

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 2431 - L2 Version 001
Chandra X-Ray Center

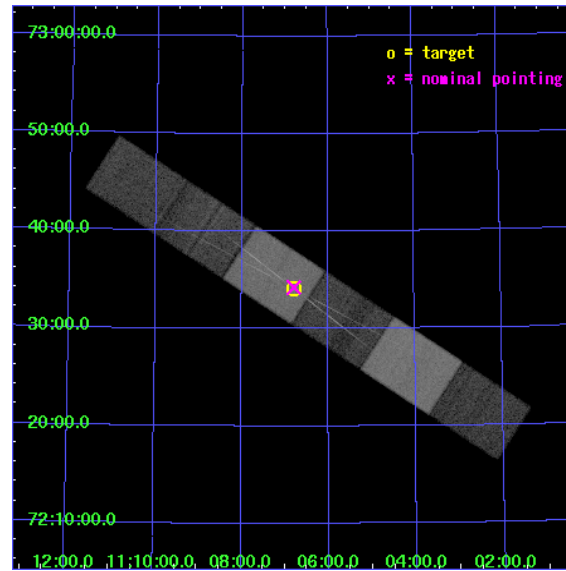
L2 Processing Date : Nov 13 2006

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1 Front

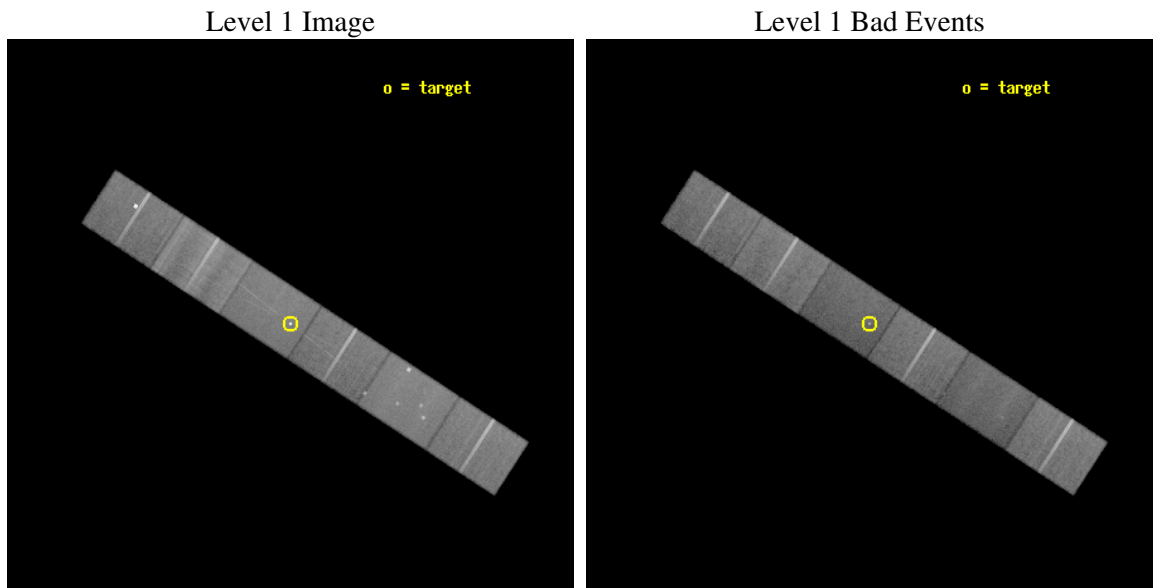
seq_num	700270
obs_id	2431
title	GAS DYNAMICS AROUND THE BLACK HOLE IN NGC 3516
observer	Dr. Tracey Turner
object	NGC 3516
dtcycle	0
cycle	P
ra_targ	166.6975
dec_targ	72.568611
ra_nom	166.69819463594
dec_nom	72.570796645706
roll_nom	213.00596659839
revision	2
ontime	36152.5
livetime	35568.605767717
ontime4	36152.5
ontime5	36152.5
ontime6	36152.5
ontime7	36152.5
ontime8	36152.5
ontime9	36152.5
l2events	352928



2 OBI

2.1 OBI

2.1.1 Images

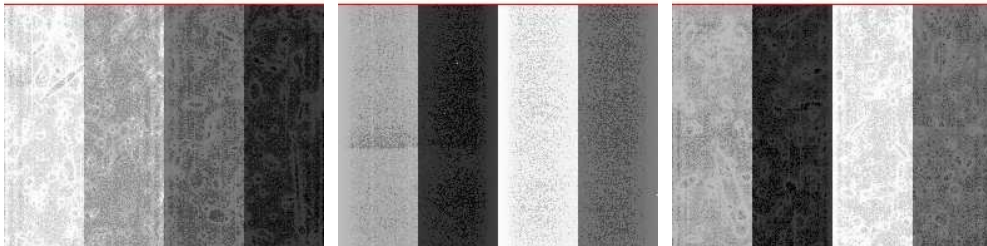


2.1.2 Bias

Chip 4

Chip 5

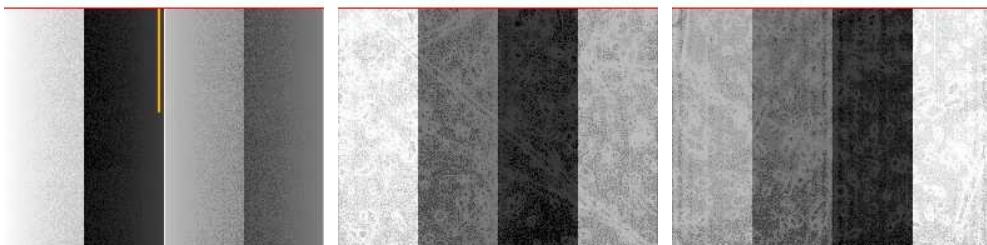
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.4
date	2006-11-13T16:58:20
revision	2

sched_exp_time	36000.000000
ontime	36155.990160823
ontime4	36155.990160823
ontime5	36155.990160823
ontime6	36155.990140885
ontime7	36155.990160823
ontime8	36158.531180888
ontime9	36158.531180888
l1events	1563207

2.1.4 Events

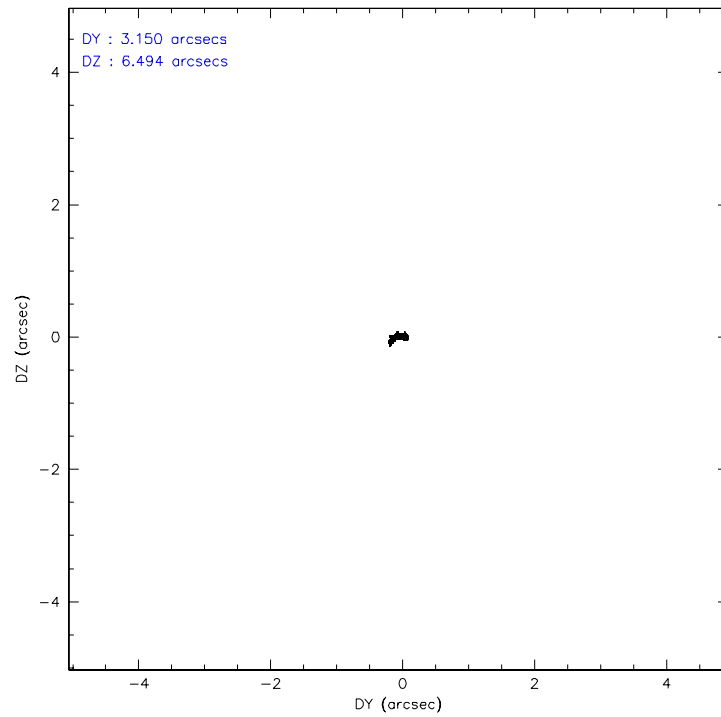
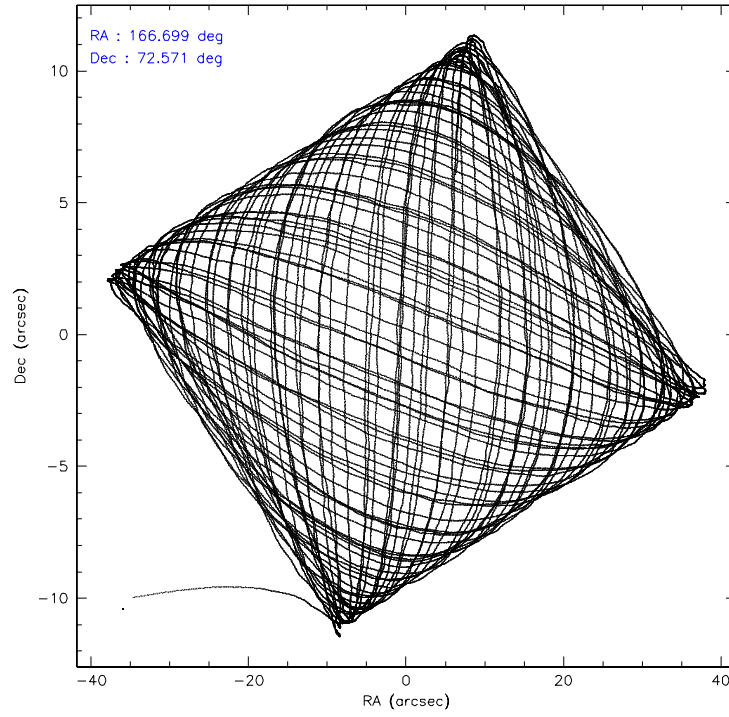
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	262839	273849	231317	250538	310645	234019
rejected events	229069	137409	197007	133249	219428	188350
rejected %	87%	50%	85%	53%	70%	80%

