

V&V Reference Report

L2 ASCDS Version : 7.6.8.1

Observation 3452 - L2 Version 001
Chandra X-Ray Center

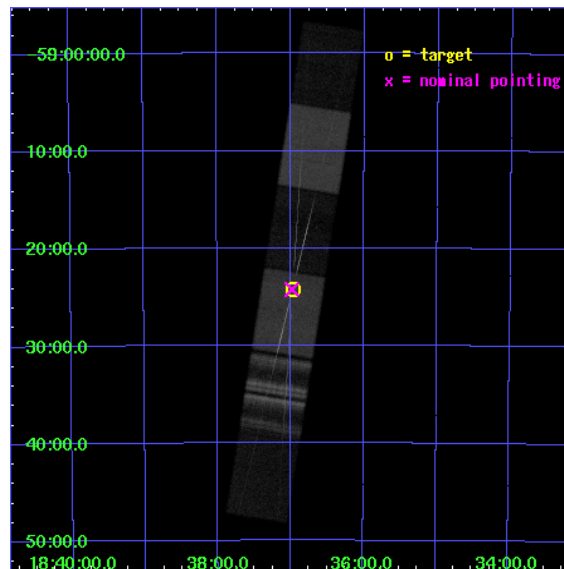
L2 Processing Date : Sep 8 2006

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1 Front

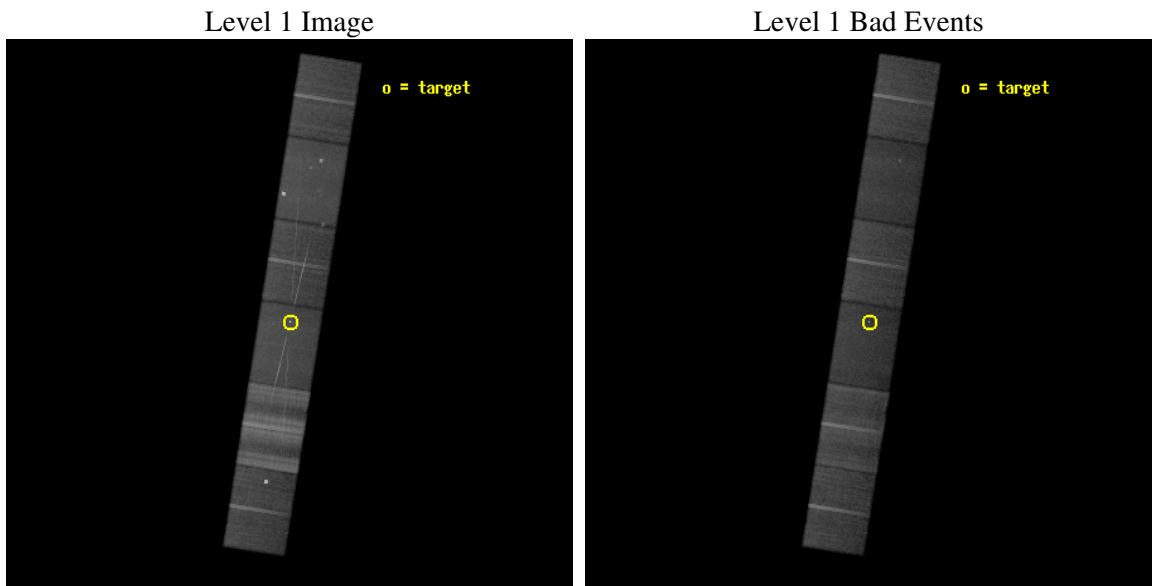
seq_num	700587
obs_id	3452
title	CHANDRA HETG OBSERVATION OF THE SEYFERT 2 GALAXY IRAS 18325-5926
observer	Prof. Claude Canizares
object	IRAS 18325-5926
dtcycle	0
cycle	P
ra_targ	279.241667
dec_targ	-59.402778
ra_nom	279.24538345545
dec_nom	-59.403930940796
roll_nom	99.019981591323
revision	2
ontime	51090.0
livetime	50264.852186506
ontime4	51090.0
ontime5	51090.0
ontime6	51087.459129423
ontime7	51090.0
ontime8	51082.377099276
ontime9	51090.0
l2events	479655



2 OBI

2.1 OBI

2.1.1 Images

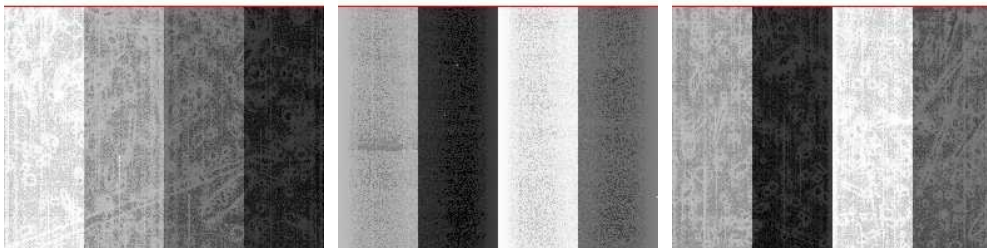


2.1.2 Bias

Chip 4

Chip 5

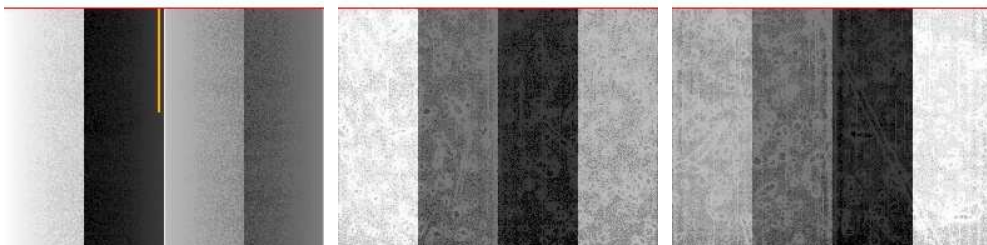
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	1
ascdsver	7.6.8.1
caldbver	3.2.3
date	2006-09-08T10:29:02
revision	2

sched_exp_time	51000.000000
ontime	51094.599529937
ontime4	51094.599529937
ontime5	51094.599529937
ontime6	51092.05865936
ontime7	51094.599529937
ontime8	51086.976629212
ontime9	51094.599529937
l1events	2175054

2.1.4 Events

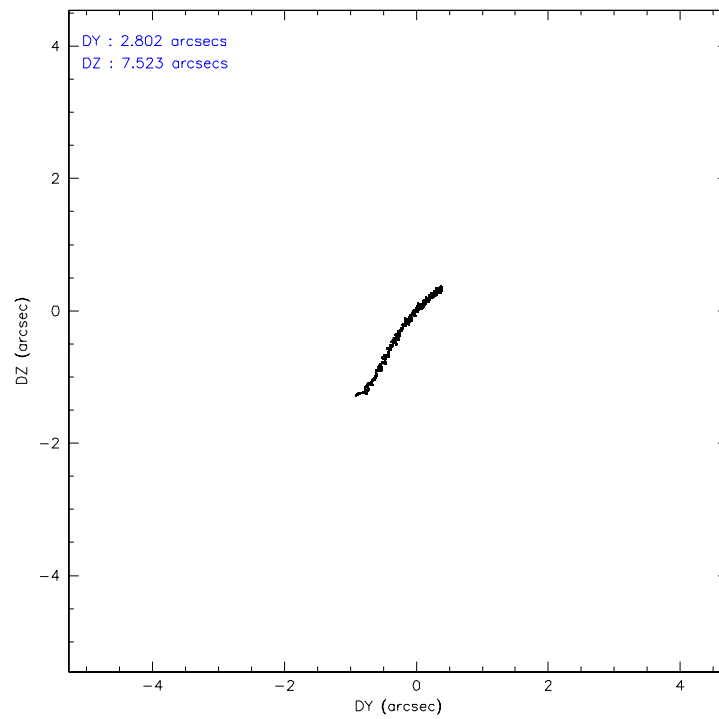
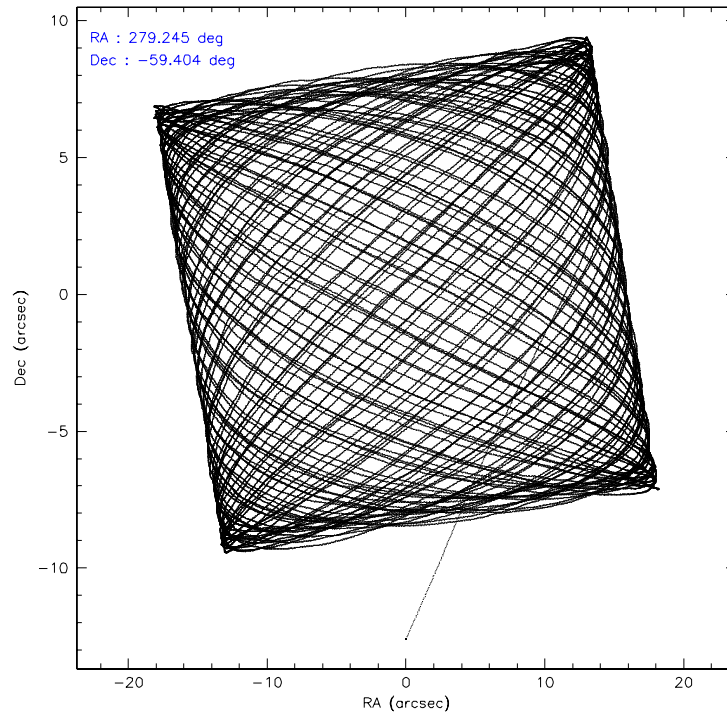
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	309773	360328	304292	336778	575683	288200
rejected events	265630	193212	258182	191745	304755	237792
rejected %	85%	53%	84%	56%	52%	82%

