

V&V Reference Report

L2 ASCDS Version : 7.6.7.1

Observation 6151 - L2 Version 001
Chandra X-Ray Center

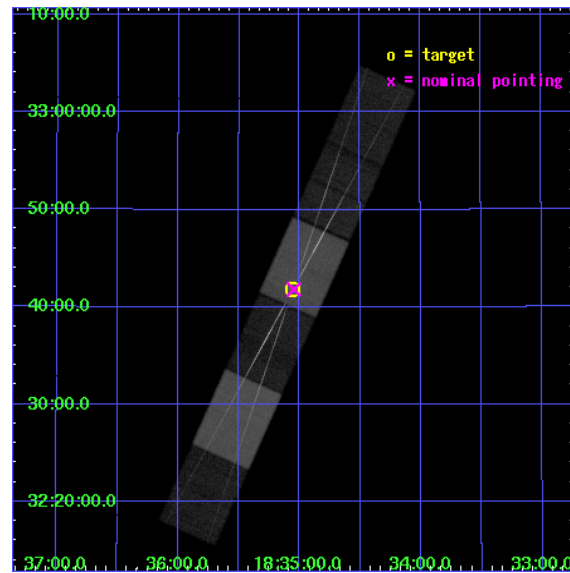
L2 Processing Date : Apr 13 2006

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

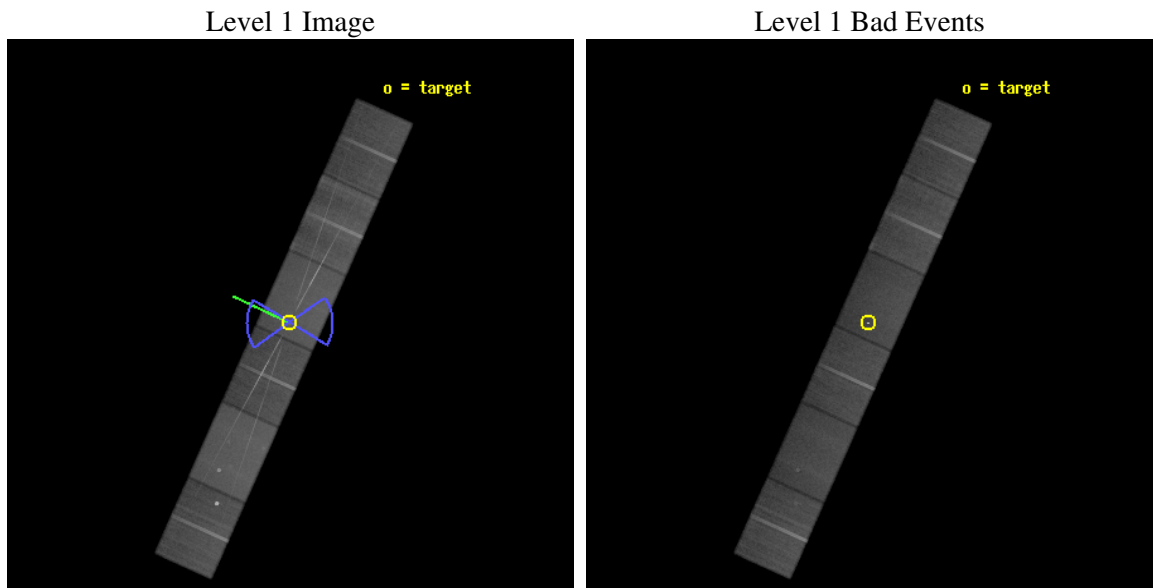
seq_num	700991
obs_id	6151
title	The profile of the Fe Kalpha line in the Broad Line Radio Galaxy 3C382
observer	Dr. Rita Sambruna
object	3C382
dtcycle	0
cycle	P
ra_targ	278.764167
dec_targ	32.696389
ra_nom	278.76163603575
dec_nom	32.697079230817
roll_nom	294.15799779952
revision	2
ontime	64920.0
livetime	63871.485690898
ontime4	64920.0
ontime5	64920.0
ontime6	64920.0
ontime7	64920.0
ontime8	64920.0
ontime9	64917.458999842
l2events	732837



2 OBI

2.1 OBI

2.1.1 Images

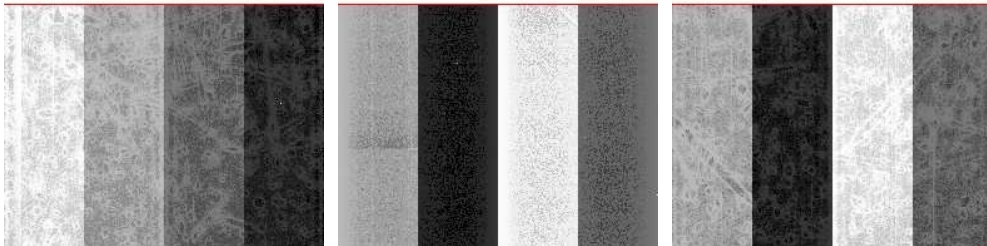


2.1.2 Bias

Chip 4

Chip 5

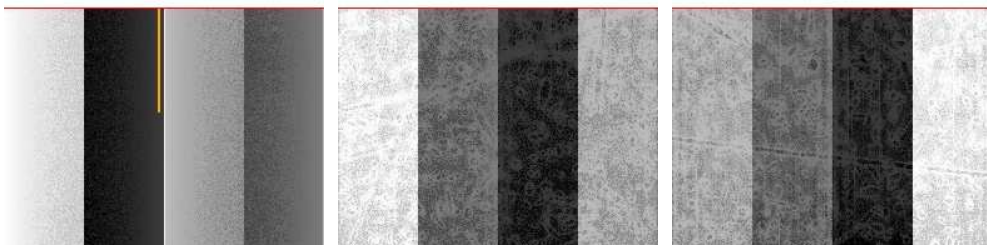
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.1
caldsver	3.2.1
date	2006-04-13T13:14:27
revision	2

sched_exp_time	65000.000000
ontime	64925.330950439
ontime4	64925.330950439
ontime5	64925.330950439
ontime6	64925.330930561
ontime7	64925.330950439
ontime8	64925.330930561
ontime9	64922.789930403
l1events	2986938

2.1.4 Events

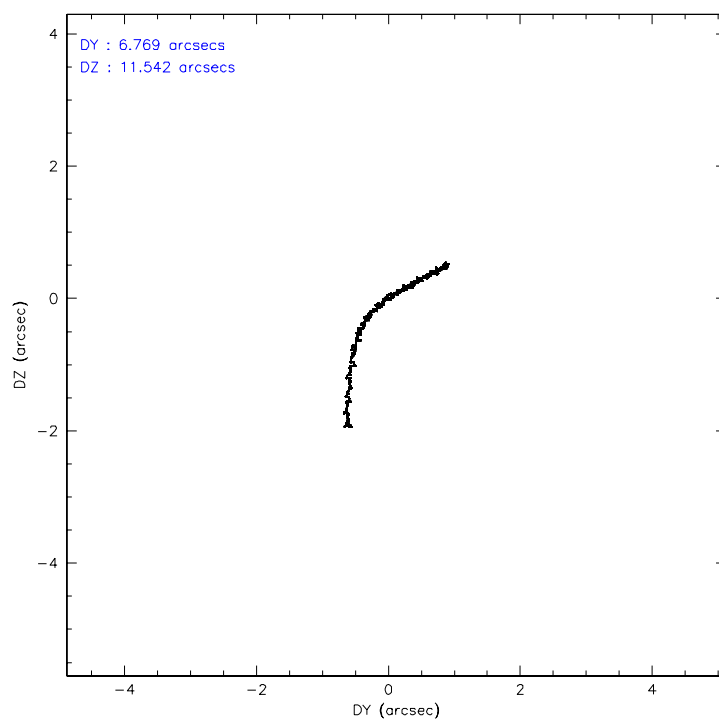
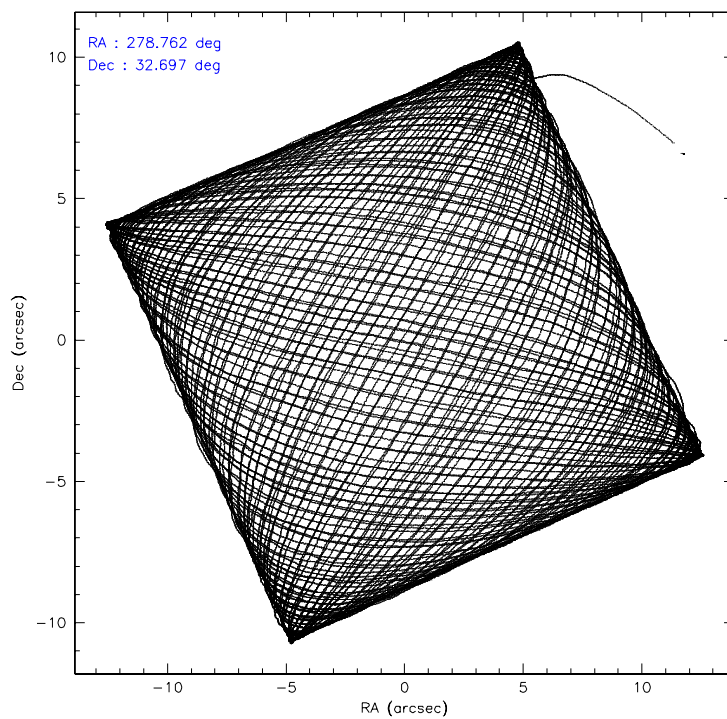
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	453821	583785	439086	586882	524884	398480
rejected events	386355	321709	357316	328994	393380	344736
rejected %	85%	55%	81%	56%	74%	86%

