

V&V Reference Report

L2 ASCDS Version : 7.6.10

Observation 2482 - L2 Version 001
Chandra X-Ray Center

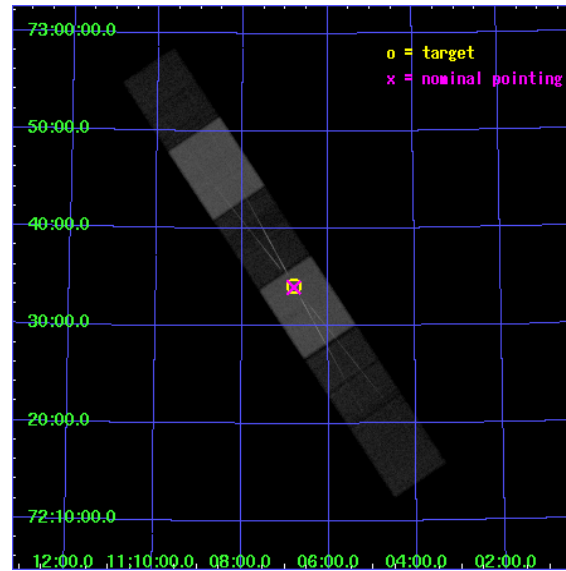
L2 Processing Date : Jan 13 2007

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

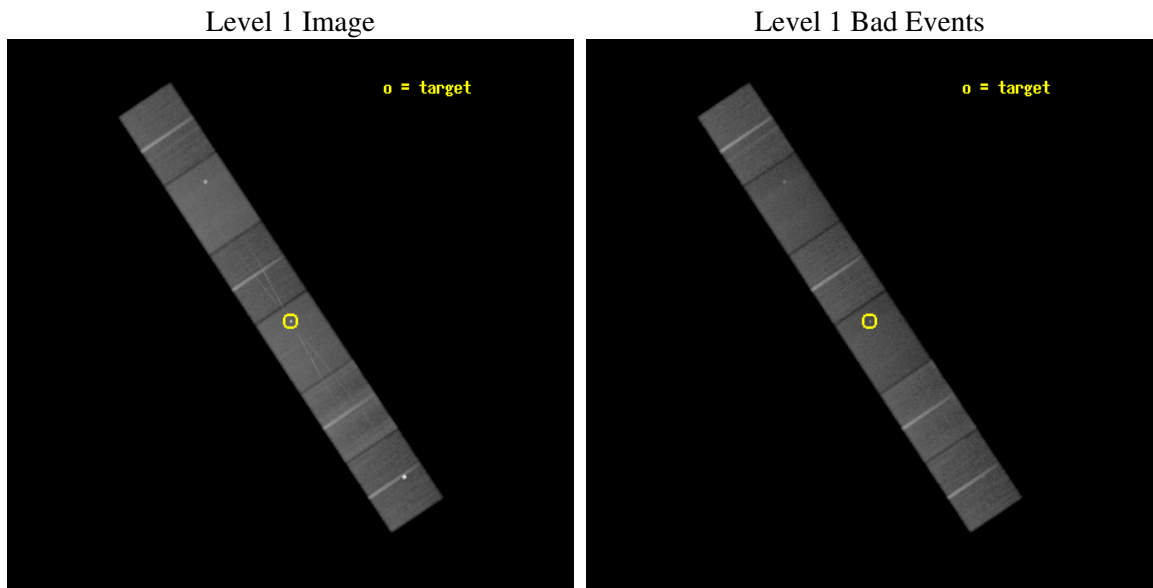
seq_num	700270
obs_id	2482
title	GAS DYNAMICS AROUND THE BLACK HOLE IN NGC 3516
observer	Dr. Tracey Turner
object	NGC 3516
dtcycle	0
cycle	P
ra_targ	166.6975
dec_targ	72.568611
ra_nom	166.69957222306
dec_nom	72.566482755186
roll_nom	56.31097323358
revision	2
ontime	89452.459039763
livetime	88007.72423866
ontime4	89439.754078999
ontime5	89452.459039763
ontime6	89444.836059272
ontime7	89452.459039763
ontime8	89444.836039349
ontime9	89449.918049574
l2events	718403



2 OBI

2.1 OBI

2.1.1 Images

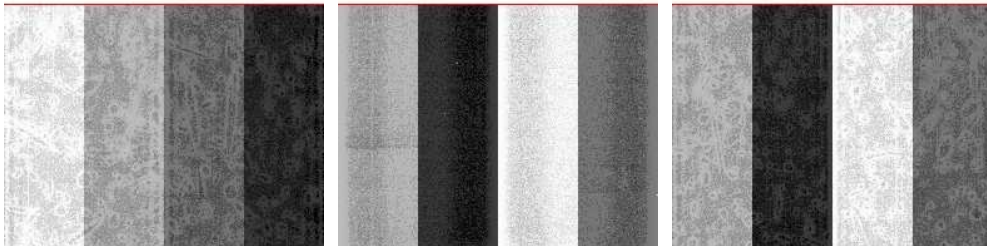


2.1.2 Bias

Chip 4

Chip 5

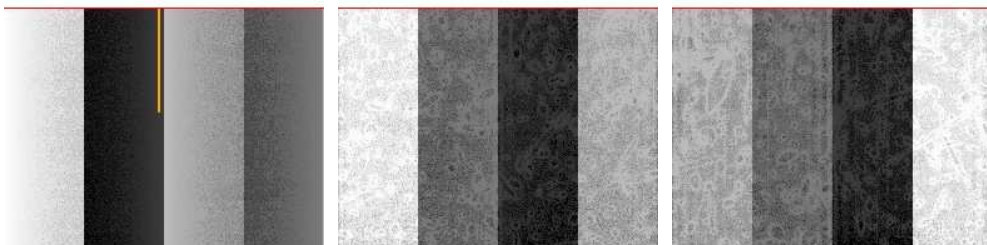
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	3
ascdsver	7.6.10
caldsver	3.3.0
date	2007-01-13T12:08:44
revision	2

sched_exp_time	89305.000000
ontime	89452.459039763
ontime4	89439.754078999
ontime5	89452.459039763
ontime6	89444.836059272
ontime7	89452.459039763
ontime8	89444.836039349
ontime9	89449.918049574
l1events	3186083

2.1.4 Events

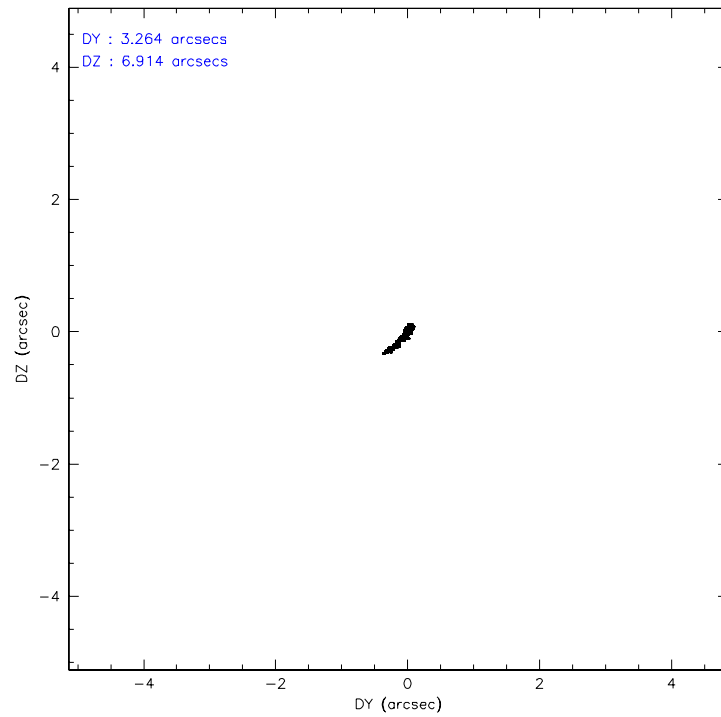
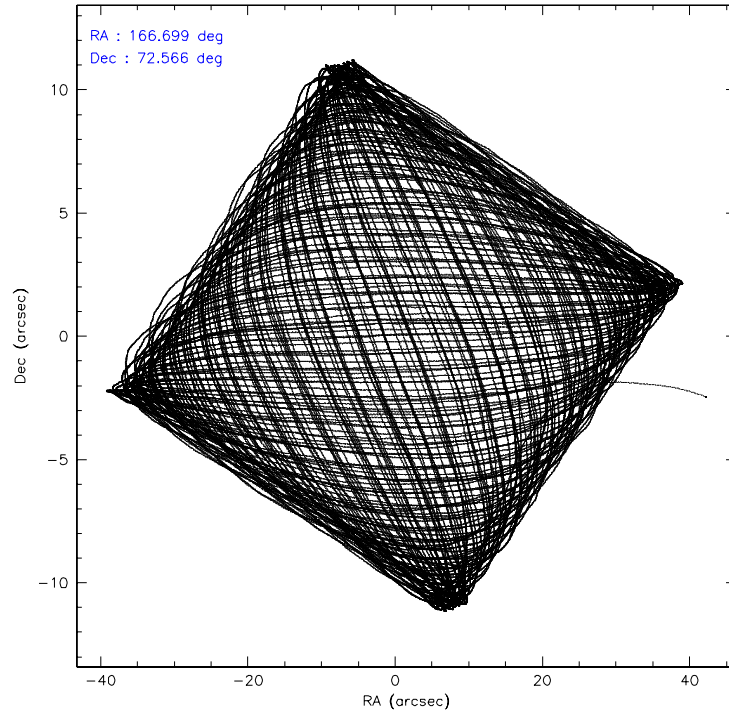
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	483838	606747	455275	581413	589703	469107
rejected events	426657	329890	393757	323890	447991	380276
rejected %	88%	54%	86%	55%	75%	81%

