

V&V Reference Report

L2 ASCDS Version : 7.6.7.1

Observation 7176 - L2 Version 002
Chandra X-Ray Center

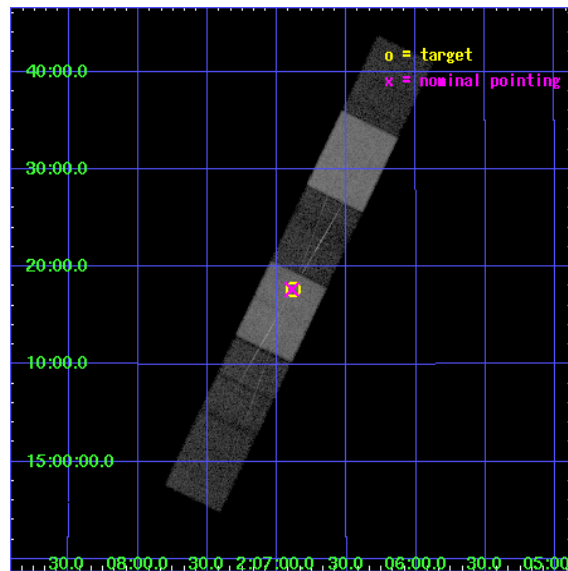
L2 Processing Date : Mar 31 2006

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1 Front

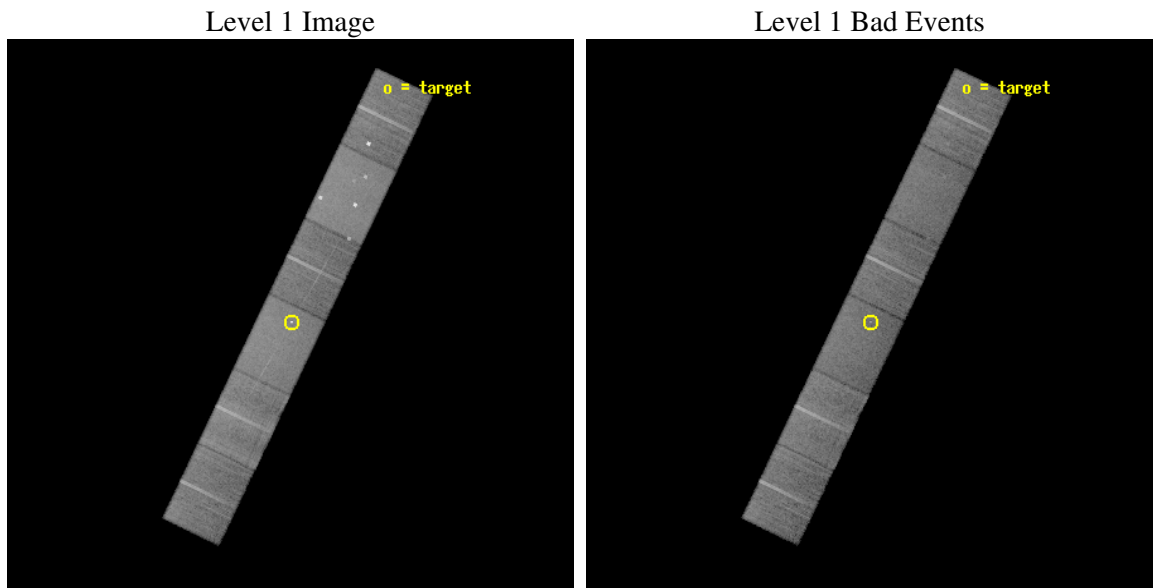
seq_num	300148
obs_id	7176
title	Chandra HETG Spectroscopy of the VY Sculptoris Star TT Ari
observer	Dr. Christopher Mauche
object	TT Ari
dtcycle	0
cycle	P
ra_targ	31.72125
dec_targ	15.295278
ra_nom	31.723479907951
dec_nom	15.294648317361
roll_nom	115.6560405709
revision	2
ontime	24417.5
livetime	24023.136196203
ontime4	24417.5
ontime5	24417.5
ontime6	24417.5
ontime7	24417.5
ontime8	24417.5
ontime9	24414.959009826
l2events	228666



2 OBI

2.1 OBI

2.1.1 Images

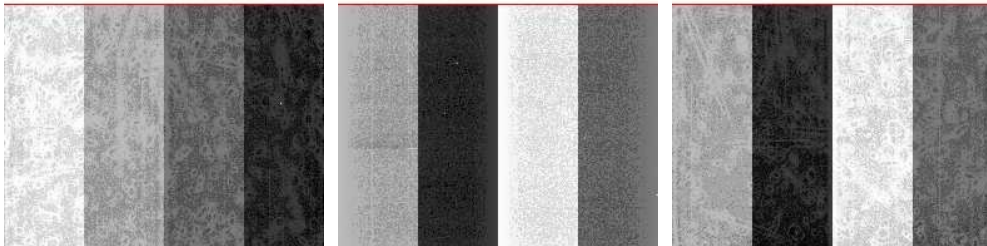


2.1.2 Bias

Chip 4

Chip 5

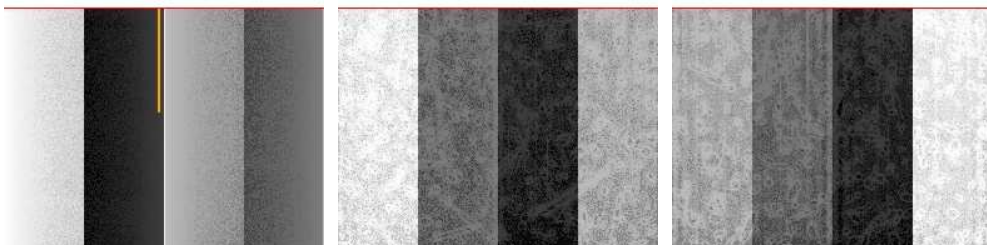
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.1
caldsver	3.2.1
date	2006-03-31T21:17:09
revision	2

sched_exp_time	24300.000000
ontime	25013.771681428
ontime4	25013.771681428
ontime5	25013.771681428
ontime6	25013.771681428
ontime7	25013.771681428
ontime8	25013.771681428
ontime9	25011.230671346
l1events	1069434

2.1.4 Events

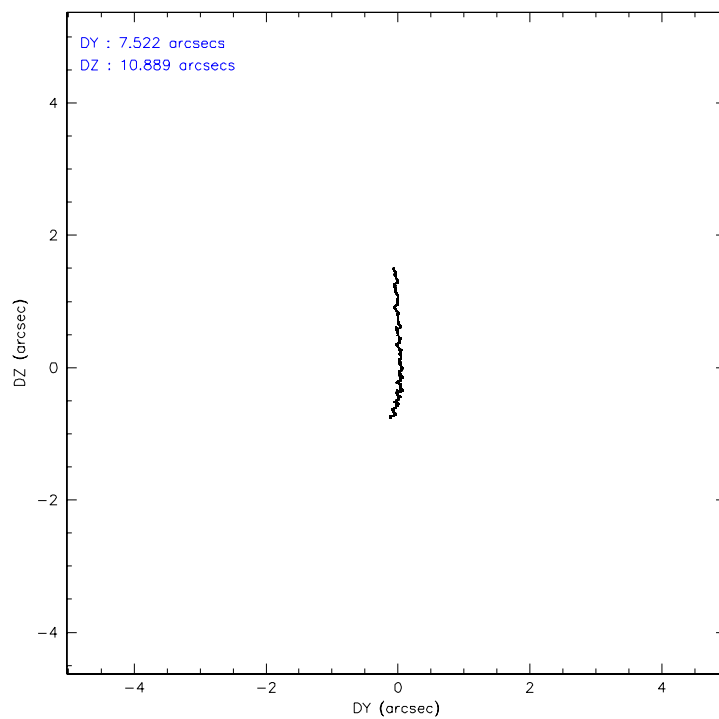
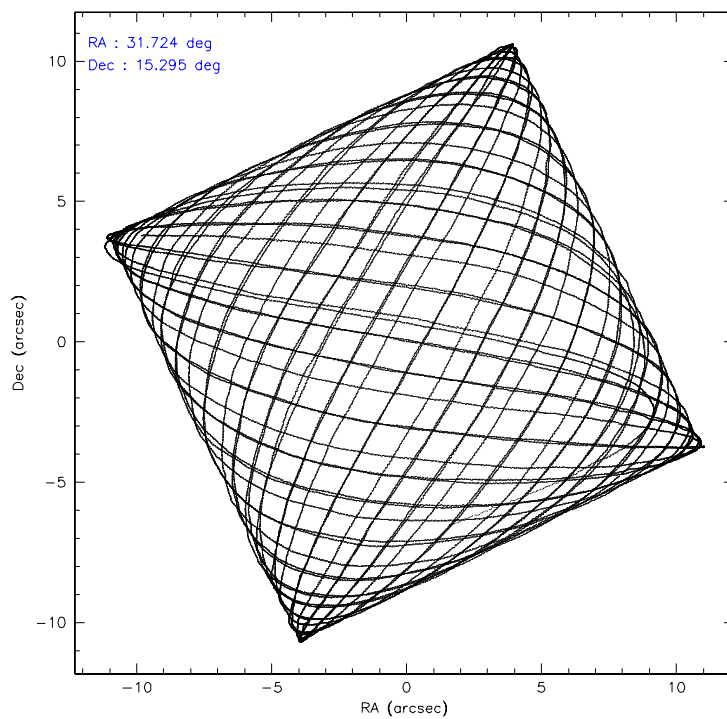
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	165006	226665	145595	199855	188662	143651
rejected events	140663	124385	127086	122064	147888	125977
rejected %	85%	54%	87%	61%	78%	87%