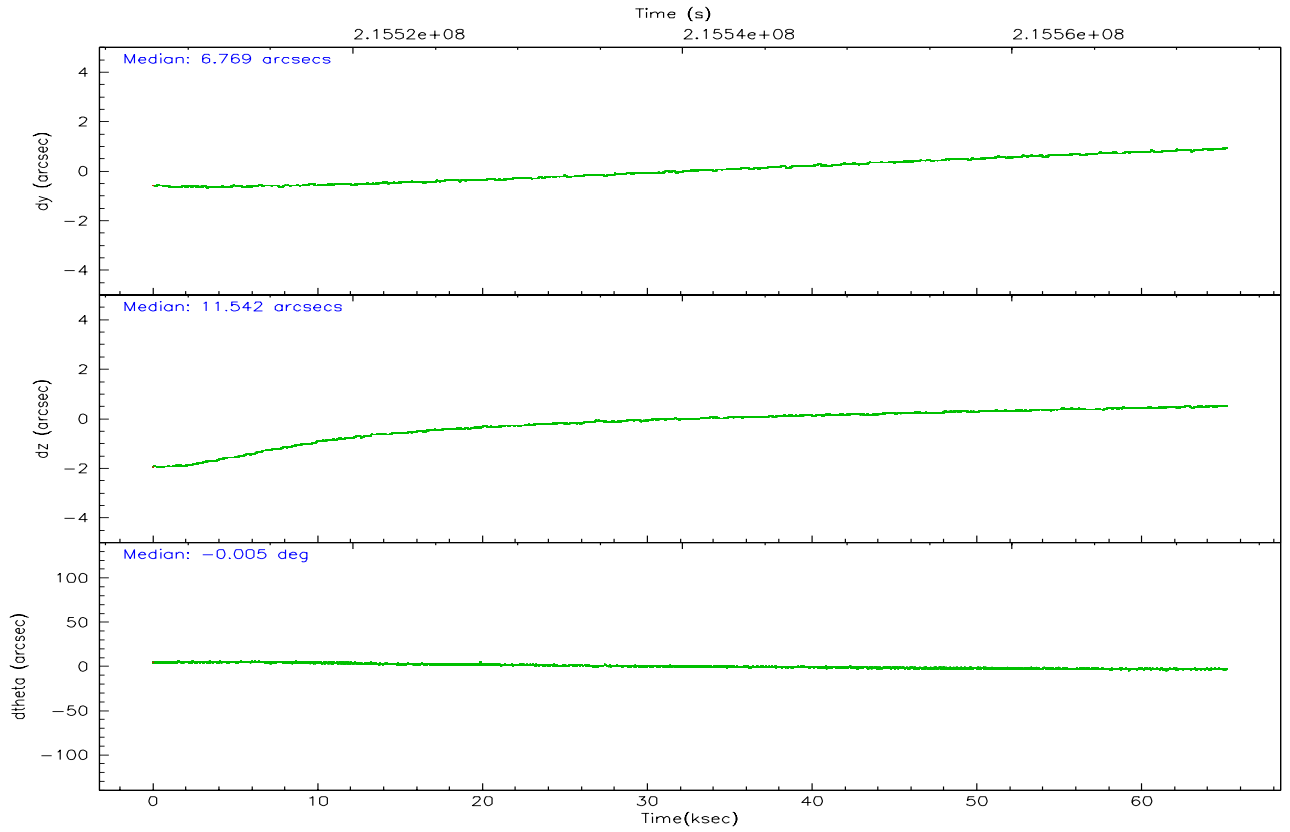
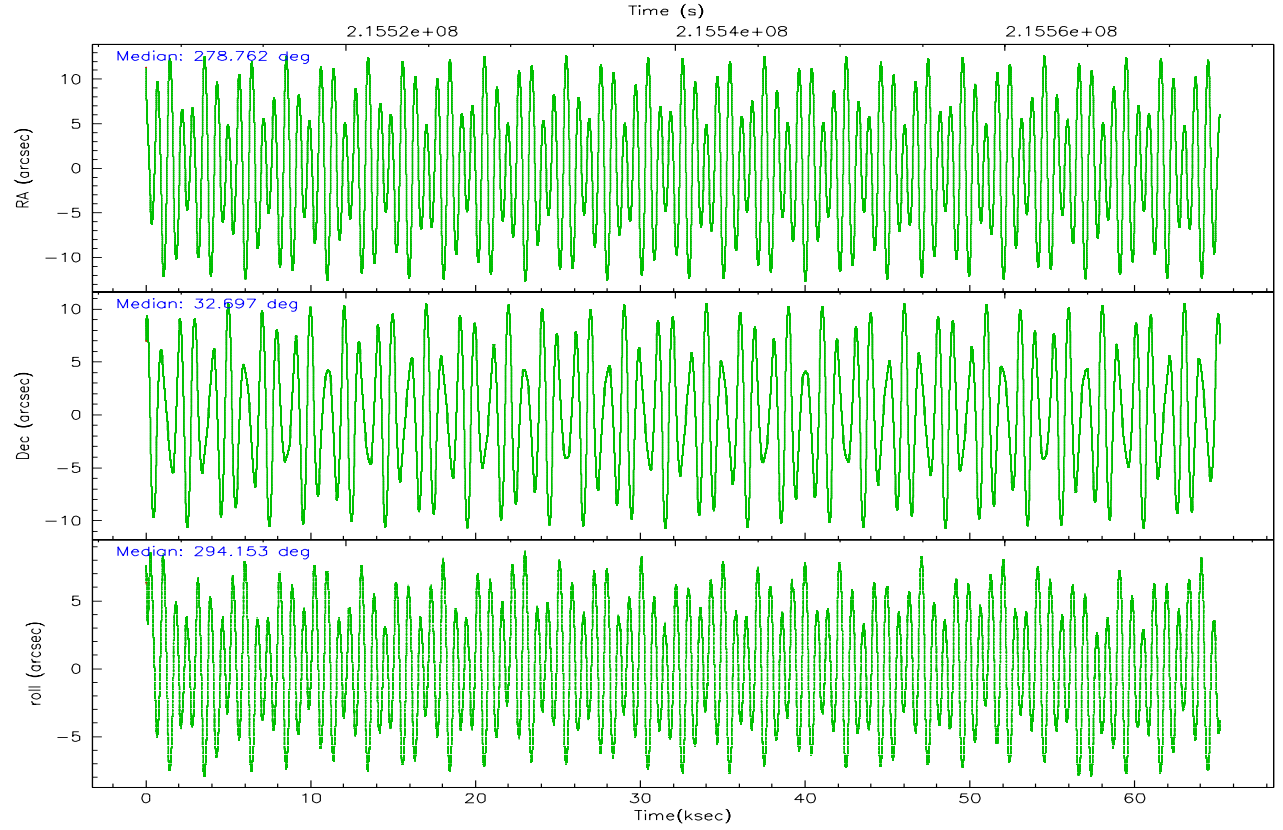
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	37510	16899	44863	21135	49159	23328
	8%	2%	10%	3%	9%	5%
grade 1 events	441	473	297	755	376	220
	0%	0%	0%	0%	0%	0%
grade 2 events	11239	82118	13816	63727	26109	10051
	2%	14%	3%	10%	4%	2%
grade 3 events	5195	7625	6031	16490	13469	5293
	1%	1%	1%	2%	2%	1%
grade 4 events	5258	7174	6099	16086	12448	5232
	1%	1%	1%	2%	2%	1%
grade 5 events	16672	28603	17379	40394	22755	18489
	3%	4%	3%	6%	4%	4%
grade 6 events	8268	148276	10967	140473	30324	9844
	1%	25%	2%	23%	5%	2%
grade 7 events	369238	292617	339634	287822	370244	326023
	81%	50%	77%	49%	70%	81%

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	278.735154	278.7616360357457	Subarray start row	1	1
Pointing Dec	32.712702	32.69707923081737	Subarray row count	774	774
Pointing Roll	294.015678	294.1579977995173	Alternating exposures requested	N	N
Roll angle	268.000000	268.000000	Primary exposure time	0.000000	2.5
Roll tolerance	33.000000	33.000000			
Roll constraint allows 180D rotation	Y	Y			
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	215508063.184000	215507120.84352			
Observation start date	2004-10-30T07:19:59	2004-10-30T07:05:20			
Observation end time	215573063.184000	215573877.04651			
Observation end date	2004-10-31T01:23:19	2004-10-31T01:37:57			
Read mode	TIMED	TIMED			