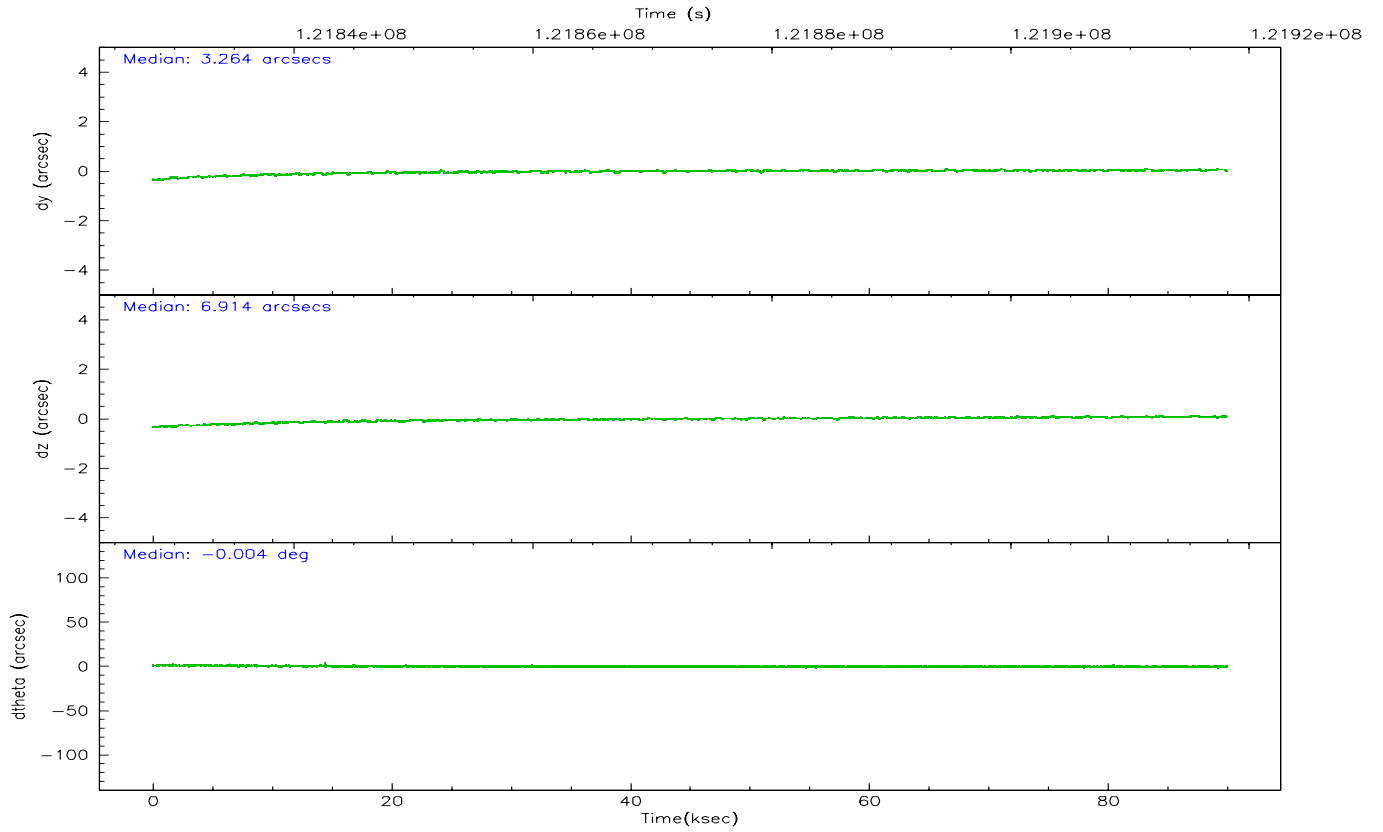
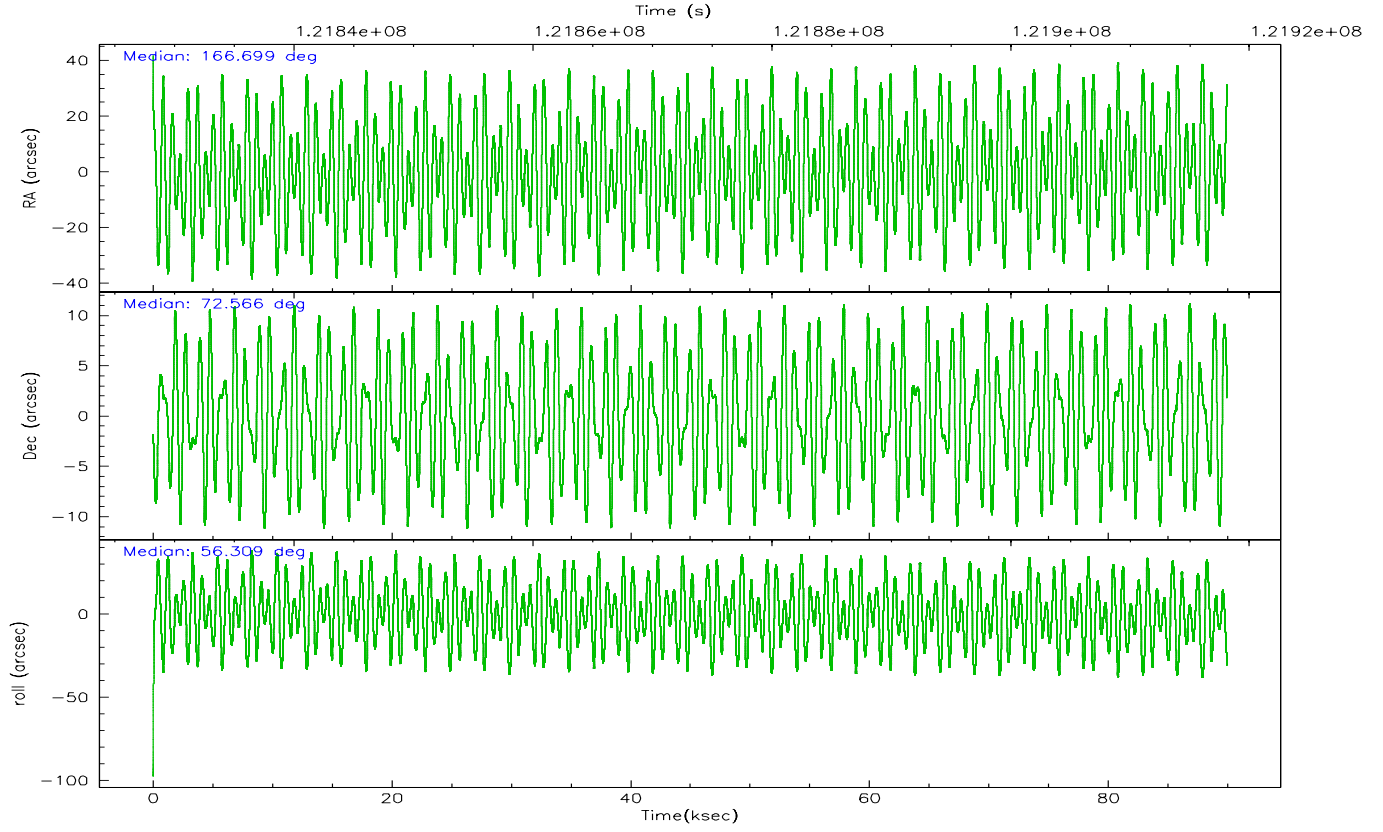
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	23031	23991	26753	26235	44605	55767
	4%	3%	5%	4%	7%	11%
grade 1 events	204	1660	195	637	372	219
	0%	0%	0%	0%	0%	0%
grade 2 events	13921	79901	12245	52402	27760	11306
	2%	13%	2%	9%	4%	2%
grade 3 events	5397	14274	5873	24244	17573	5576
	1%	2%	1%	4%	2%	1%
grade 4 events	5099	13506	5689	23948	15994	5409
	1%	2%	1%	4%	2%	1%
grade 5 events	15630	47664	18344	54011	23399	18834
	3%	7%	4%	9%	3%	4%
grade 6 events	9743	145197	10966	130714	35783	10777
	2%	23%	2%	22%	6%	2%
grade 7 events	410813	280554	375210	269222	424217	361219
	84%	46%	82%	46%	71%	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	166.694780	166.6995722230572	Subarray requested	CUSTOM	CUSTOM
Pointing Dec	72.539266	72.56648275518562	Subarray start row	1	1
Pointing Roll	56.158930	56.31097323357982	Subarray row count	774	774
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
SIM defocus (mm)	0	0.001444936568705701	Primary exposure time	0.000000	2.5
SIM translation stage pos (mm)	-187.132523	-187.1254020033014			
SIM translation stage offset (mm)	-3	-3.007120579706367			
Observation start time	121828827.184000	121827625.73558			
Observation start date	2001-11-11T01:19:23	2001-11-11T01:00:25			
Observation end time	121918132.184000	121918762.58922			
Observation end date	2001-11-12T02:07:48	2001-11-12T02:19:22			
Read mode	TIMED	TIMED			

