

V&V Reference Report

L2 ASCDS Version : 7.6.7

Observation 5422 - L2 Version 002
Chandra X-Ray Center

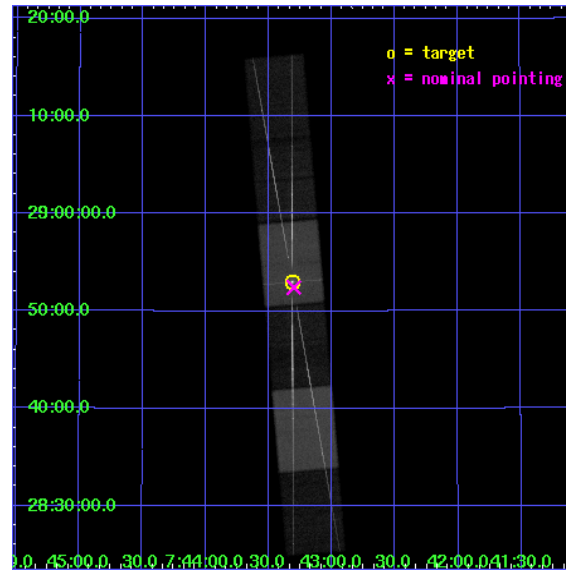
L2 Processing Date: Mar 3 2006

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

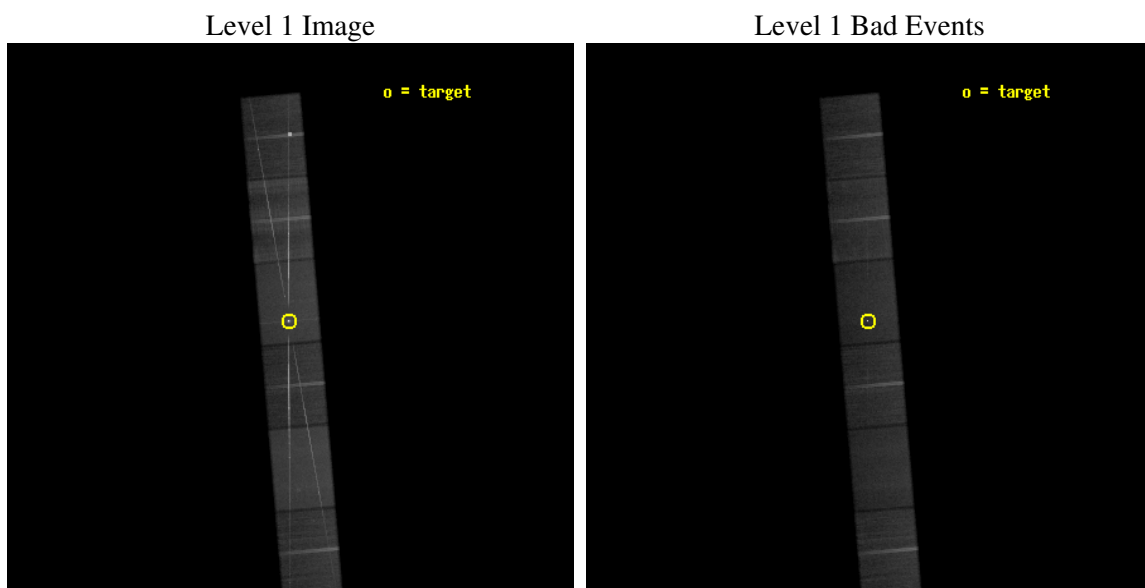
seq_num	200355
obs_id	5422
title	CORONAL FLARING AND THE NEUPERT EFFECT ON THE ACTIVE BINARY SIGMA GEM
observer	DR. Alexander Brown
object	SIGMA GEM
dtcycle	0
cycle	P
ra_targ	115.827917
dec_targ	28.88325
ra_nom	115.82506094541
dec_nom	28.873930343679
roll_nom	265.05800884499
revision	2
ontime	63860.0
livetime	62828.605610301
ontime4	63854.917939901
ontime5	63860.0
ontime6	63860.0
ontime7	63860.0
ontime8	63860.0
ontime9	63860.0
l2events	765540



2 OBI

2.1 OBI

2.1.1 Images

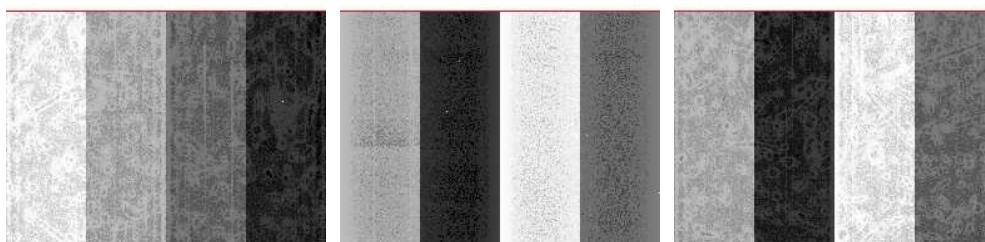


2.1.2 Bias

Chip 4

Chip 5

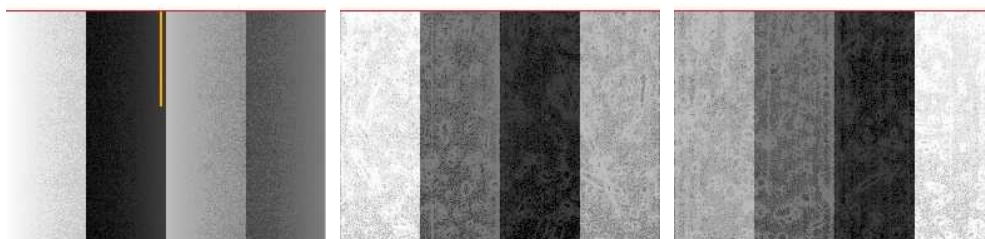
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	1
ascdsver	7.6.7
caldsver	3.2.1
date	2006-03-03T13:56:17
revision	2

sched_exp_time	63700.000000
ontime	64450.166326374
ontime4	64445.084246367
ontime5	64450.166326374
ontime6	64450.166306466
ontime7	64450.166326374
ontime8	64450.166306466
ontime9	64450.166306466
l1events	2626223

2.1.4 Events

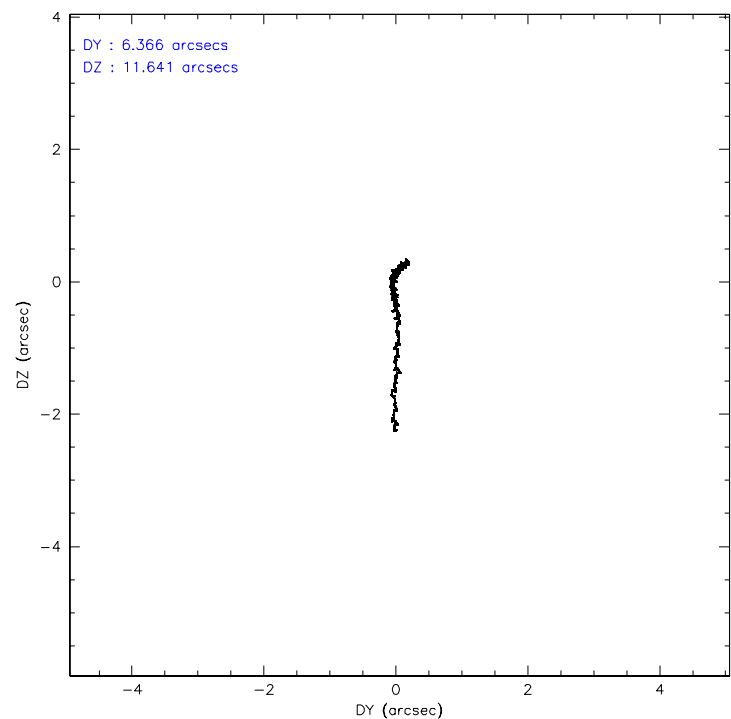
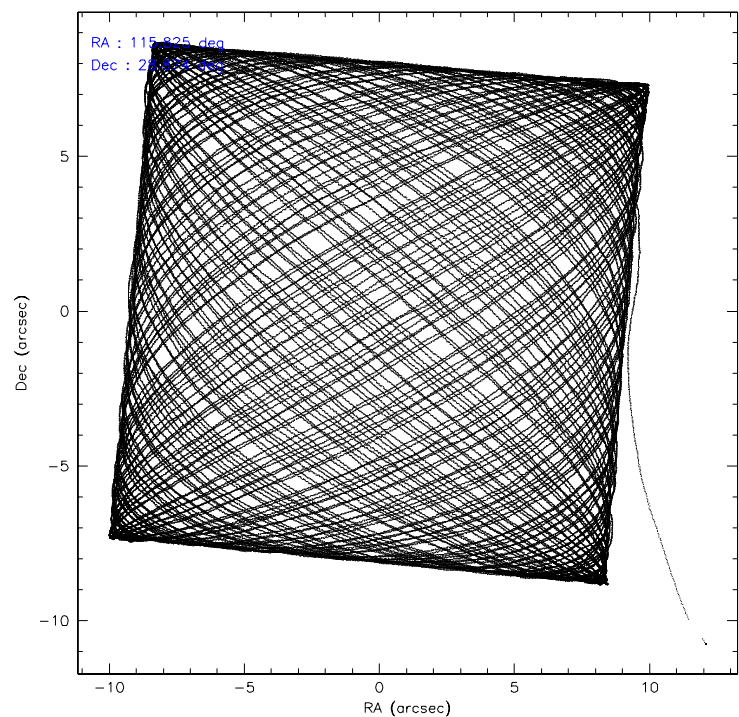
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	355775	489297	411394	514436	506539	348782
rejected events	304609	258848	279912	276803	315406	264925
rejected %	85%	52%	68%	53%	62%	75%