2.3 Aspect



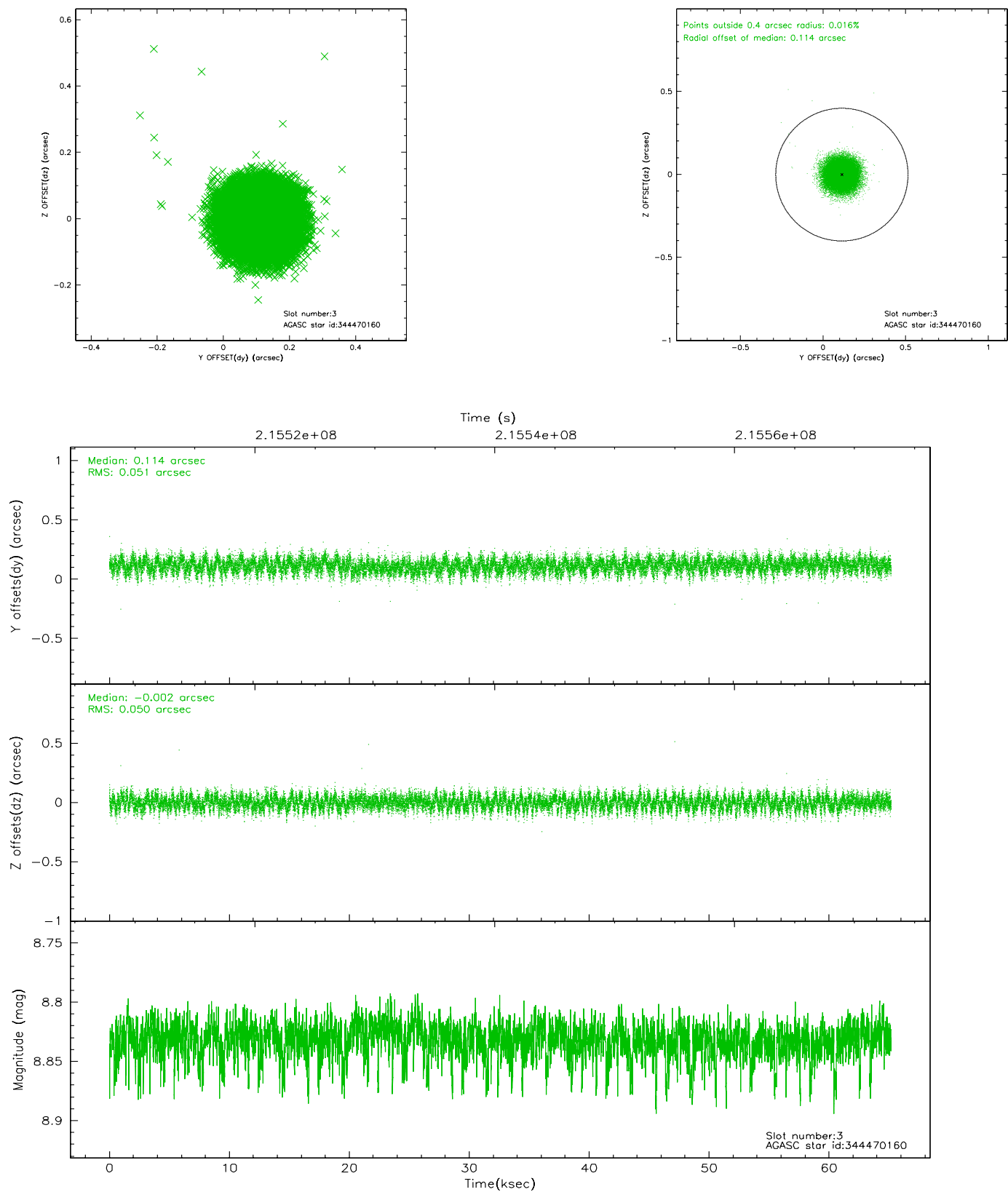


Slot Statistics

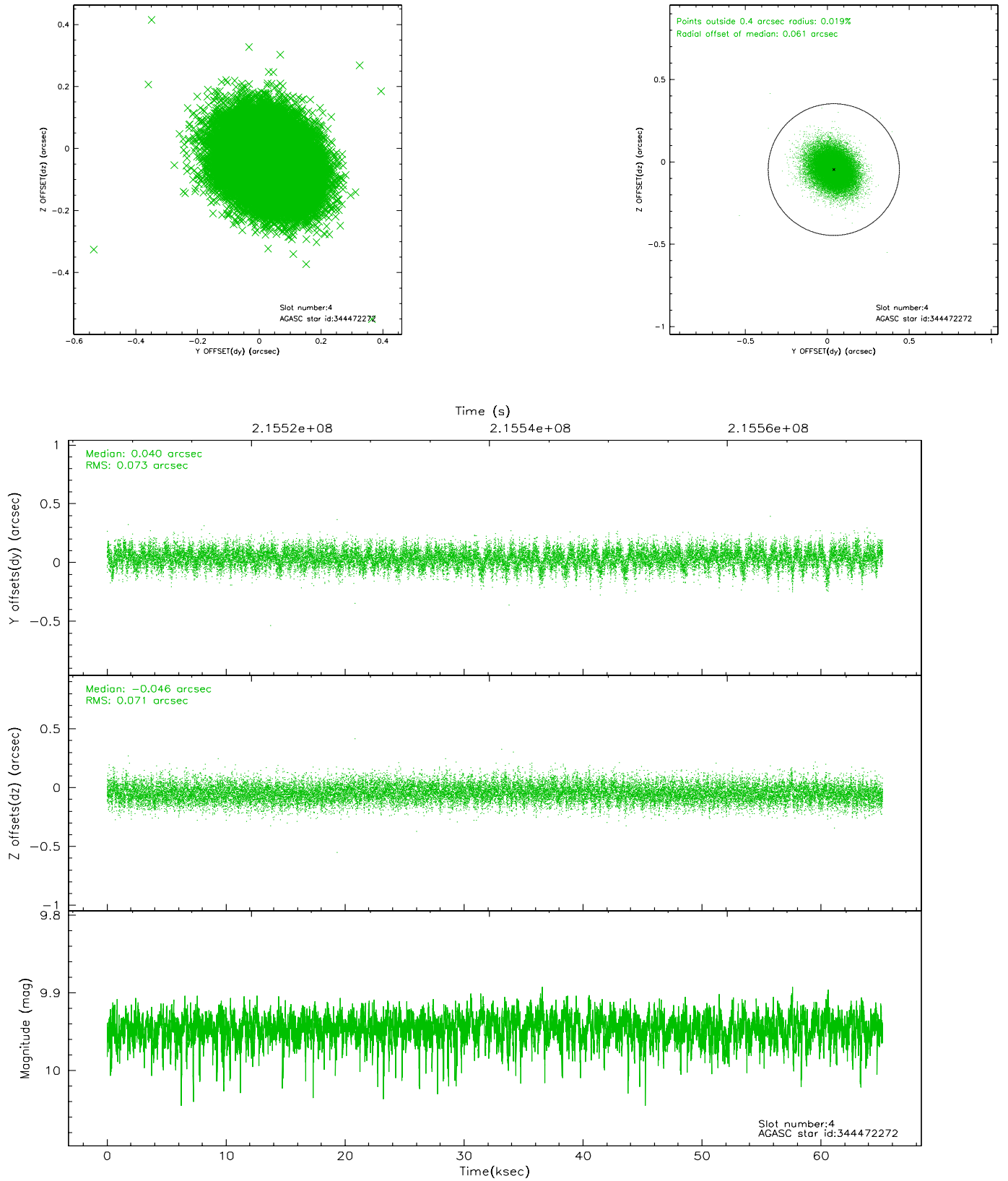
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	15899	0.008	0.066	0.019	0.056	0.000000	0.000000	936.69	-1790.32
1	FID	ACIS-S-5	7.23	15899	-0.057	0.023	0.014	0.030	0.000000	0.000000	-1812.39	107.26
2	FID	ACIS-S-6	7.37	15898	0.028	-0.078	0.015	0.047	0.000000	0.000000	402.34	751.05
3	GUIDE	344470160	8.83	31774	0.114	-0.002	0.077	0.121	278.797364	32.225309	1680.37	-540.64
4	GUIDE	344472272	9.95	31761	0.040	-0.046	0.107	0.178	278.328477	32.179157	1248.73	-1912.37
5	GUIDE	346161984	9.35	31772	-0.100	-0.038	0.093	0.152	279.085504	33.499118	-2159.47	2113.69
6	GUIDE	346176856	9.20	31777	0.071	-0.014	0.074	0.120	279.094962	32.258255	1938.90	335.97
7	GUIDE	344464904	8.43	31782	-0.128	0.100	0.058	0.095	278.255510	33.238188	-2318.38	-547.85