2.3 Aspect



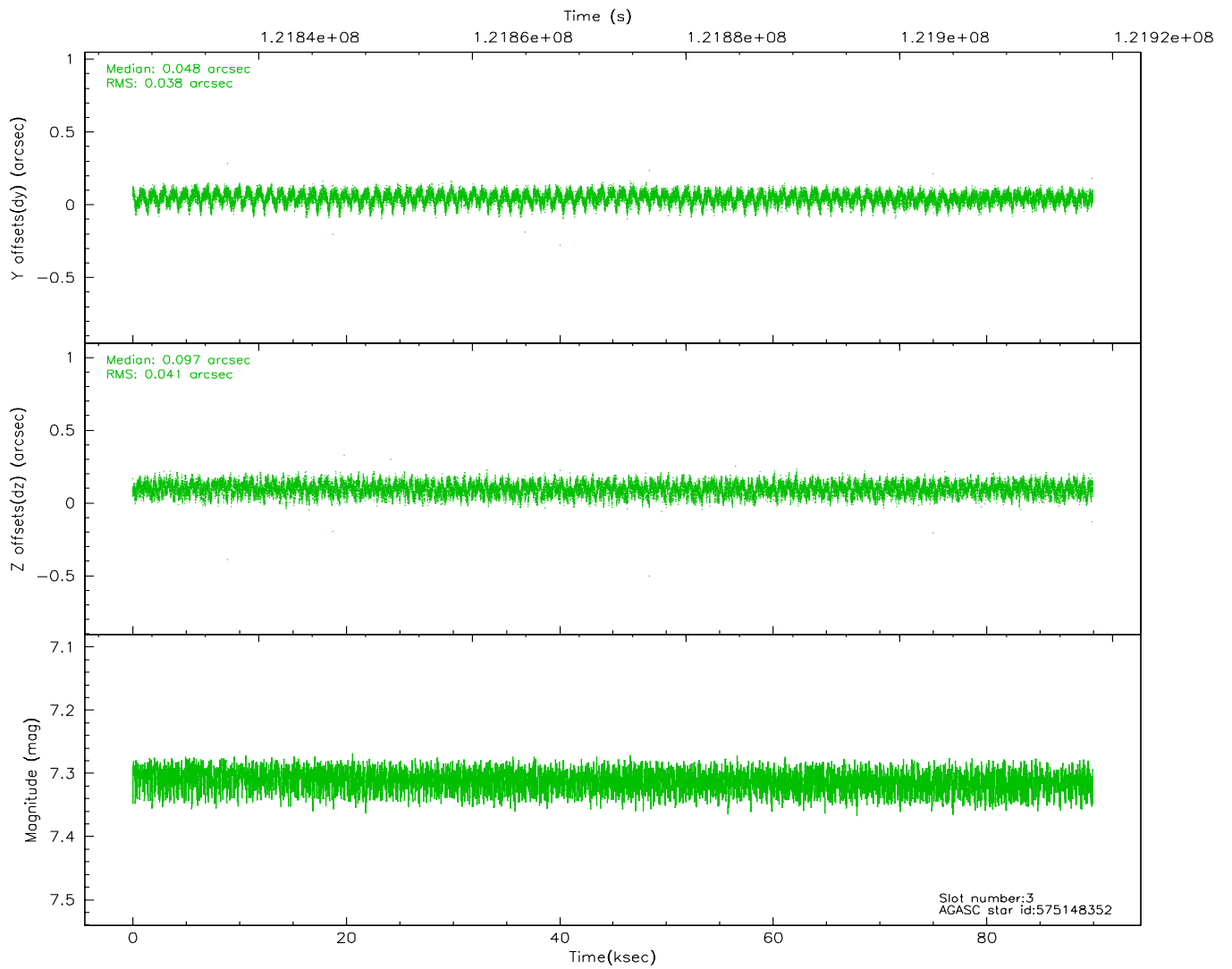
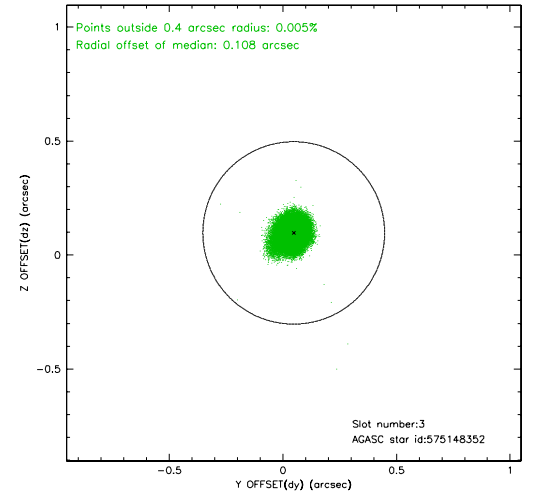
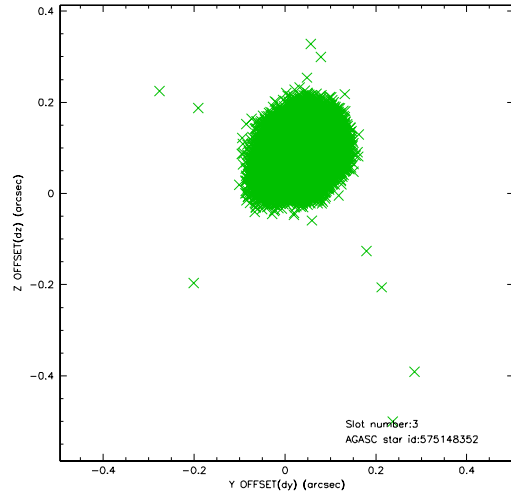


Slot Statistics

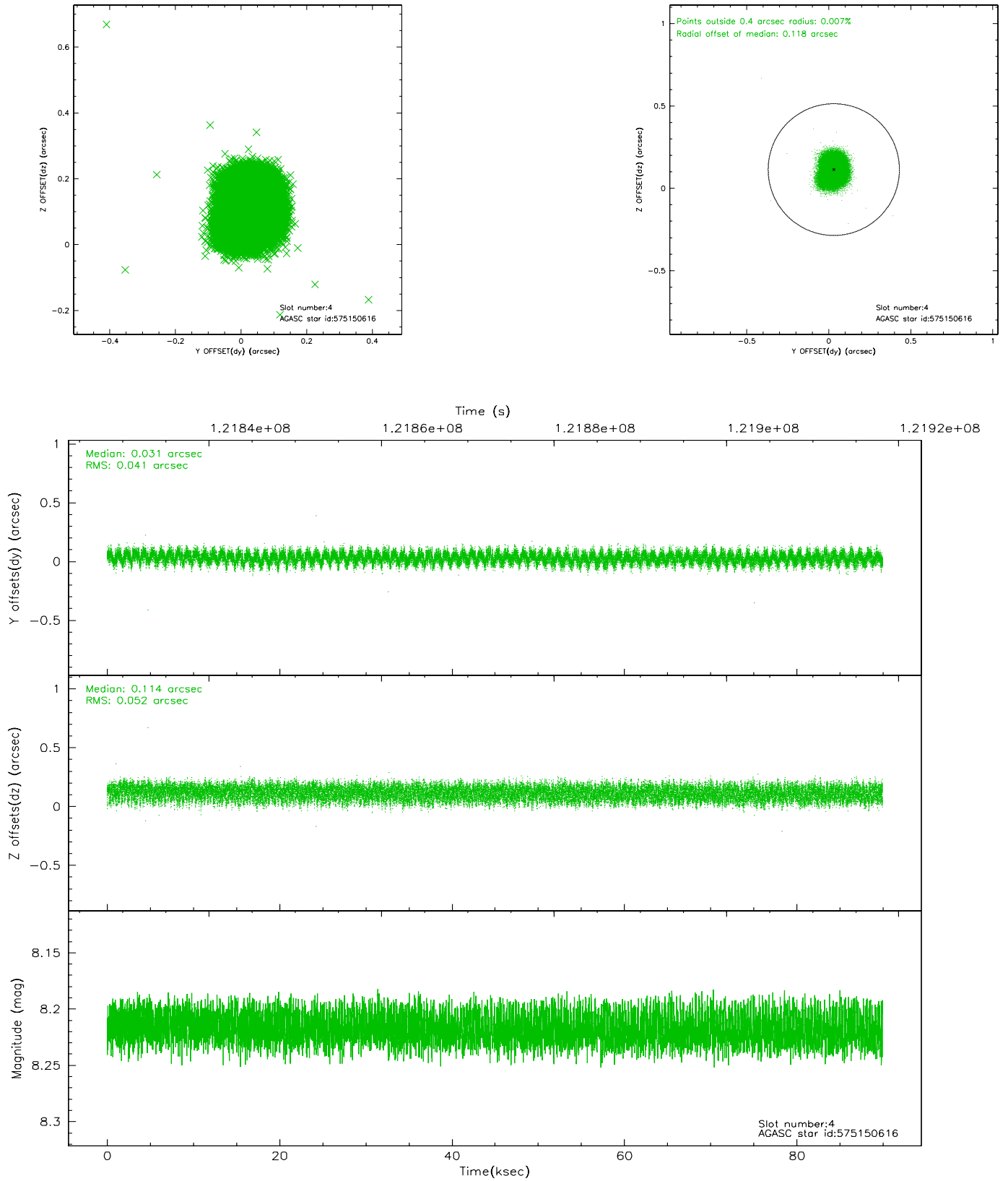
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	21935	-0.028	-0.026	0.007	0.012	0.000000	0.000000	-755.69	-1790.16
1	FID	ACIS-S-4	7.20	21928	-0.033	0.020	0.007	0.015	0.000000	0.000000	2157.60	118.46
2	FID	ACIS-S-5	7.23	21931	0.031	0.014	0.008	0.012	0.000000	0.000000	-1808.59	112.01
3	GUIDE	575148352	7.31	43859	0.048	0.097	0.060	0.095	167.090916	71.958979	-1486.87	-1529.36
4	GUIDE	575150616	8.22	43862	0.031	0.114	0.072	0.110	167.218511	72.045663	-1149.03	-1470.86
5	GUIDE	575541080	8.95	43837	-0.180	0.132	0.073	0.117	167.870403	73.115273	2417.71	140.74
6	GUIDE	575543720	9.35	43860	0.121	-0.225	0.084	0.132	164.695945	72.631615	-889.07	1988.61
7	GUIDE	575541344	9.37	43850	-0.018	-0.113	0.081	0.133	166.947366	72.953762	1389.31	609.89