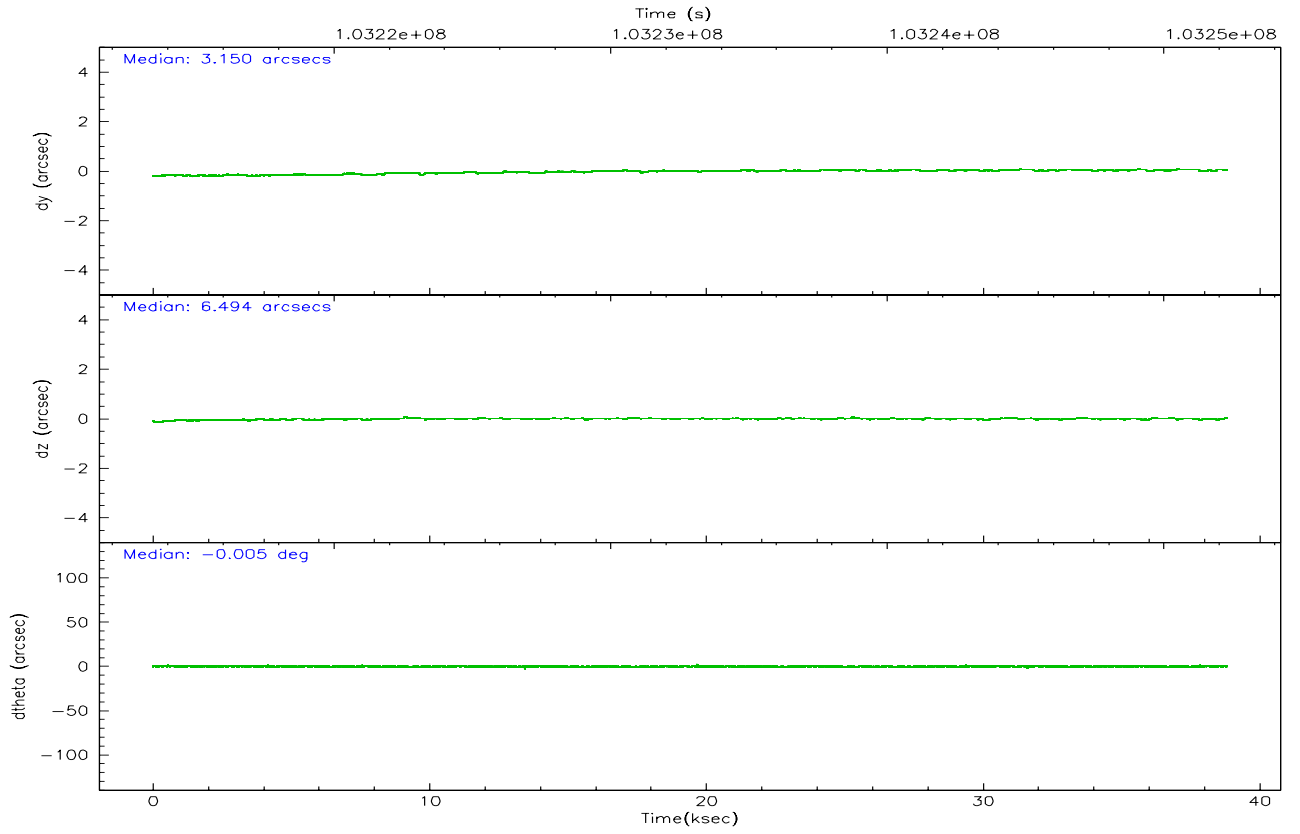
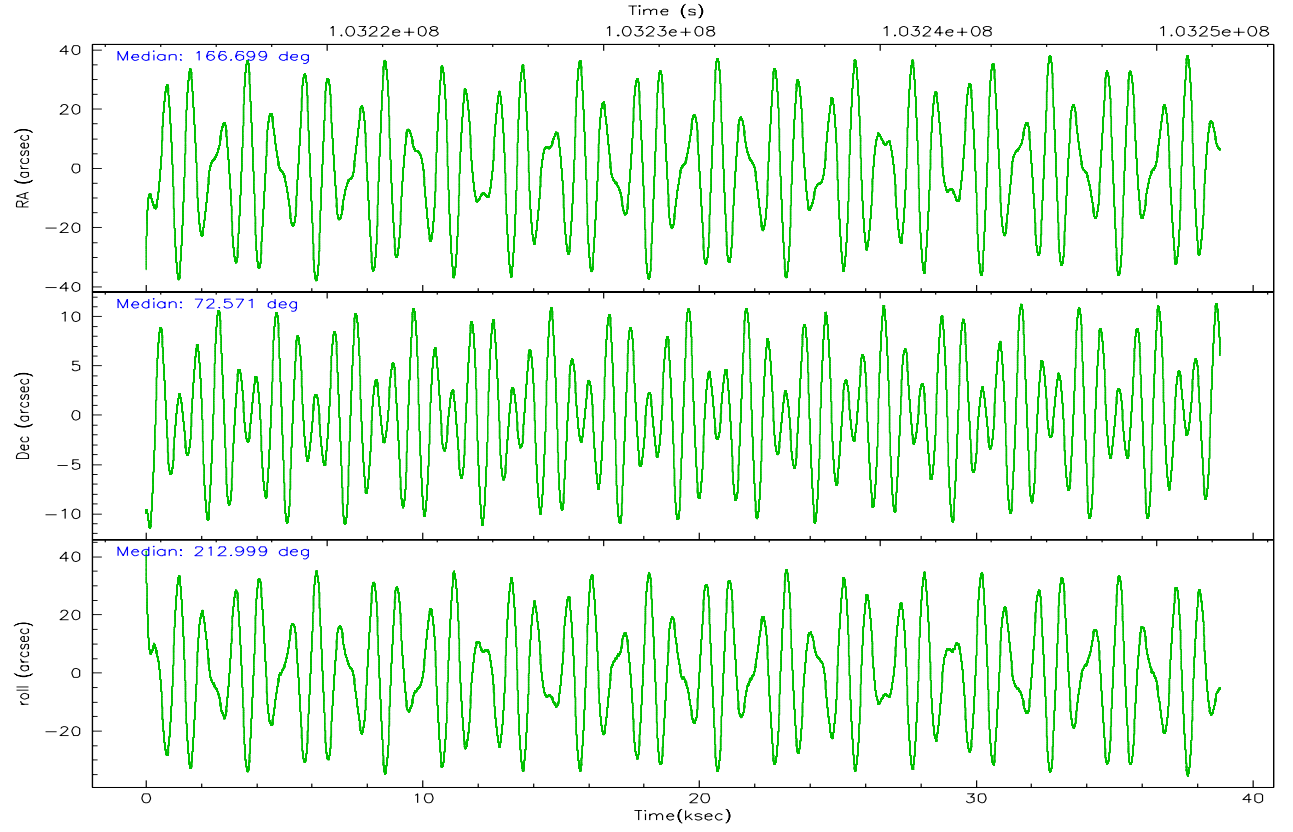
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	15207	15254	16200	8906	31969	14336
	5%	5%	7%	3%	10%	6%
grade 1 events	114	366	121	223	240	114
	0%	0%	0%	0%	0%	0%
grade 2 events	7615	43495	6247	30118	15936	19602
	2%	15%	2%	12%	5%	8%
grade 3 events	2853	4299	2982	7597	12442	3020
	1%	1%	1%	3%	4%	1%
grade 4 events	2705	4204	3024	7453	11272	2910
	1%	1%	1%	2%	3%	1%
grade 5 events	5893	12820	6859	16368	9114	7002
	2%	4%	2%	6%	2%	2%
grade 6 events	5392	69205	5858	63234	19612	5805
	2%	25%	2%	25%	6%	2%
grade 7 events	223060	124206	190026	116639	210060	181230
	84%	45%	82%	46%	67%	77%

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	166.738847	166.6981946359423	Subarray requested	CUSTOM	CUSTOM
Pointing Dec	72.595253	72.57079664570563	Subarray start row	1	1
Pointing Roll	212.810544	213.0059665983875	Subarray row count	774	774
Window start time	103215664.184000	103215664.184000	Alternating exposures requested	N	N
Window stop time	103478464.184000	103478464.184000	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	-187.1228876879999			
SIM translation stage offset (mm)	-3	-3.009634895007935			
Observation start time	103213744.184000	103212725.05476			
Observation start date	2001-04-09T14:28:00	2001-04-09T14:12:05			
Observation end time	103249744.184000	103252597.5563			
Observation end date	2001-04-10T00:28:00	2001-04-10T01:16:37			
Read mode	TIMED	TIMED			