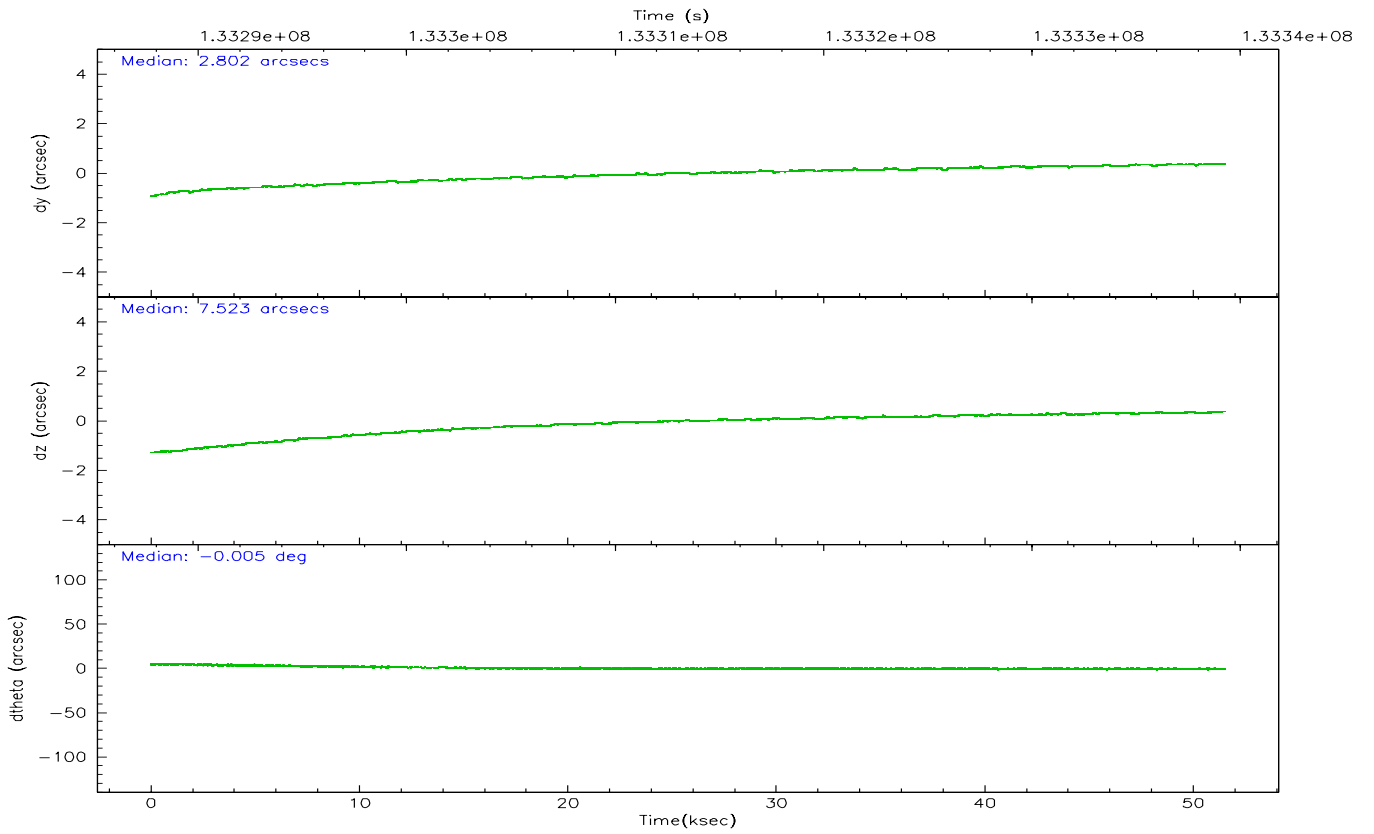
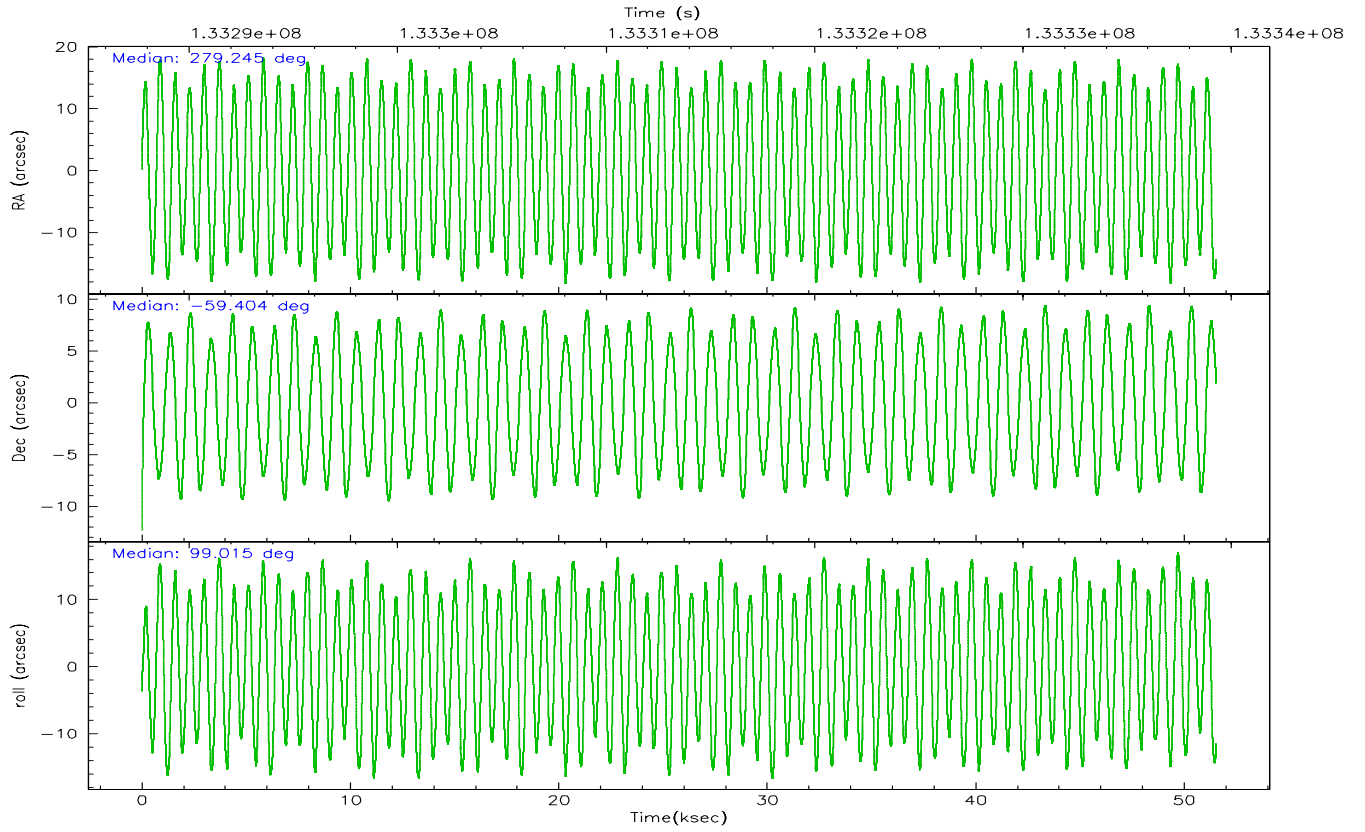
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	17282	26072	21895	11835	71123	28898
	5%	7%	7%	3%	12%	10%
grade 1 events	173	809	138	393	529	138
	0%	0%	0%	0%	0%	0%
grade 2 events	14236	47543	10964	36726	42904	8909
	4%	13%	3%	10%	7%	3%
grade 3 events	3100	5104	3395	9726	45615	3079
	1%	1%	1%	2%	7%	1%
grade 4 events	3044	4935	3241	9410	40330	3046
	0%	1%	1%	2%	7%	1%
grade 5 events	8570	17233	9940	22447	15913	10153
	2%	4%	3%	6%	2%	3%
grade 6 events	6486	83482	6620	77358	70969	6482
	2%	23%	2%	22%	12%	2%
grade 7 events	256882	175150	248099	168883	288300	227495
	82%	48%	81%	50%	50%	78%

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	279.279619	279.2453834554524	Subarray start row	1	1
Pointing Dec	-59.424901	-59.40393094079617	Subarray row count	774	774
Pointing Roll	98.892828	99.01998159132316	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	133288272.184000	133287140.03409			
Observation start date	2002-03-23T16:30:08	2002-03-23T16:12:20			
Observation end time	133339272.184000	133340868.48626			
Observation end date	2002-03-24T06:40:08	2002-03-24T07:07:48			
Read mode	TIMED	TIMED			