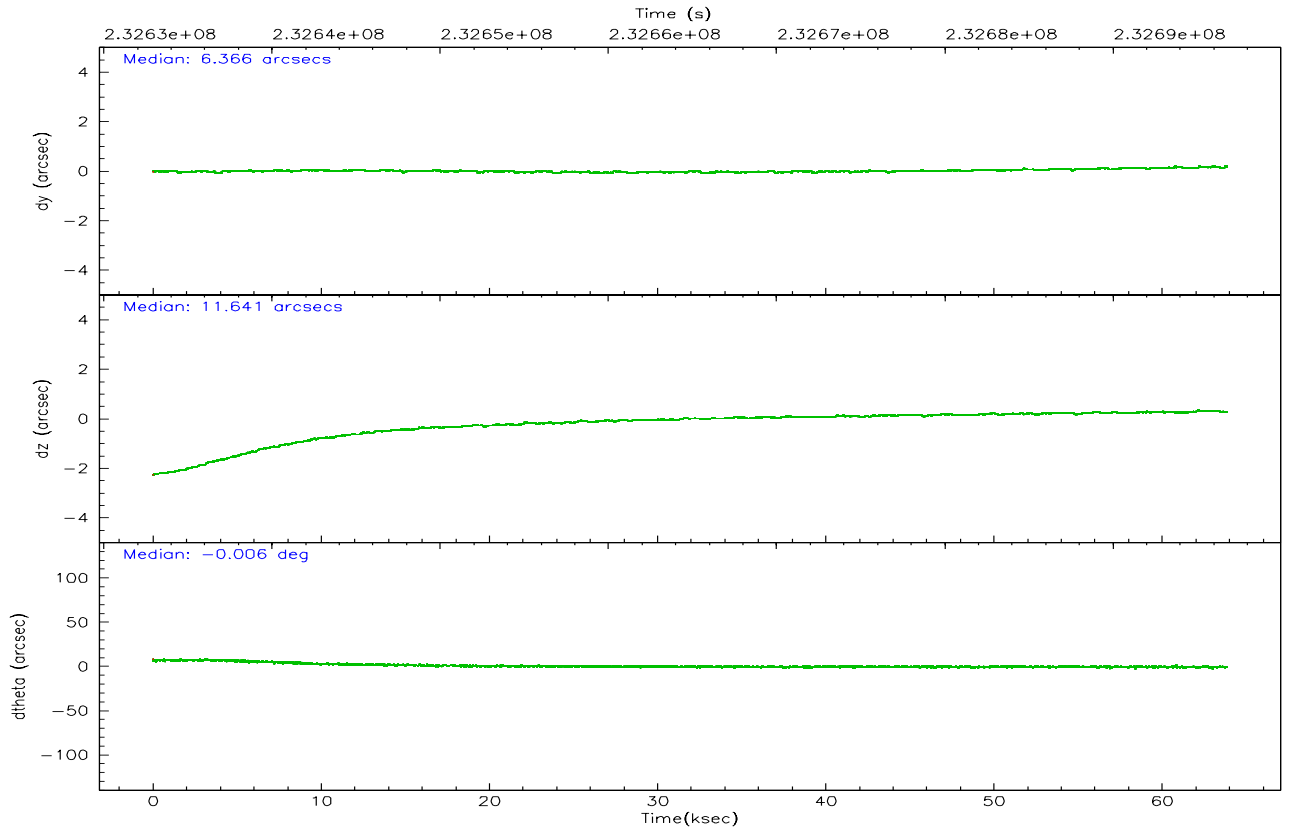
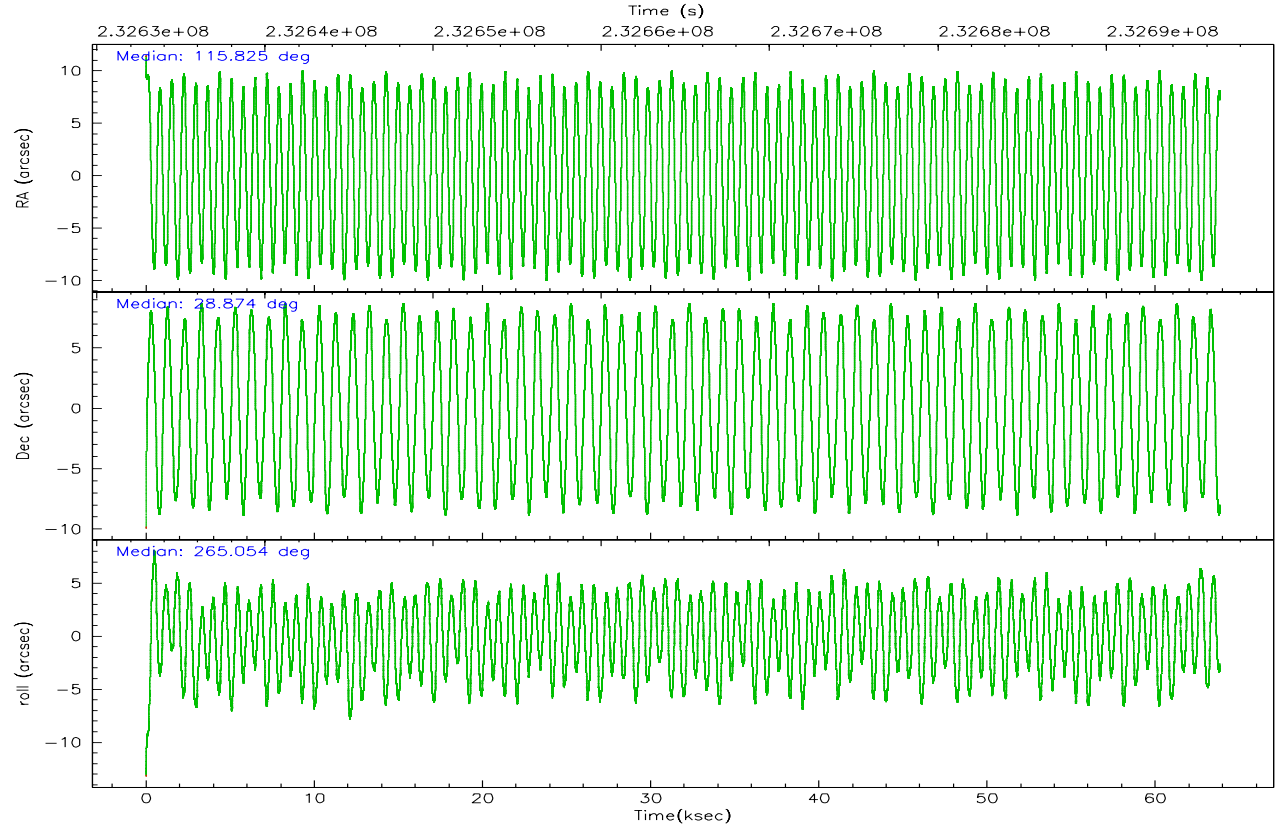
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	25900	20454	90856	24992	93608	28024
	7%	4%	22%	4%	18%	8%
grade 1 events	230	404	419	795	533	192
	0%	0%	0%	0%	0%	0%
grade 2 events	10379	73566	18010	59470	29782	40022
	2%	15%	4%	11%	5%	11%
grade 3 events	4378	8359	6854	17000	18913	4447
	1%	1%	1%	3%	3%	1%
grade 4 events	4237	8113	6587	16564	17270	4213
	1%	1%	1%	3%	3%	1%
grade 5 events	13255	23062	14450	32363	19095	14976
	3%	4%	3%	6%	3%	4%
grade 6 events	6850	122237	9738	121221	33274	7907
	1%	24%	2%	23%	6%	2%
grade 7 events	290546	233102	264480	242031	294064	249001
	81%	47%	64%	47%	58%	71%

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	115.811498	115.8250609454087	Subarray start row	1	1
Pointing Dec	28.898419	28.87393034367949	Subarray row count	747	747
Pointing Roll	264.907938	265.0580088449862	Alternating exposures requested	N	N
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Primary exposure time	0.000000	2.5
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	232633089.184000	232631854.53007			
Observation start date	2005-05-16T12:17:05	2005-05-16T11:57:34			
Observation end time	232696789.184000	232697757.42057			
Observation end date	2005-05-17T05:58:45	2005-05-17T06:15:57			
Read mode	TIMED	TIMED			