2.4 Star Slots

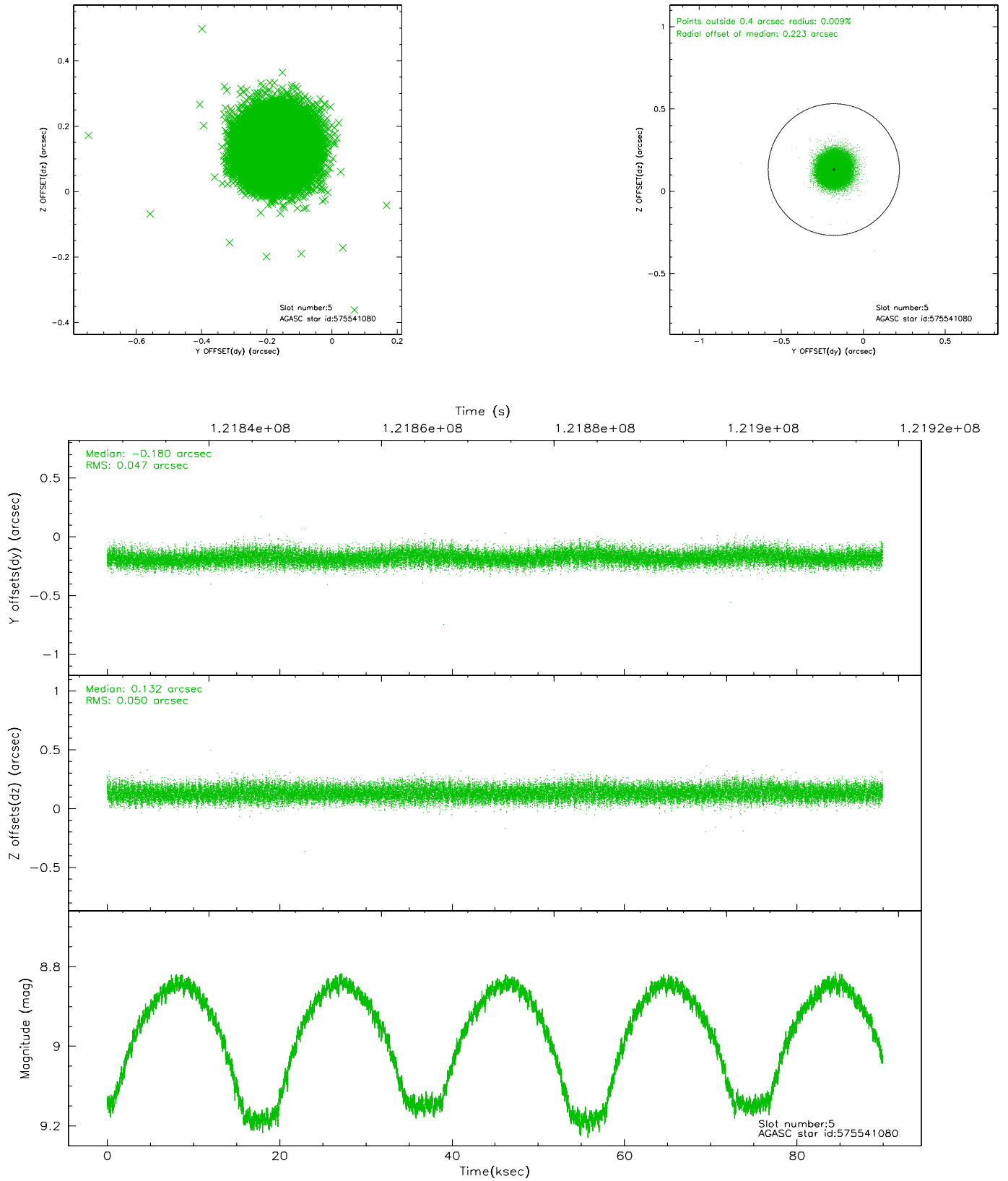
2.4.1 Slot 3



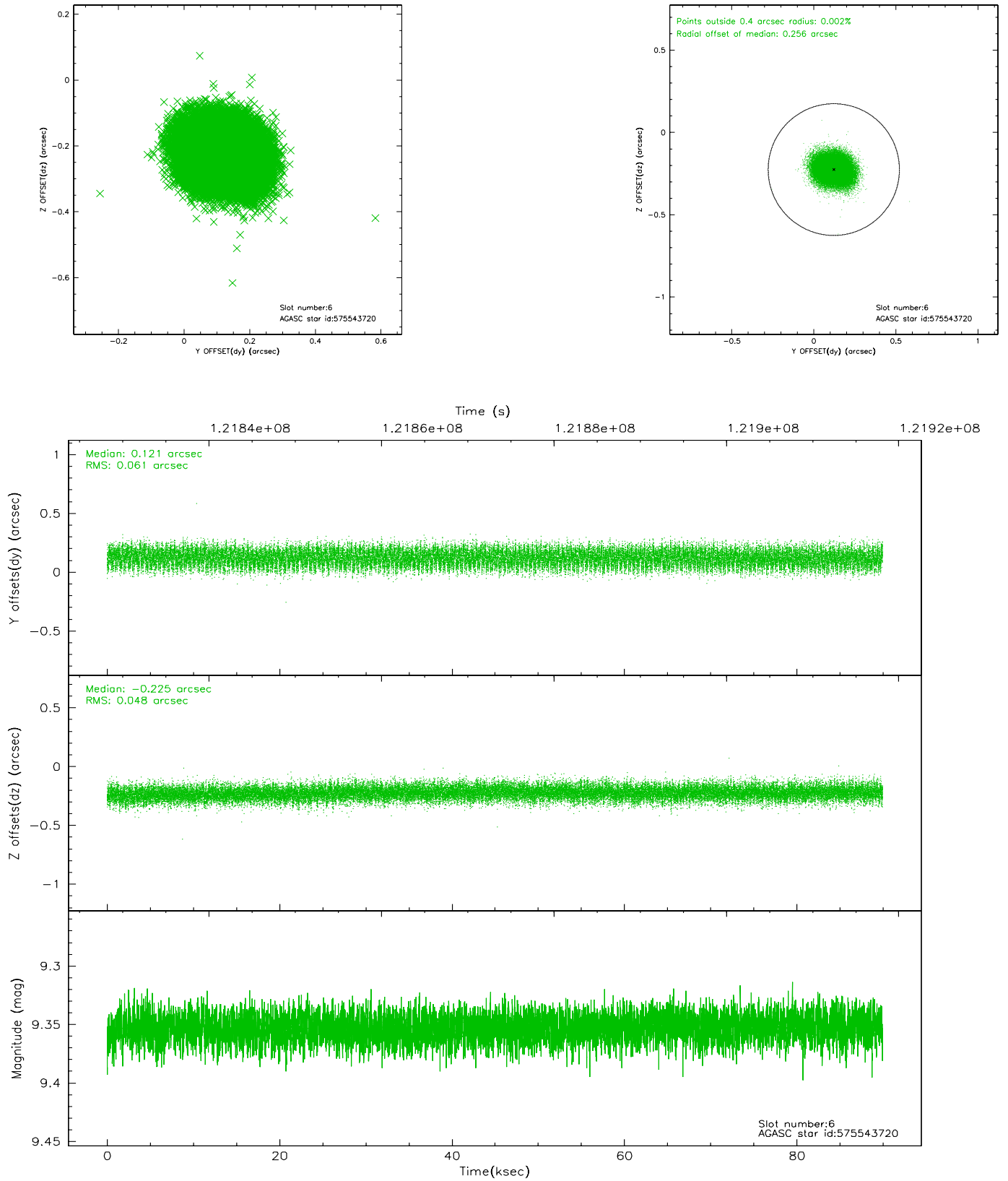
2.4.2 Slot 4