2.3 Aspect



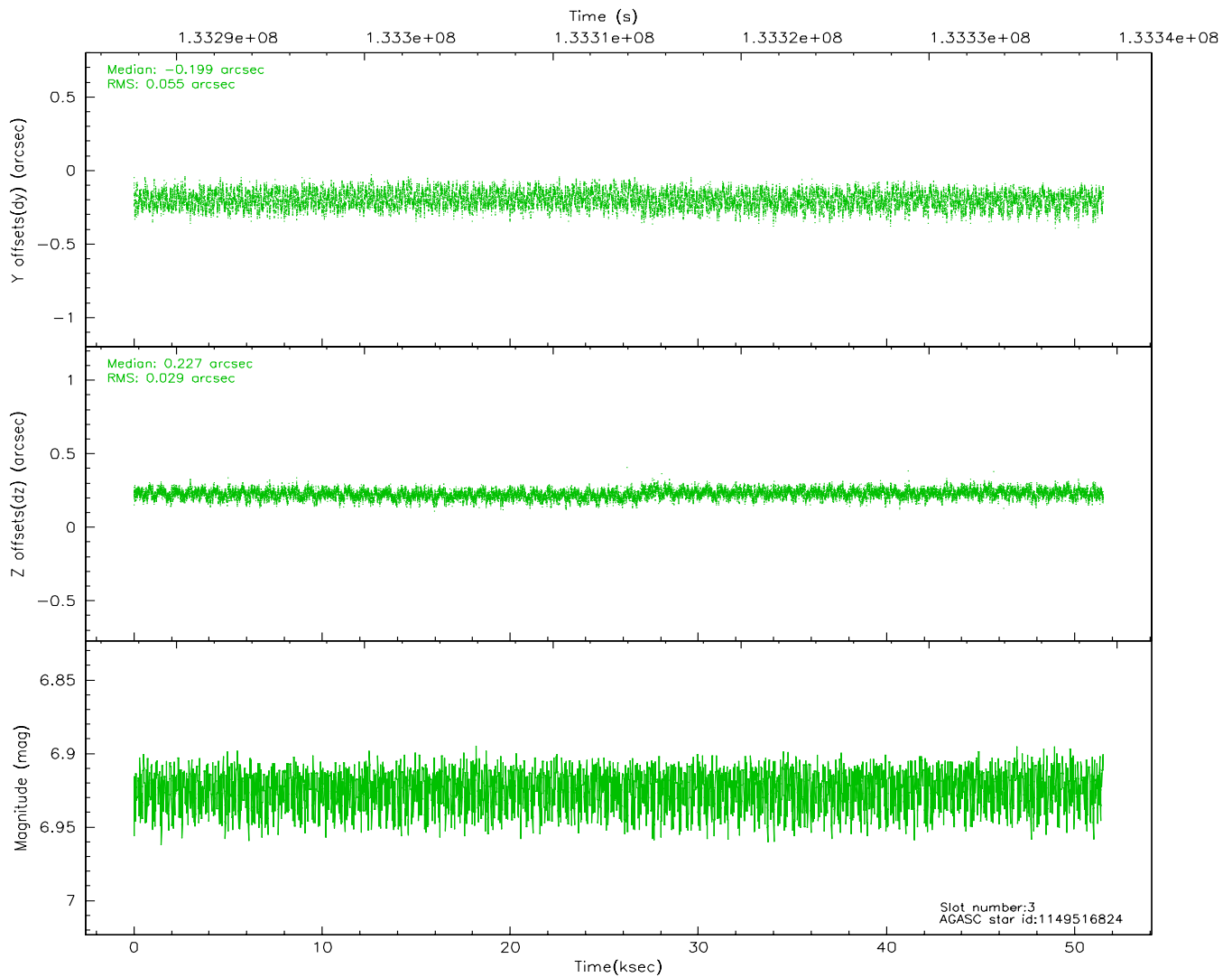
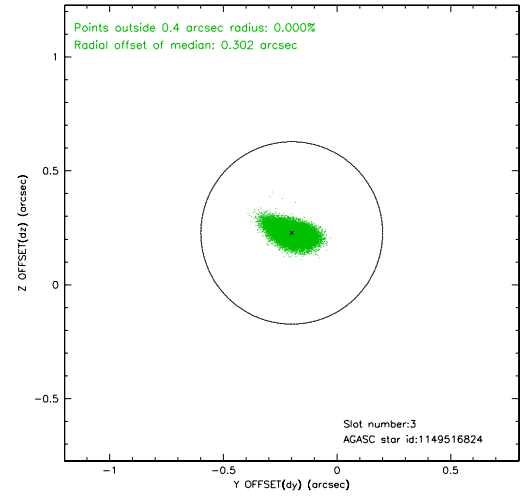
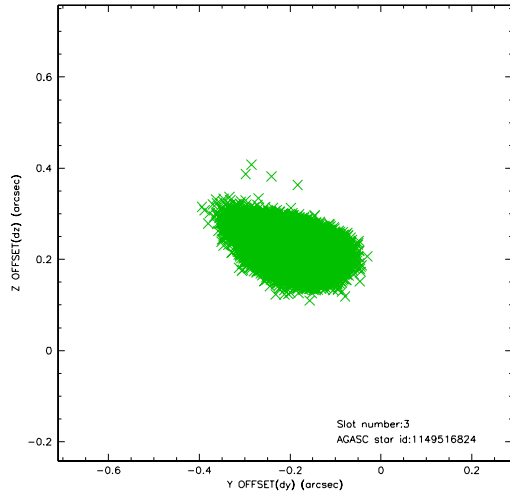


Slot Statistics

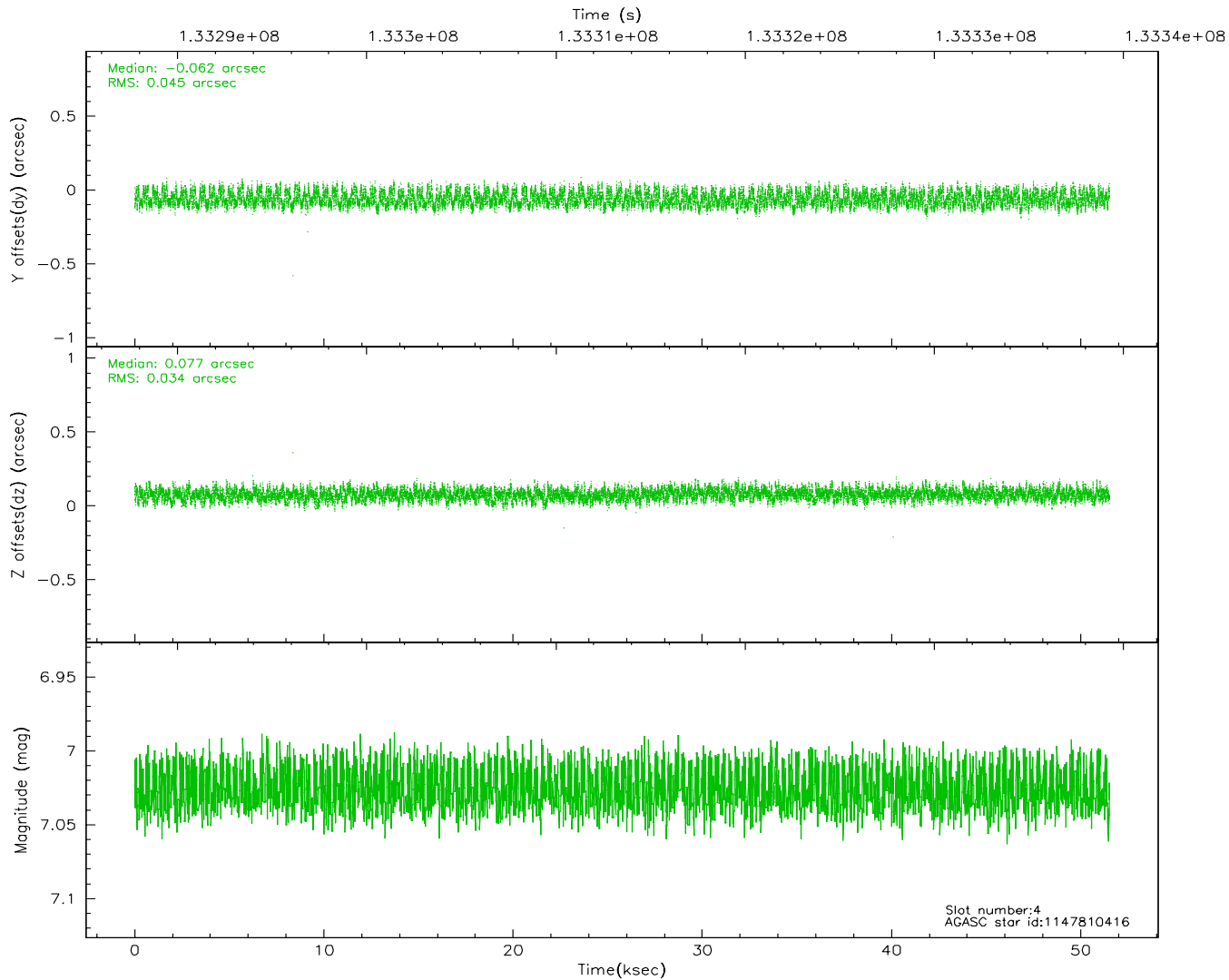
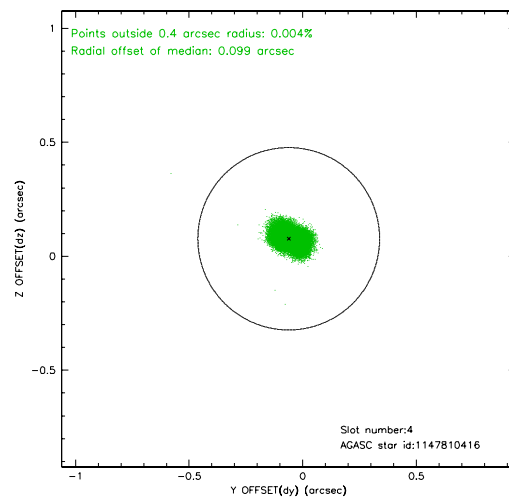
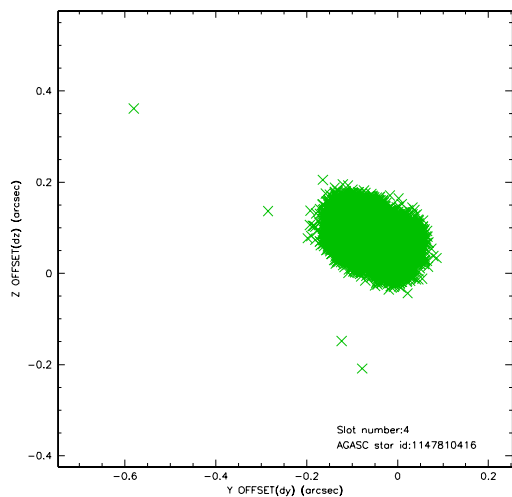
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	12568	-0.039	-0.016	0.019	0.029	0.000000	0.000000	-755.17	-1790.66
1	FID	ACIS-S-4	7.19	12568	-0.039	0.022	0.011	0.021	0.000000	0.000000	2158.09	117.92
2	FID	ACIS-S-5	7.23	12569	0.044	-0.002	0.016	0.029	0.000000	0.000000	-1807.99	111.48
3	GUIDE	1149516824	6.92	25137	-0.199	0.227	0.066	0.108	280.087590	-58.779899	2052.42	-1847.06
4	GUIDE	1147810416	7.03	25137	-0.062	0.077	0.061	0.094	279.820613	-59.121800	919.84	-1155.74
5	GUIDE	1149514016	7.69	25069	0.120	0.102	0.049	0.084	280.111504	-59.726541	-1314.94	-1322.69
6	GUIDE	1188567688	9.03	25127	0.277	-0.219	0.090	0.147	278.293322	-60.146121	-2304.63	2148.84
7	GUIDE	1147807520	9.27	25125	-0.137	-0.185	0.087	0.140	278.003382	-59.016072	1797.32	2112.39