2.3 Aspect



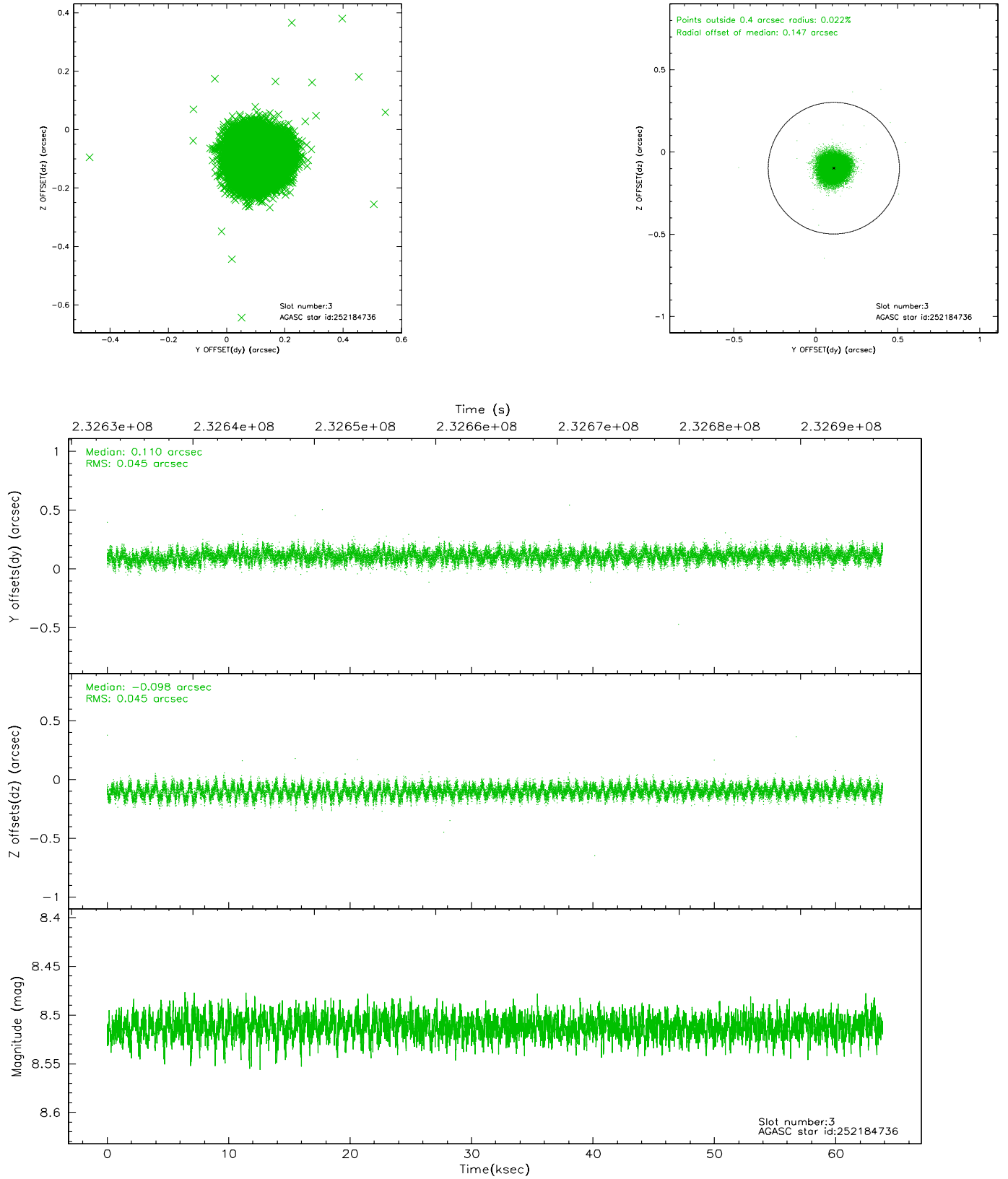


Slot Statistics

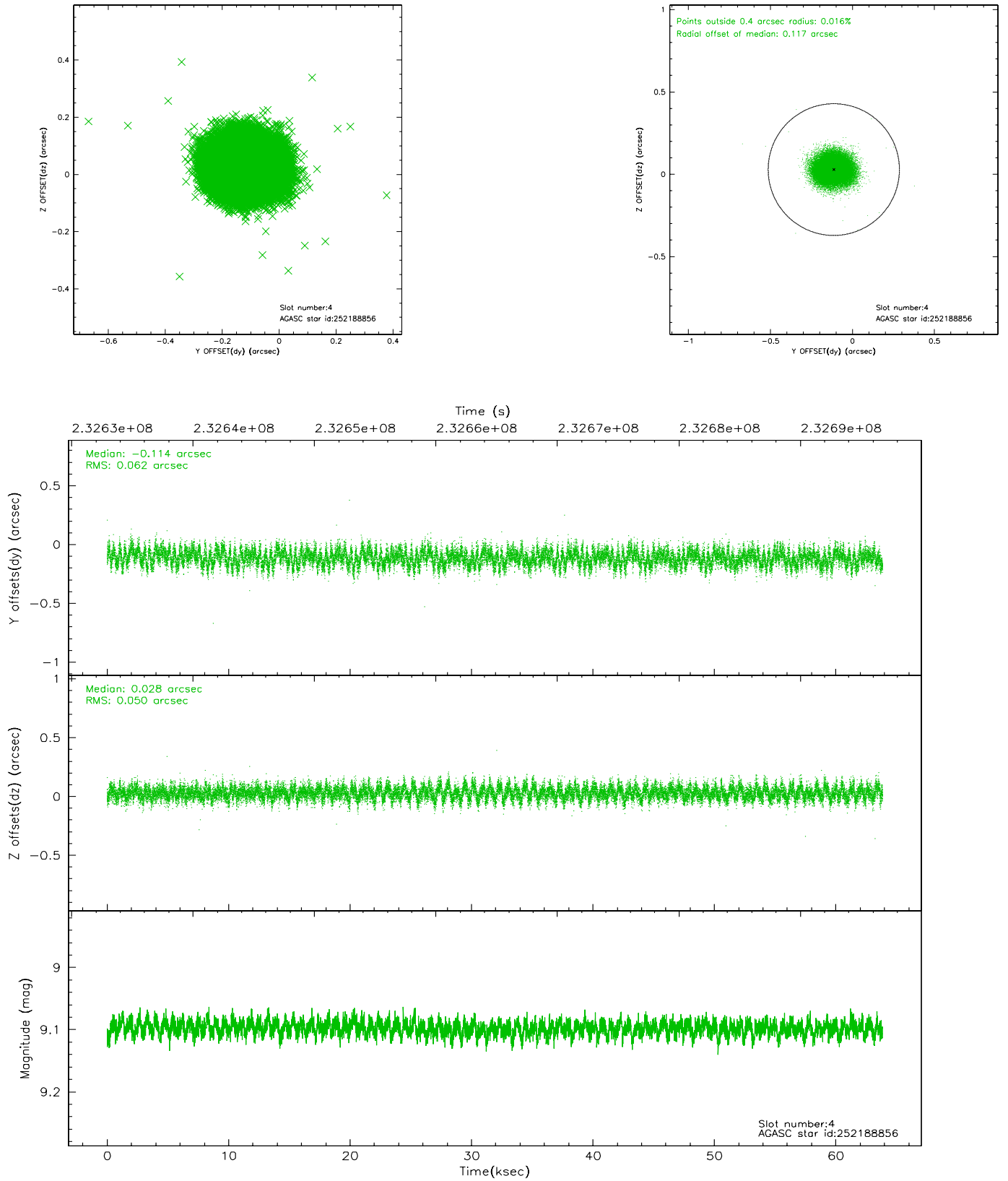
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	15578	0.053	0.048	0.009	0.032	0.000000	0.000000	937.20	-1790.39
1	FID	ACIS-S-2	7.09	15578	-0.077	-0.099	0.012	0.042	0.000000	0.000000	-758.86	-1795.05
2	FID	ACIS-S-5	7.23	15576	0.002	0.056	0.013	0.029	0.000000	0.000000	-1812.00	107.20
3	GUIDE	252184736	8.51	31148	0.110	-0.098	0.069	0.107	115.841049	28.337104	2004.79	272.87
4	GUIDE	252188856	9.10	31149	-0.114	0.028	0.086	0.134	115.995799	29.406043	-1871.77	413.64
5	GUIDE	252192288	9.05	31147	-0.007	0.122	0.163	0.233	116.362333	28.752504	365.06	1778.29
6	GUIDE	252194776	9.29	31142	0.031	-0.079	0.098	0.159	115.244419	29.434716	-1769.05	-1942.66
7	GUIDE	252196488	7.03	31154	-0.026	0.031	0.062	0.097	115.667880	28.833856	271.77	-430.26

