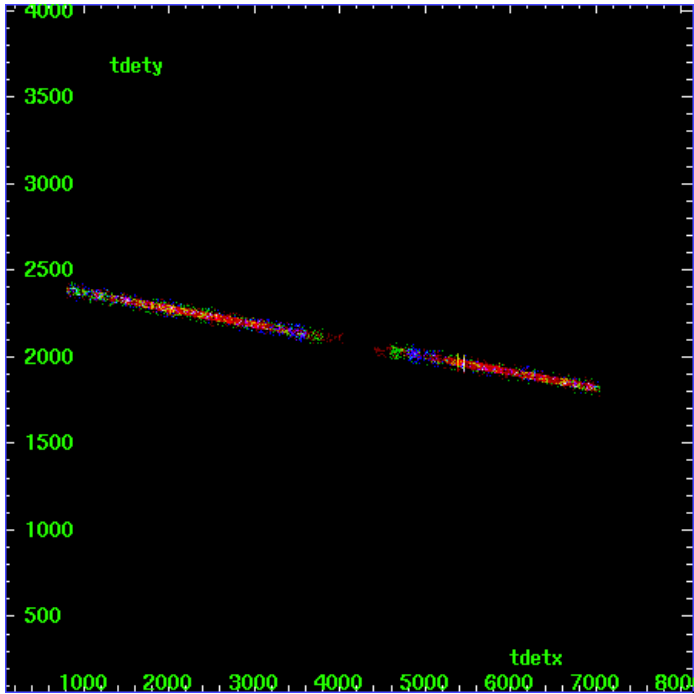
HEG Zero Order



HEG Order Sort ALL

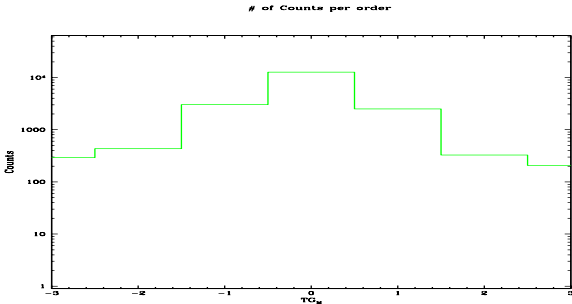


Spot Image HEG

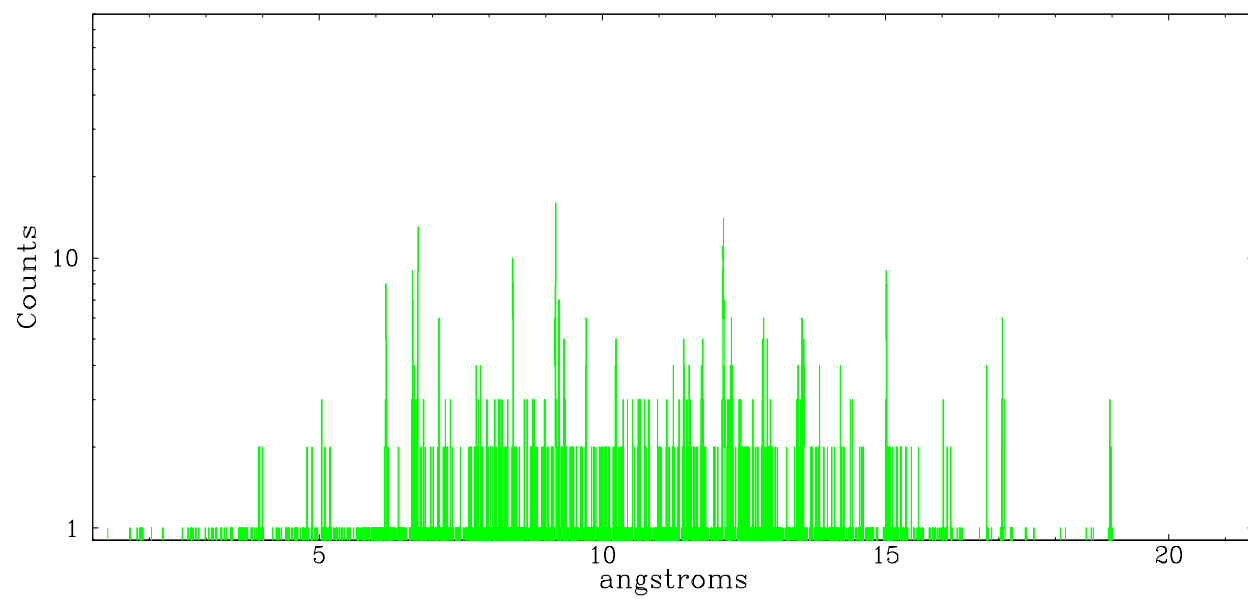