2.4 Star Slots

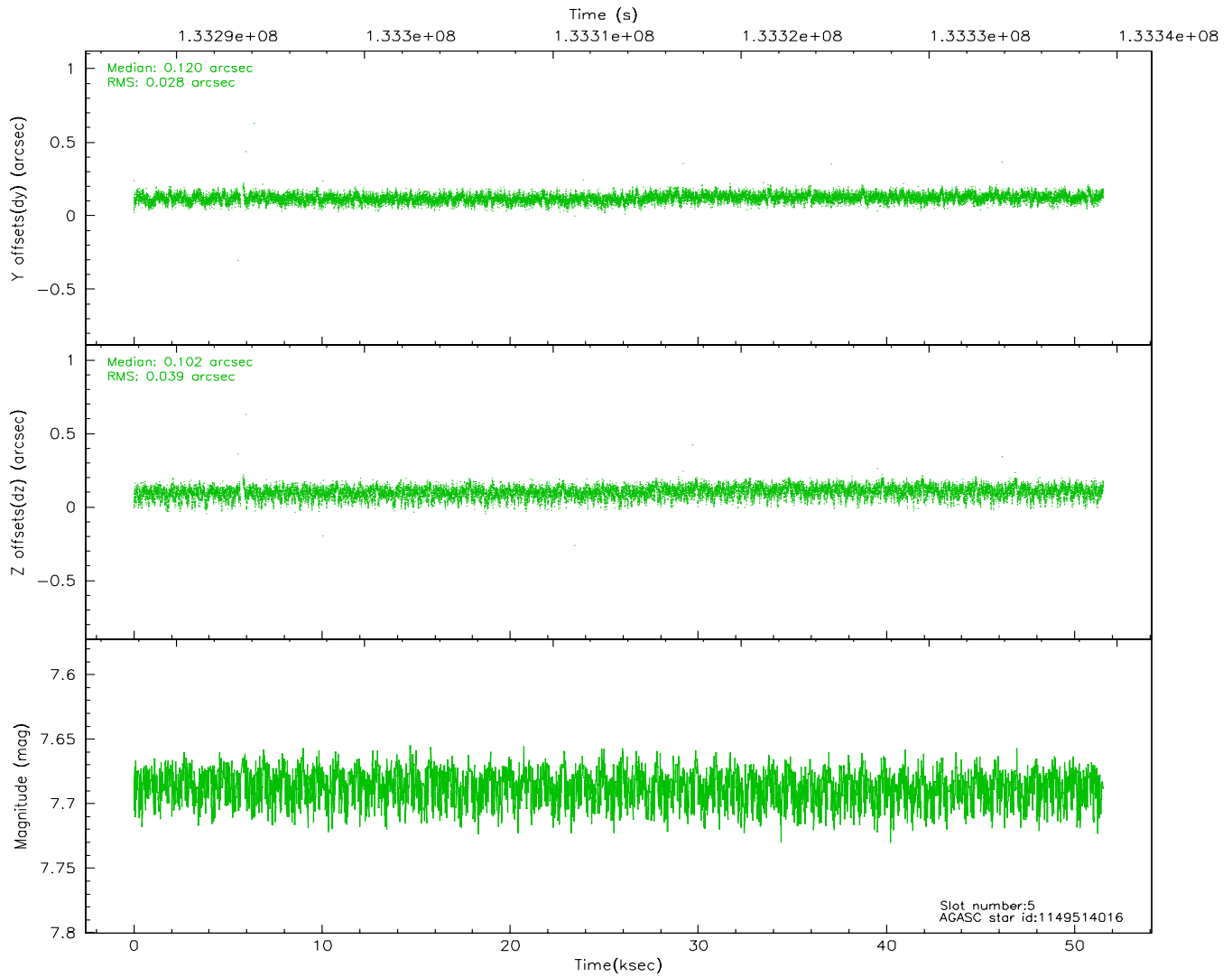
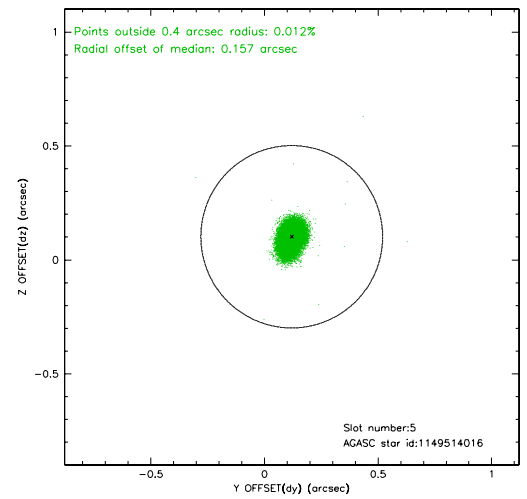
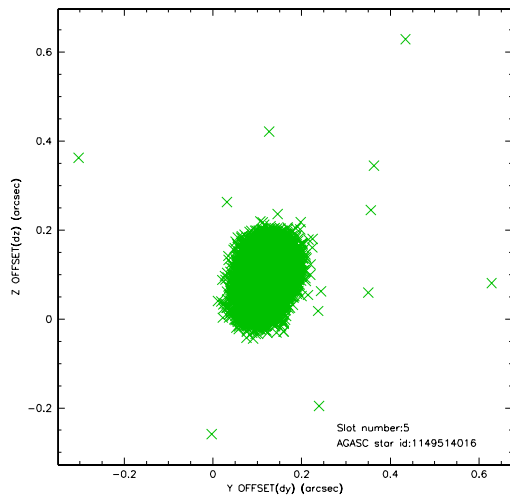
2.4.1 Slot 3



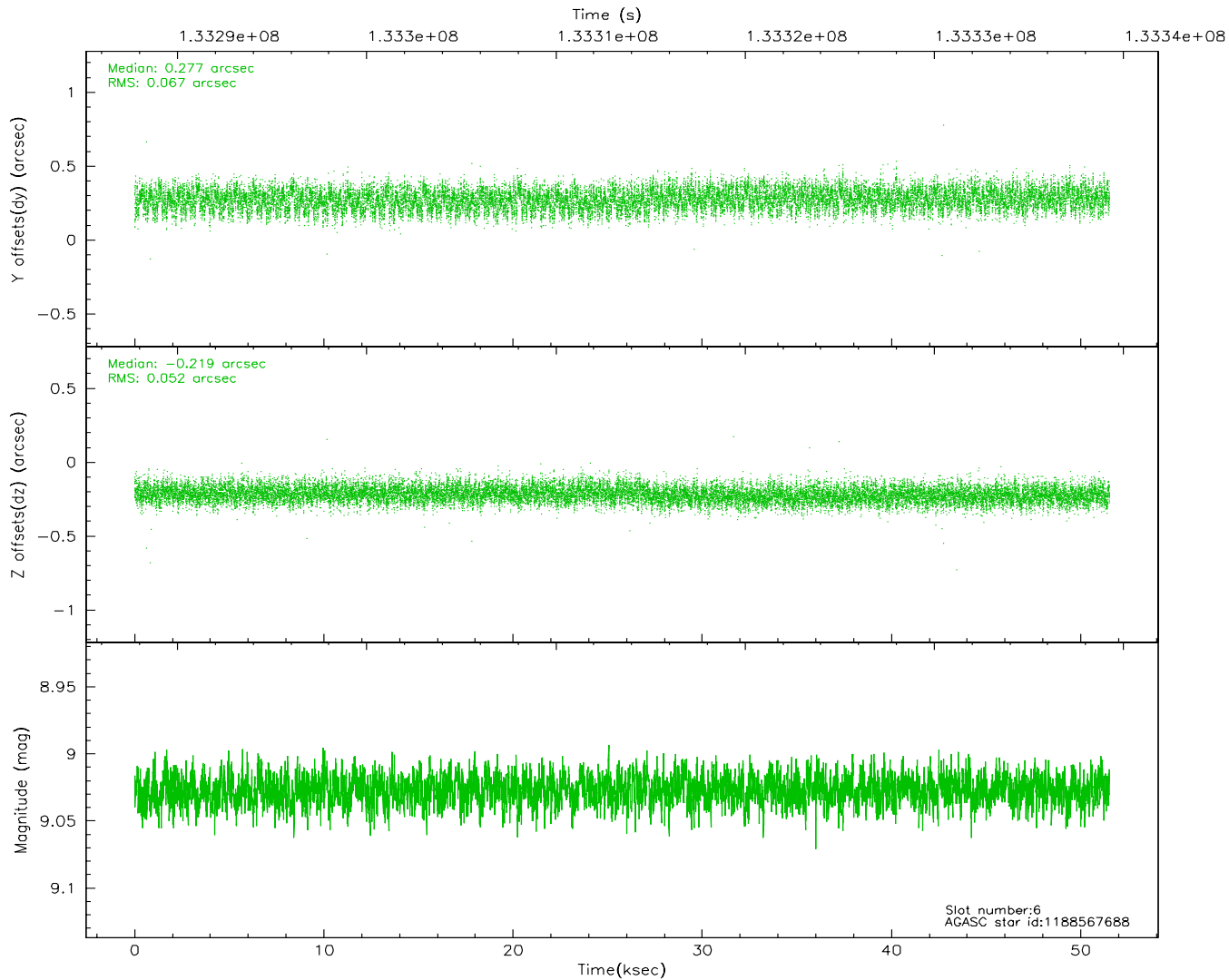
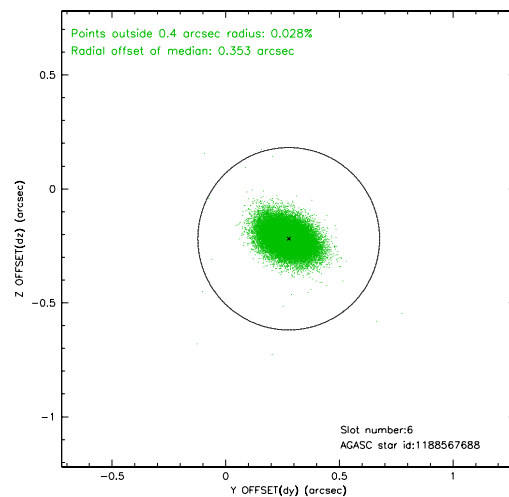
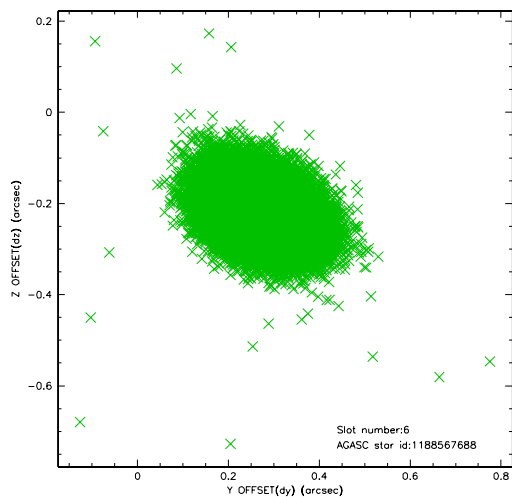
2.4.2 Slot 4