2.4 Star Slots

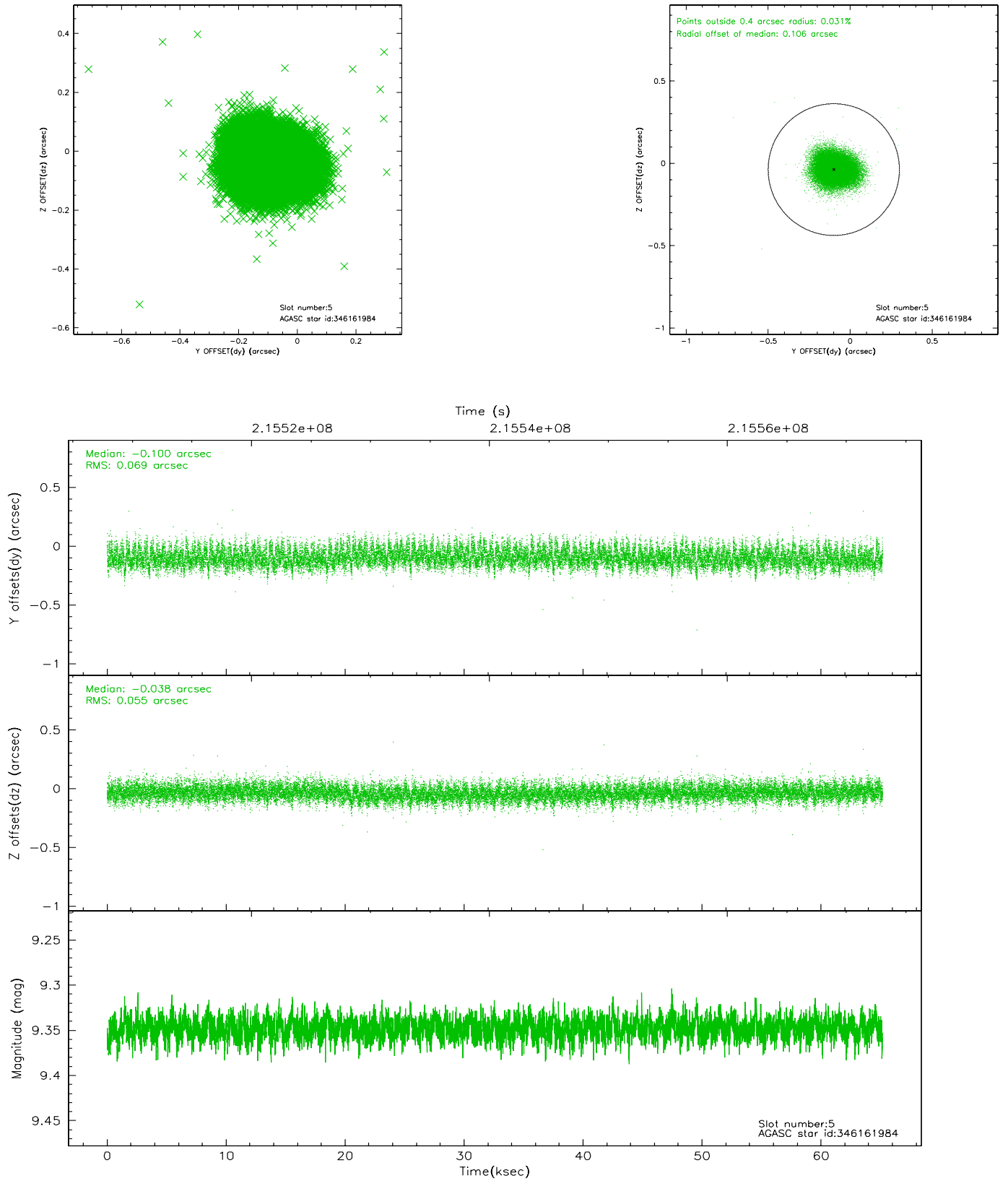
2.4.1 Slot 3



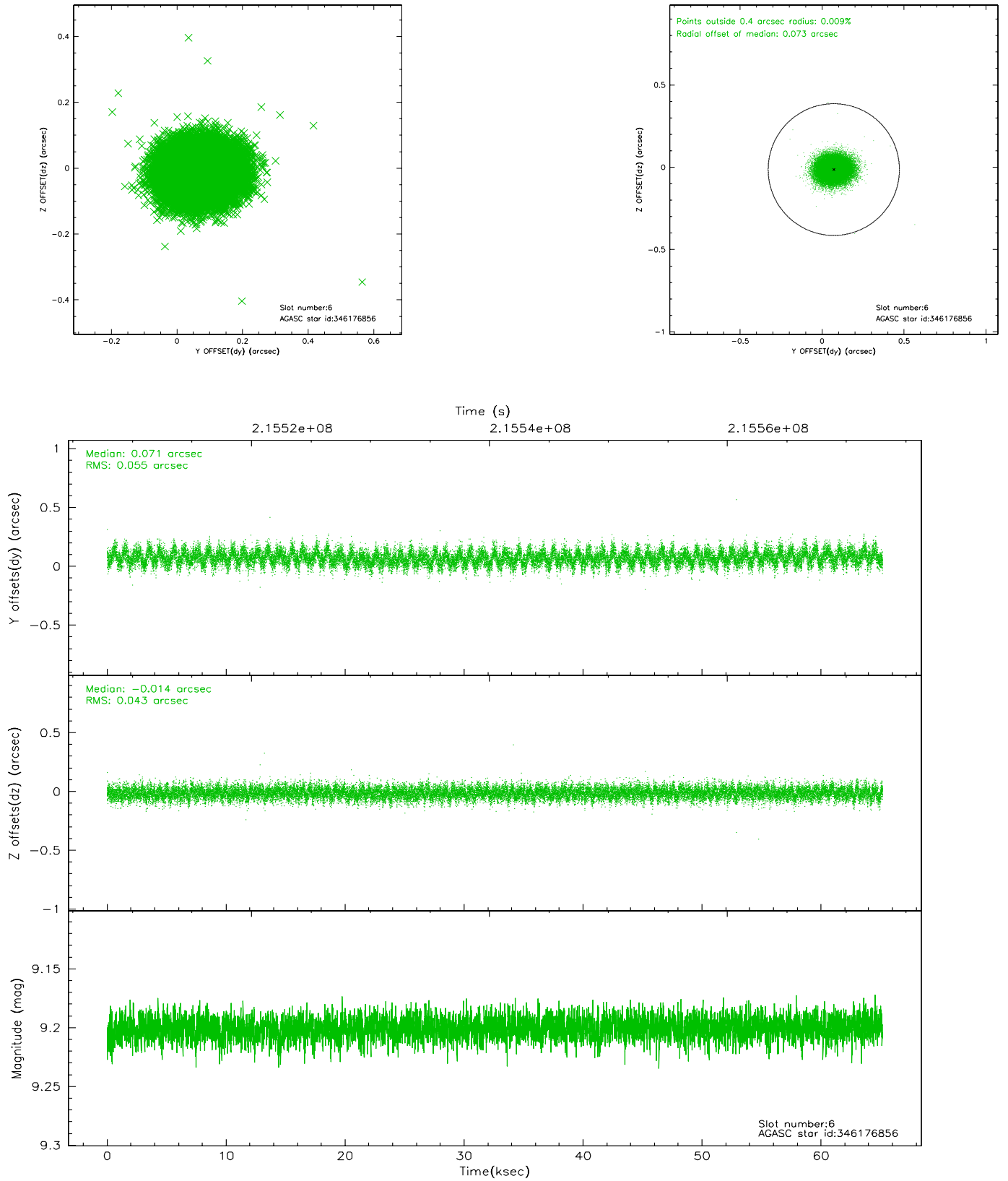
2.4.2 Slot 4



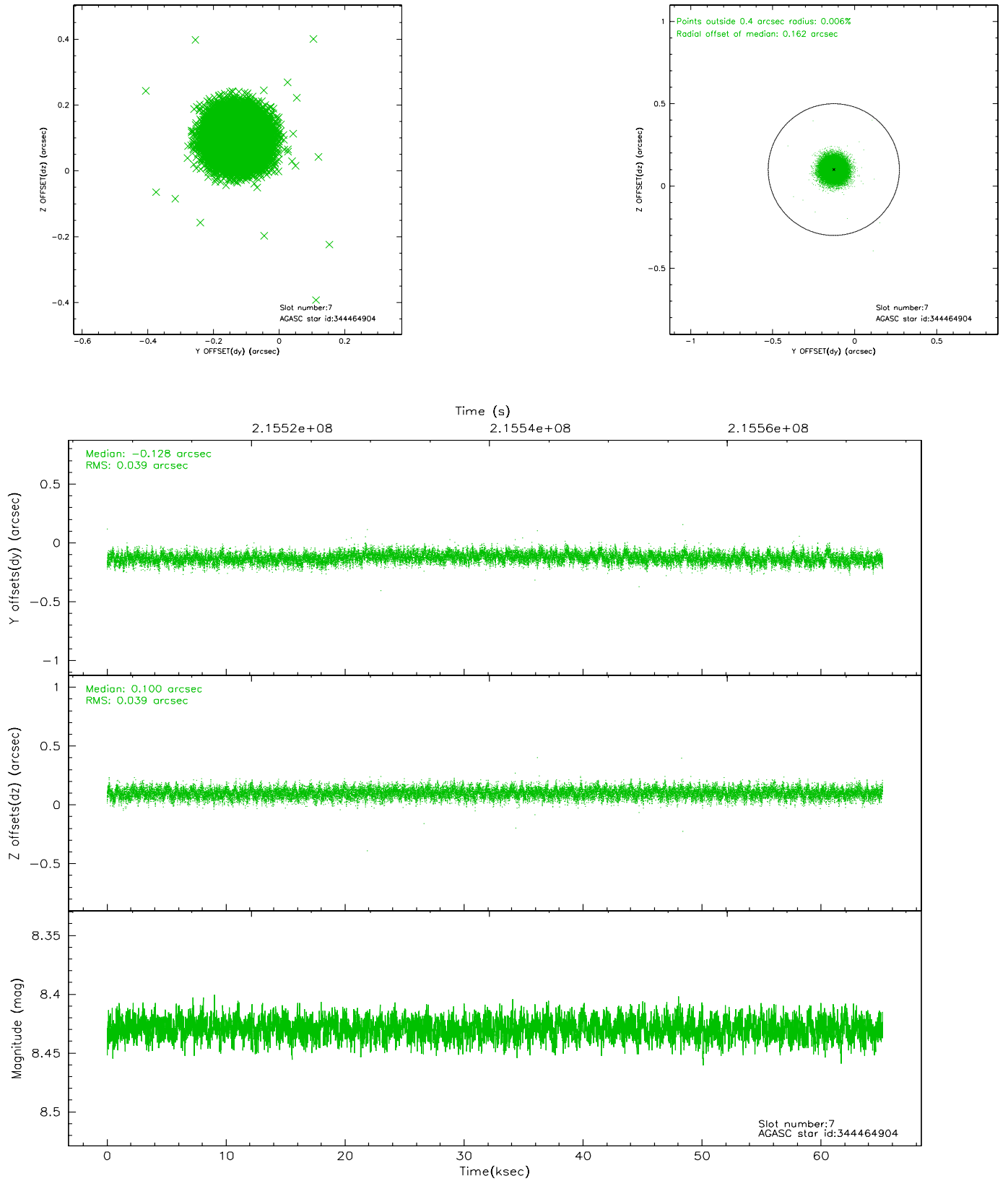