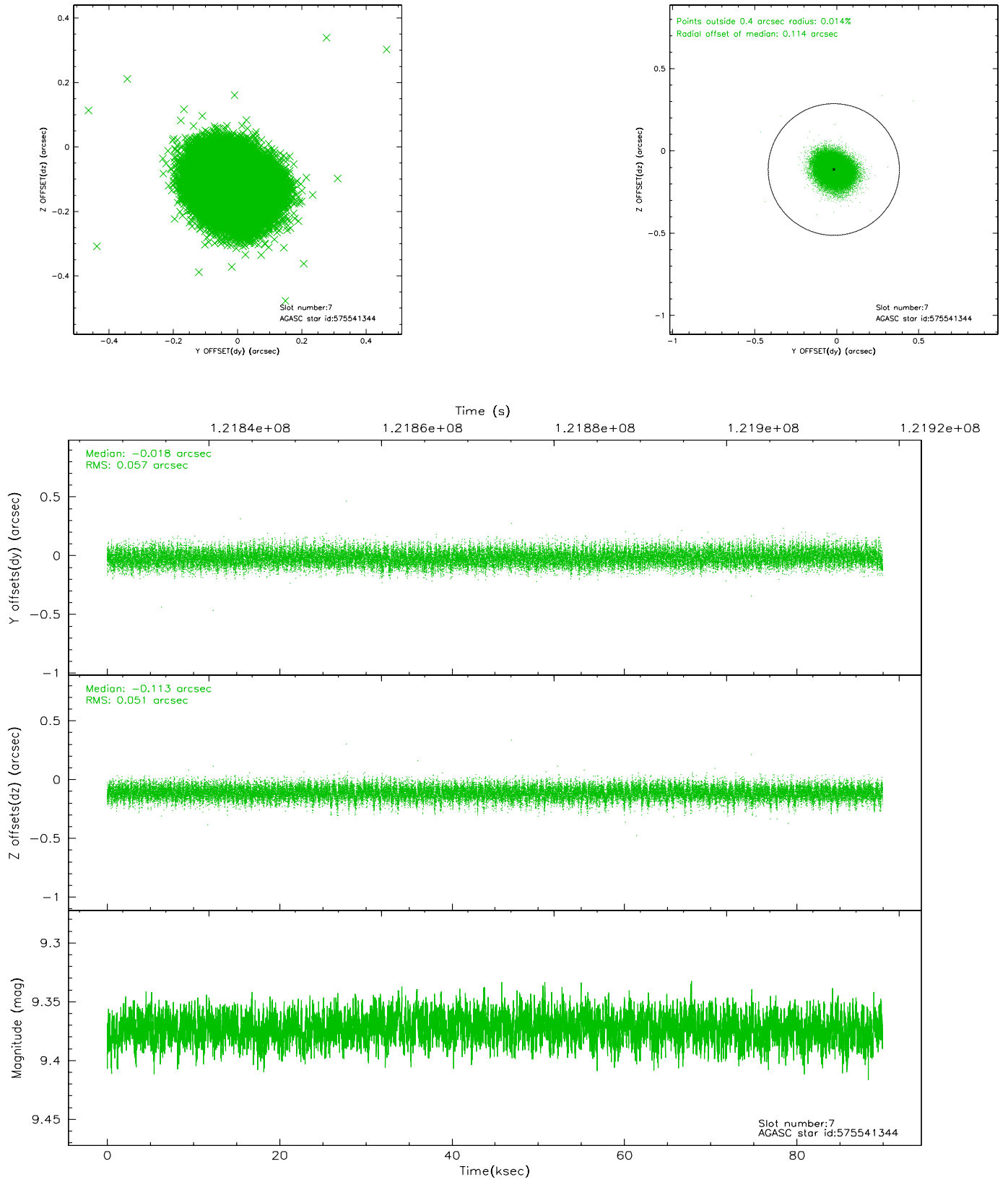
2.4.3 Slot 5



2.4.4 Slot 6

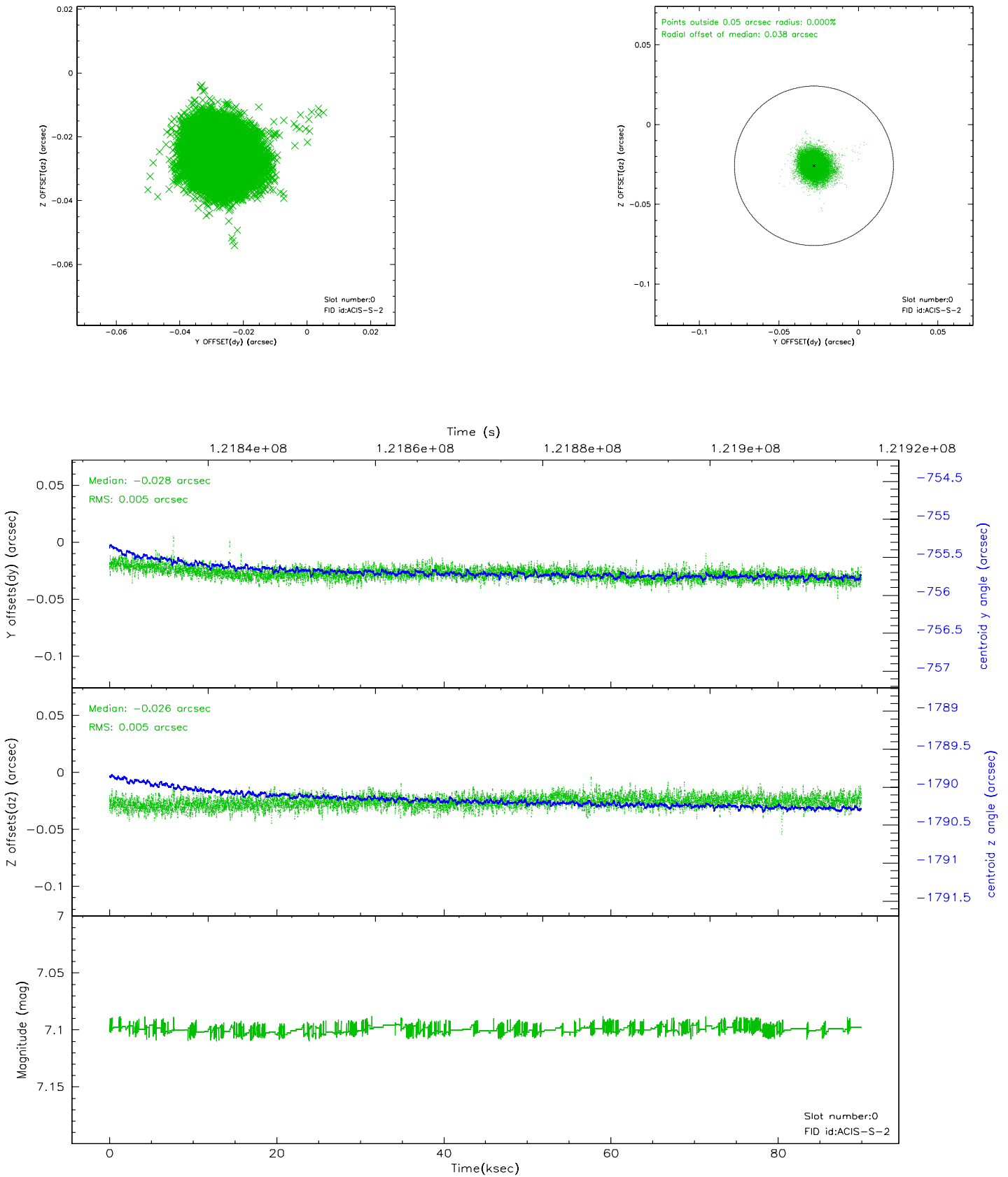


2.4.5 Slot 7