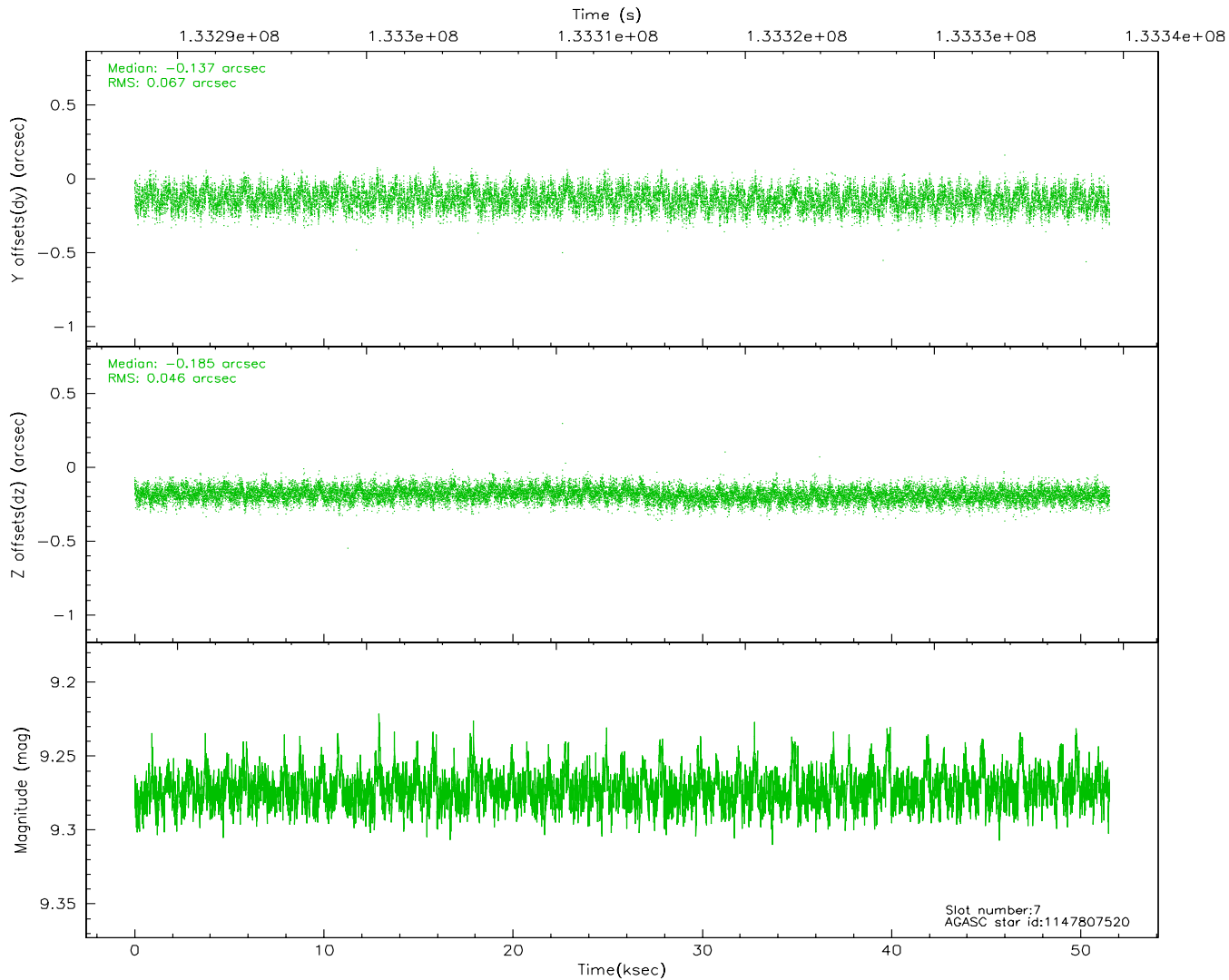
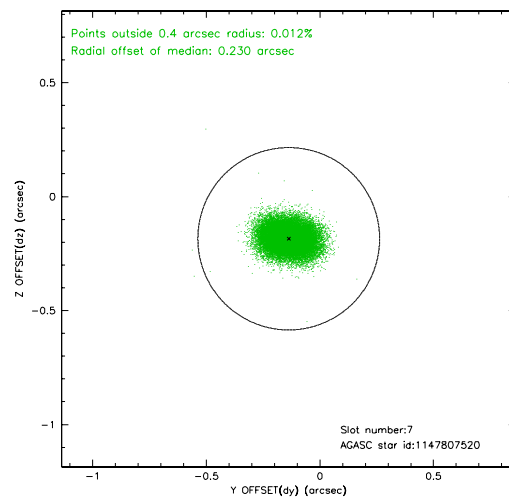
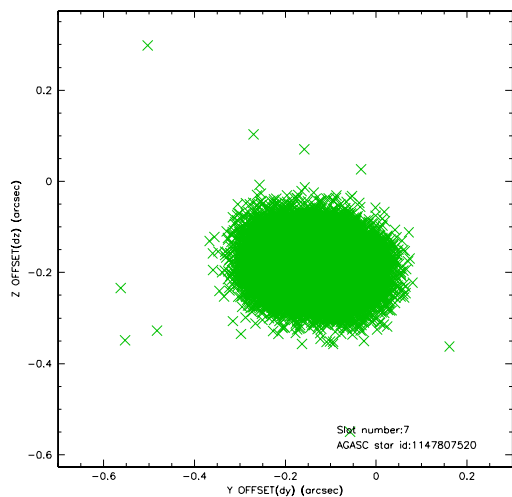
2.4.3 Slot 5



2.4.4 Slot 6

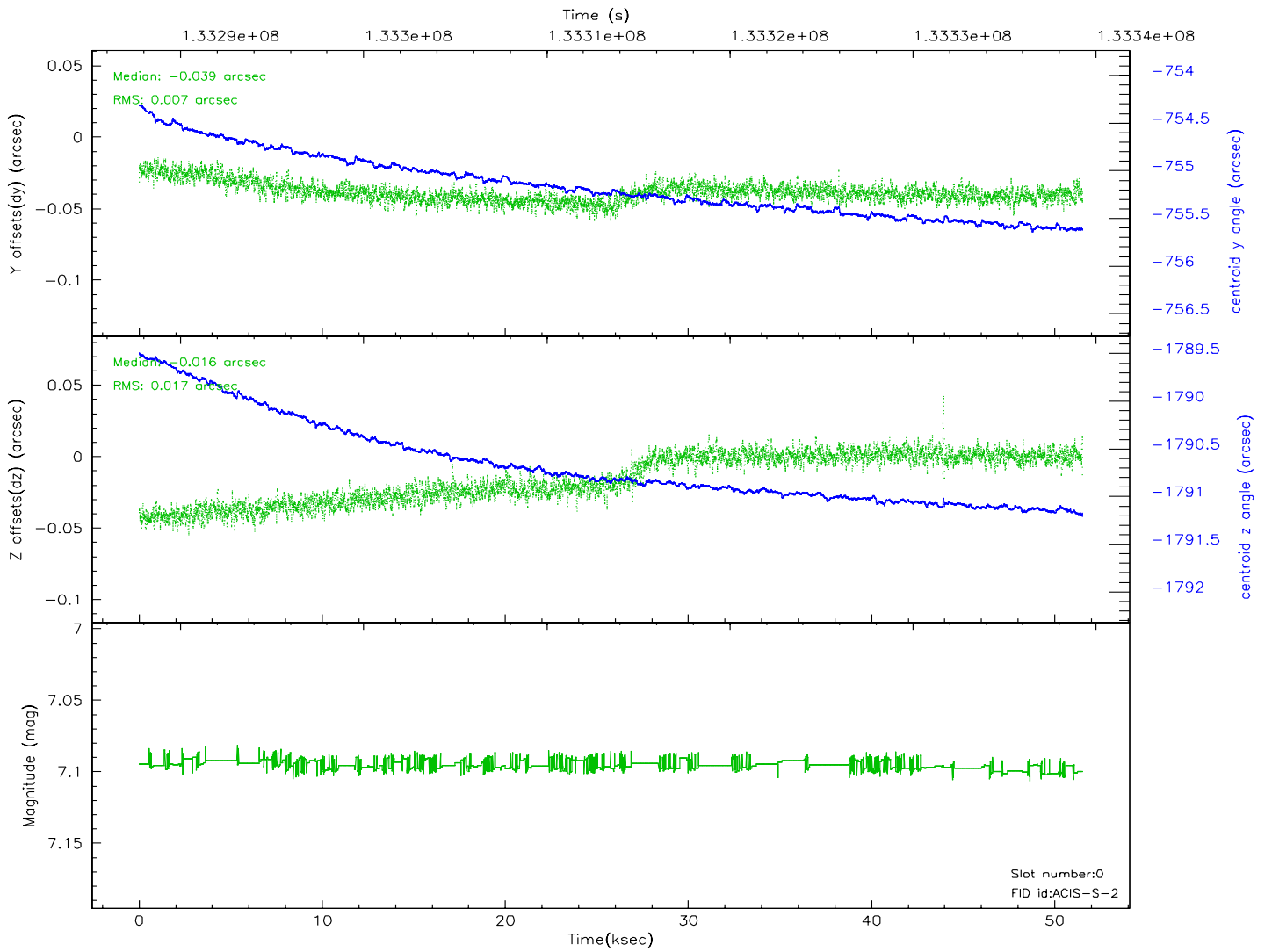
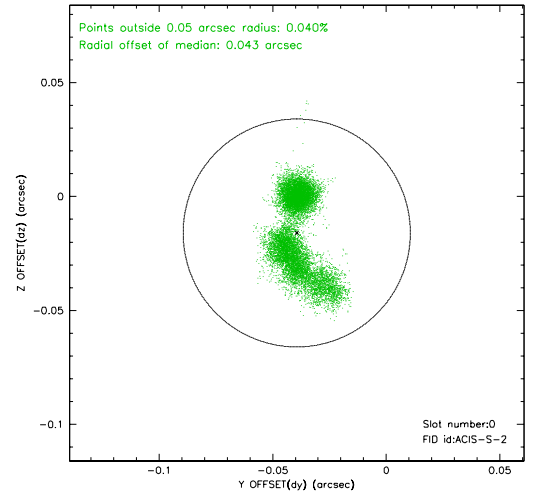
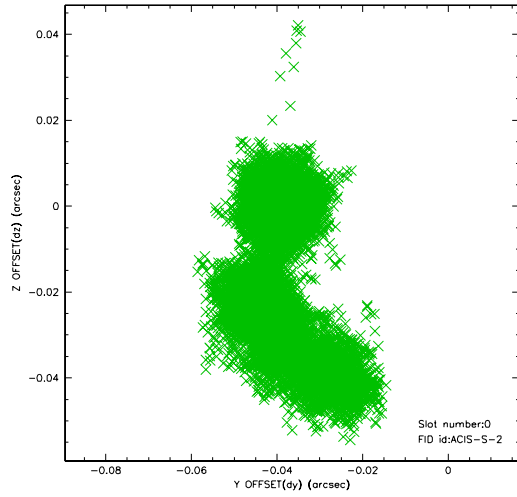