2.3 Aspect



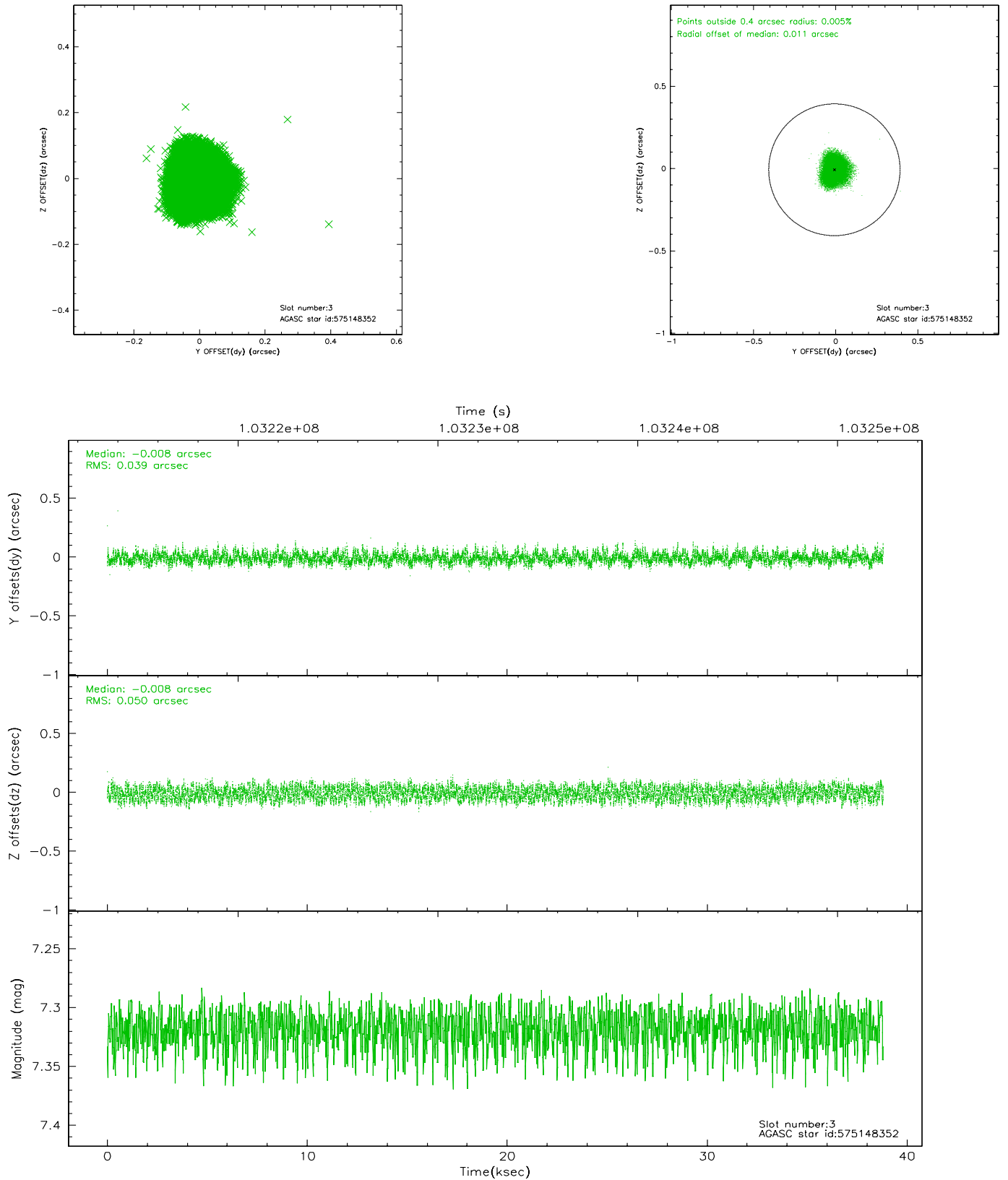


Slot Statistics

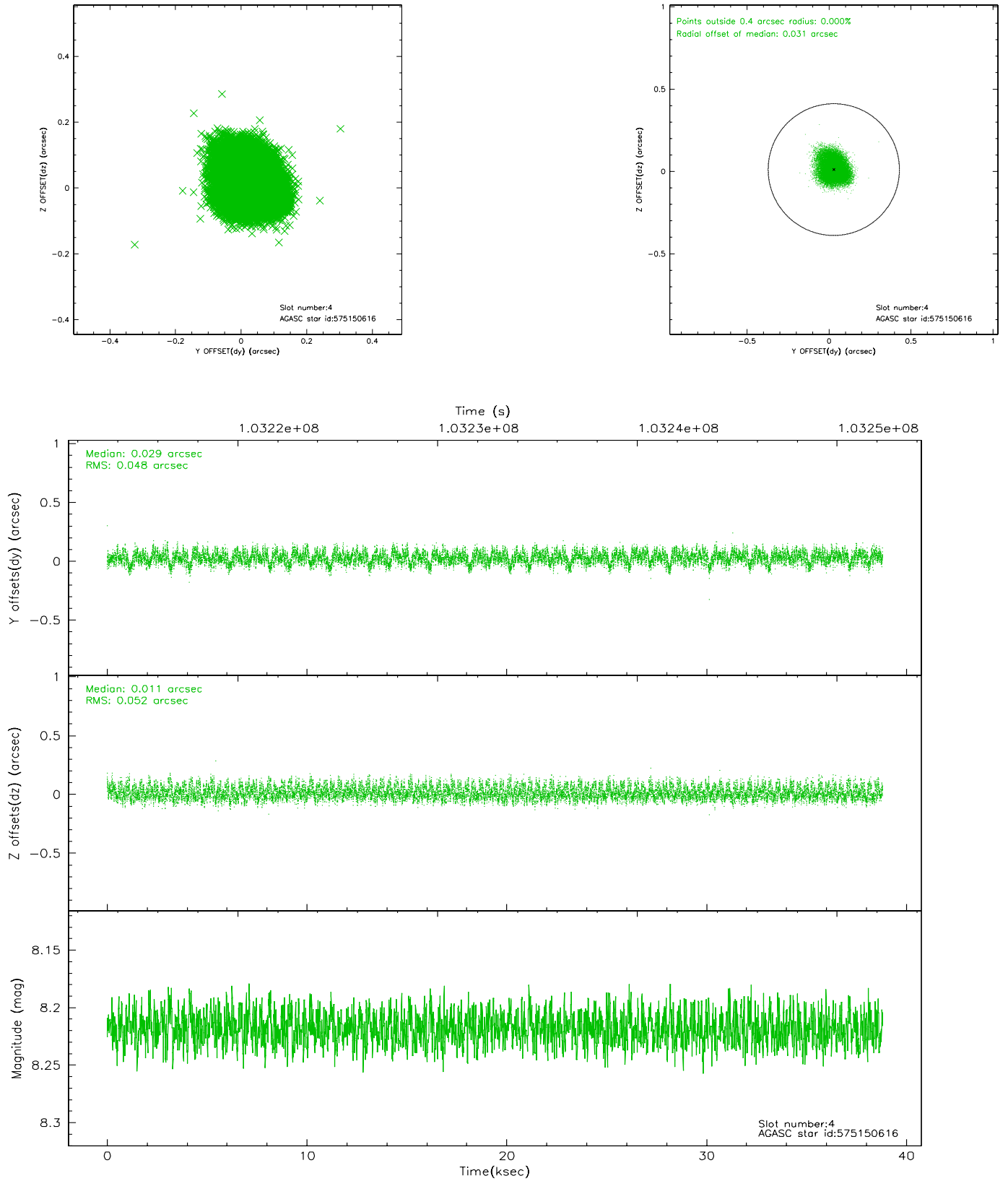
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	9467	-0.015	0.083	0.006	0.011	0.000000	0.000000	940.46	-1785.33
1	FID	ACIS-S-5	7.24	9468	0.028	0.024	0.007	0.011	0.000000	0.000000	-1808.47	112.15
2	FID	ACIS-S-6	7.38	9469	-0.035	-0.096	0.007	0.011	0.000000	0.000000	405.98	756.00
3	GUIDE	575148352	7.32	18937	-0.008	-0.008	0.070	0.103	167.090916	71.958979	911.55	2136.86
4	GUIDE	575150616	8.22	18930	0.029	0.011	0.076	0.119	167.218511	72.045663	624.50	1949.56
5	GUIDE	575541080	8.93	18920	-0.017	-0.045	0.070	0.111	167.870403	73.115273	-2013.64	-942.06
6	GUIDE	575543720	9.34	18928	-0.007	0.000	0.089	0.144	164.695945	72.631615	1754.79	-1330.81
7	GUIDE	575541344	9.37	18917	0.005	0.039	0.094	0.148	166.947366	72.953762	-883.23	-966.11