2.4.3 Slot 5



2.4.4 Slot 6

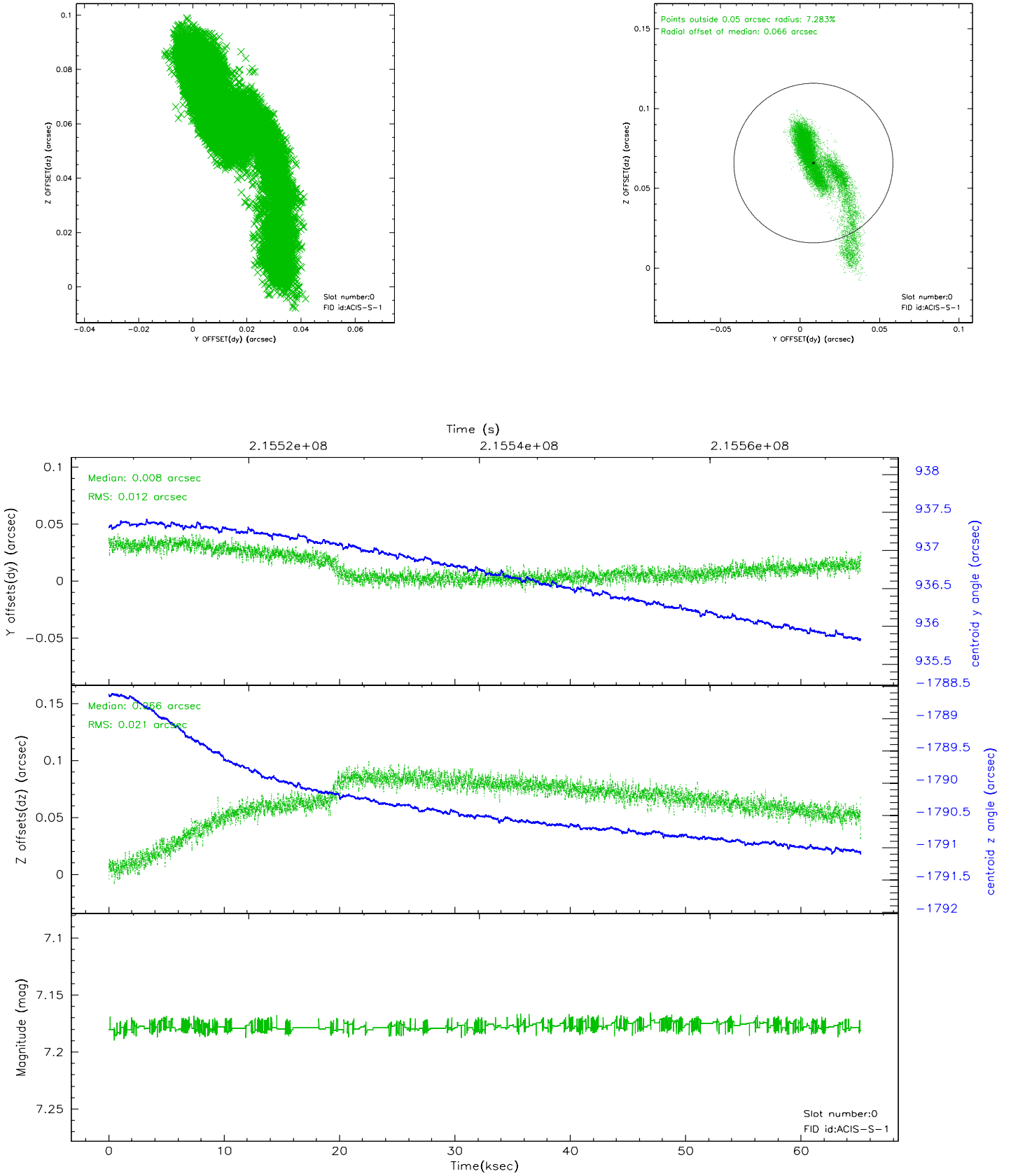


2.4.5 Slot 7

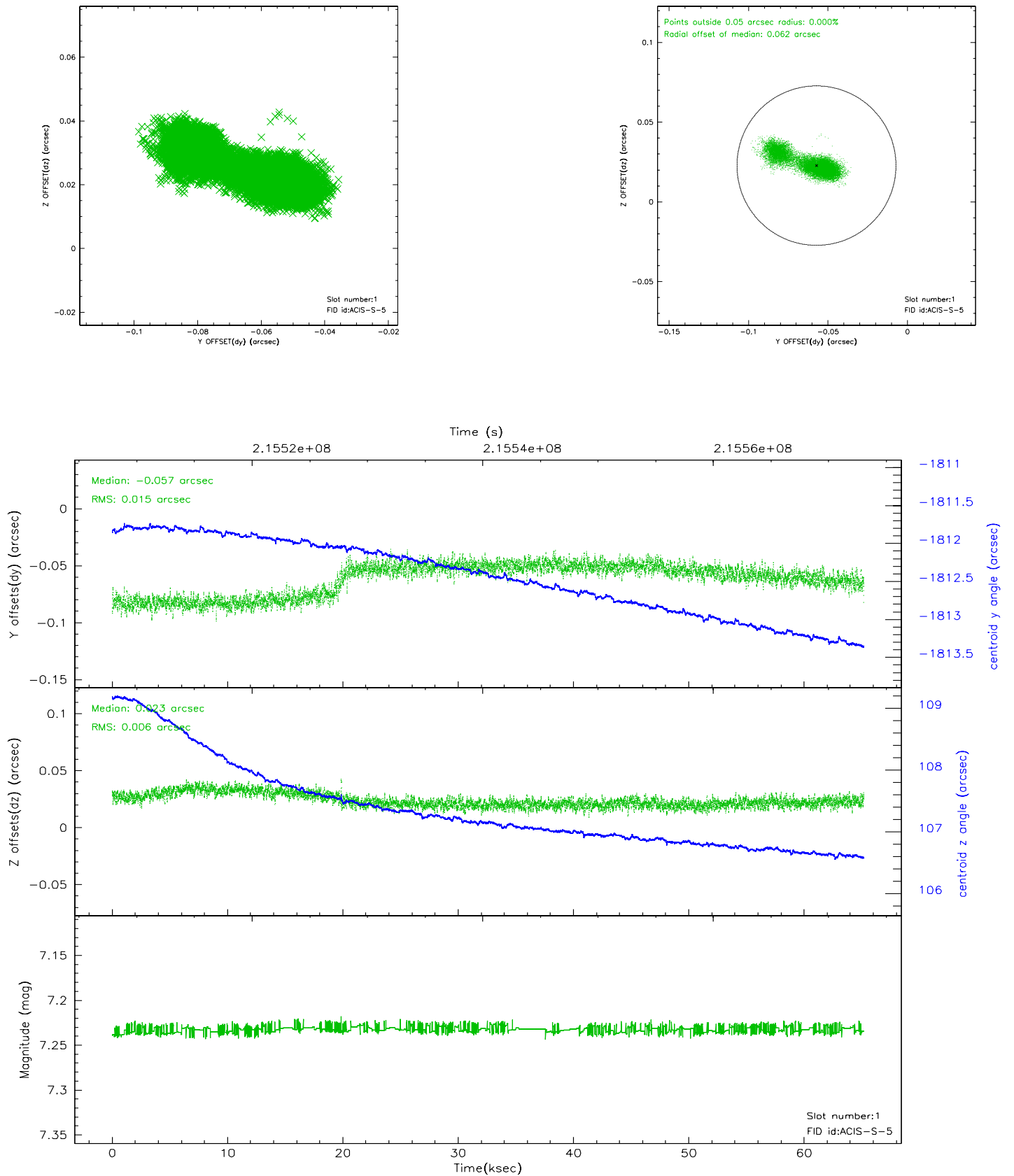