2.4.5 Slot 7

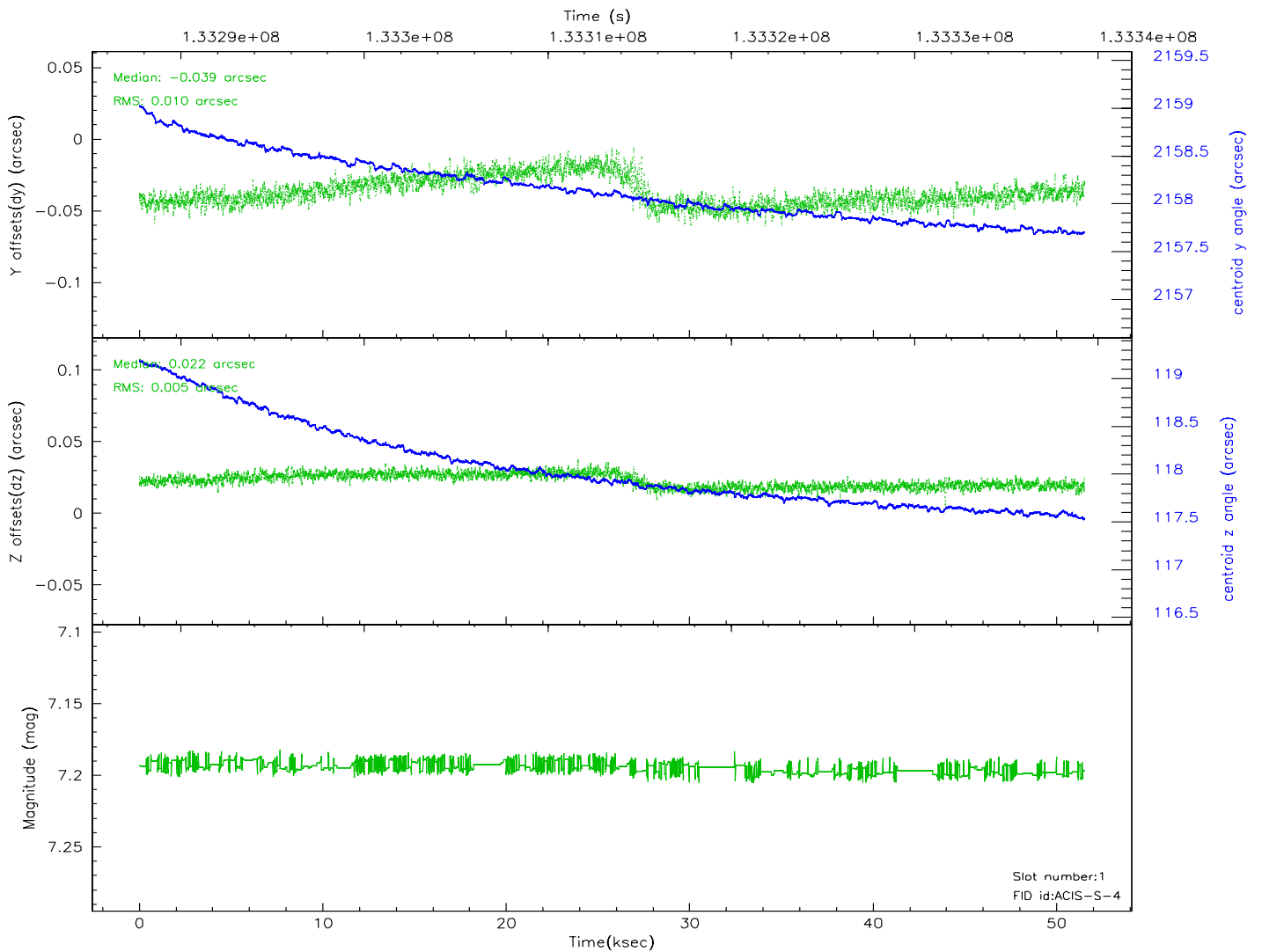
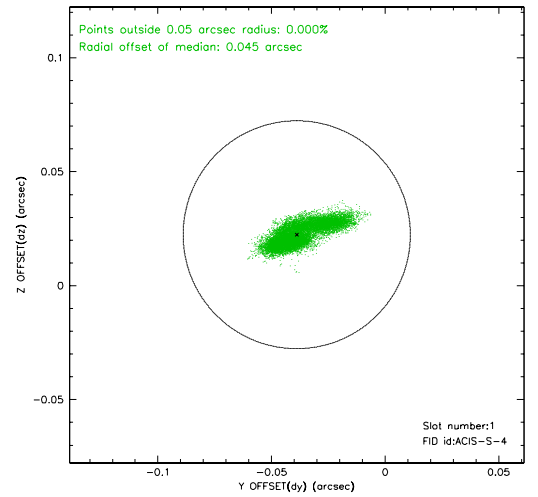
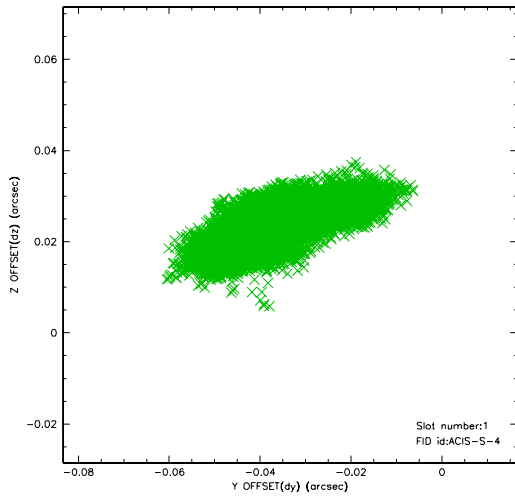


2.5 FID Slots

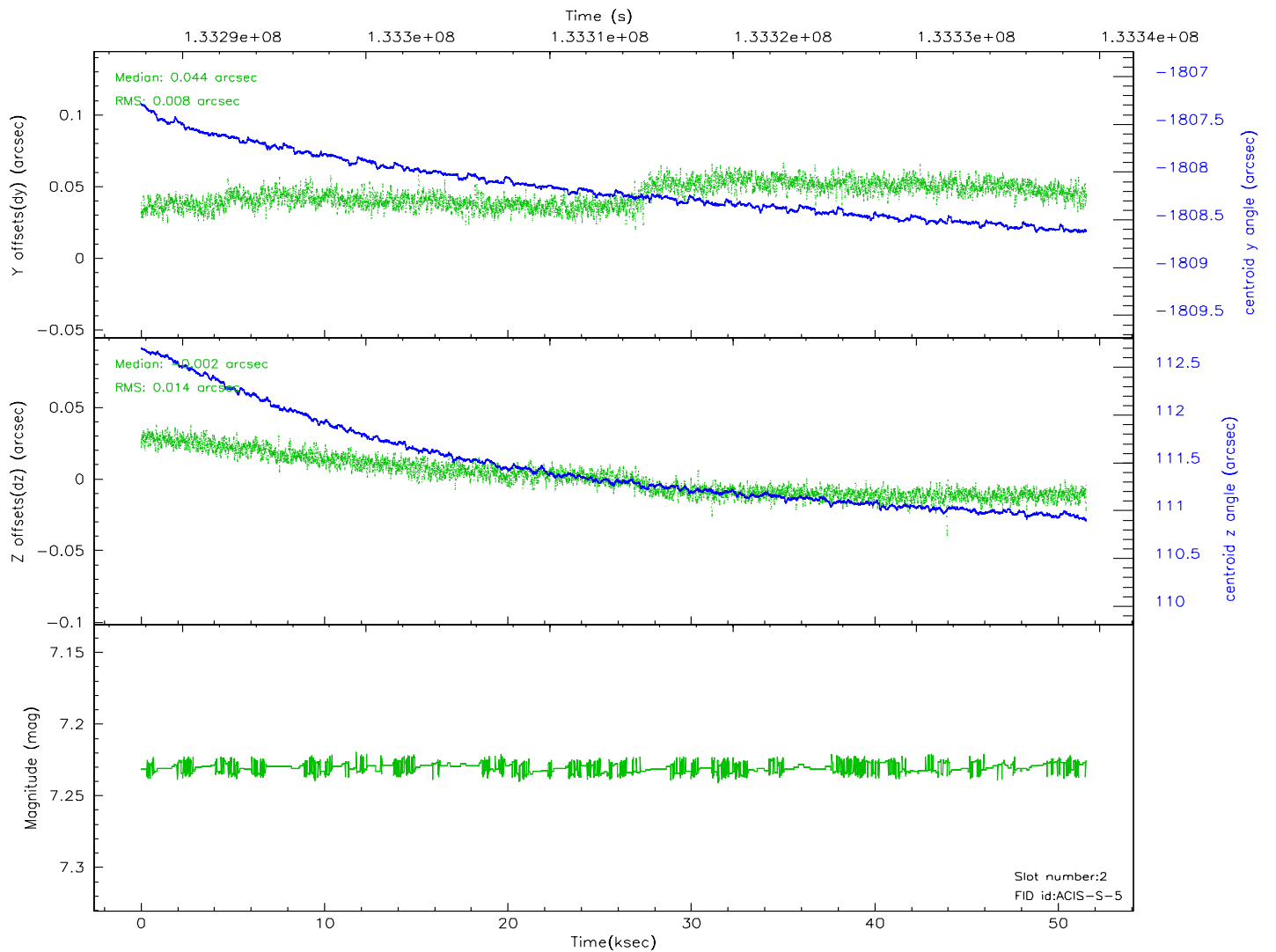
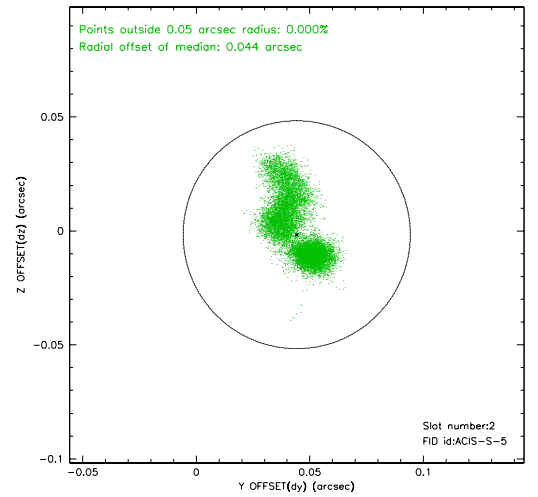
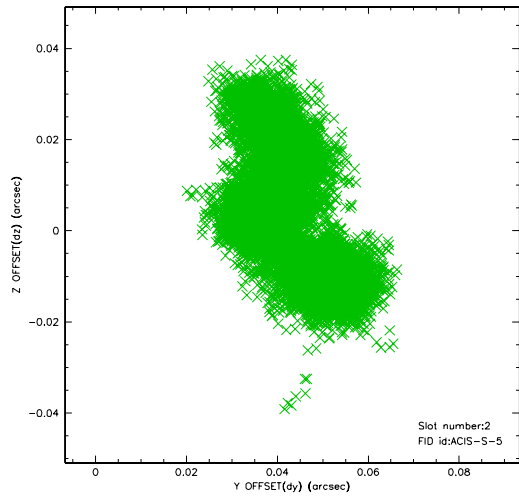
2.5.1 Slot 0