2.4 Star Slots

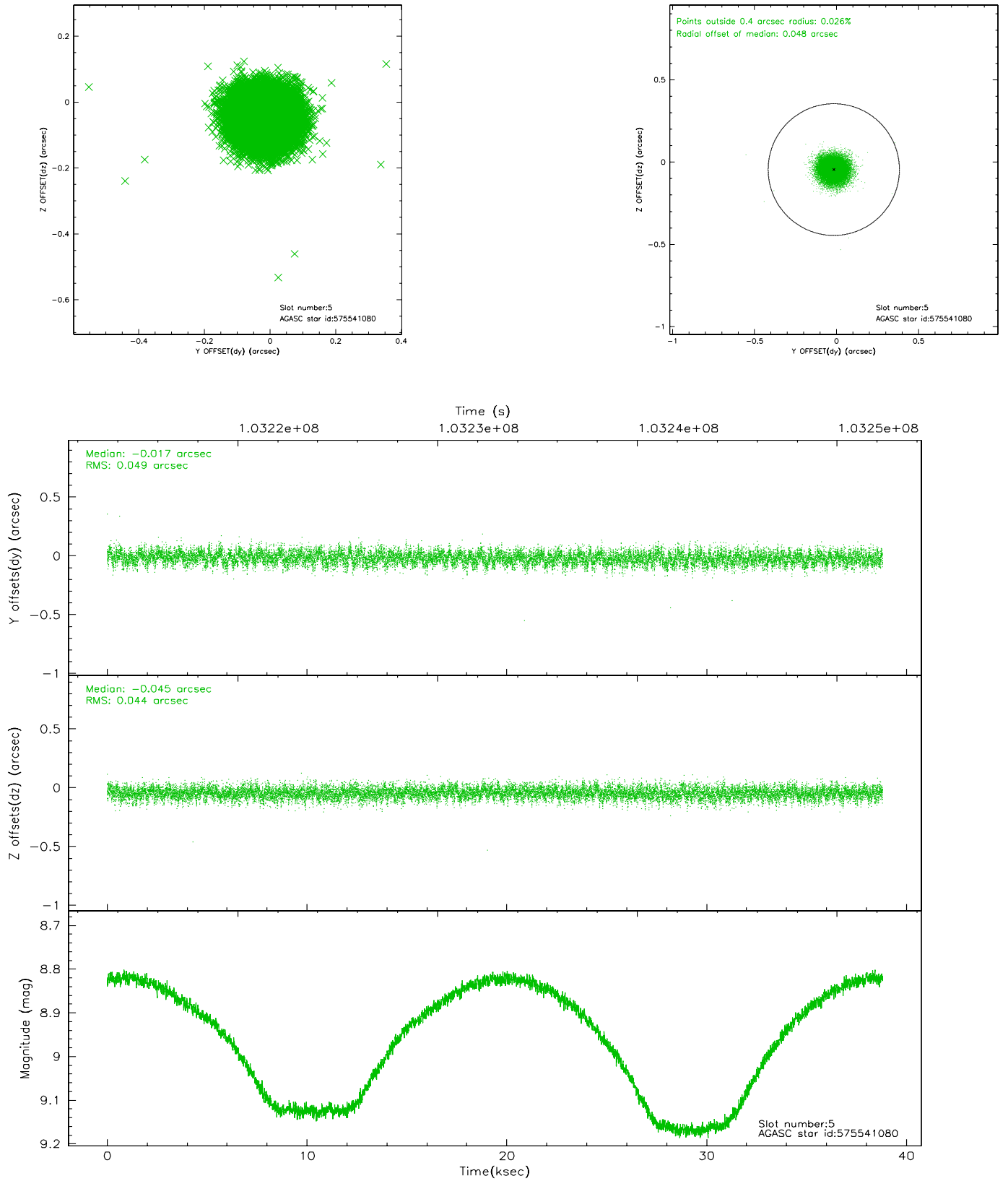
2.4.1 Slot 3



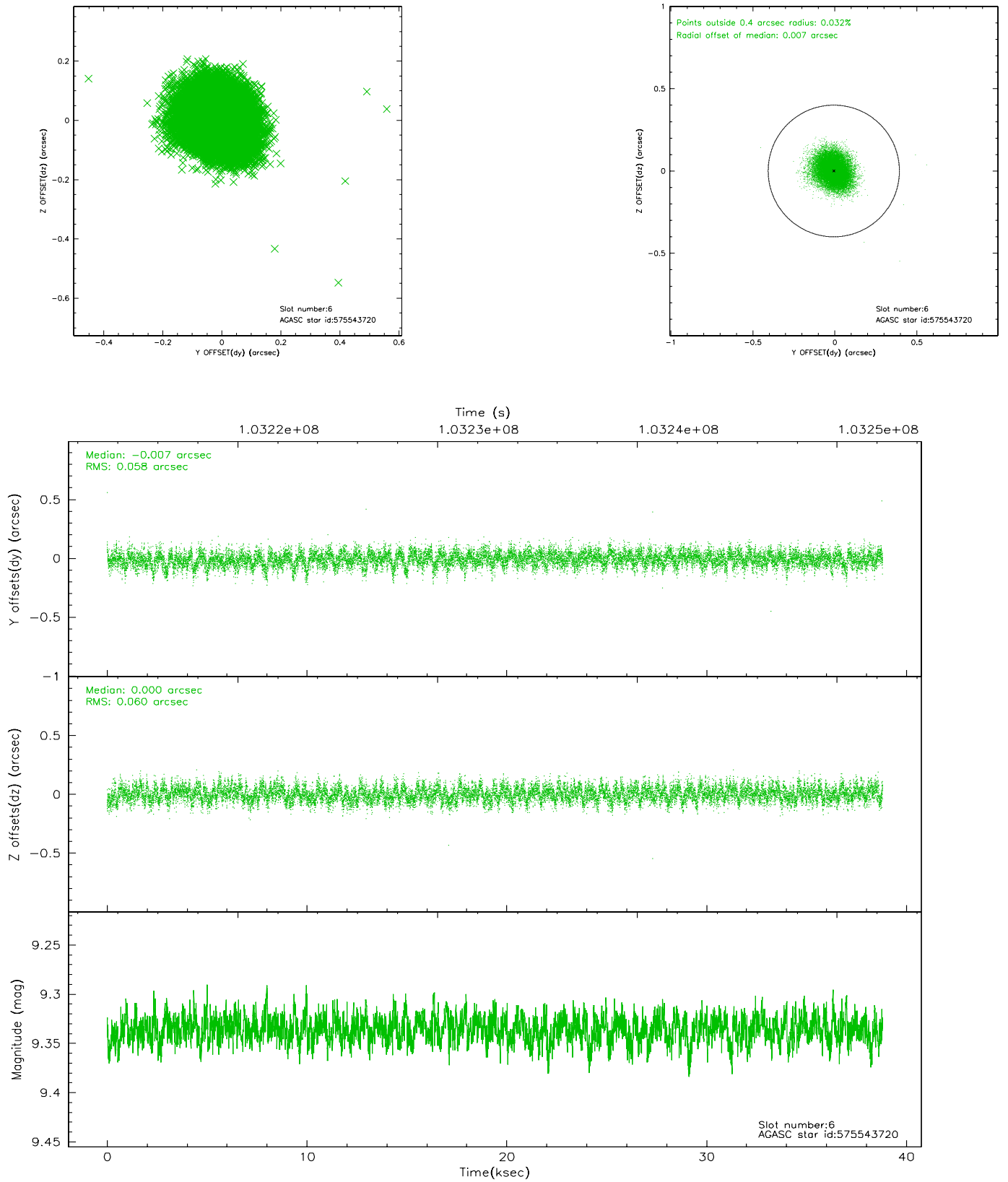
2.4.2 Slot 4



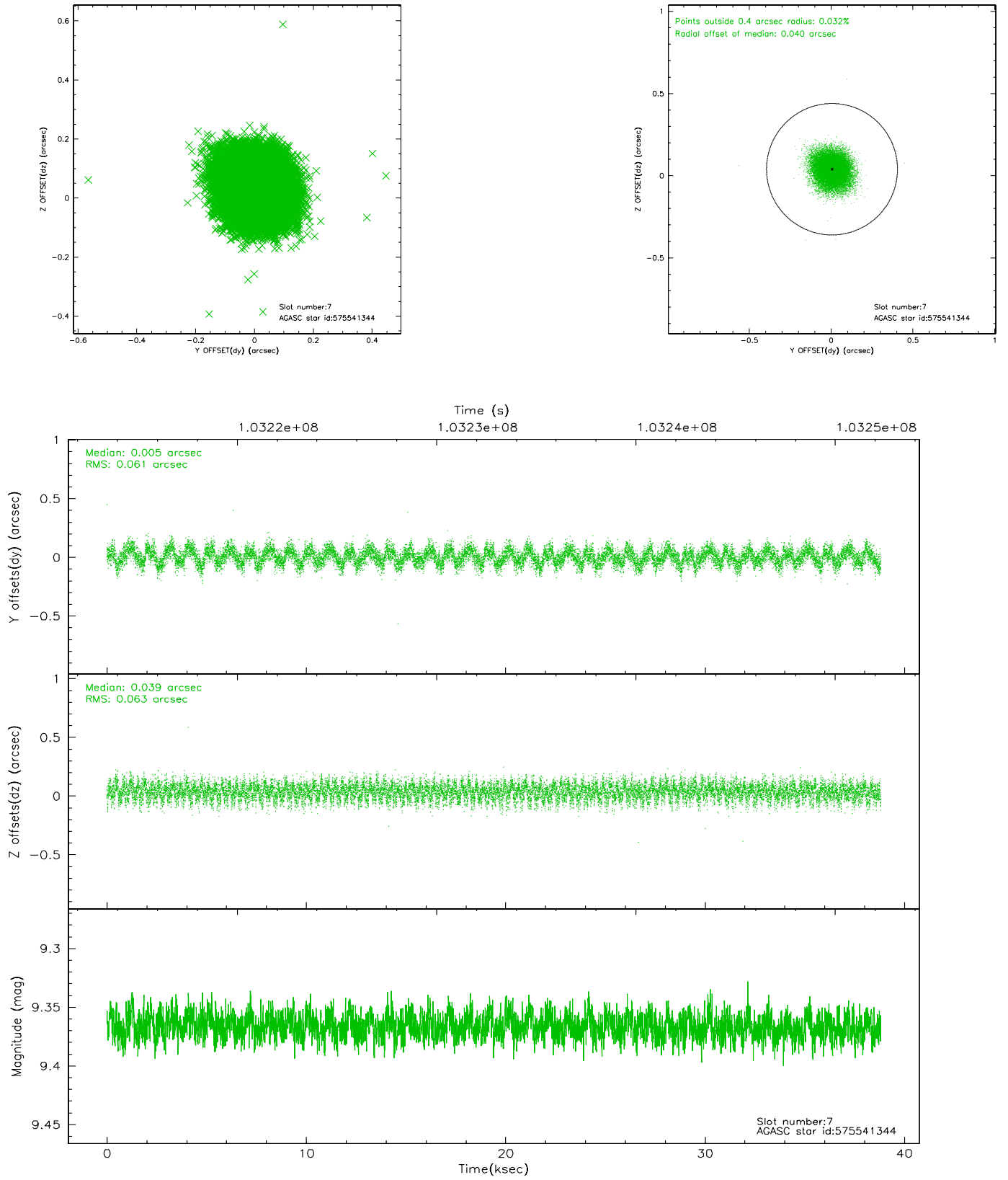