Full Detector HEG

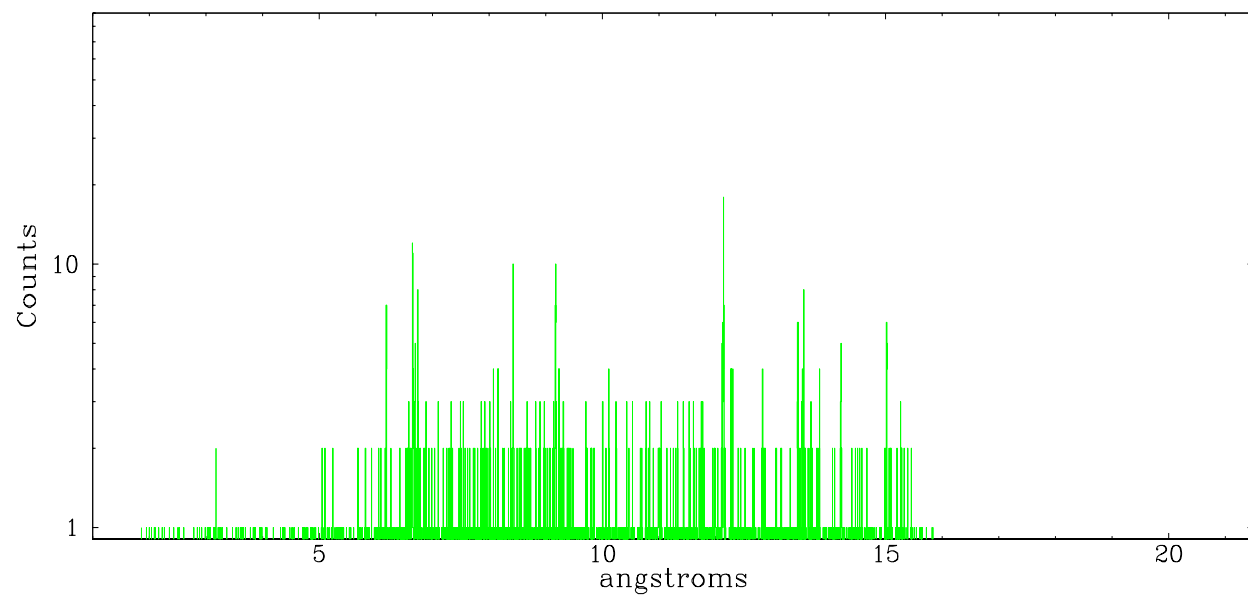
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	291	432	3034	12708	2513	326	207