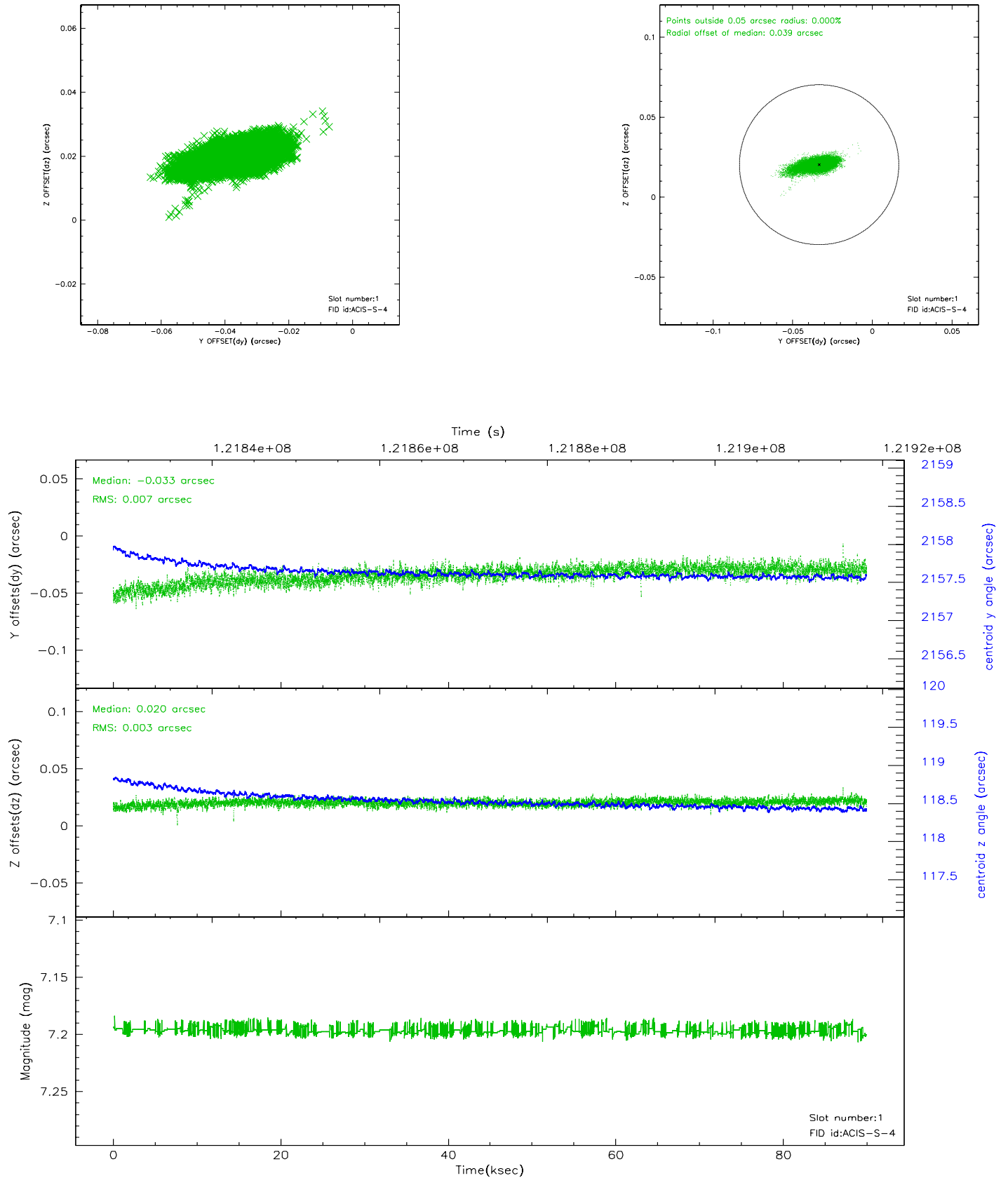


2.5 FID Slots

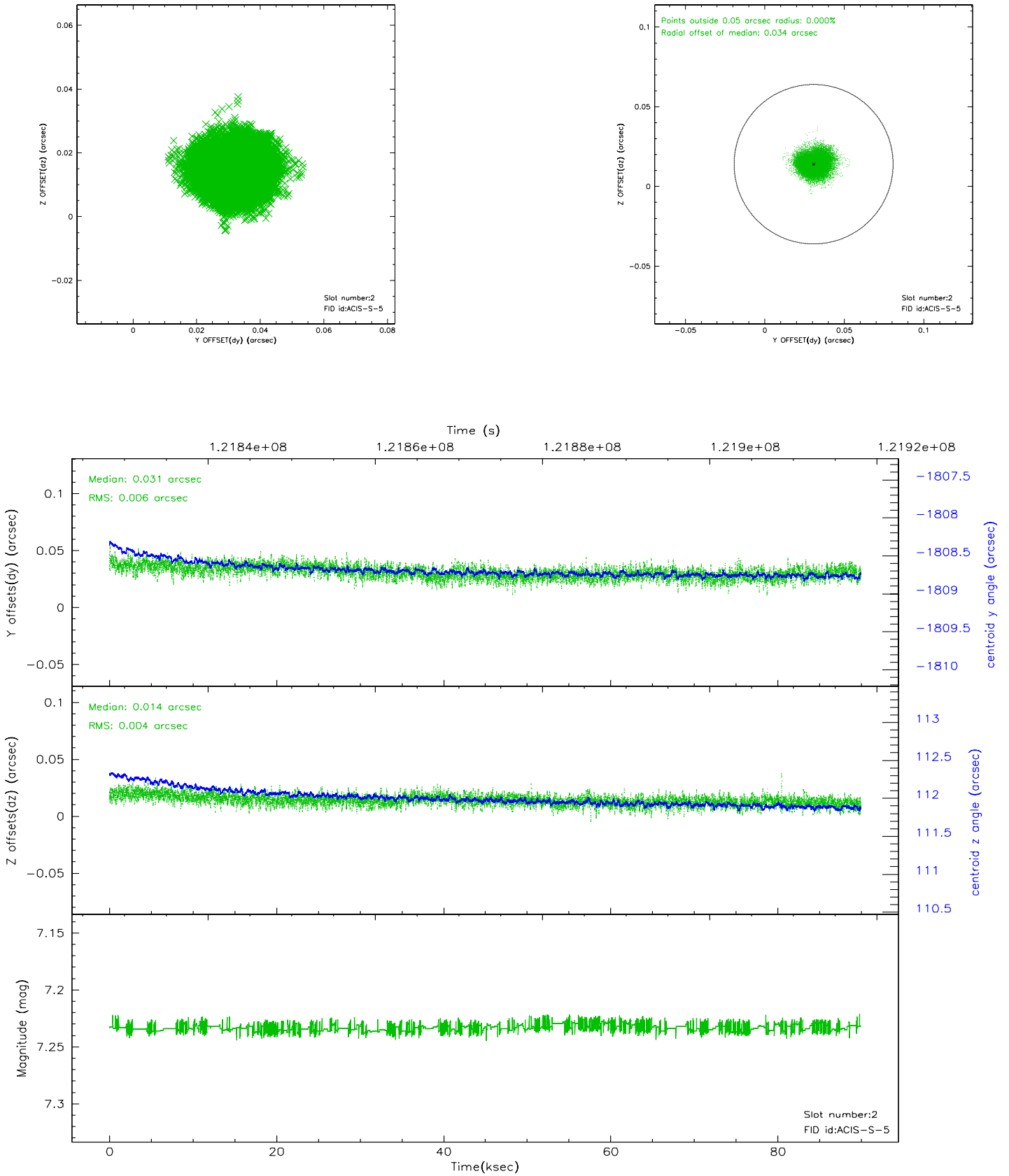
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