2.4.3 Slot 5



2.4.4 Slot 6

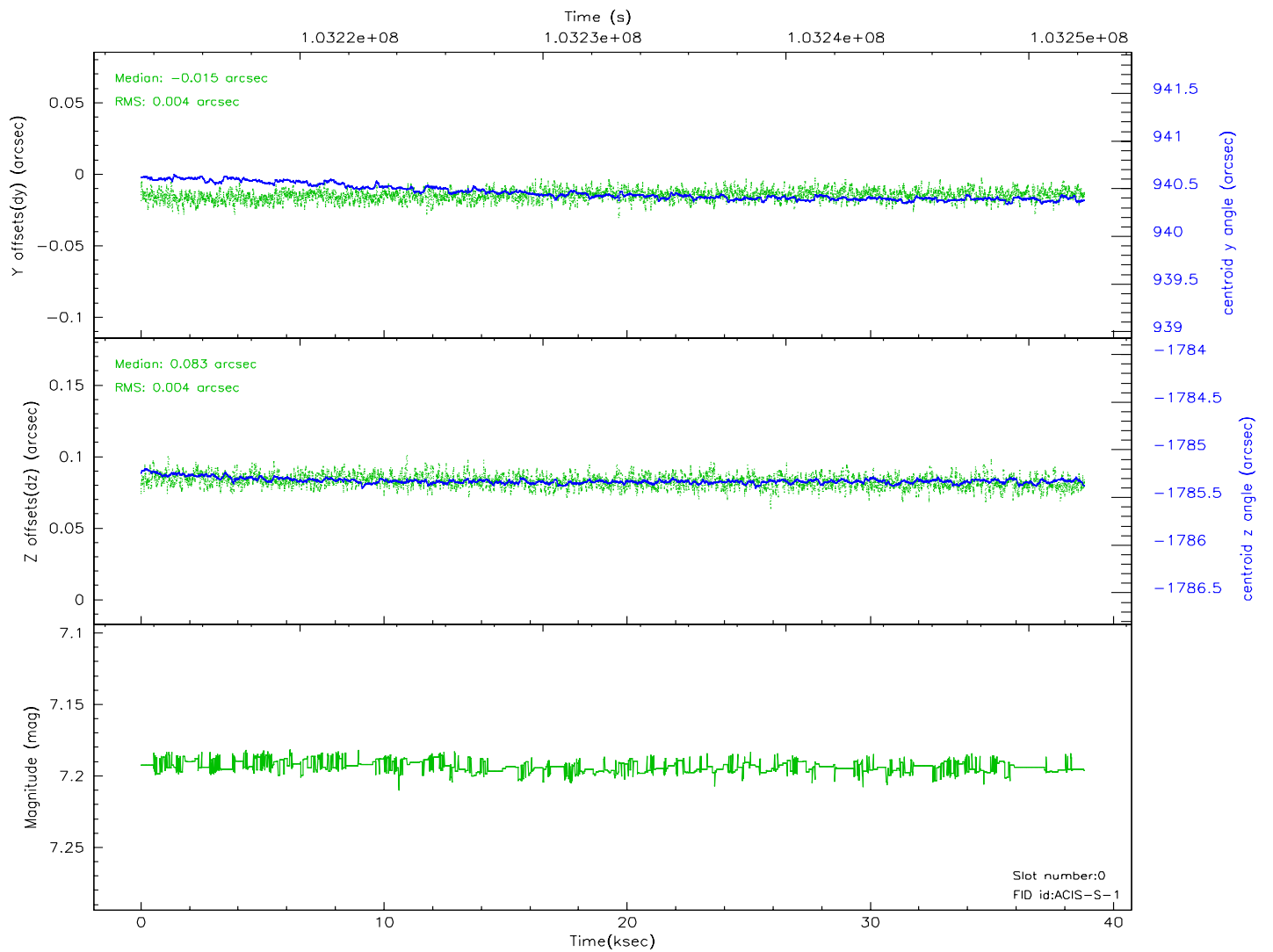
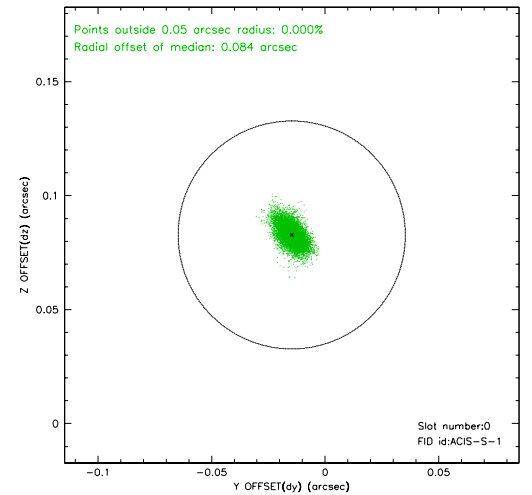
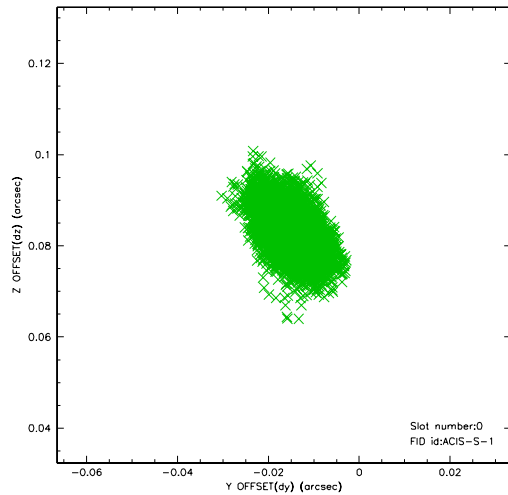