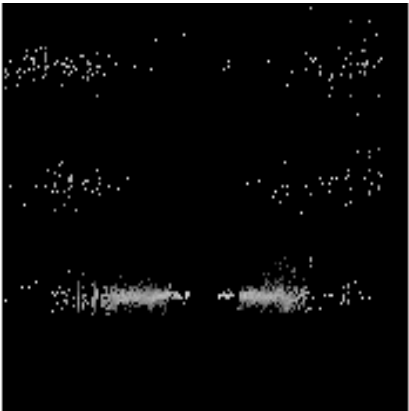
heg order -1



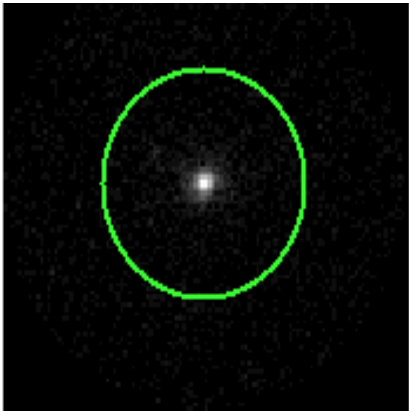
heg order +1



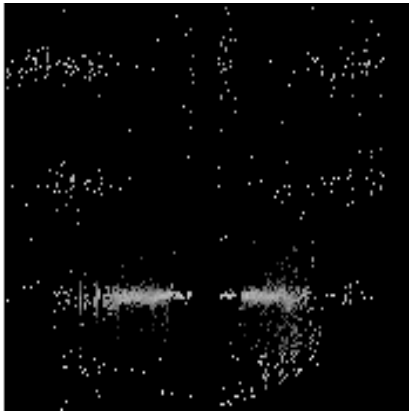
3.2 MEG Arm



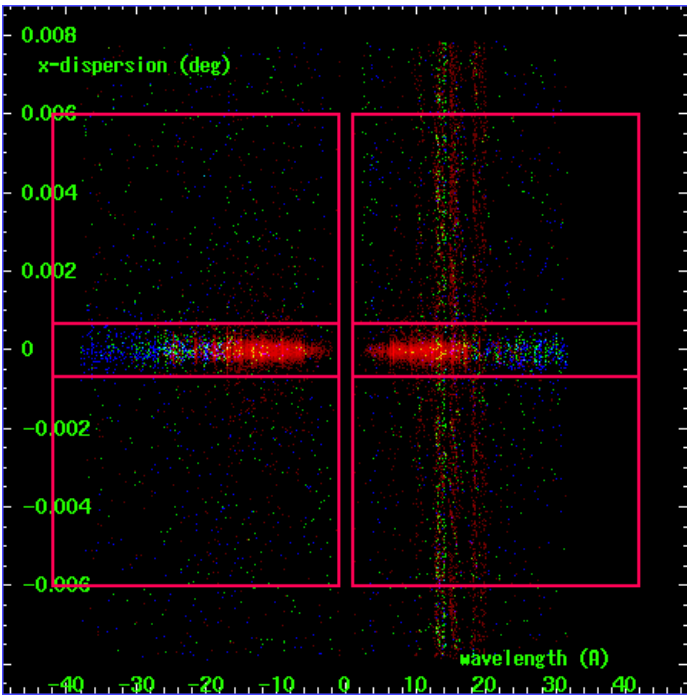
MEG Order Sort 123



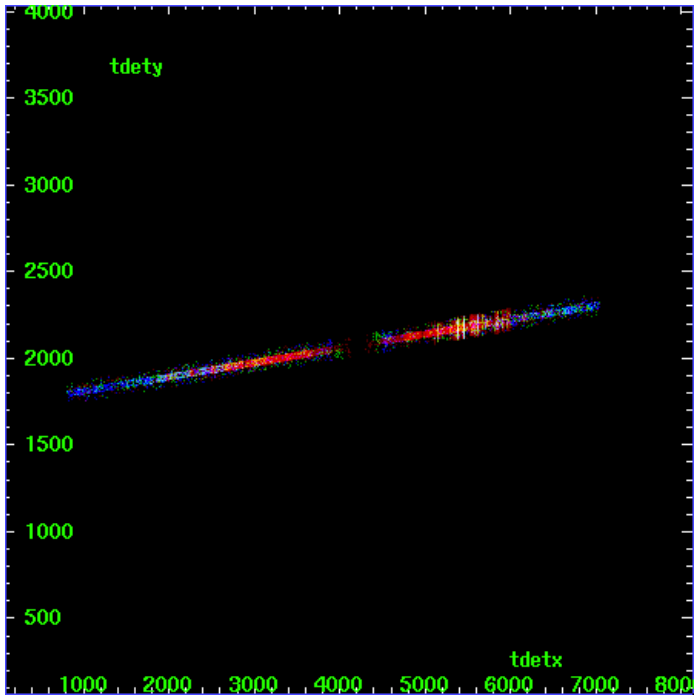
MEG Zero Order



MEG Order Sort ALL

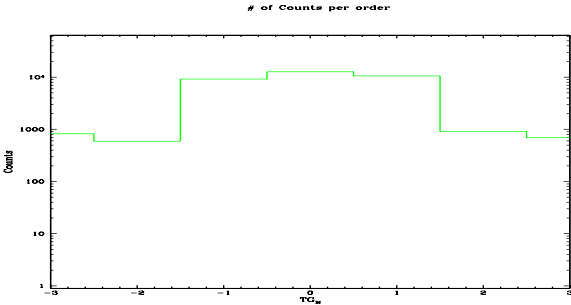


Spot Image MEG

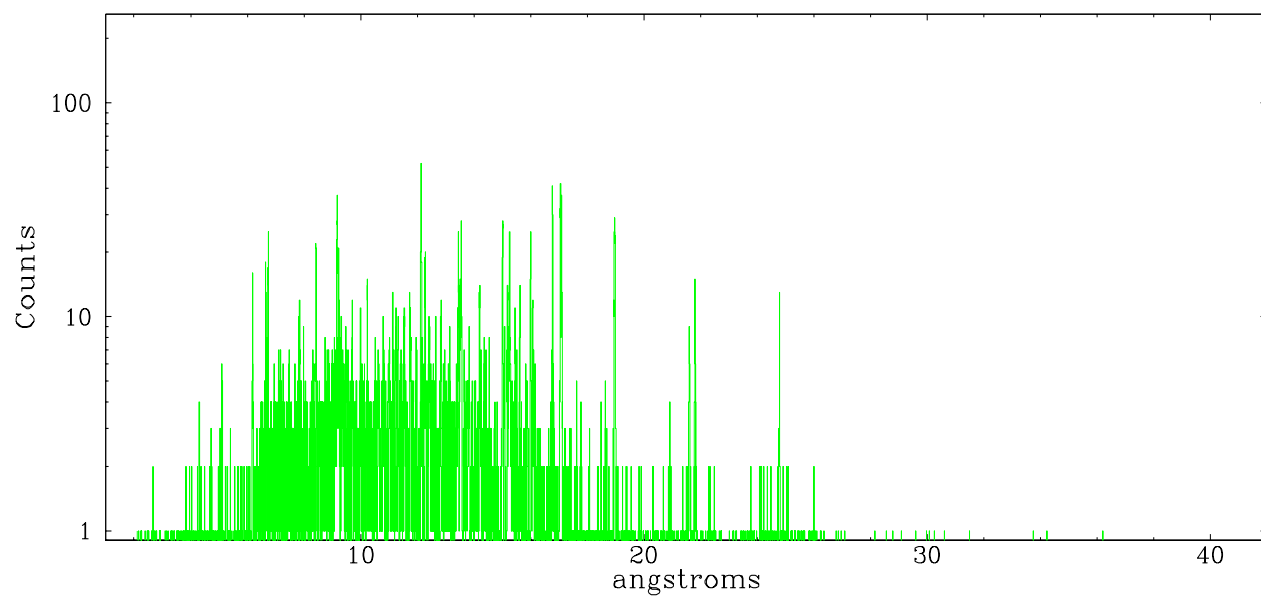