2.4 Star Slots

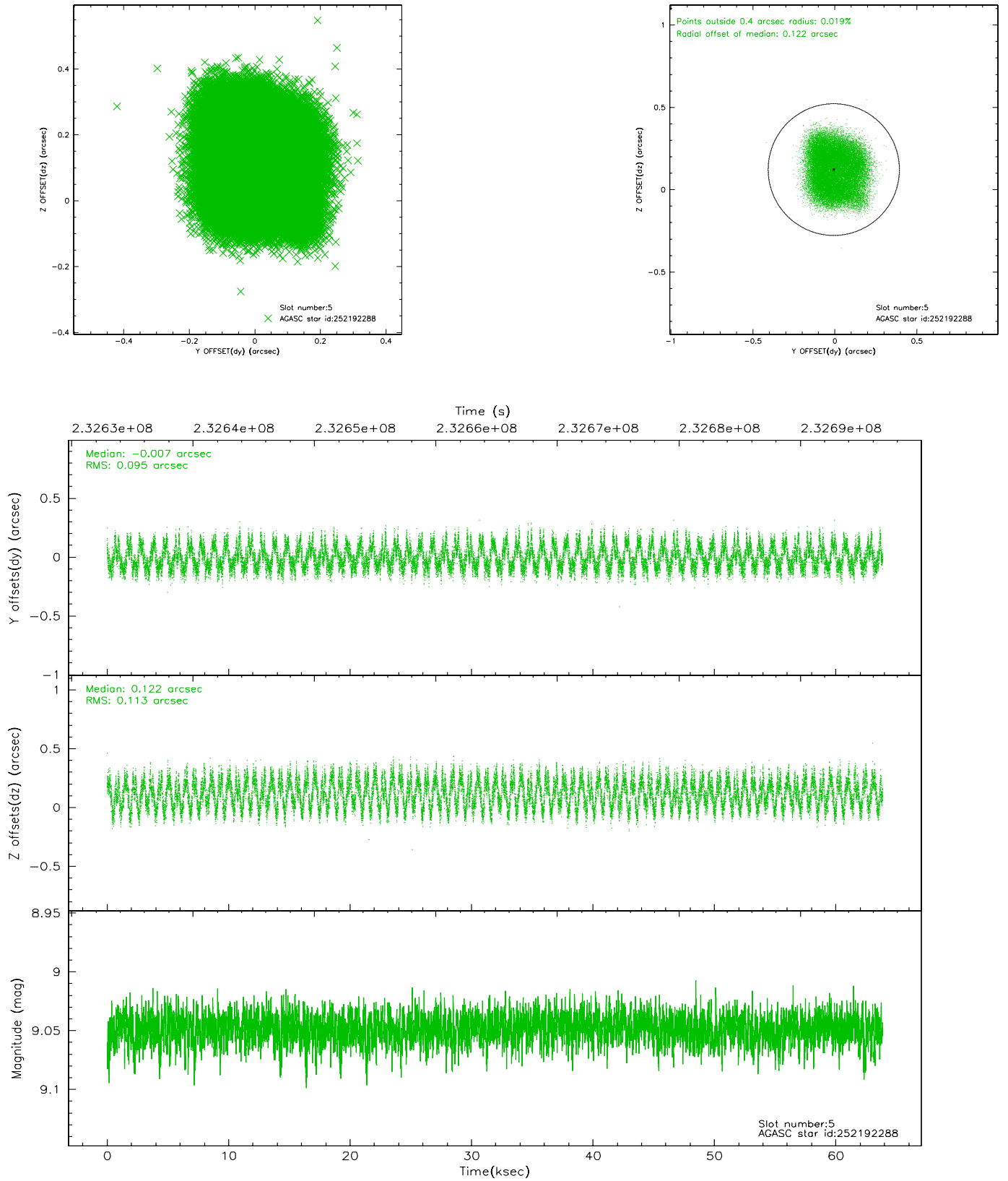
2.4.1 Slot 3



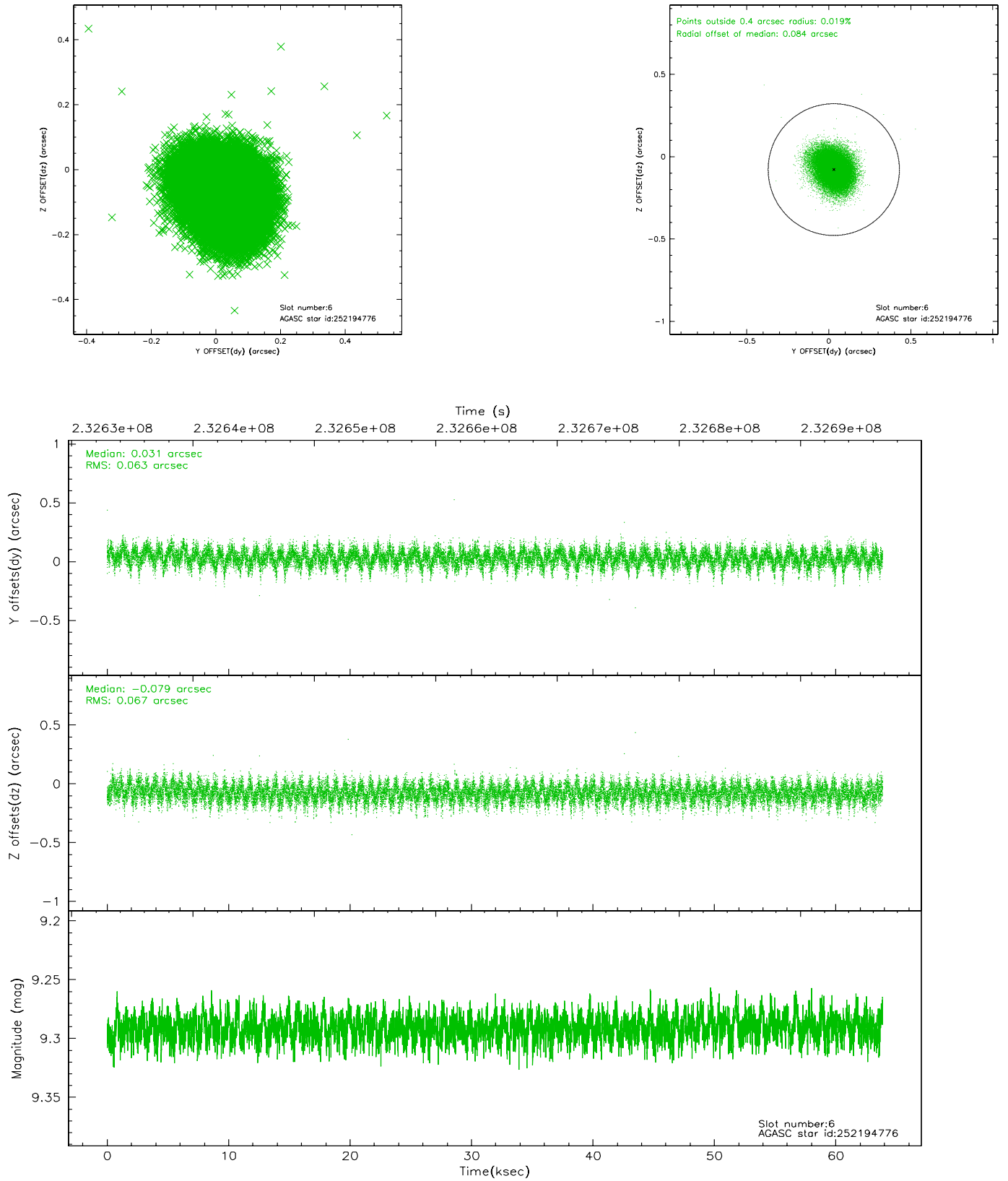
2.4.2 Slot 4



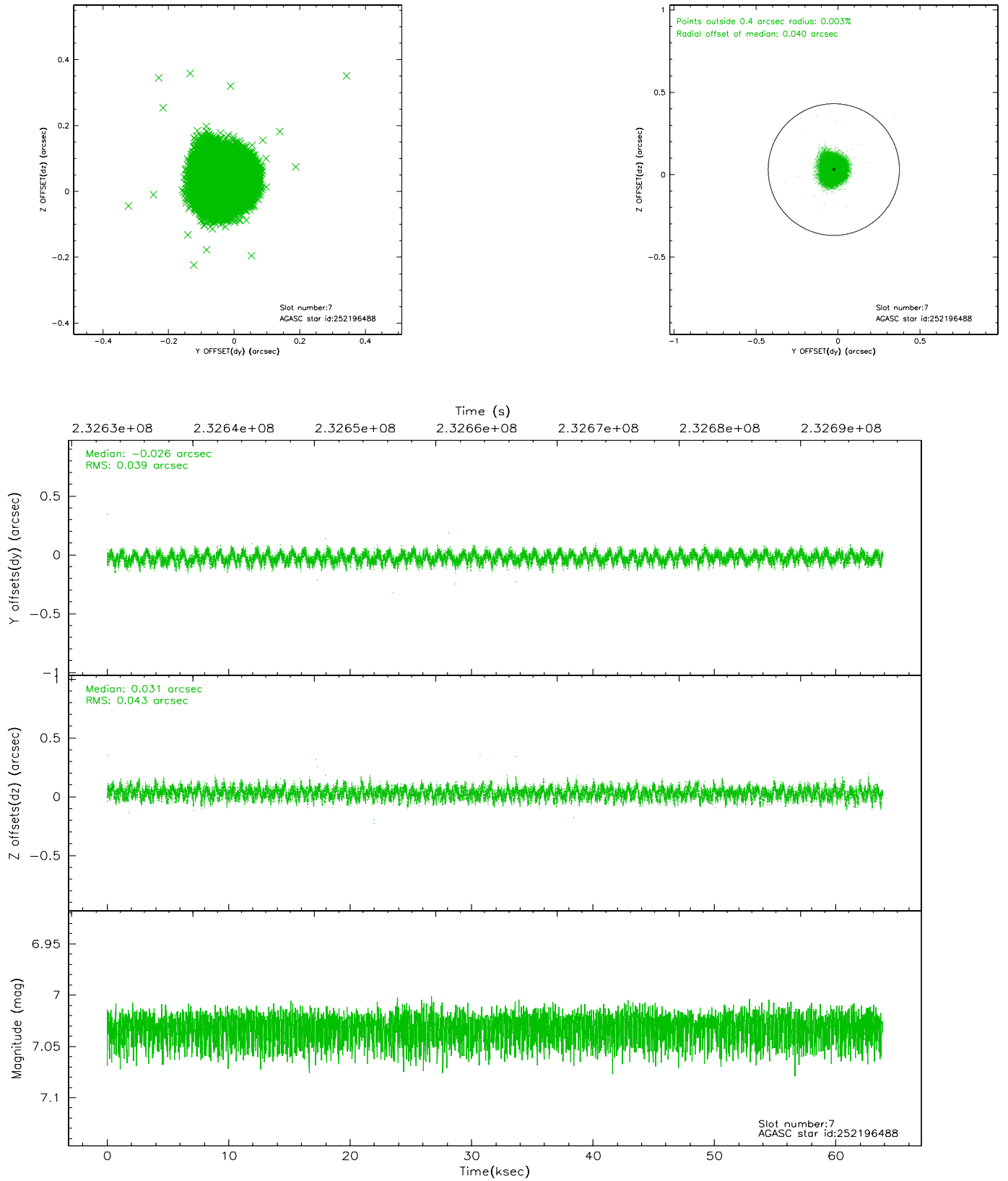
2.4.3 Slot 5



2.4.4 Slot 6

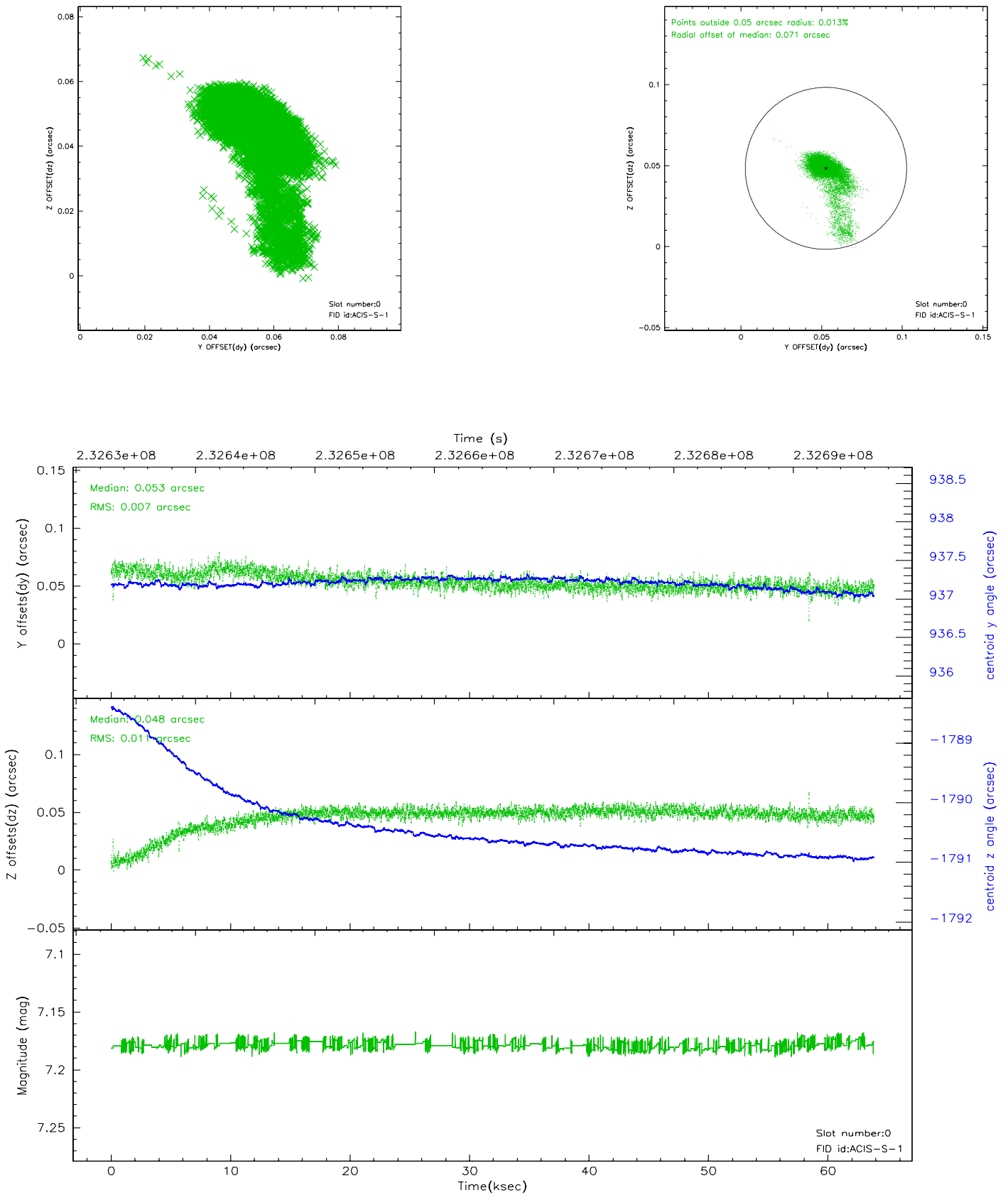