2.4.5 Slot 7

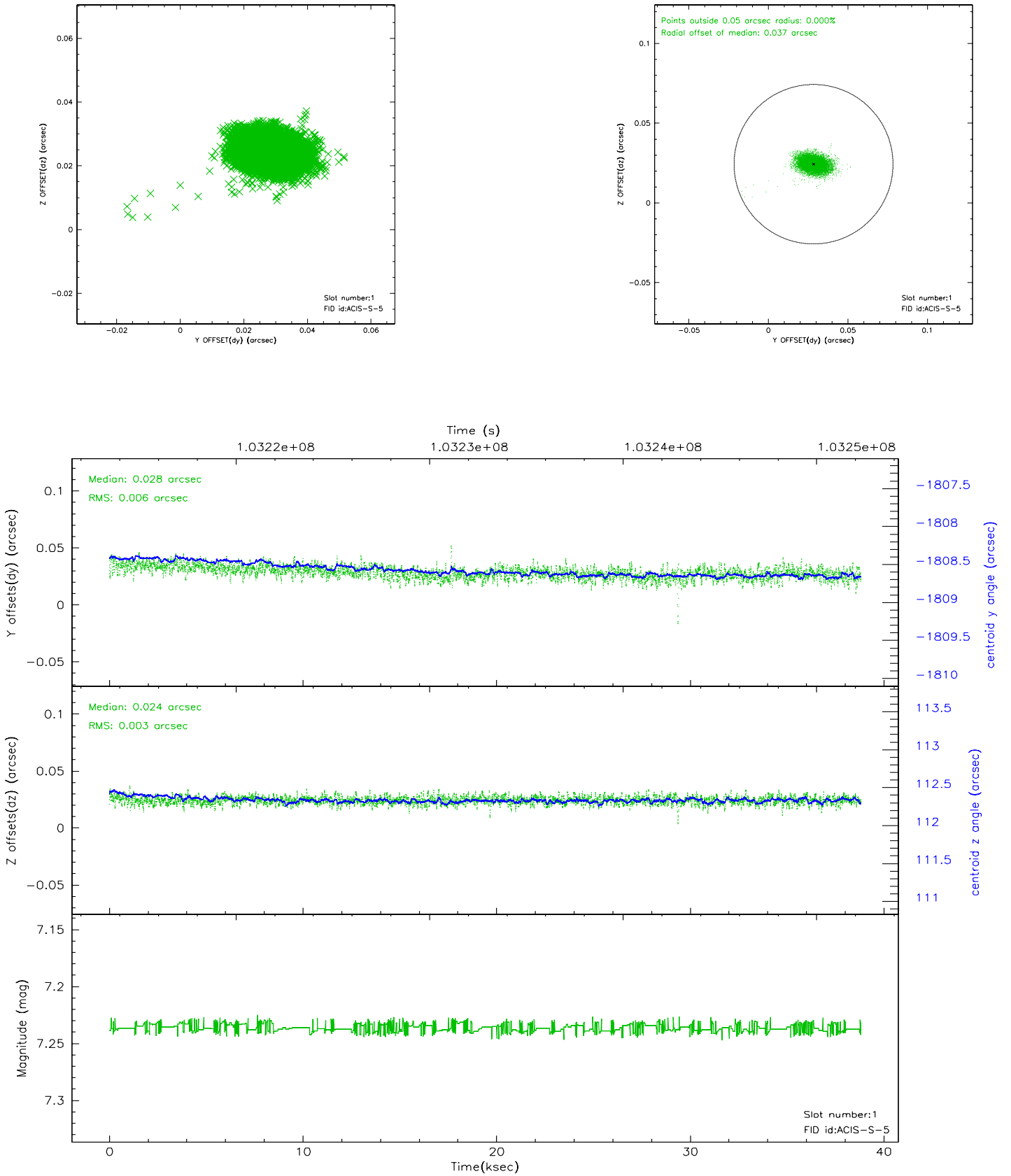


2.5 FID Slots

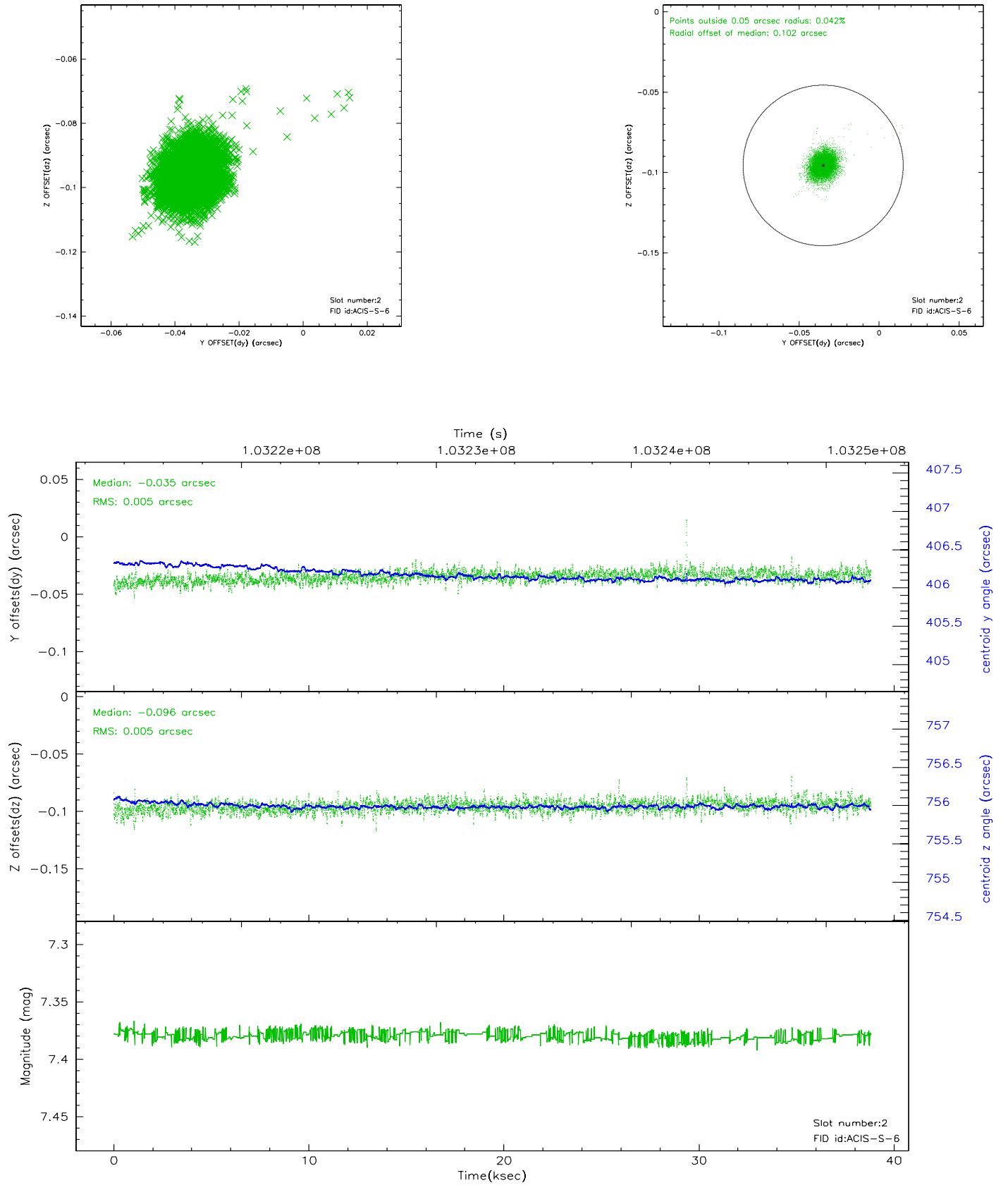
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