Full Detector MEG

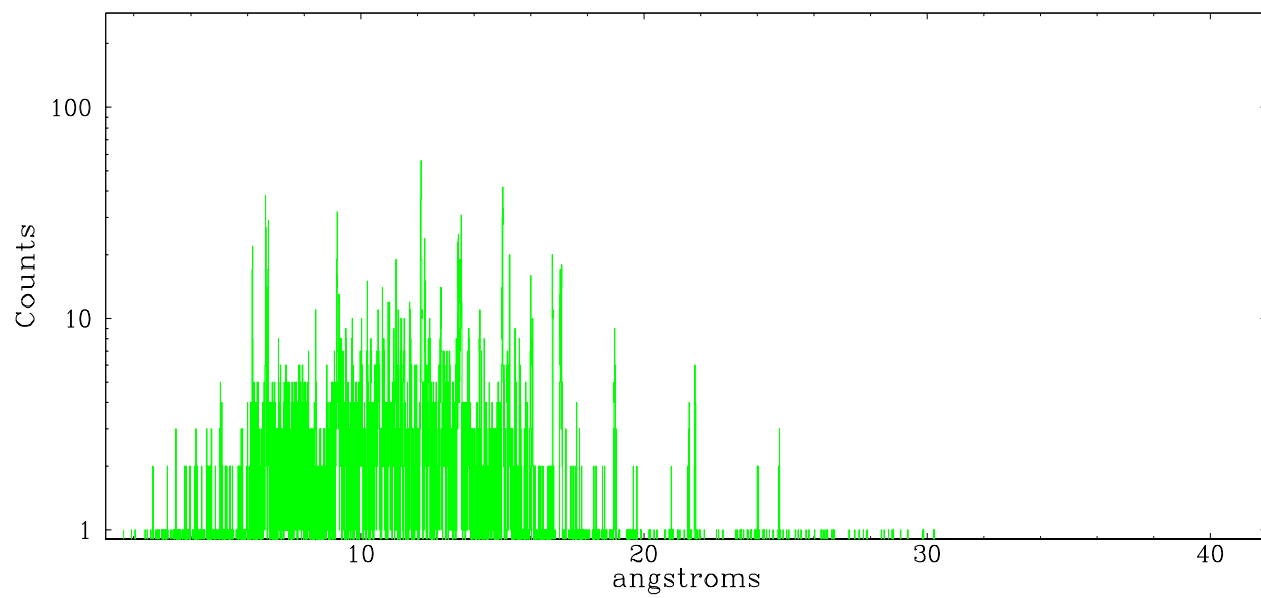
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	824	593	9178	12708	10605	918	693



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2007.06.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	59.939

A.2 Comments

Chip S4 is severely streaked. Running the destreak algorithm on the level 2 data may improve the analysis.