2.4.5 Slot 7

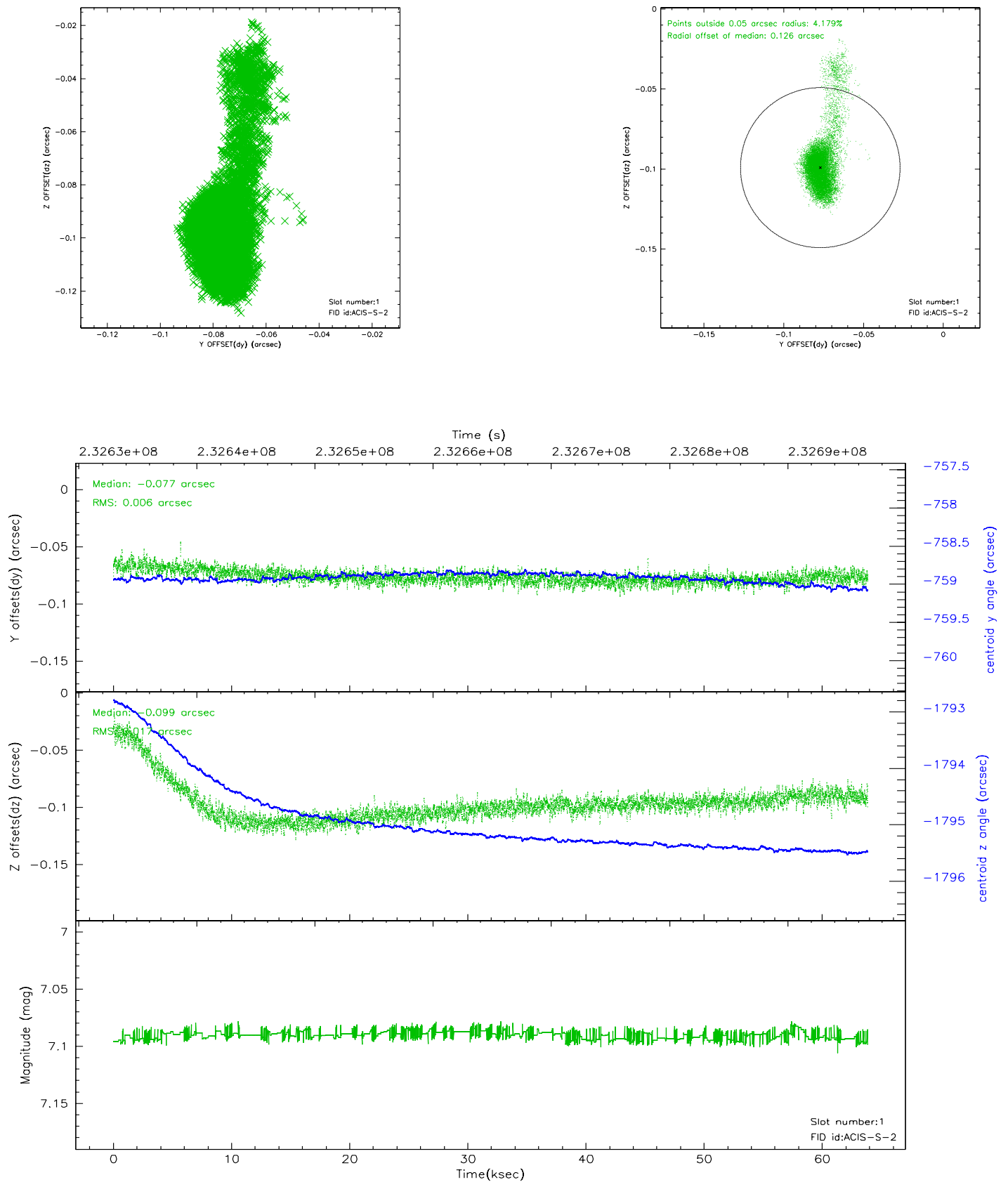


2.5 FID Slots

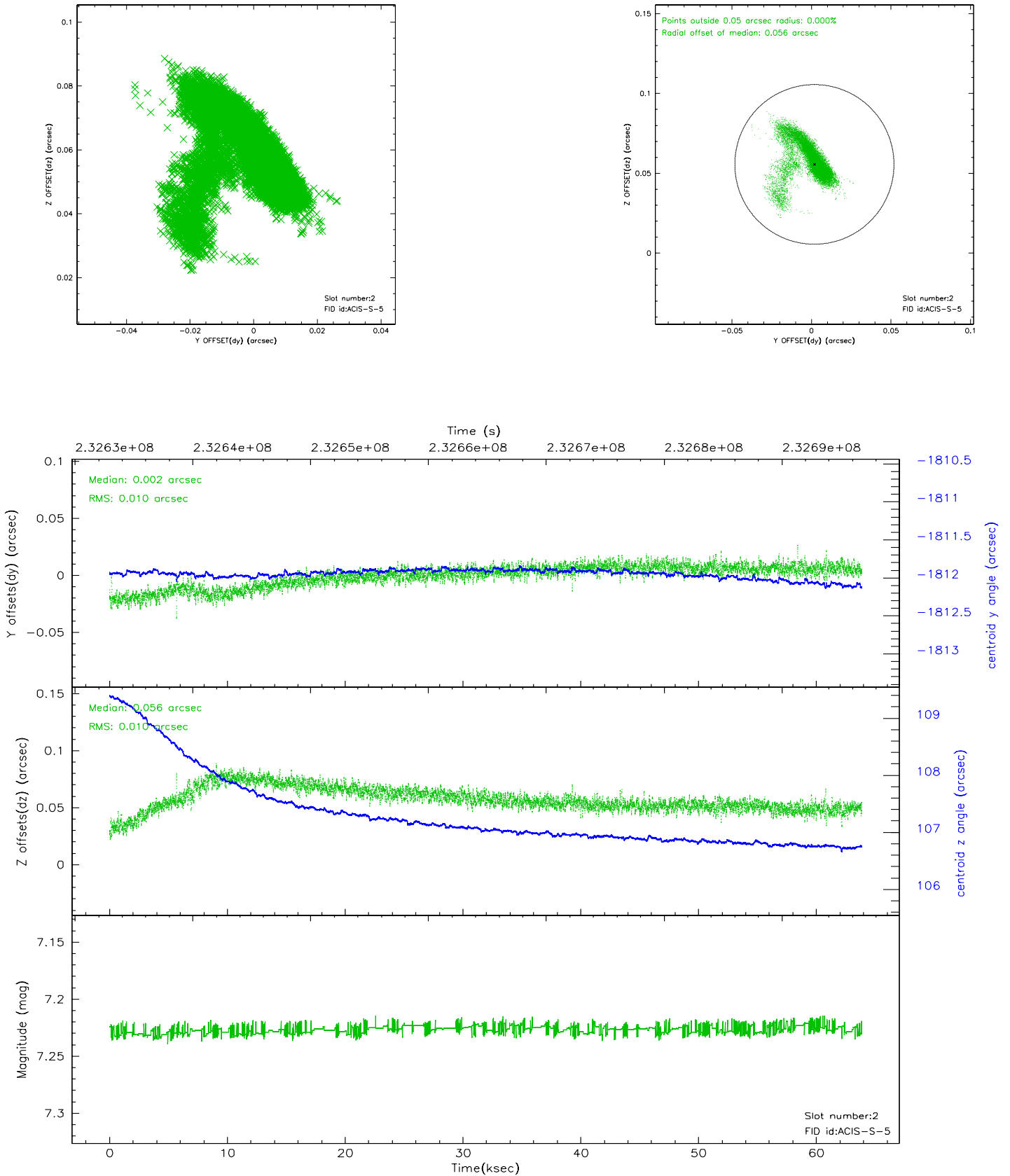
2.5.1 Slot 0



2.5.2 Slot 1

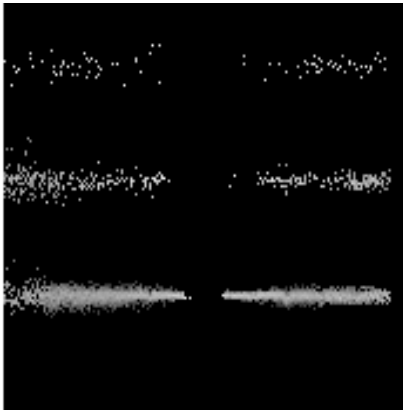


2.5.3 Slot 2

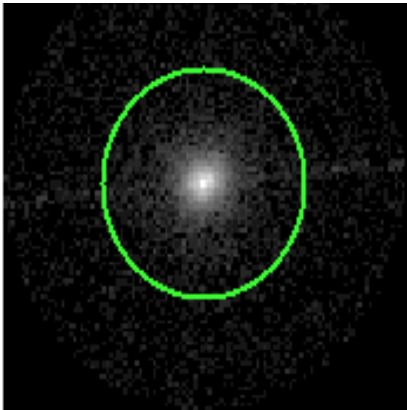