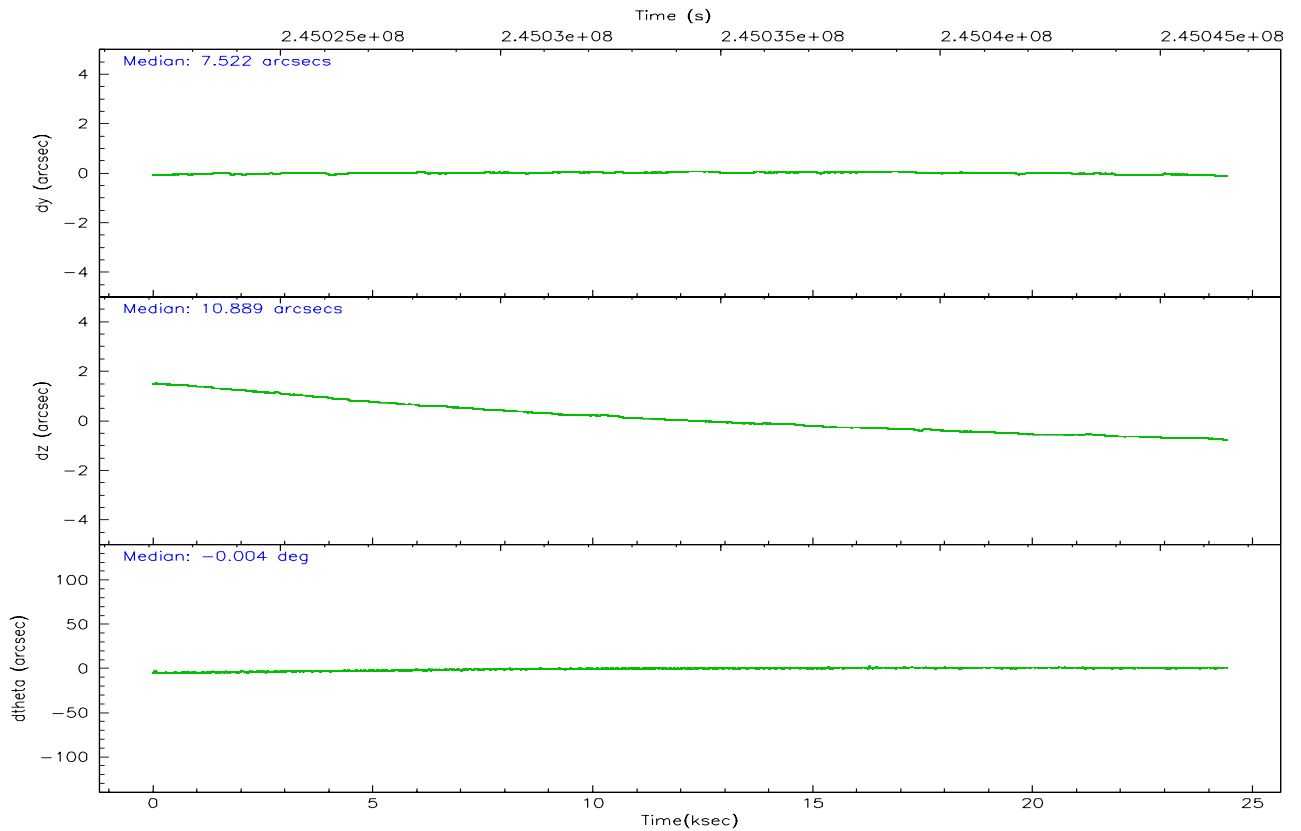
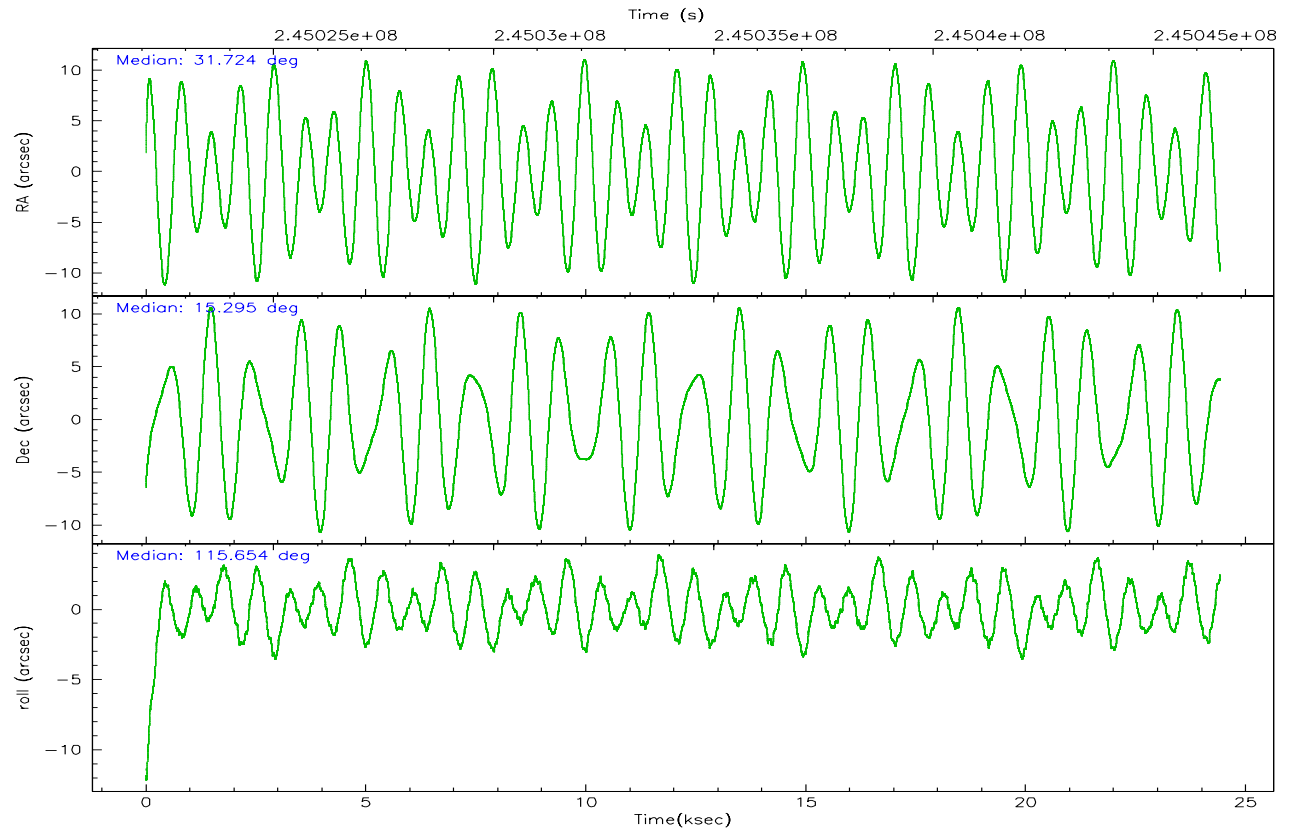
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	14273	14593	7932	4801	13155	7243
	8%	6%	5%	2%	6%	5%
grade 1 events	150	310	73	149	95	62
	0%	0%	0%	0%	0%	0%
grade 2 events	3887	30166	3815	19635	9264	3644
	2%	13%	2%	9%	4%	2%
grade 3 events	1959	2640	1798	4565	4509	1895
	1%	1%	1%	2%	2%	1%
grade 4 events	1845	2428	1853	4456	4099	1878
	1%	1%	1%	2%	2%	1%
grade 5 events	6191	11132	6658	13501	8860	6989
	3%	4%	4%	6%	4%	4%
grade 6 events	2913	54905	3524	46159	10795	3509
	1%	24%	2%	23%	5%	2%
grade 7 events	133788	110491	119942	106589	137885	118431
	81%	48%	82%	53%	73%	82%

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	31.746992	31.72347990795118	Subarray start row	1	1
Pointing Dec	15.279613	15.2946483173612	Subarray row count	774	774
Pointing Roll	115.493208	115.6560405708999	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	-187.1254020033014			
SIM translation stage offset (mm)	-3	-3.007120579706367			
Observation start time	245022221.184000	245020930.15991			
Observation start date	2005-10-06T21:42:37	2005-10-06T21:22:10			
Observation end time	245046521.184000	245046826.7861			
Observation end date	2005-10-07T04:27:37	2005-10-07T04:33:46			
Read mode	TIMED	TIMED			