2.5.2 Slot 1

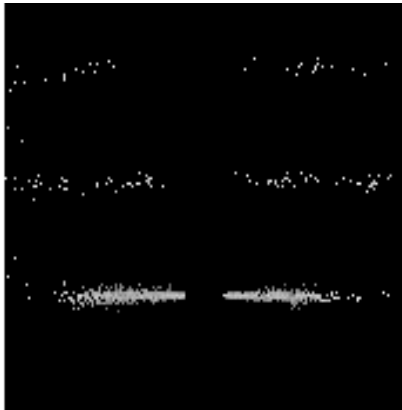


2.5.3 Slot 2

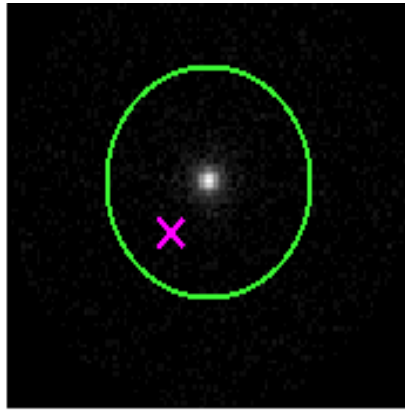


3 Gratings

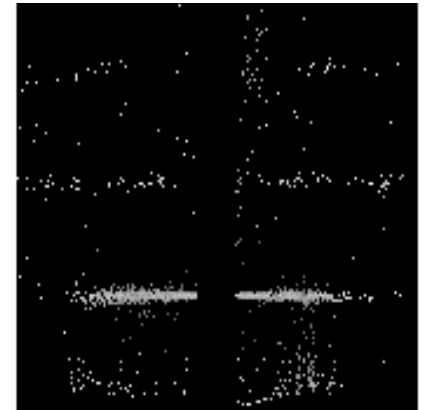
3.1 HEG Arm



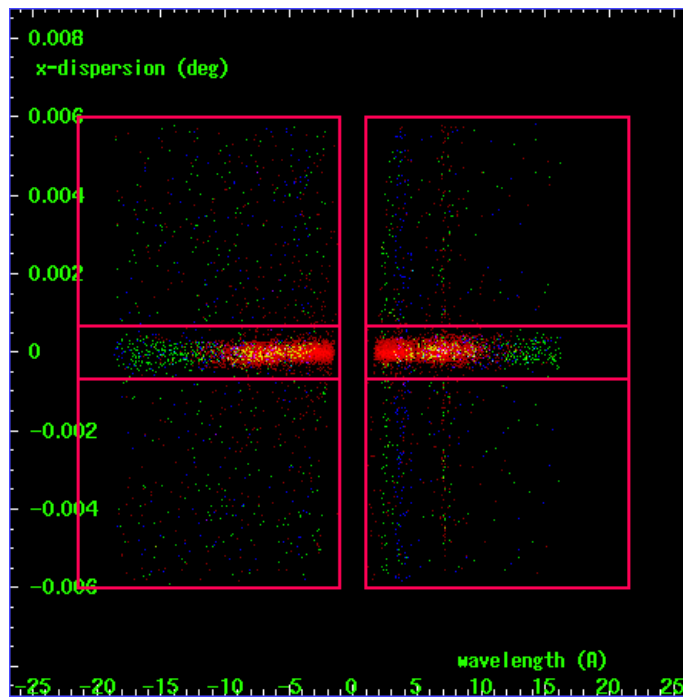
HEG Order Sort 123



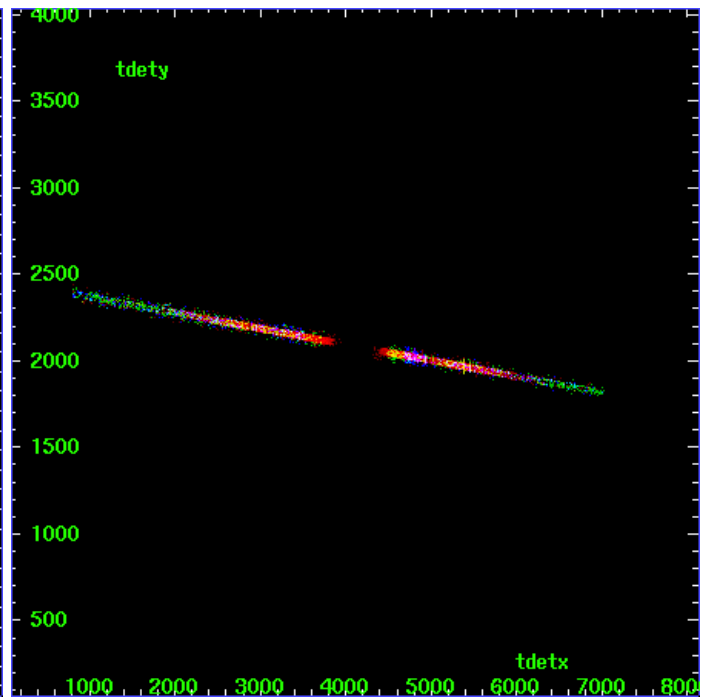
HEG Zero Order



HEG Order Sort ALL

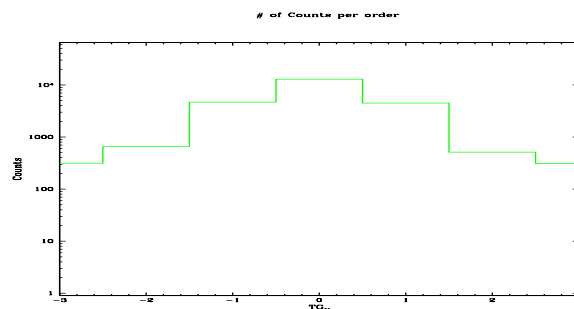


Spot Image HEG

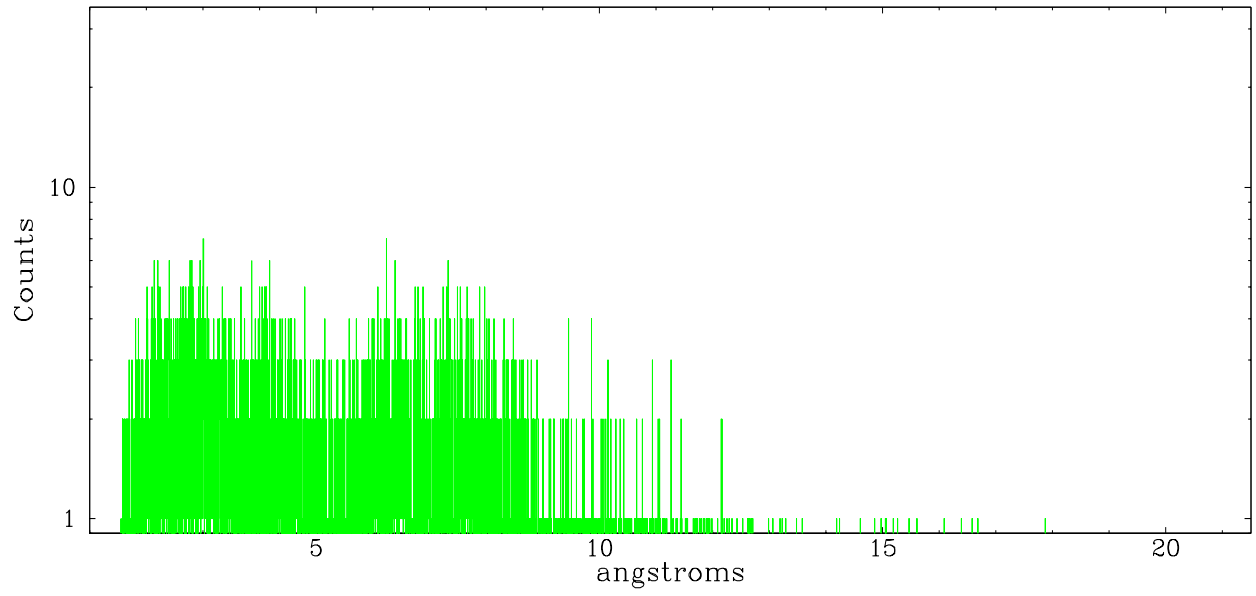


Full Detector HEG

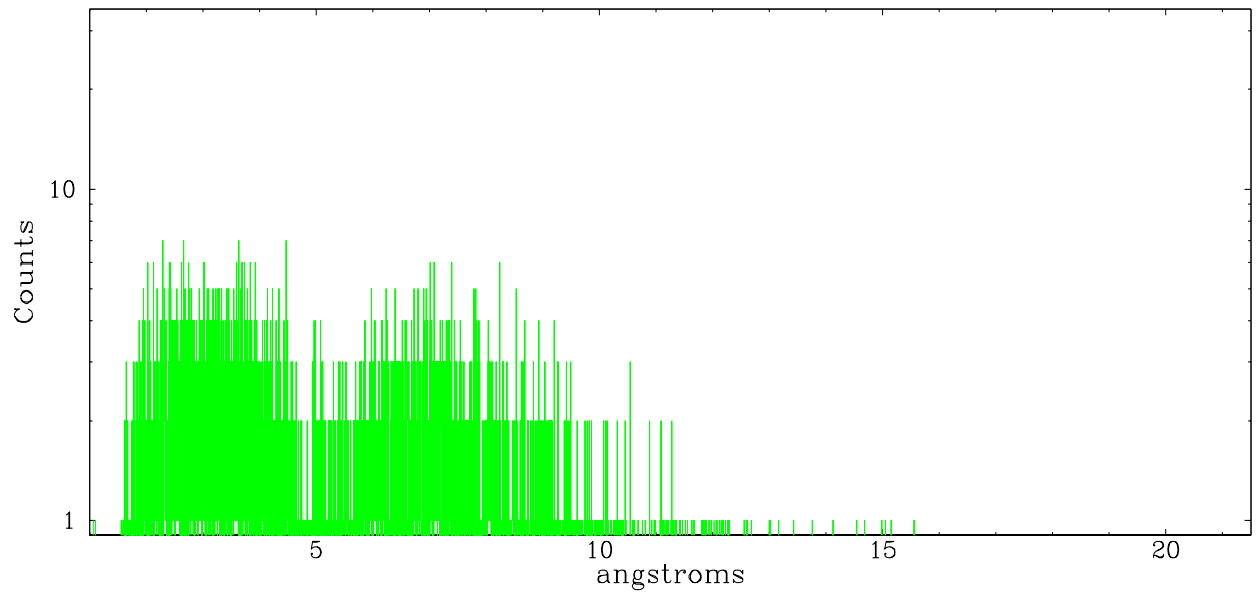