3 Gratings

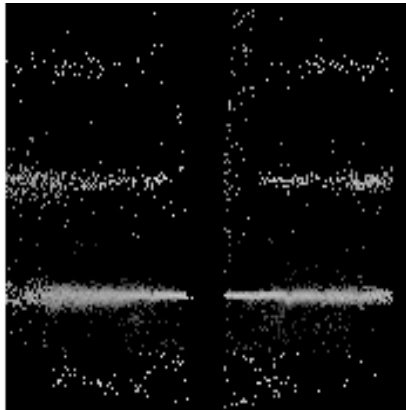
3.1 HEG Arm



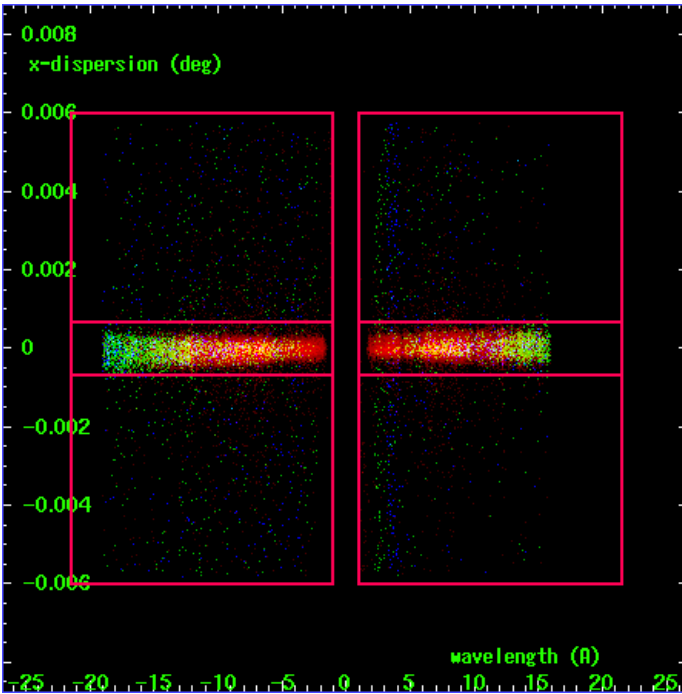
HEG Order Sort 123



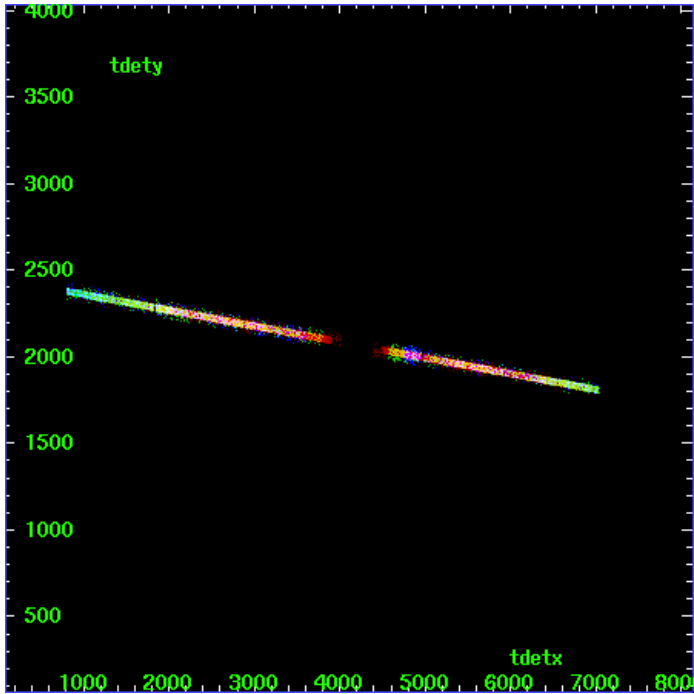
HEG Zero Order



HEG Order Sort ALL