2.3 Aspect



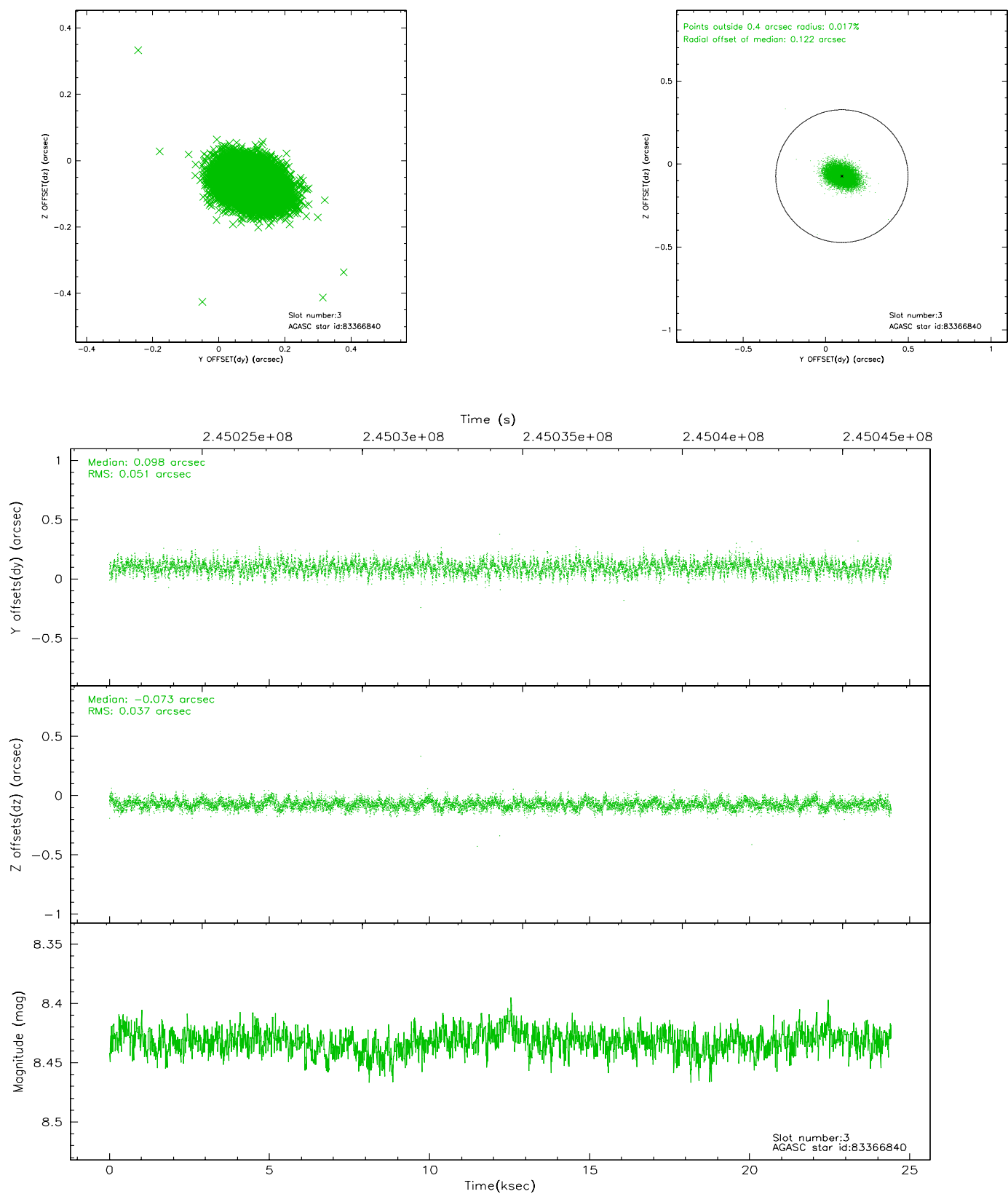


Slot Statistics

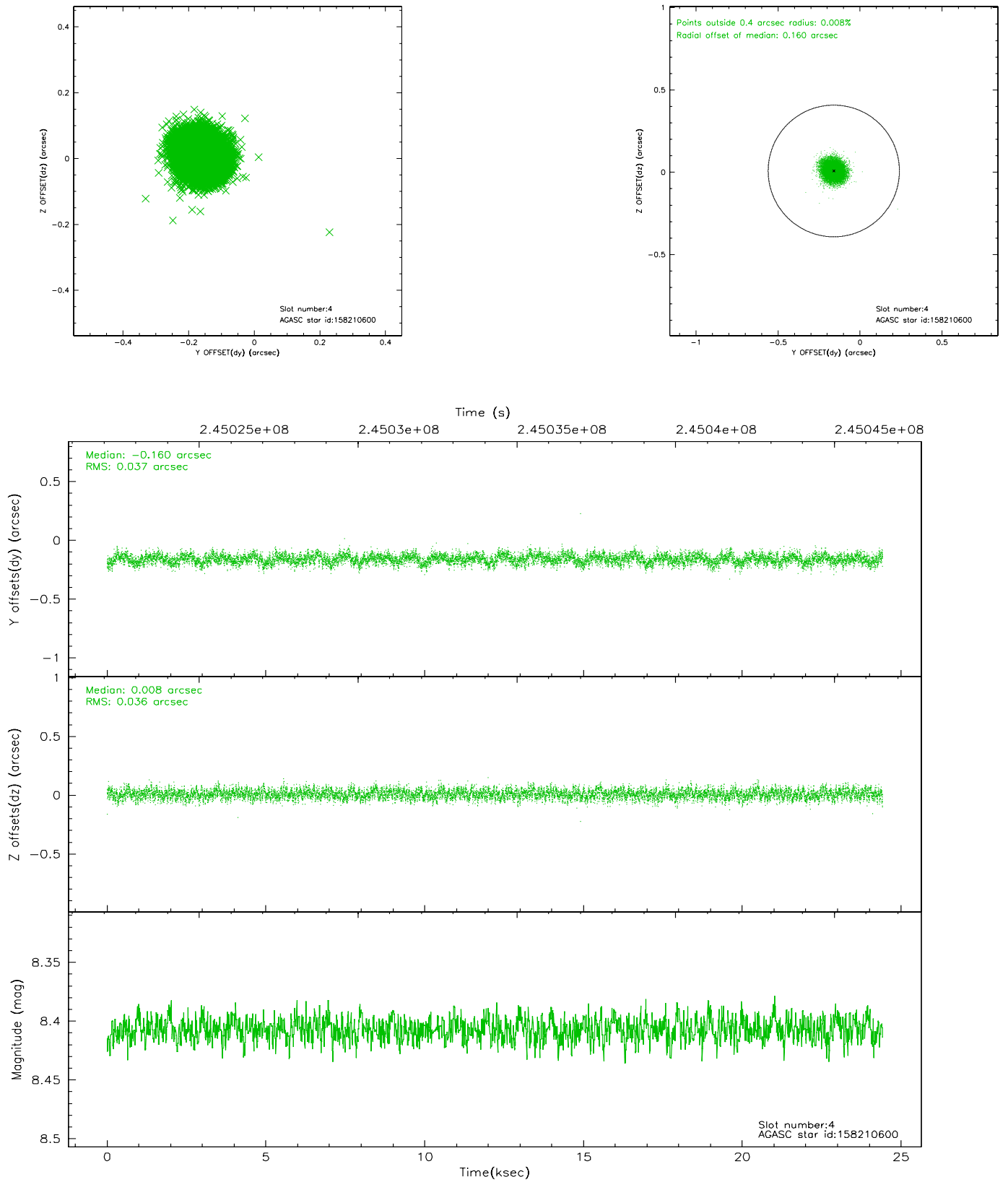
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	5957	-0.043	-0.079	0.012	0.030	0.000000	0.000000	-760.13	-1794.46
1	FID	ACIS-S-4	7.19	5957	0.075	0.042	0.007	0.013	0.000000	0.000000	2153.22	113.98
2	FID	ACIS-S-5	7.23	5957	-0.062	0.046	0.010	0.027	0.000000	0.000000	-1812.82	107.81
3	GUIDE	83366840	8.43	11910	0.098	-0.073	0.066	0.107	31.673303	14.583774	-2150.48	1309.95
4	GUIDE	158210600	8.41	11909	-0.160	0.008	0.055	0.088	31.131603	15.630068	2059.54	1381.74
5	GUIDE	158211640	9.28	11909	0.077	-0.004	0.081	0.133	31.349537	15.537415	1432.45	844.47
6	GUIDE	158215416	9.23	11906	-0.027	-0.045	0.098	0.157	31.249092	15.295299	797.05	1535.59
7	GUIDE	159131712	7.91	11909	0.015	0.117	0.065	0.104	32.565244	15.023039	-2053.28	-2172.69