2.5 FID Slots

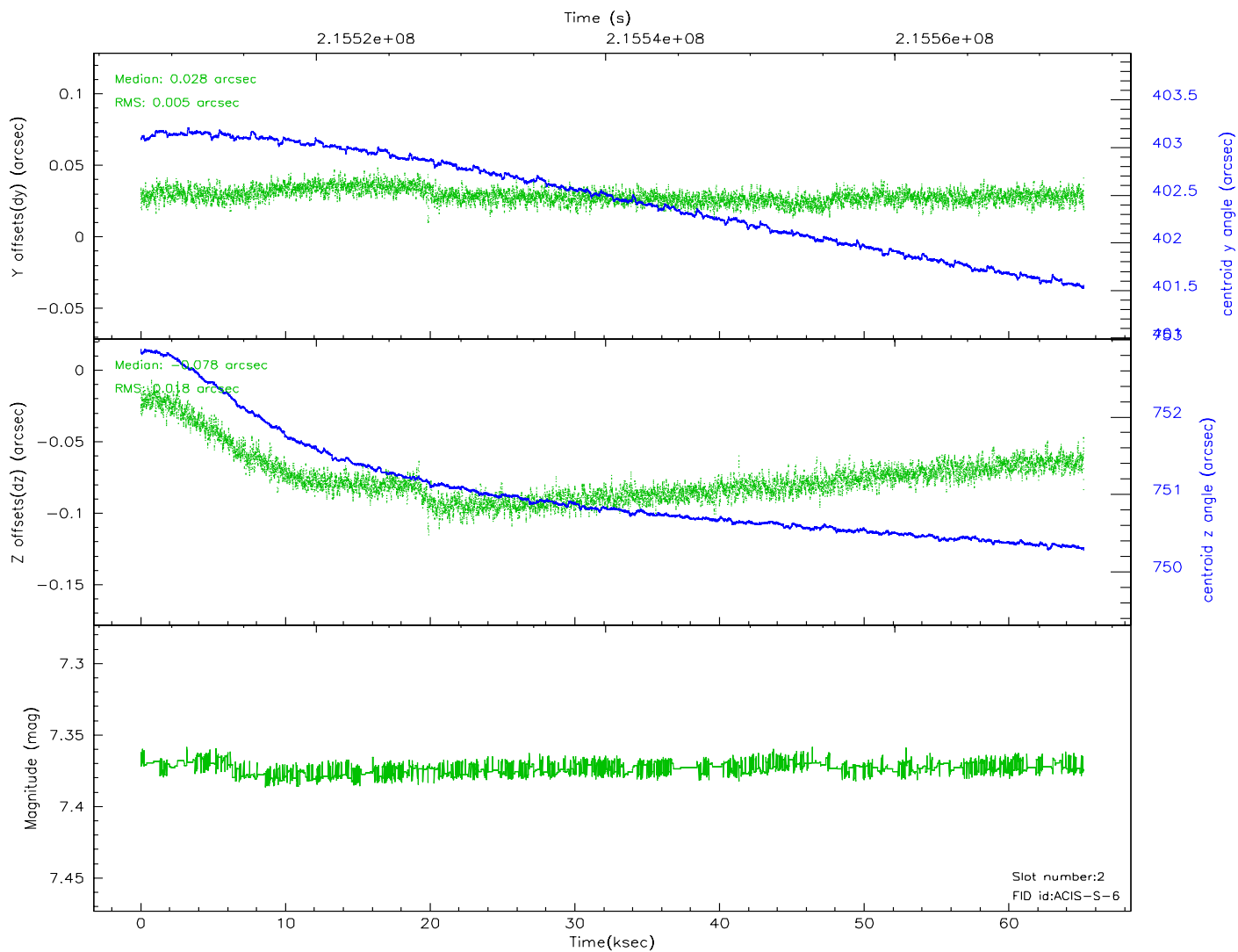
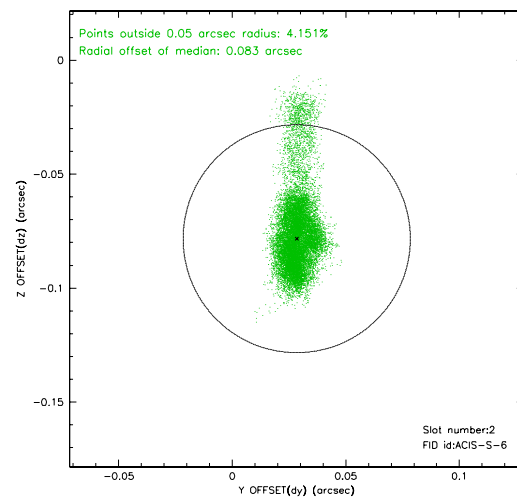
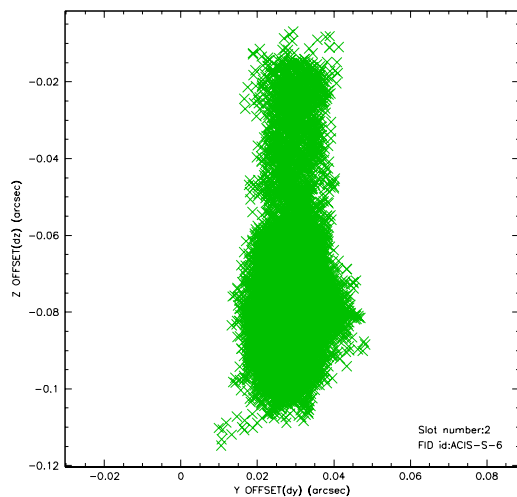
2.5.1 Slot 0