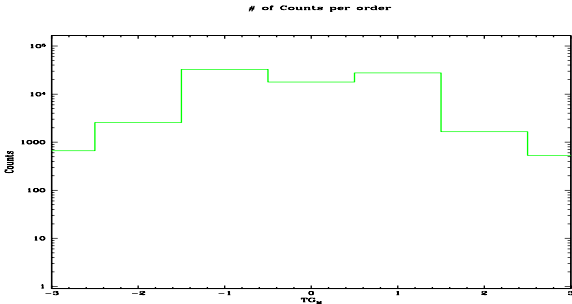


Spot Image HEG

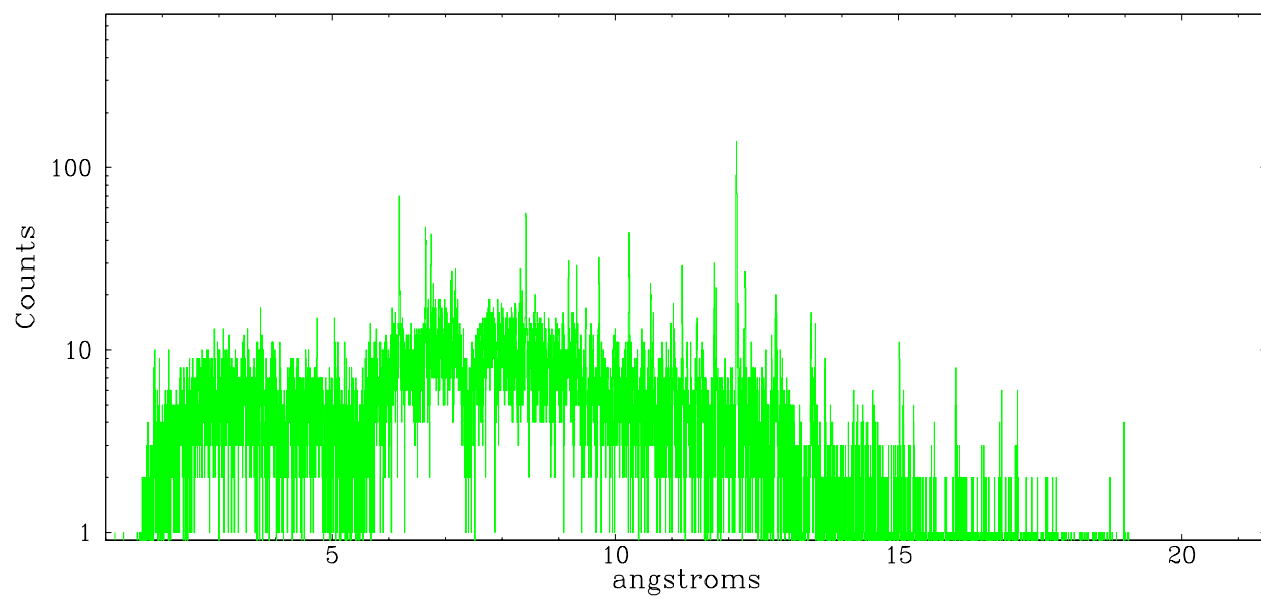


Full Detector HEG

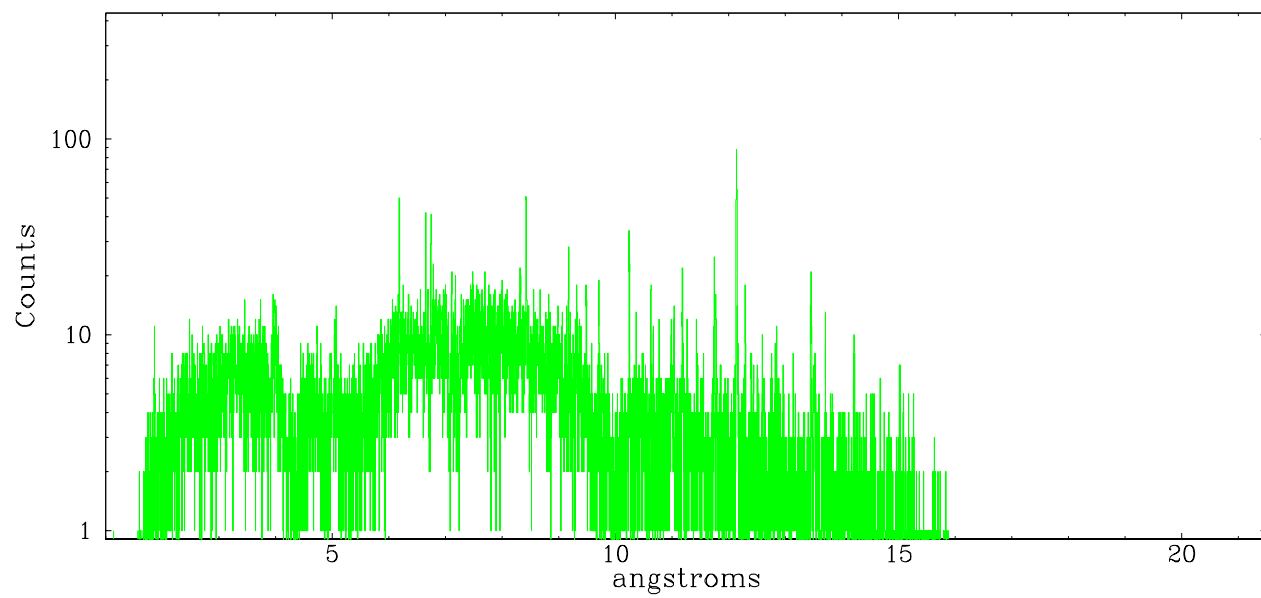
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	665	2569	32845	17810	27615	1649	529