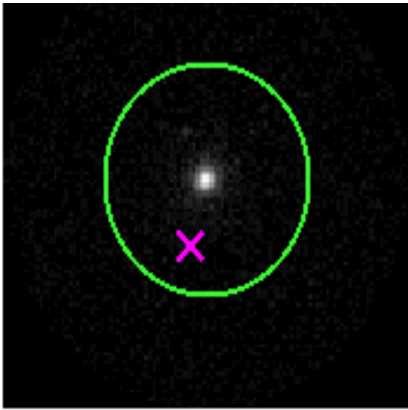


3 Gratings

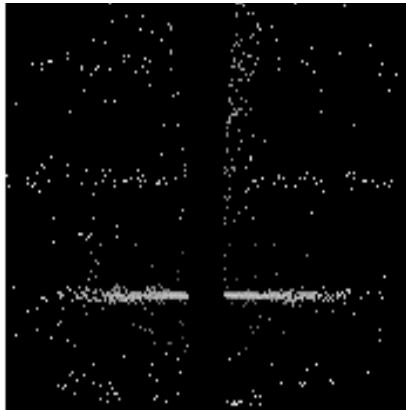
3.1 HEG Arm



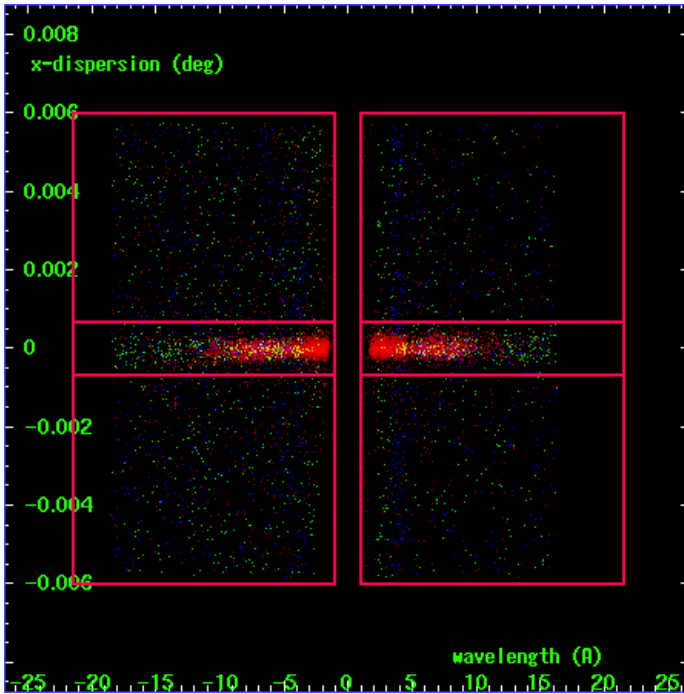
HEG Order Sort 123



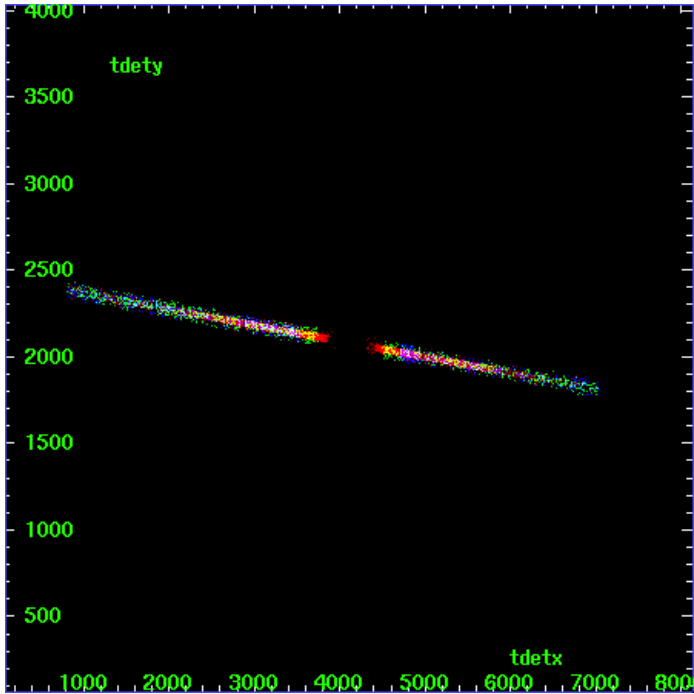
HEG Zero Order



HEG Order Sort ALL

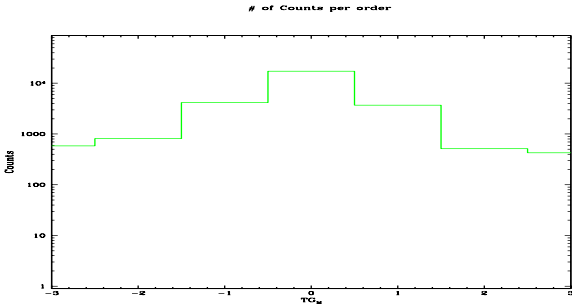


Spot Image HEG

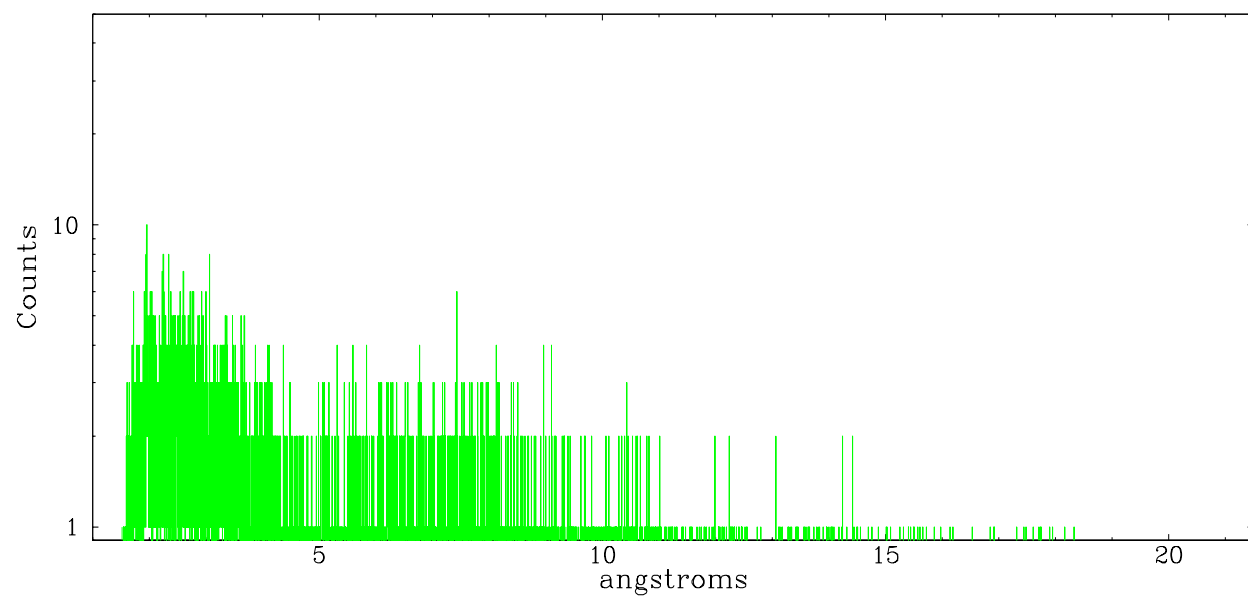


Full Detector HEG

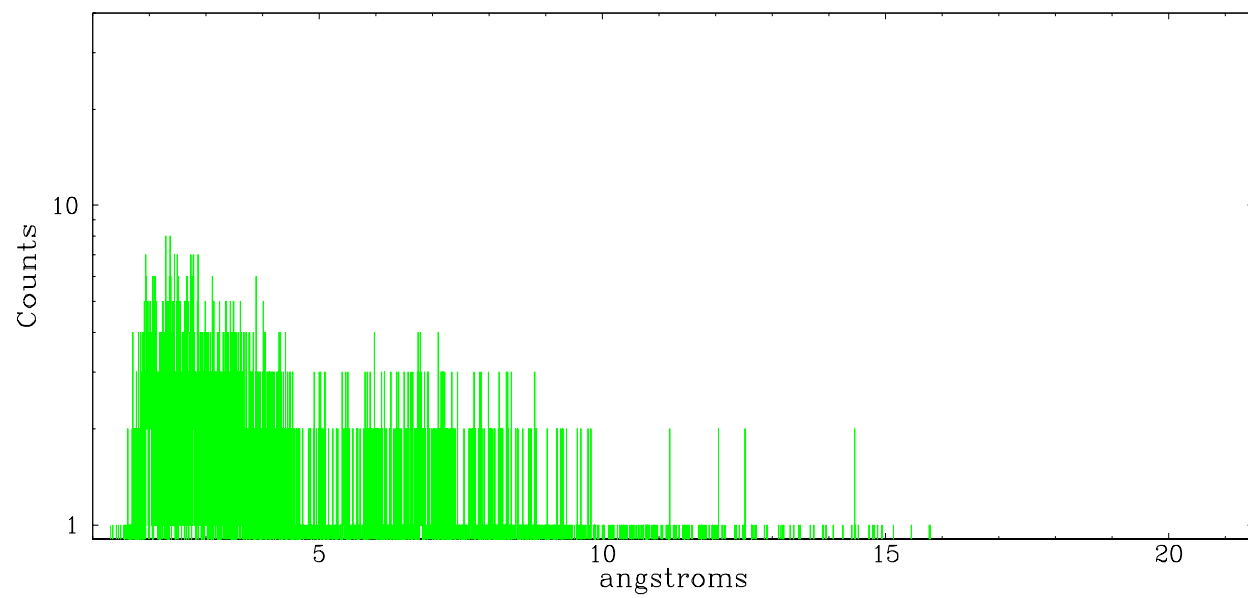
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	582	812	4175	17333	3710	513	425