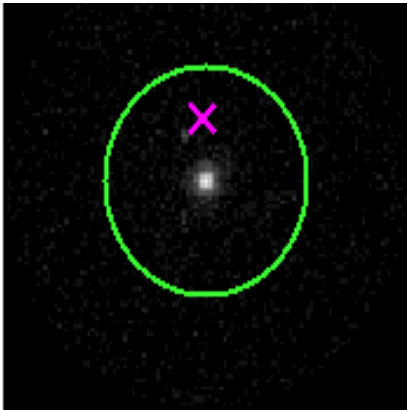


3 Gratings

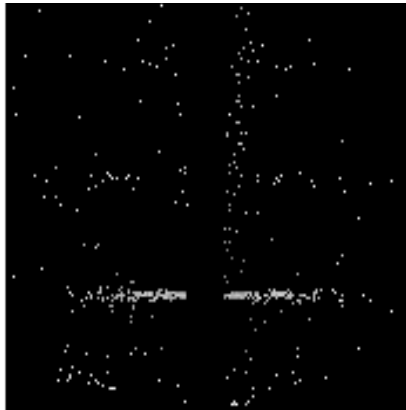
3.1 HEG Arm



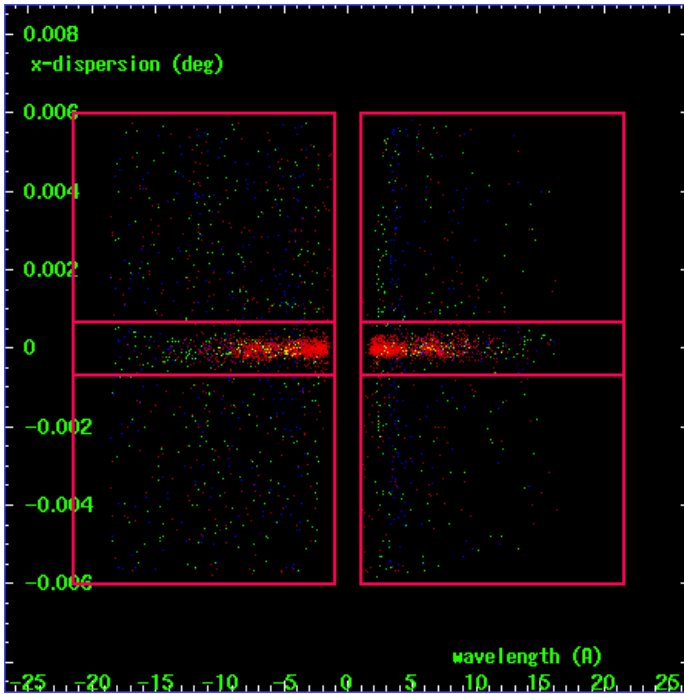
HEG Order Sort 123



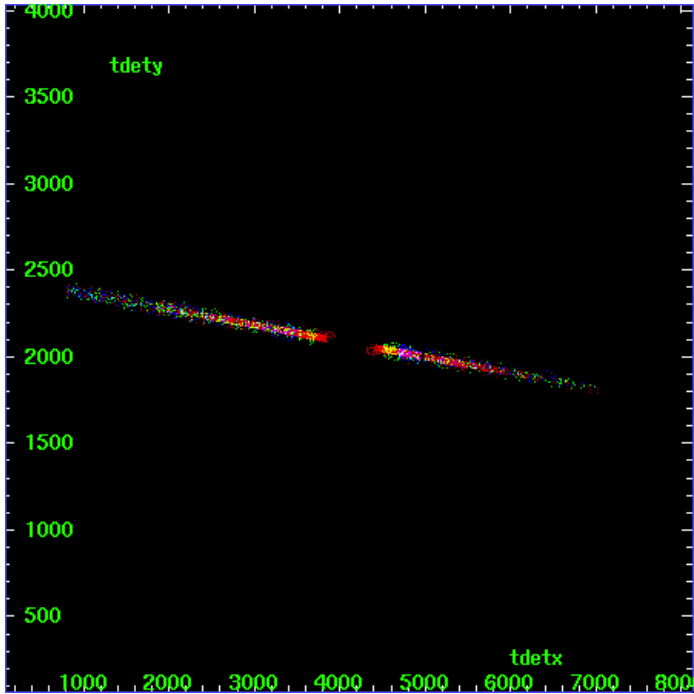
HEG Zero Order



HEG Order Sort ALL

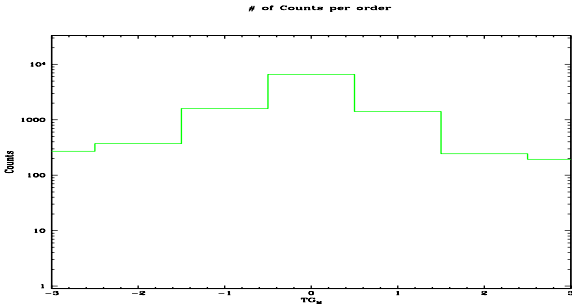


Spot Image HEG

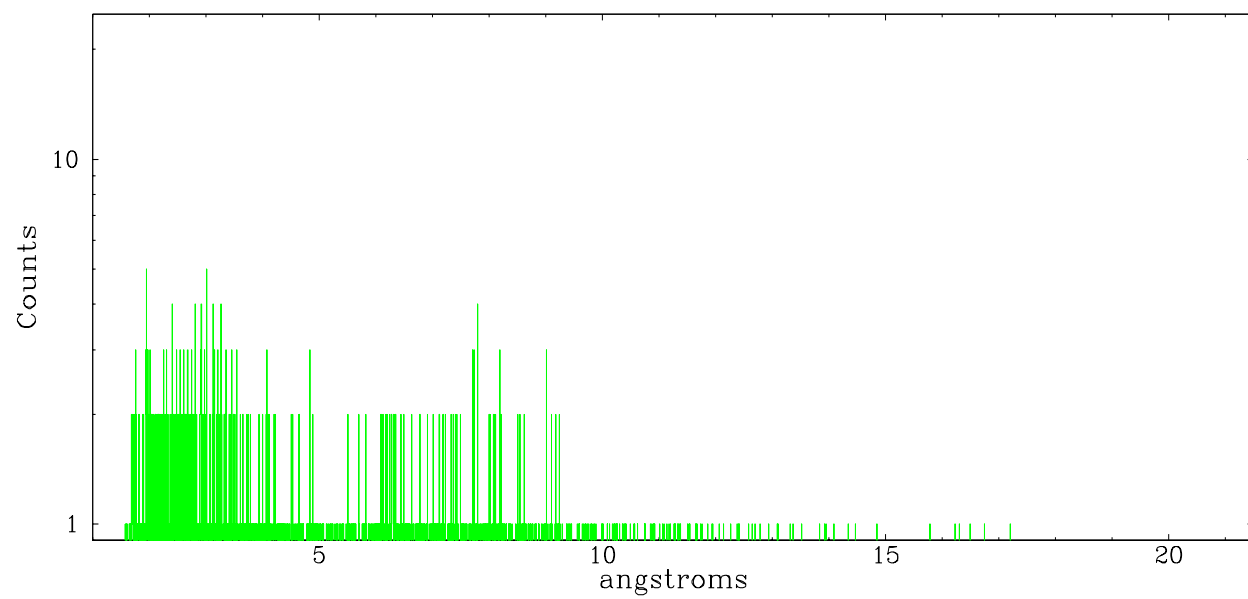


Full Detector HEG

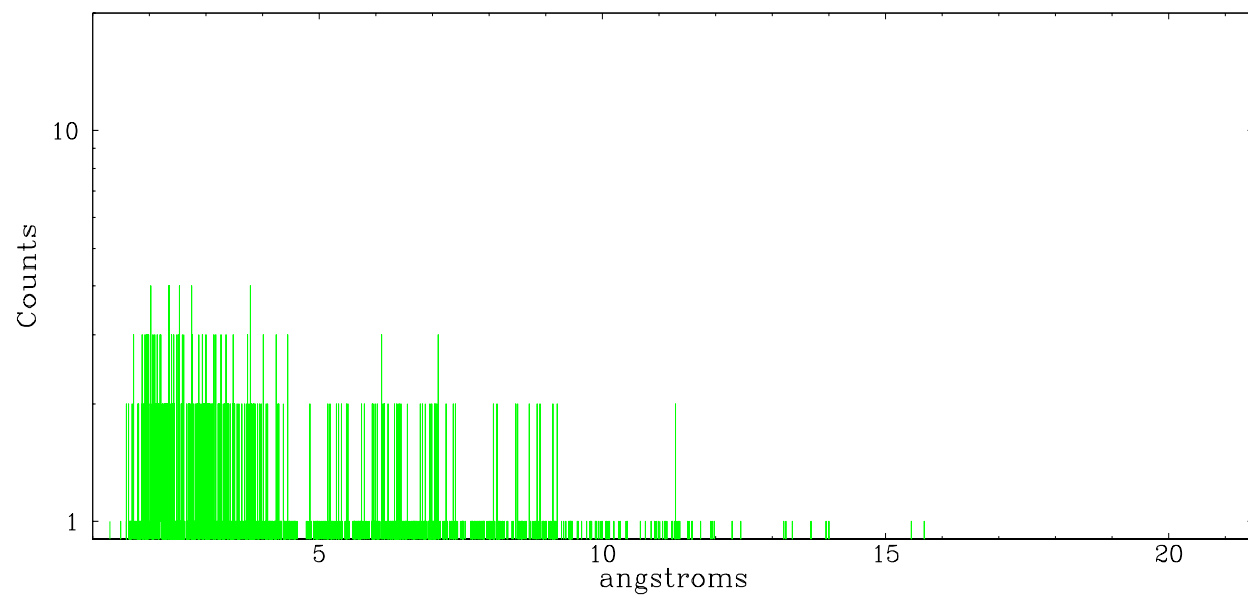
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	270	370	1591	6592	1408	244	194