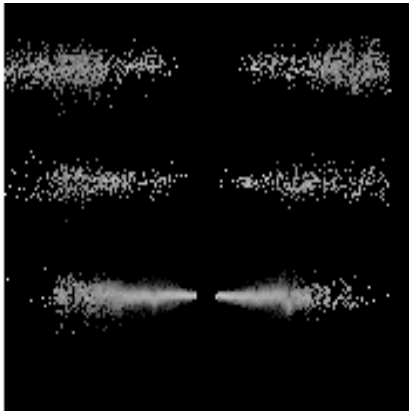
heg order -1



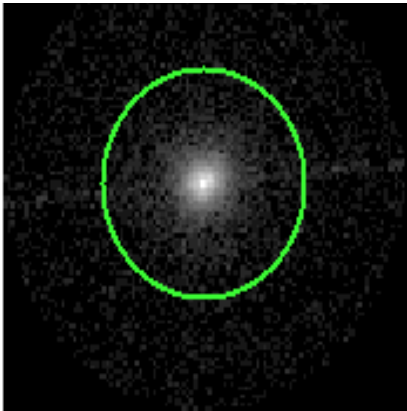
heg order +1



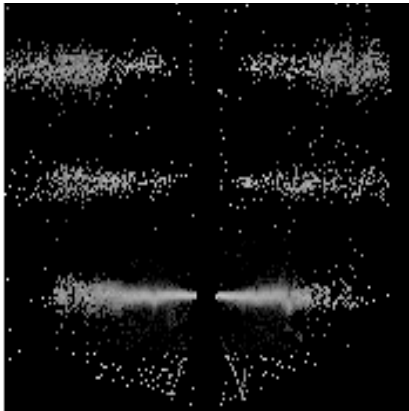
3.2 MEG Arm



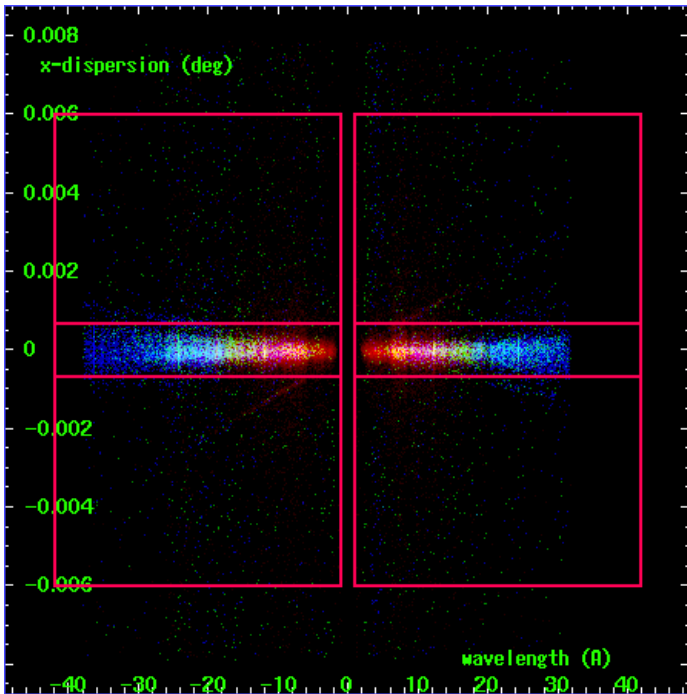
MEG Order Sort 123



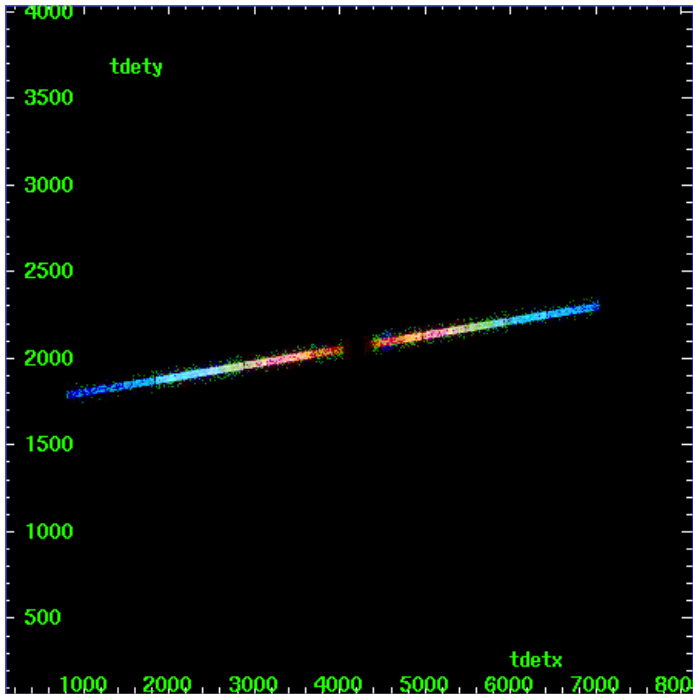
MEG Zero Order



MEG Order Sort ALL

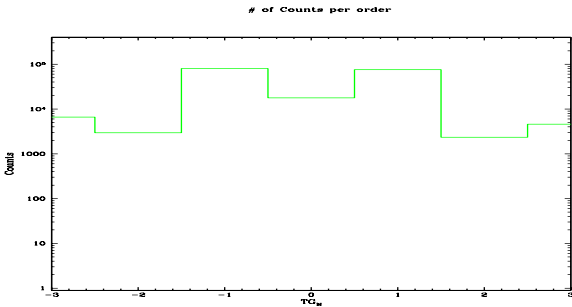


Spot Image MEG

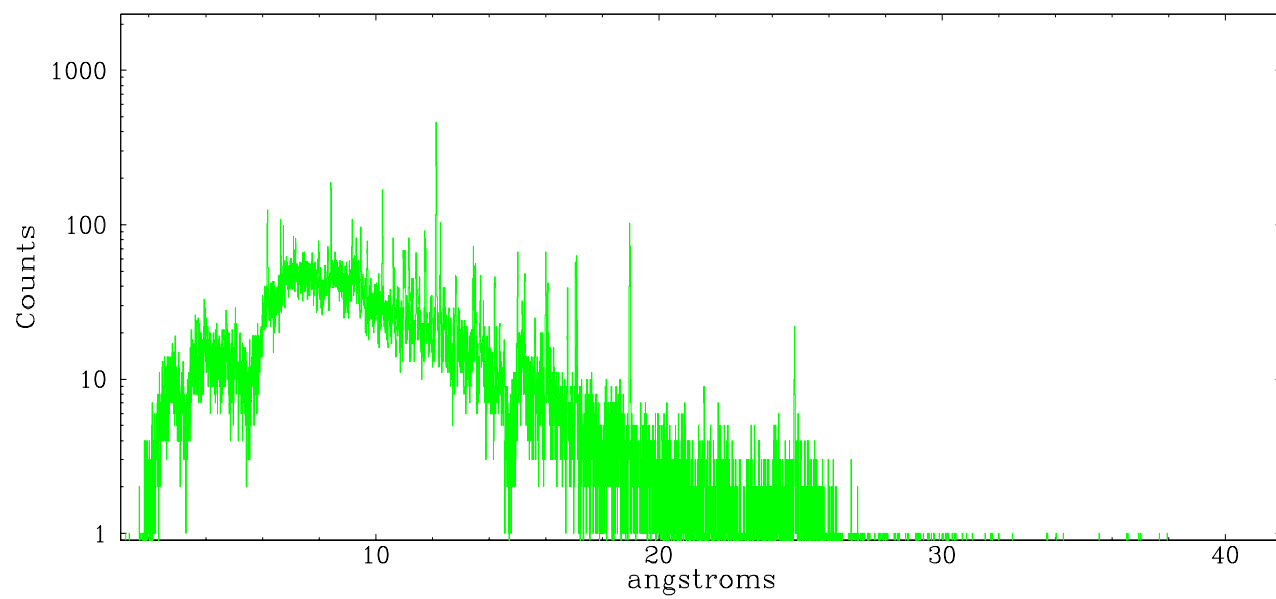


Full Detector MEG

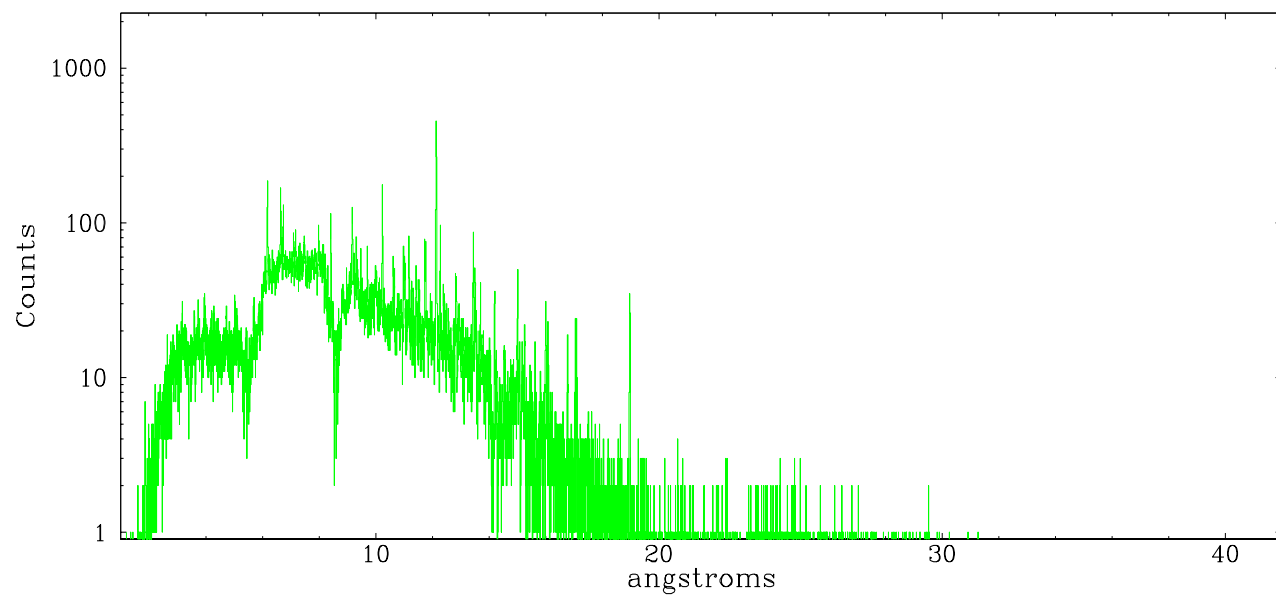
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	6602	2942	80020	17810	75683	2350	4583



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.03.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	63.86

A.2 Comments

Focal plane temperature is elevated during initial ~5 ksec of observation. Calibration may be affected.