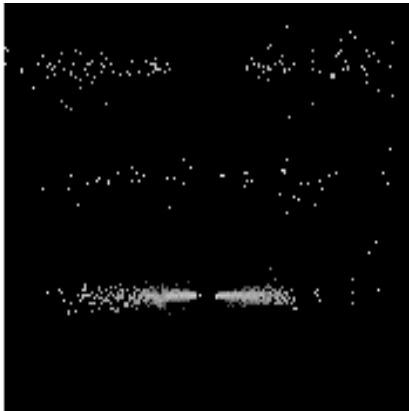
neg order -1



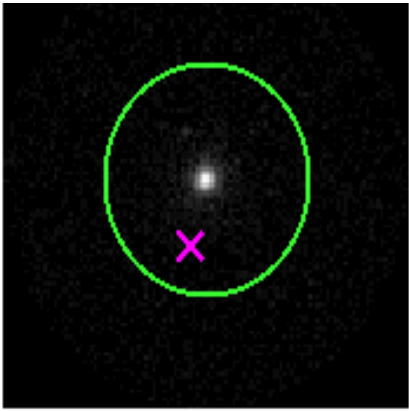
neg order +1



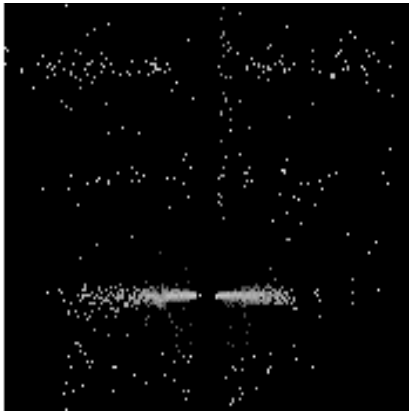
3.2 MEG Arm



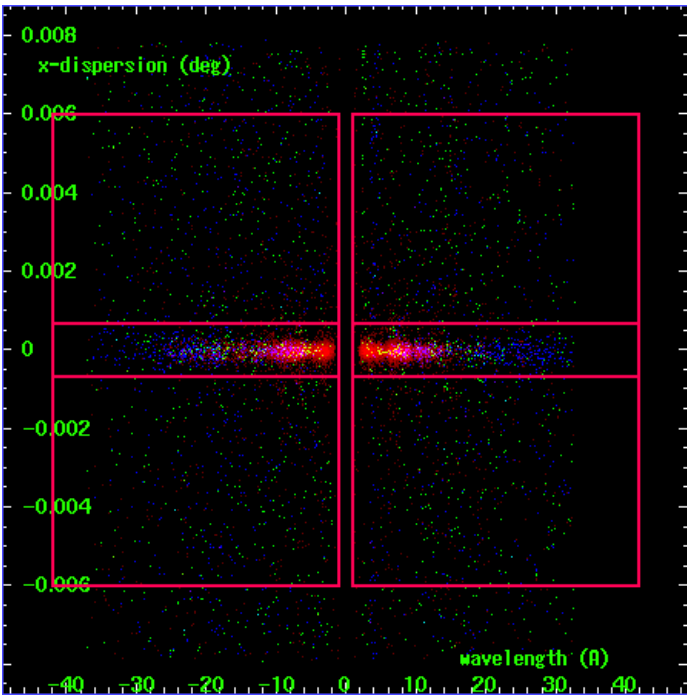
MEG Order Sort 123



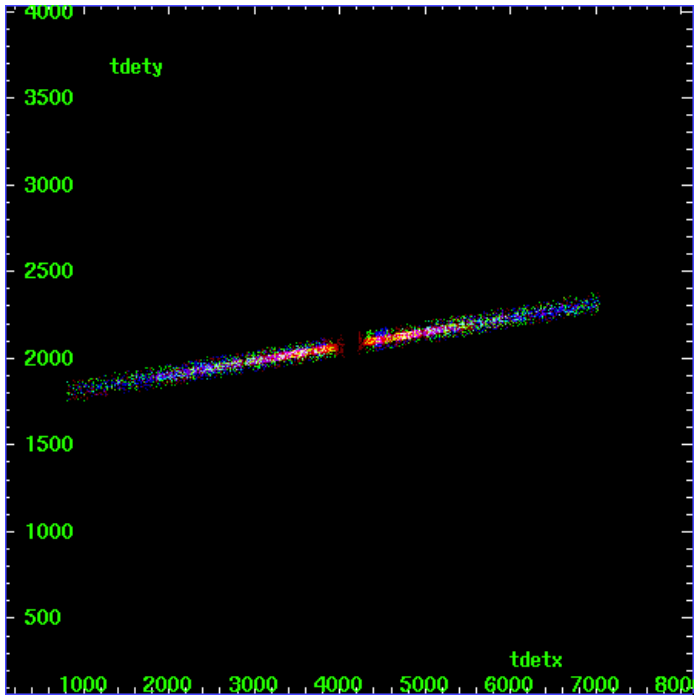
MEG Zero Order



MEG Order Sort ALL

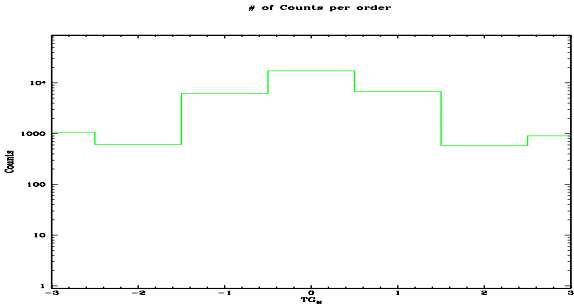


Spot Image MEG

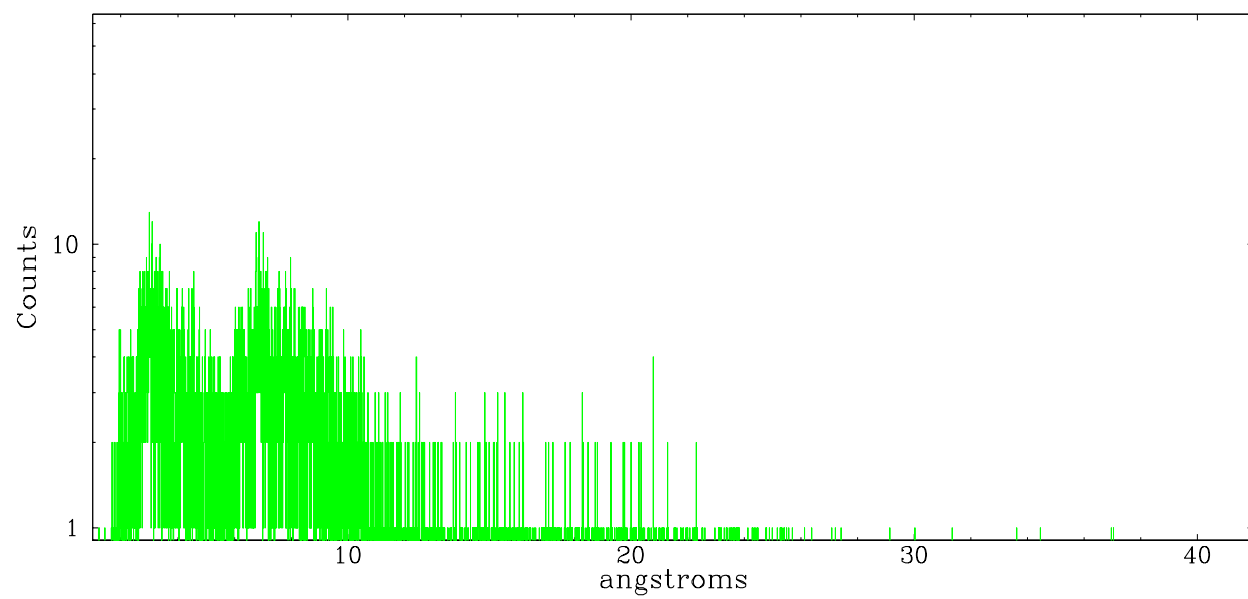


Full Detector MEG

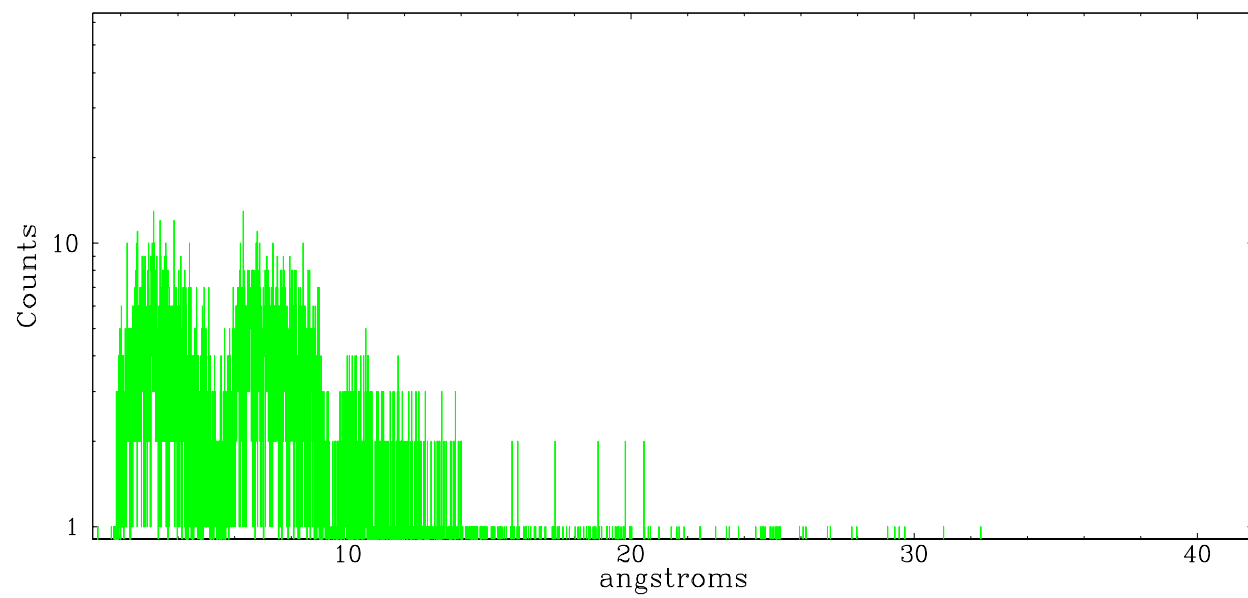
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1065	615	6200	17333	6736	589	908



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2007.01.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	89.454

A.2 Comments

Simultaneous with XMM, RXTE, BEPPOSAX