2.4 Star Slots

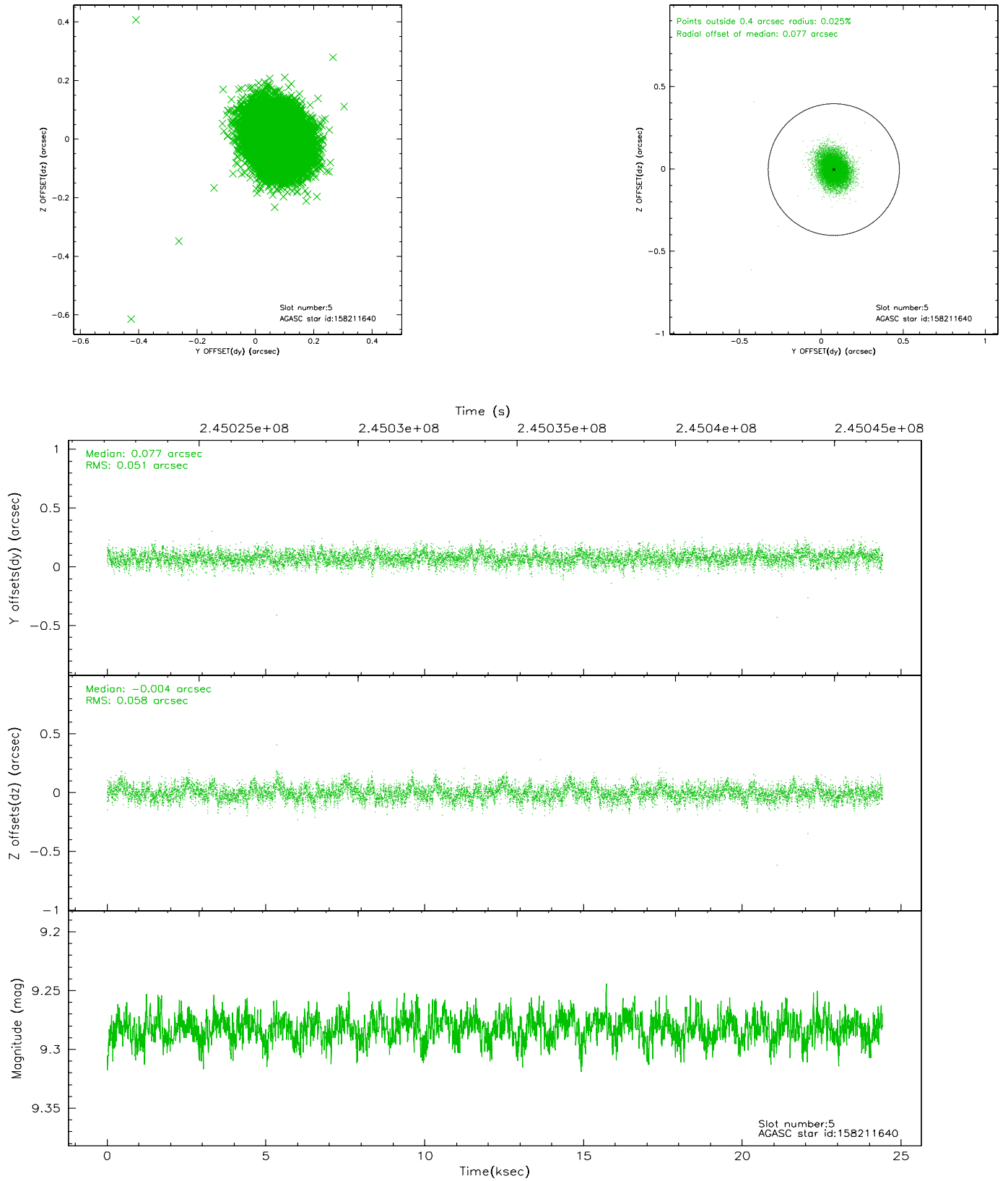
2.4.1 Slot 3



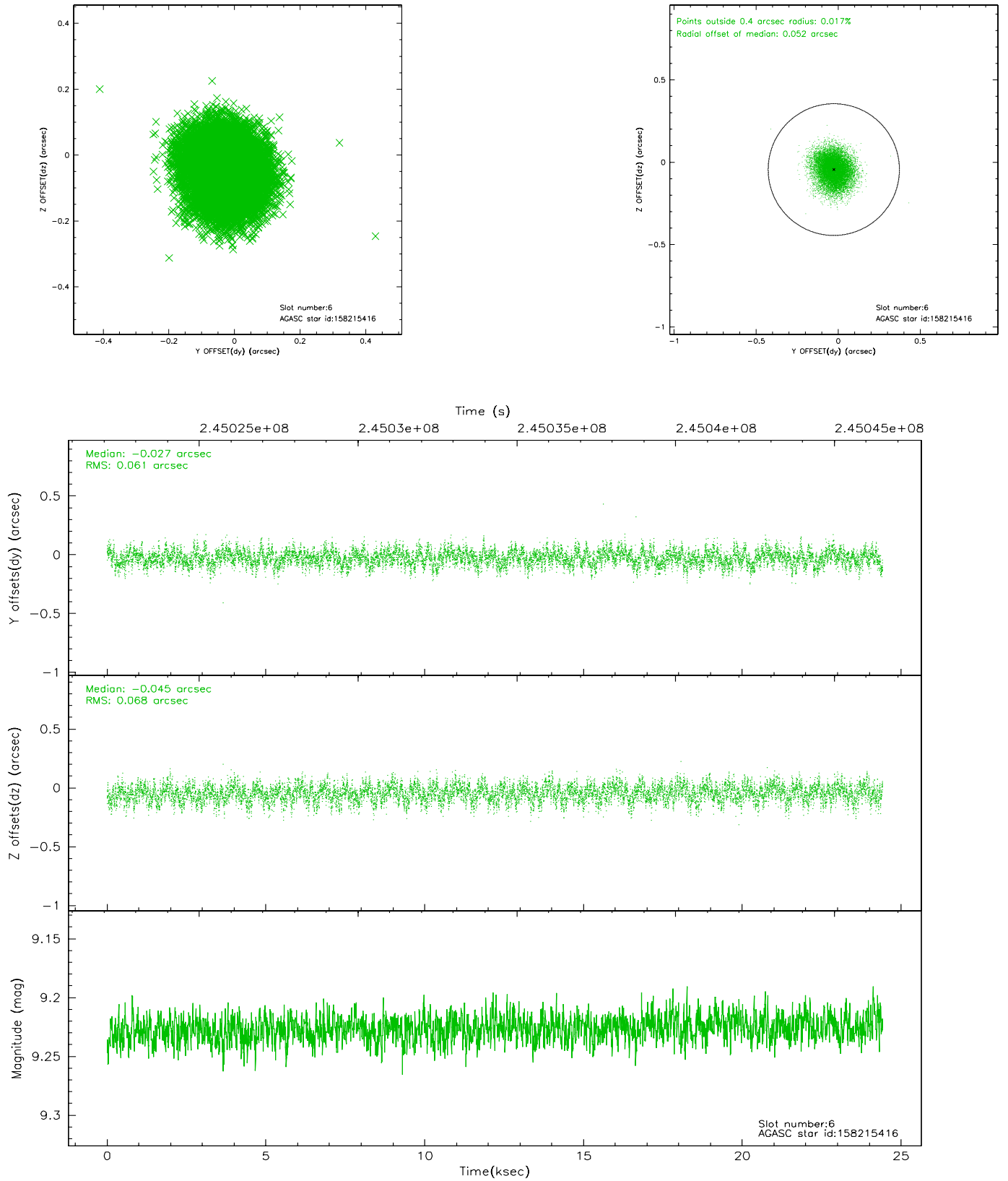
2.4.2 Slot 4



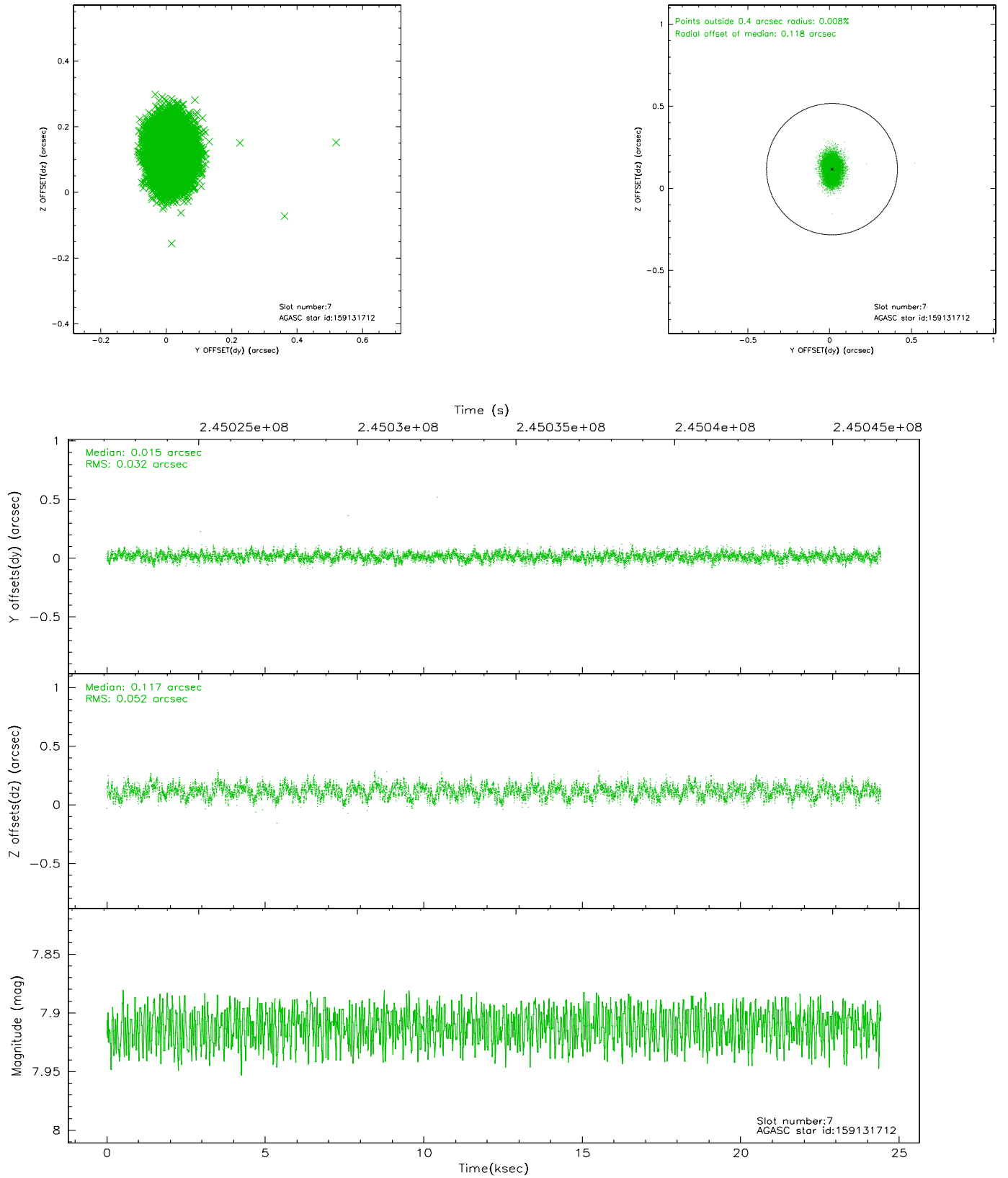
2.4.3 Slot 5