2.5.2 Slot 1

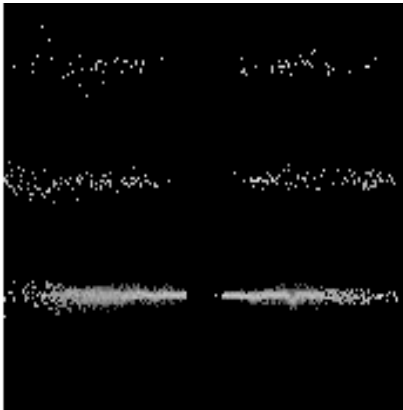


2.5.3 Slot 2

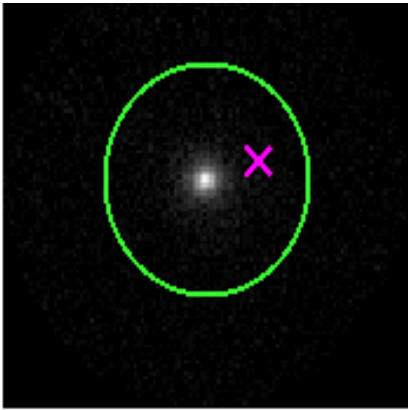


3 Gratings

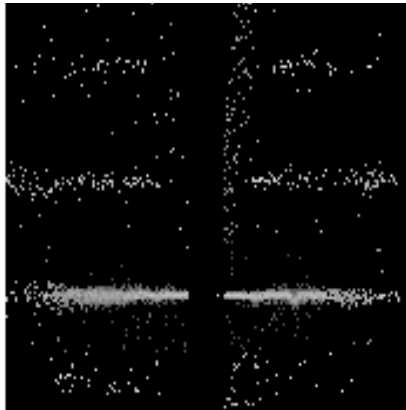
3.1 HEG Arm



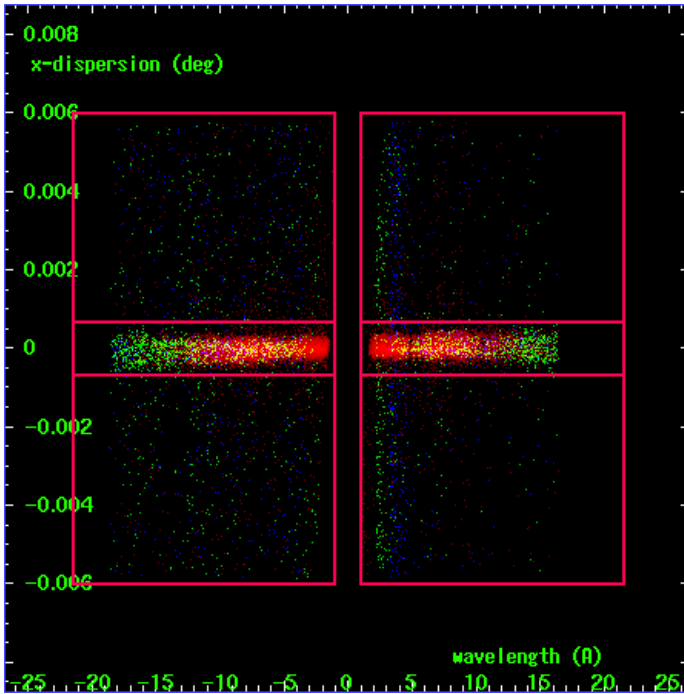
HEG Order Sort 123



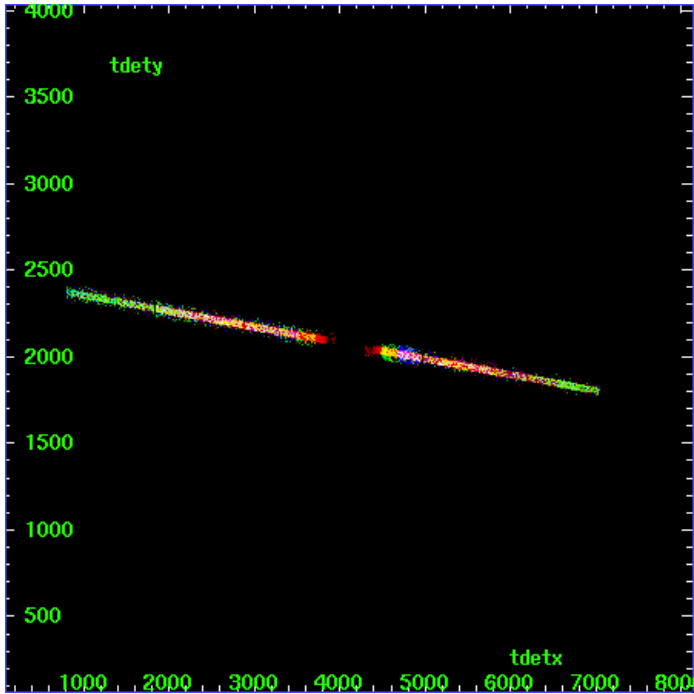
HEG Zero Order



HEG Order Sort ALL

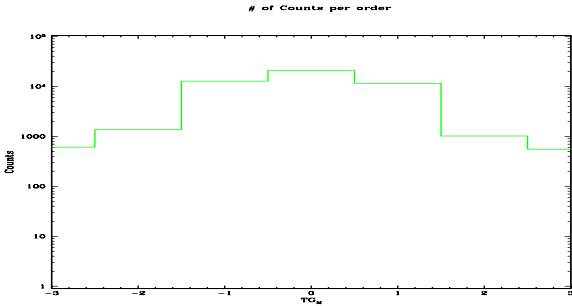


Spot Image HEG

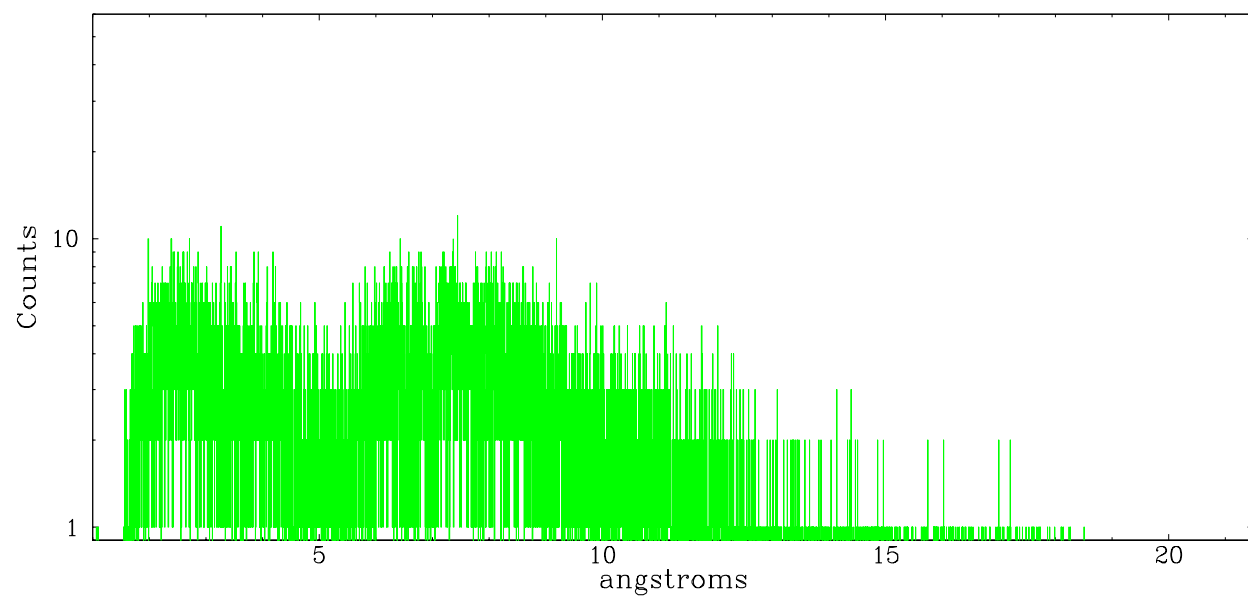


Full Detector HEG

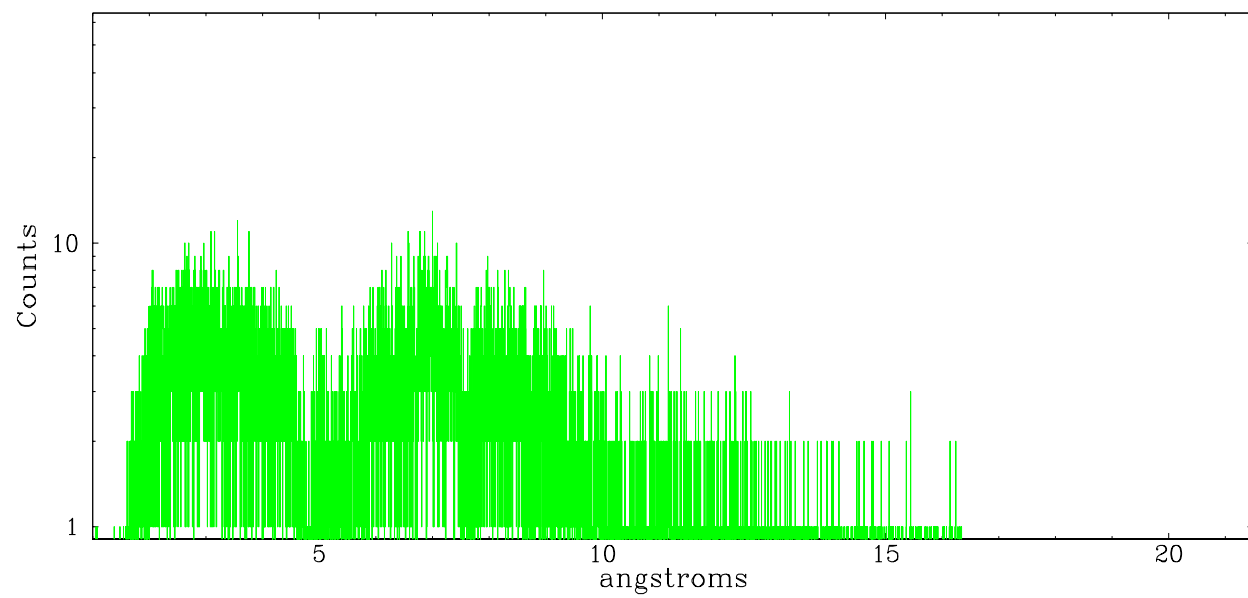
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	610	1367	12766	20732	11556	1021	553