heg order -1



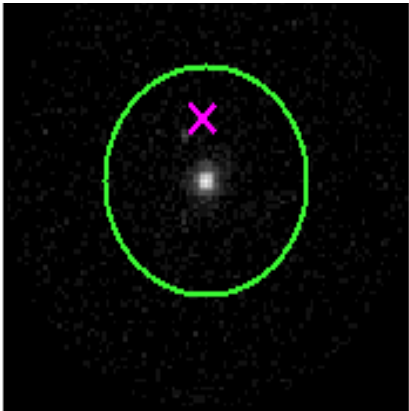
heg order +1



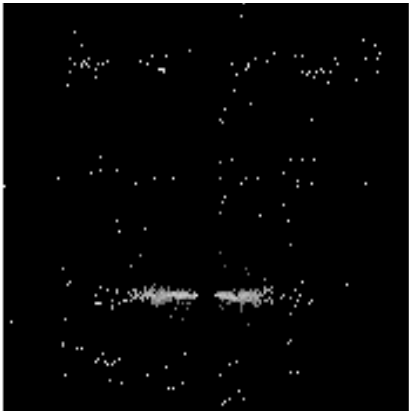
3.2 MEG Arm



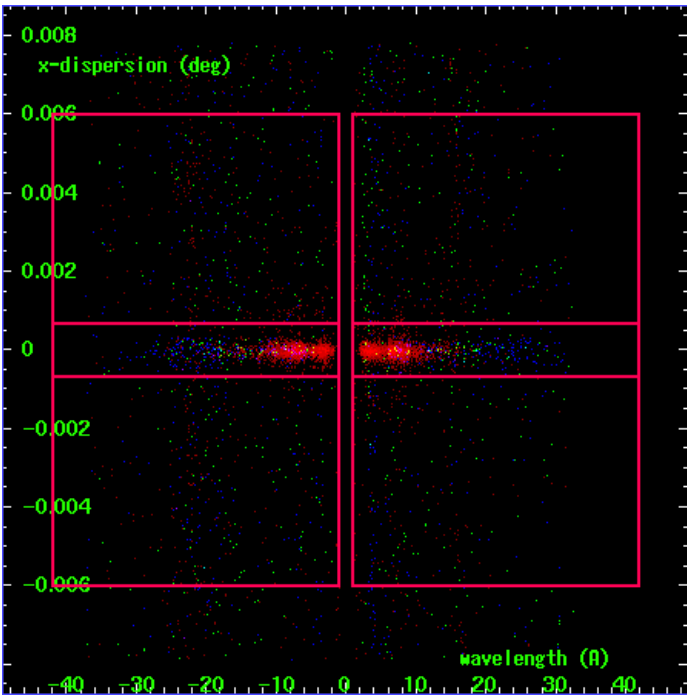
MEG Order Sort 123



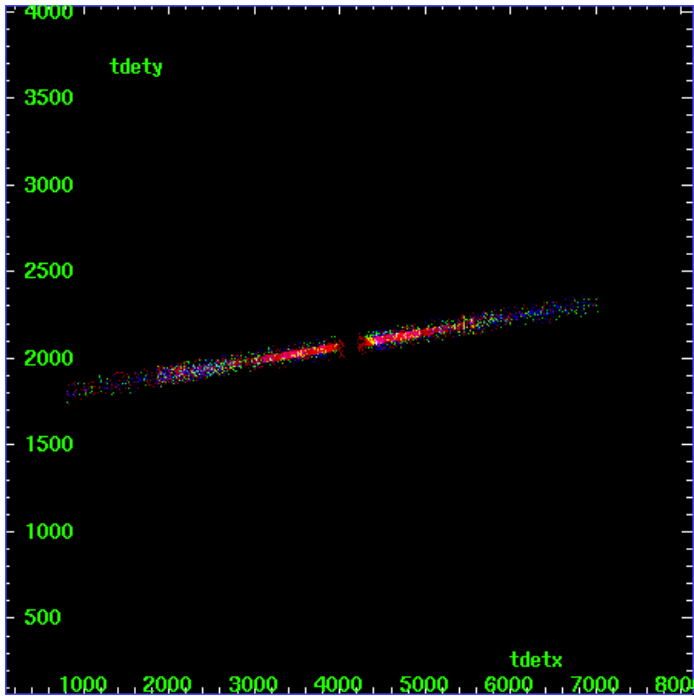
MEG Zero Order



MEG Order Sort ALL

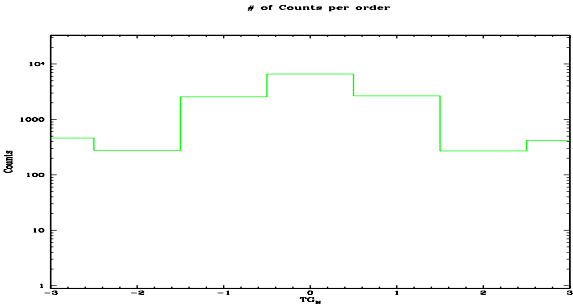


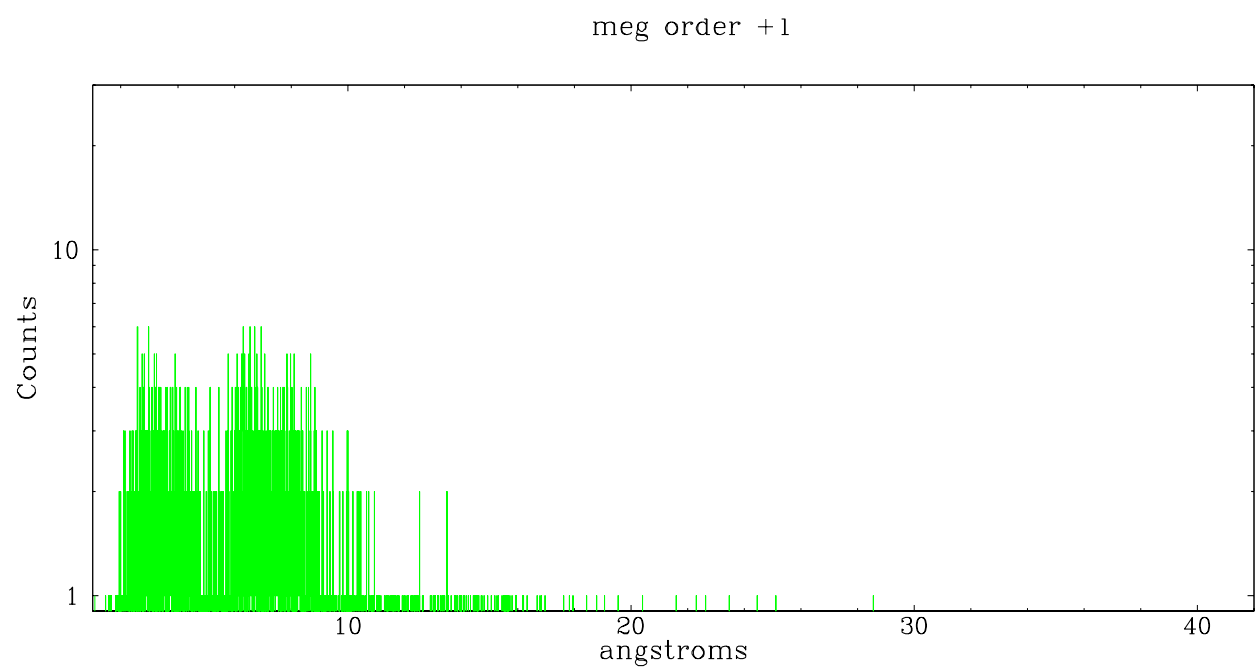
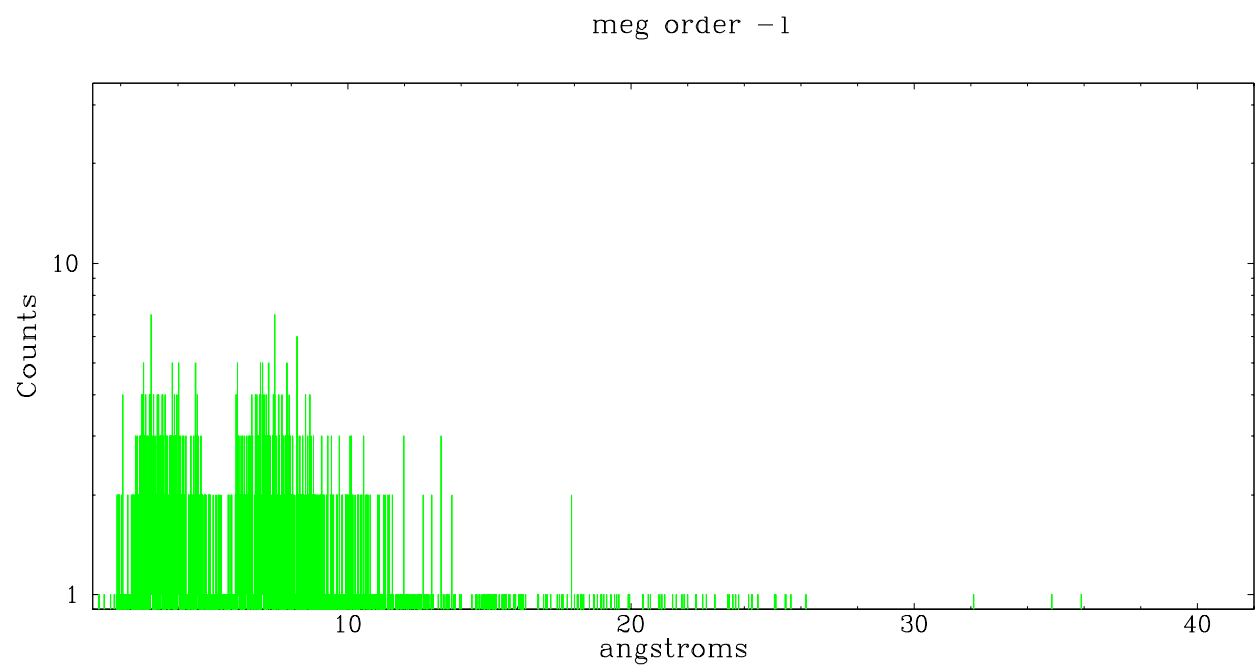
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	463	276	2553	6592	2665	270	418





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.12.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	36.155

A.2 Comments

Coordinated with XMM, RXTE, and BeppoSAX.