2.4.4 Slot 6

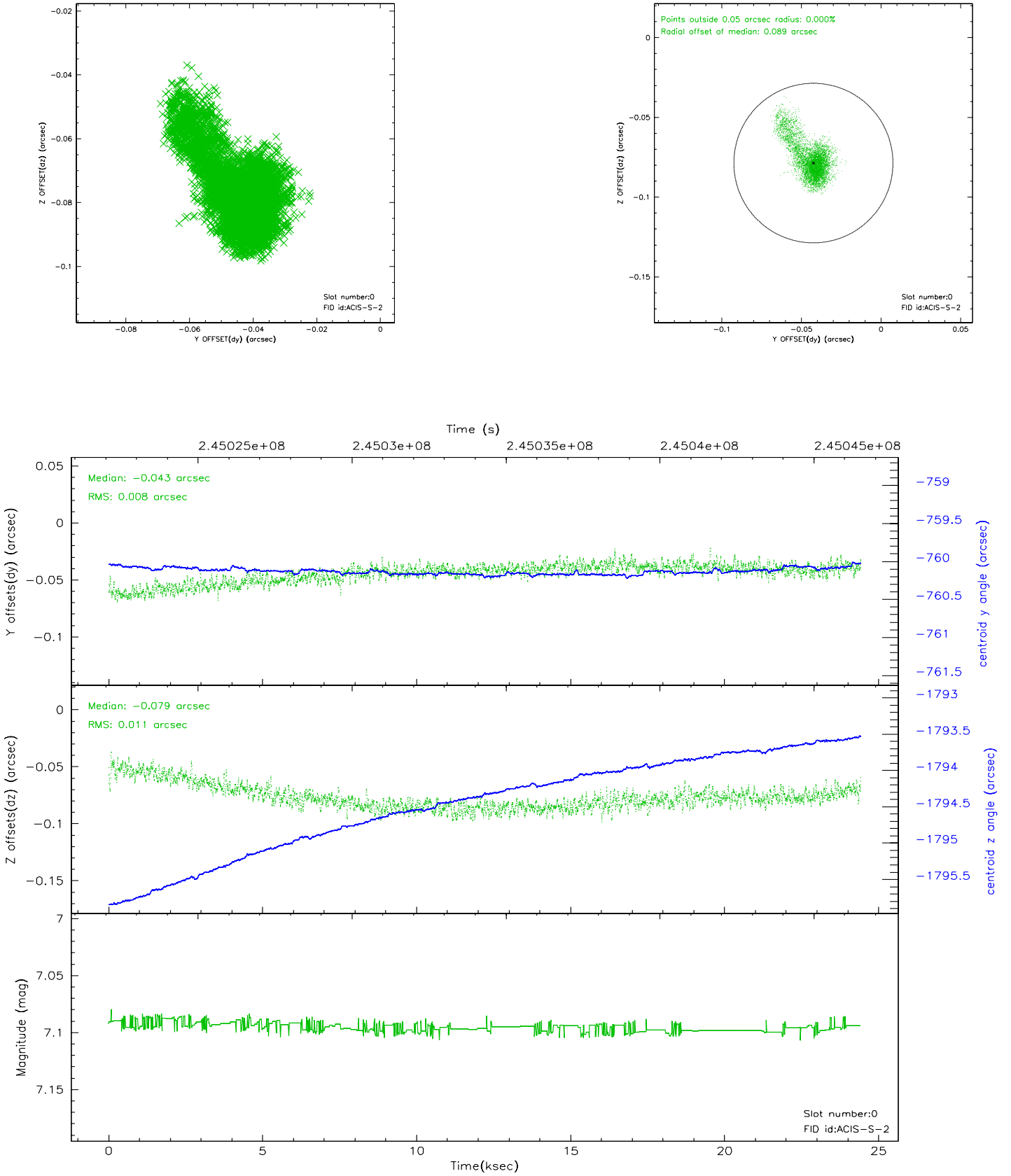


2.4.5 Slot 7

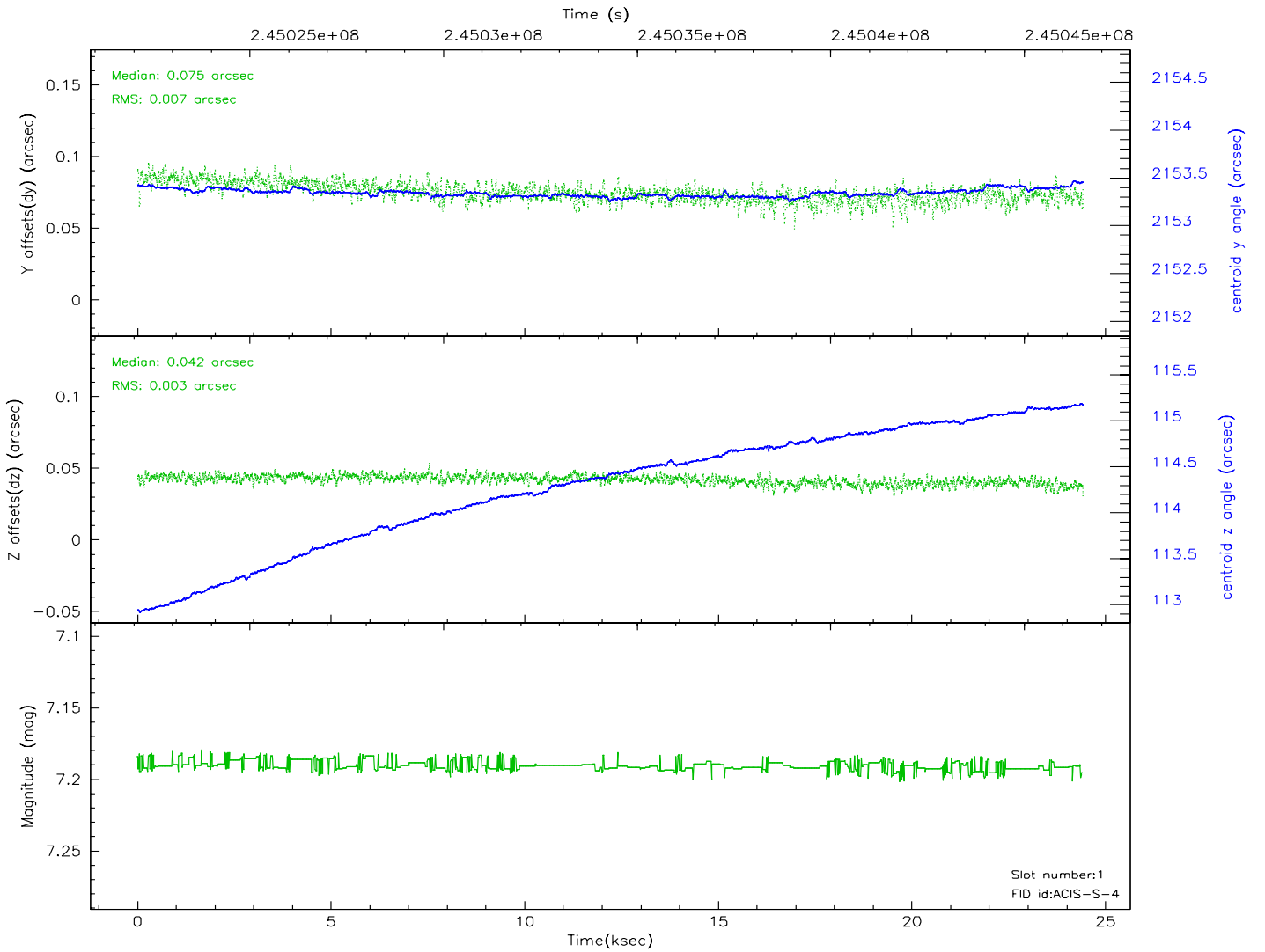
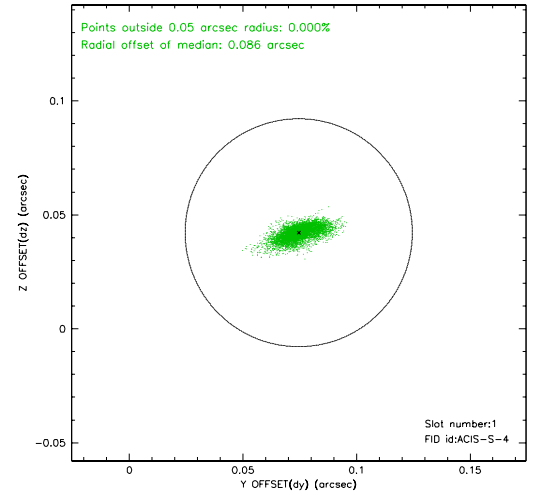
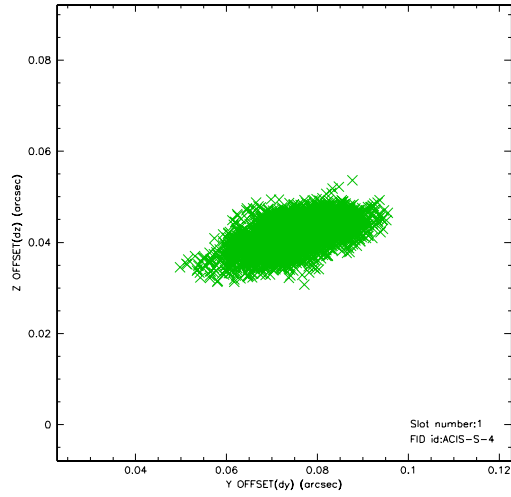