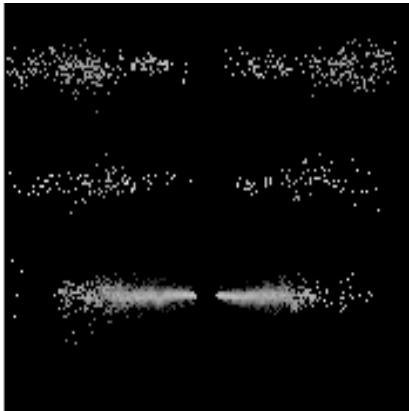
heg order -1



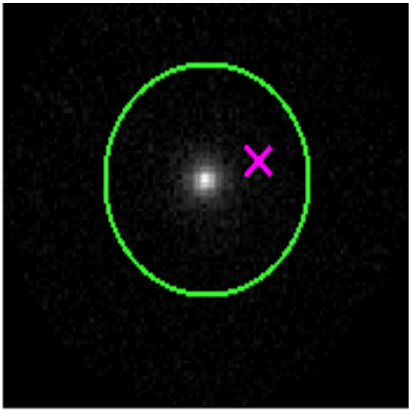
heg order +1



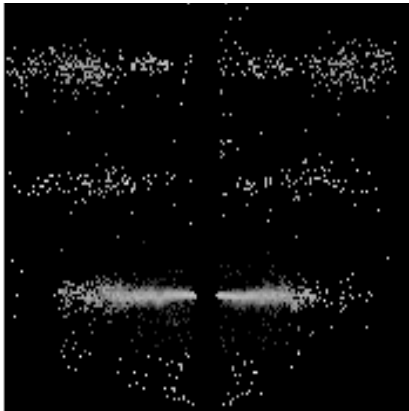
3.2 MEG Arm



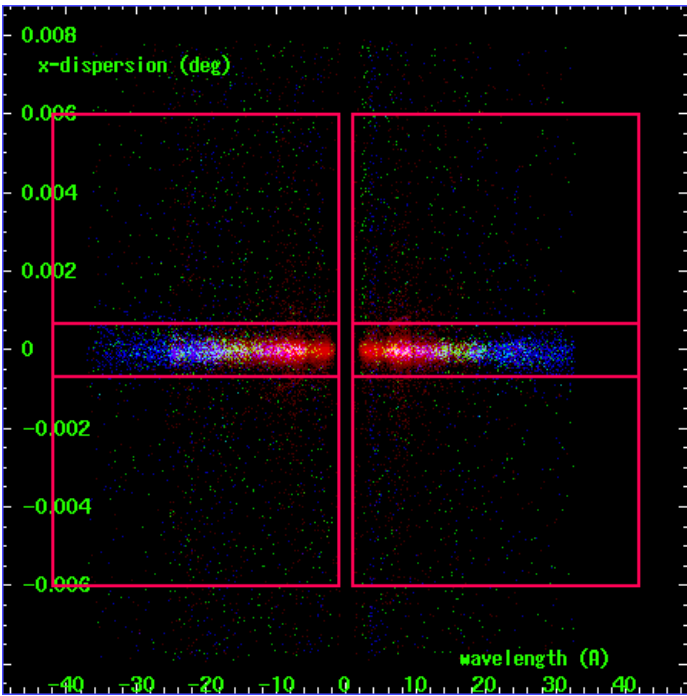
MEG Order Sort 123



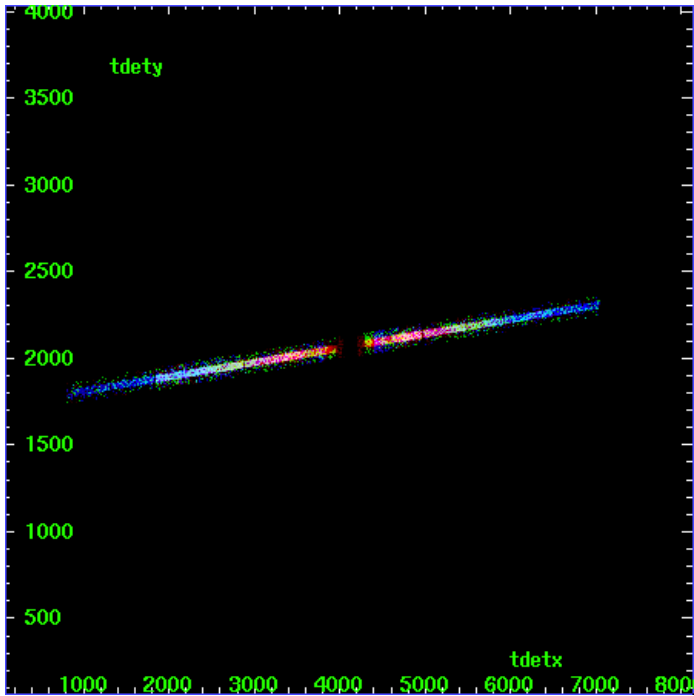
MEG Zero Order



MEG Order Sort ALL

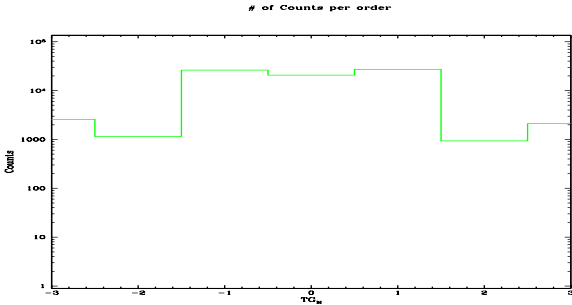


Spot Image MEG

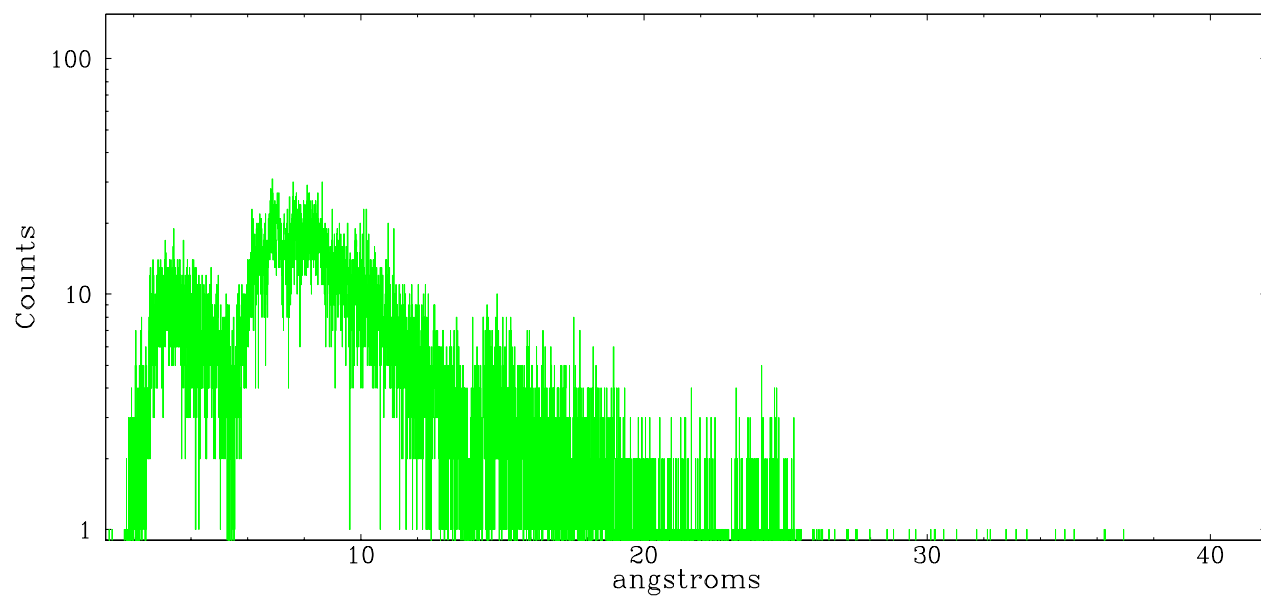


Full Detector MEG

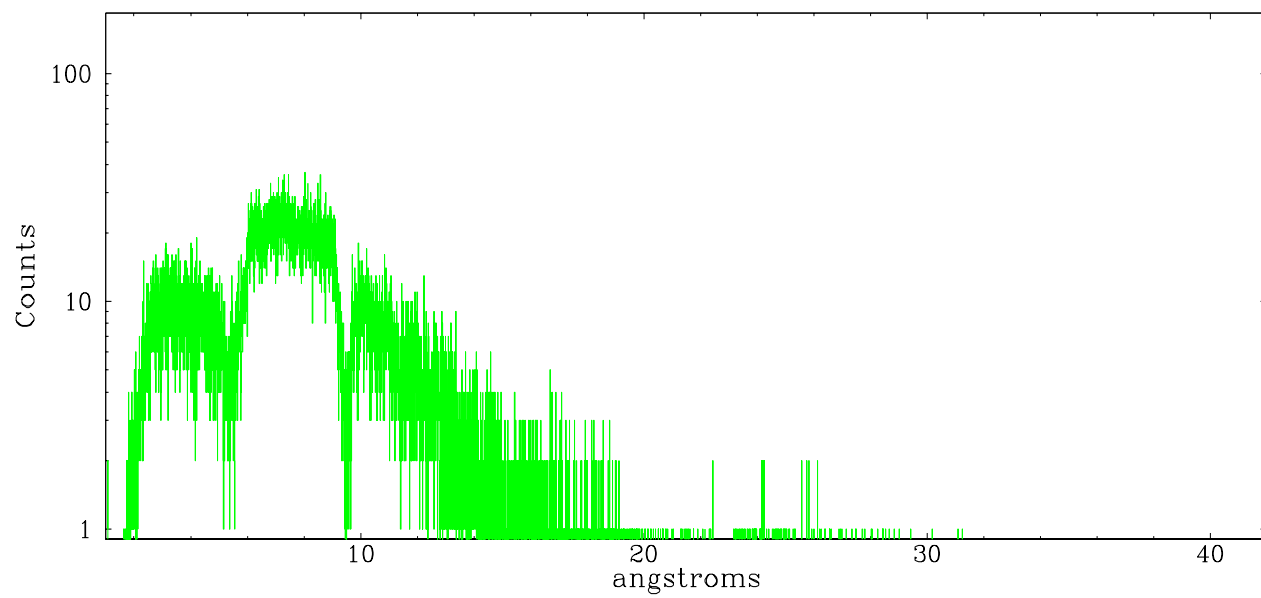
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2567	1144	26347	20732	27080	939	2108



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.04.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	64.92

A.2 Comments

Roll constraint met. The ACIS focal plane temperature decreases by a degree over the course of the observation.