2.5 FID Slots

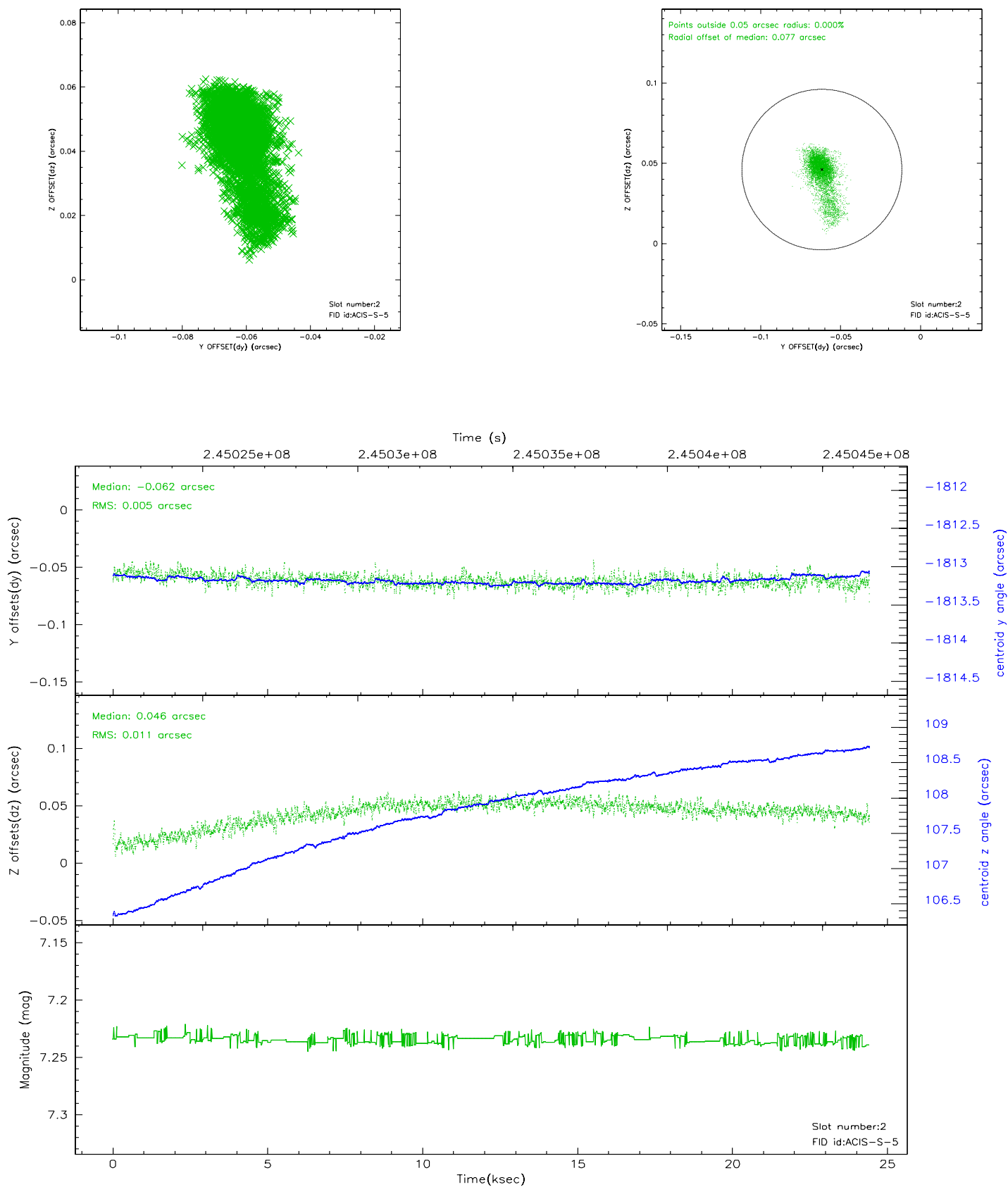
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

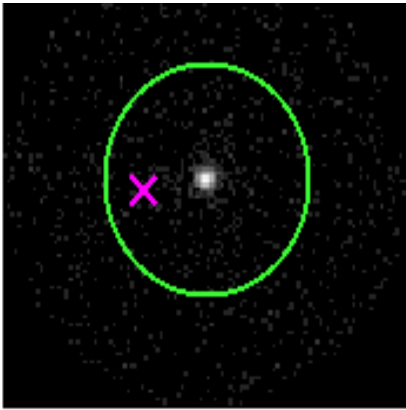


3 Gratings

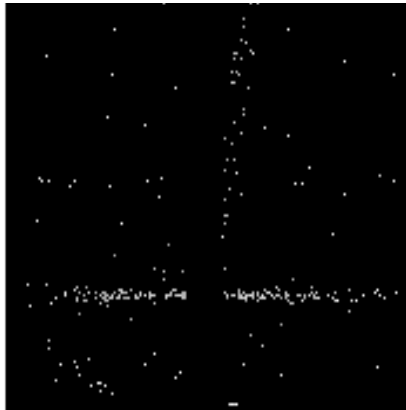
3.1 HEG Arm



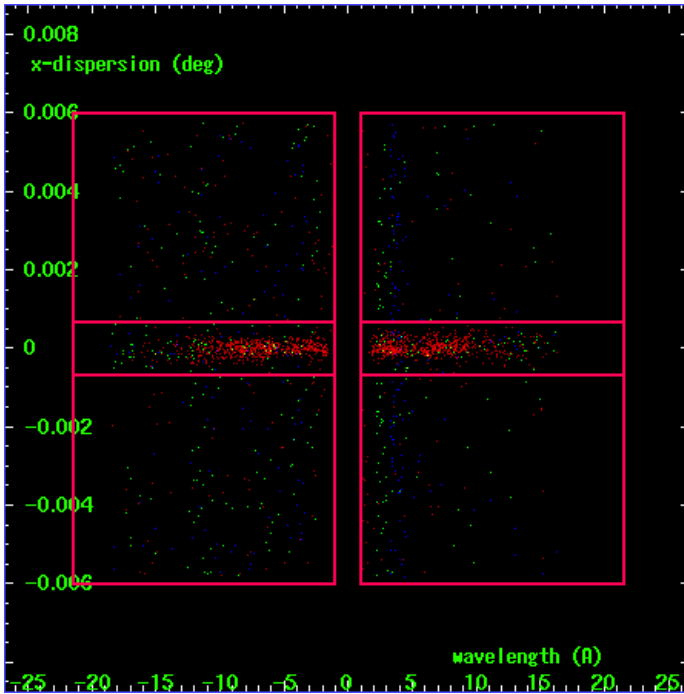
HEG Order Sort 123



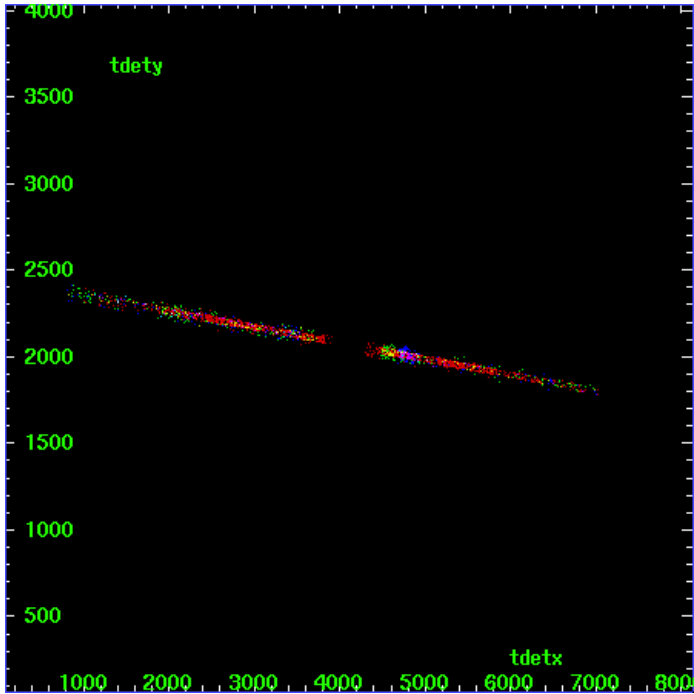
HEG Zero Order



HEG Order Sort ALL

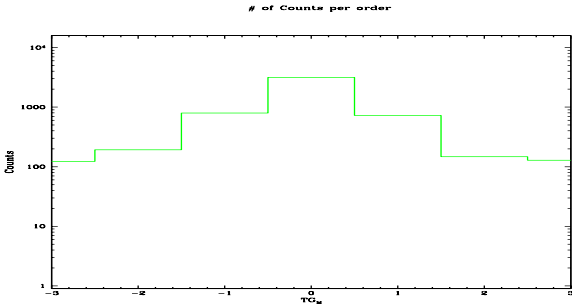


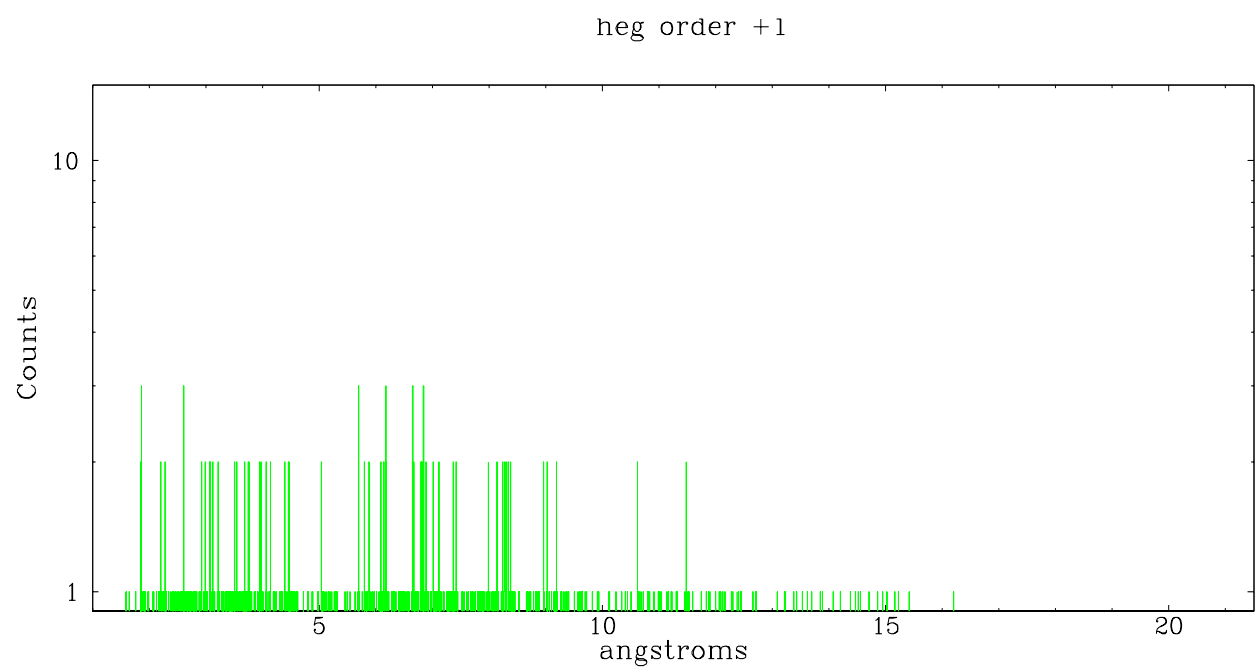
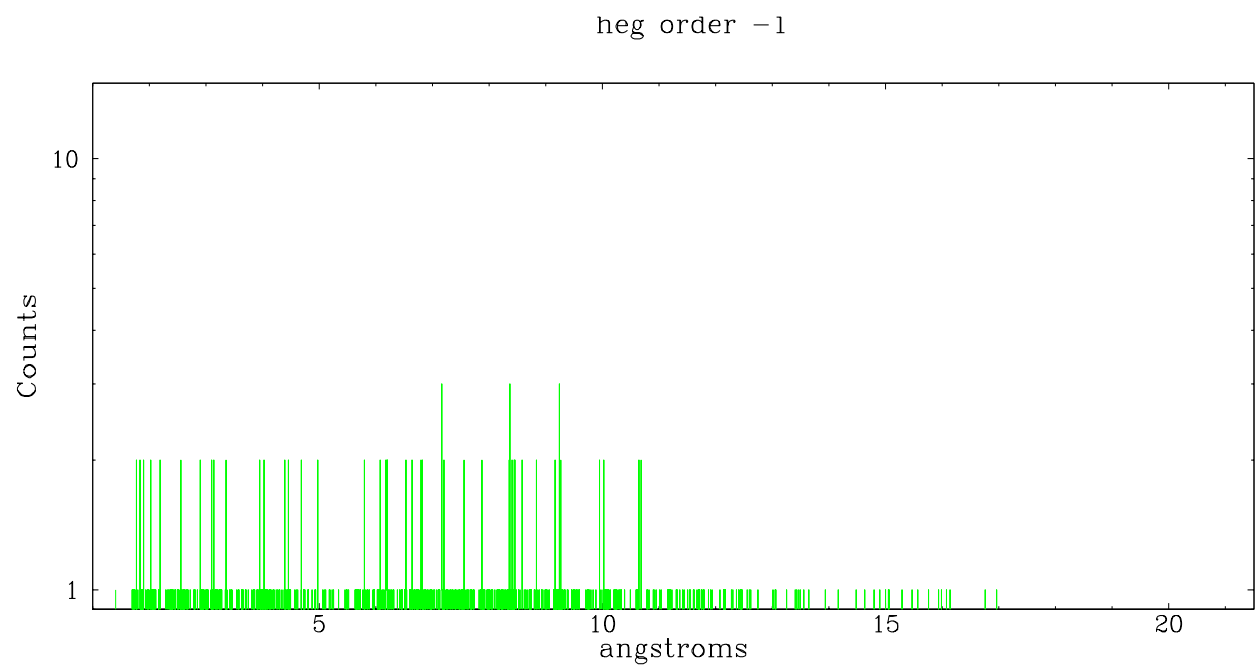
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	123	192	796	3166	725	147	128

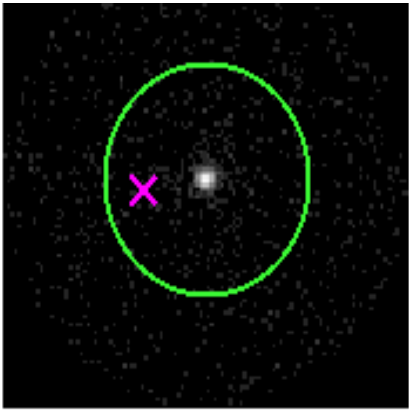




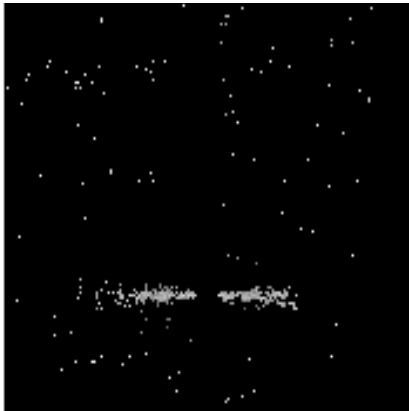
3.2 MEG Arm



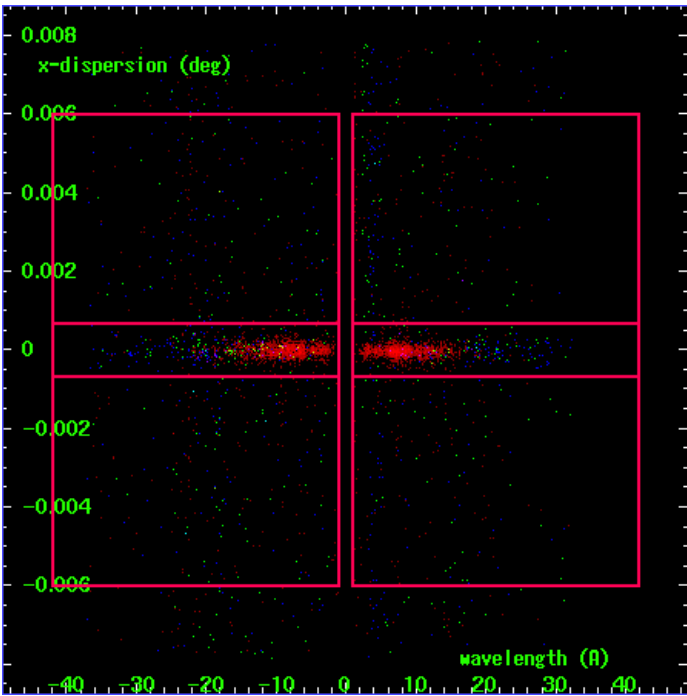
MEG Order Sort 123



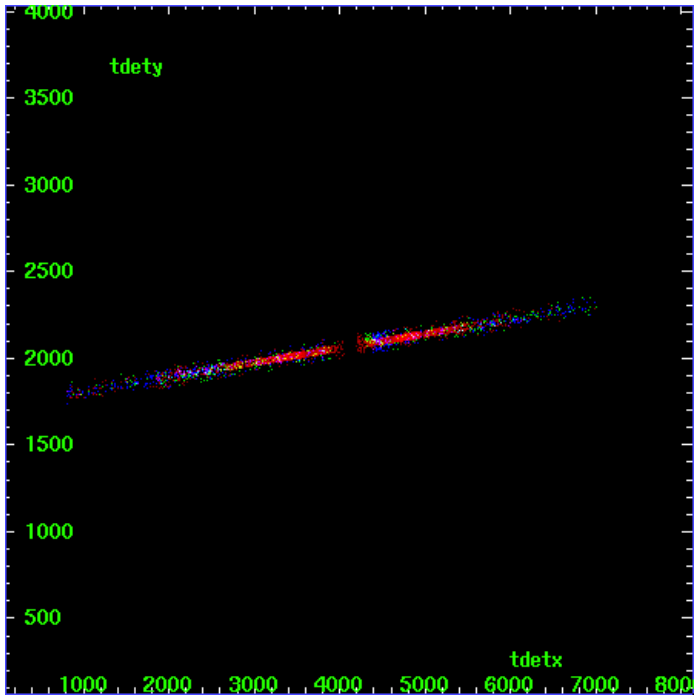
MEG Zero Order



MEG Order Sort ALL

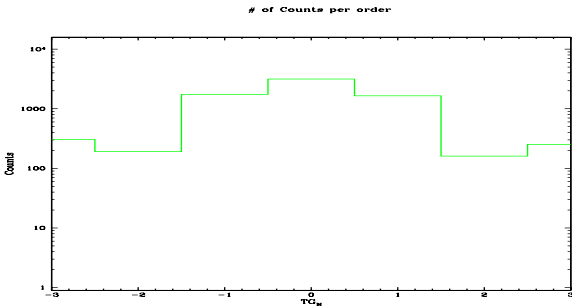


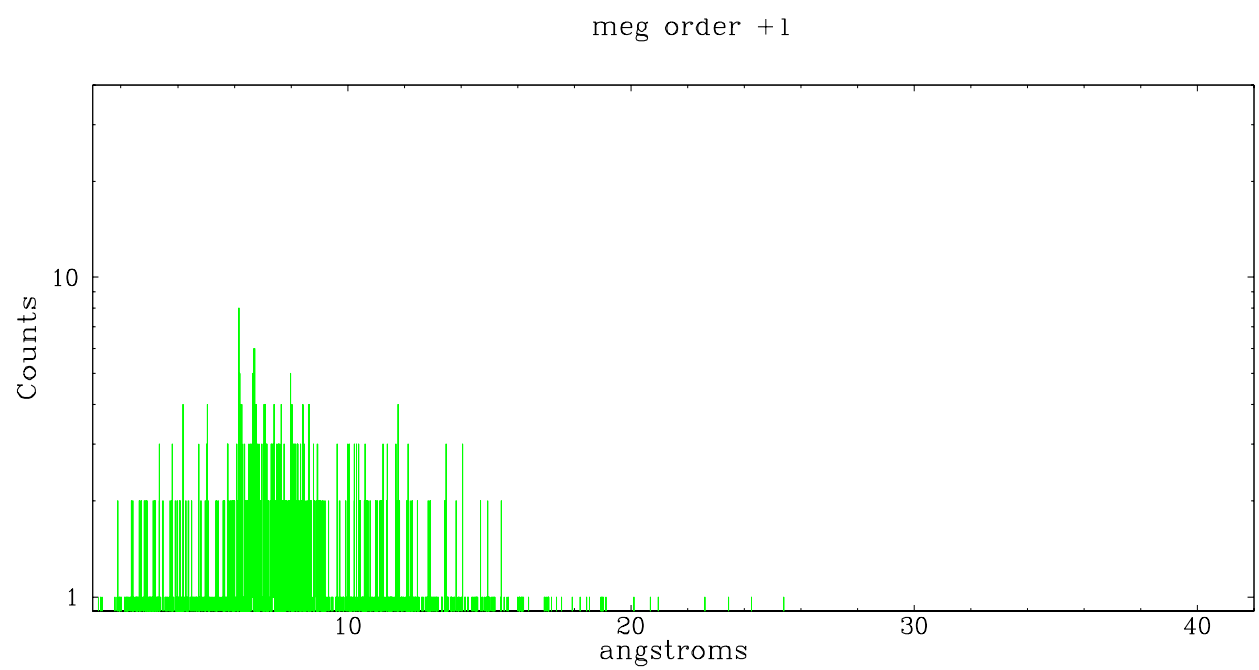
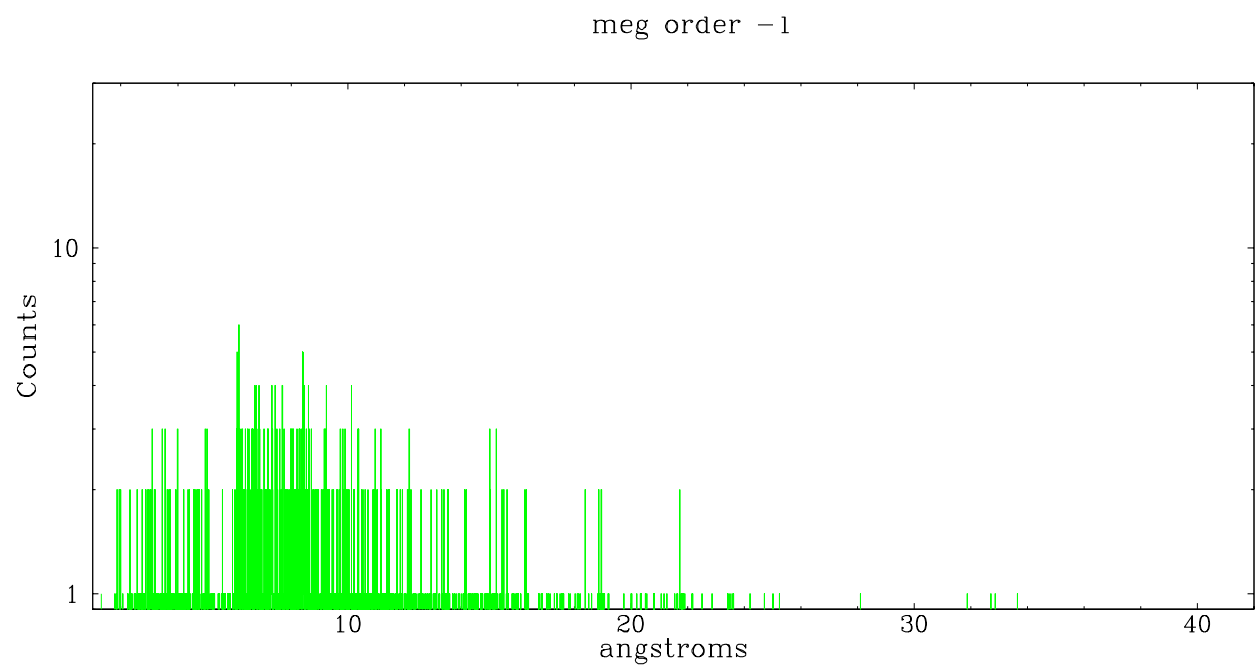
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	306	191	1749	3166	1655	161	252





A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.04.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.4175

A.2 Comments

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. GOs should subtract 1.3 degrees from the reported temperature to determine the true temperature.