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	315	658	4660	12955	4497	514	310



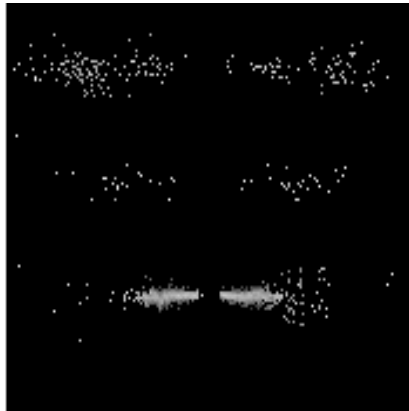
heg order -1



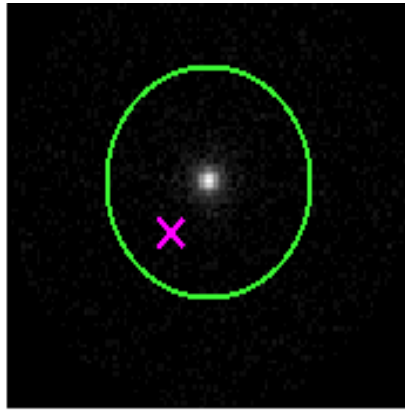
heg order +1



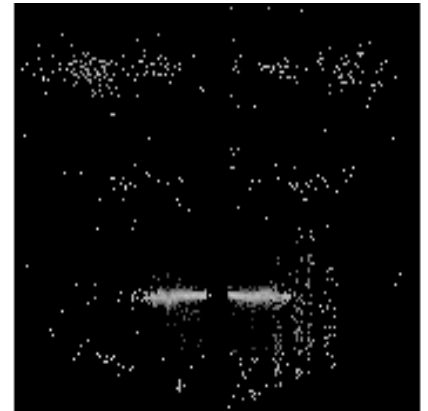
3.2 MEG Arm



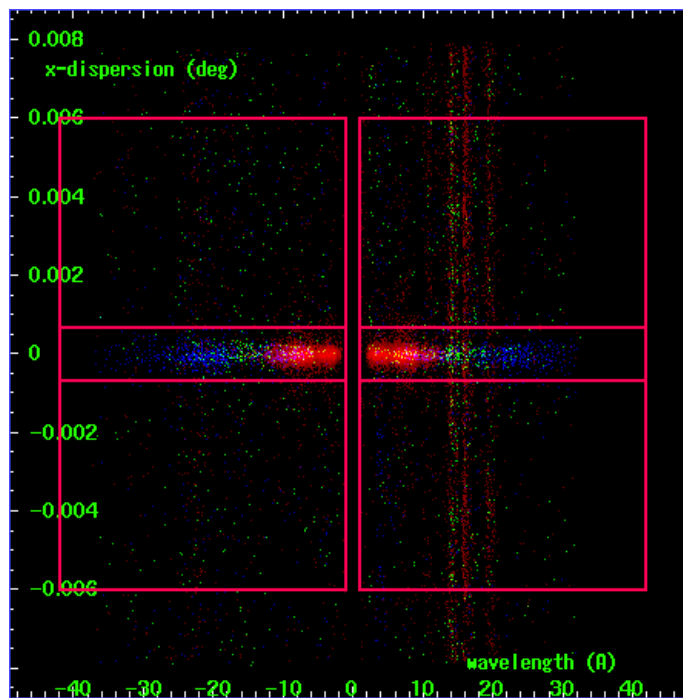
MEG Order Sort 123



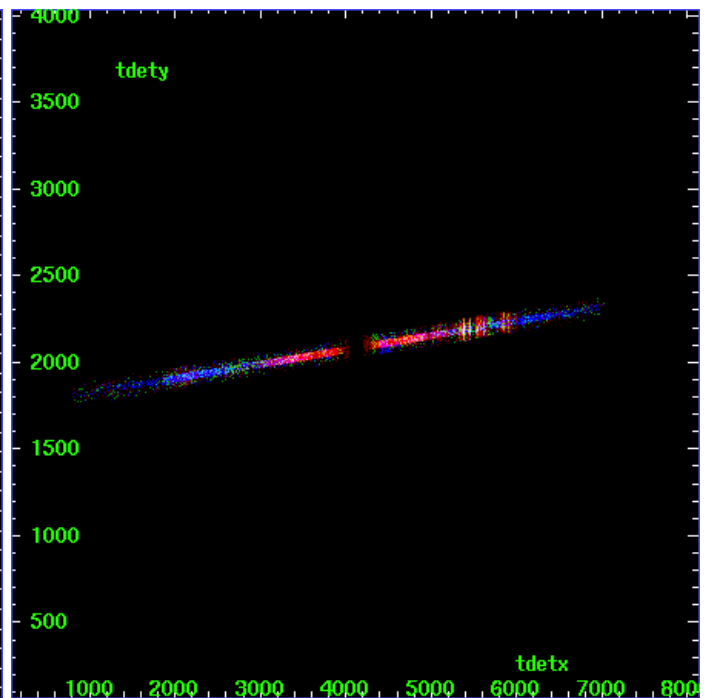
MEG Zero Order



MEG Order Sort ALL

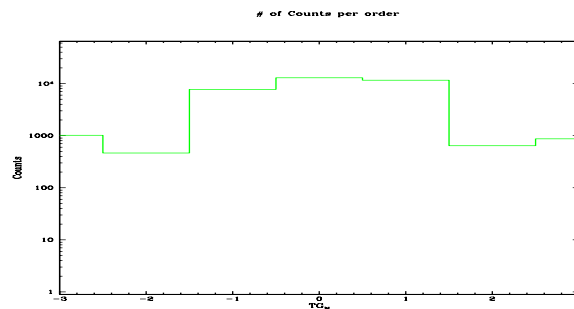


Spot Image MEG

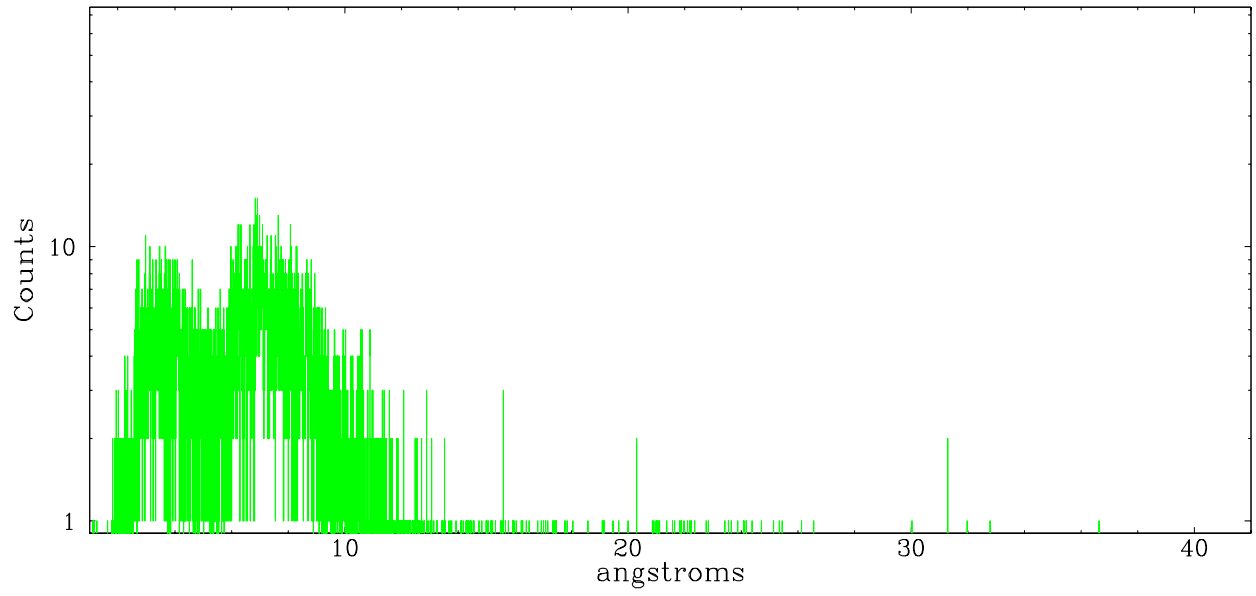


Full Detector MEG

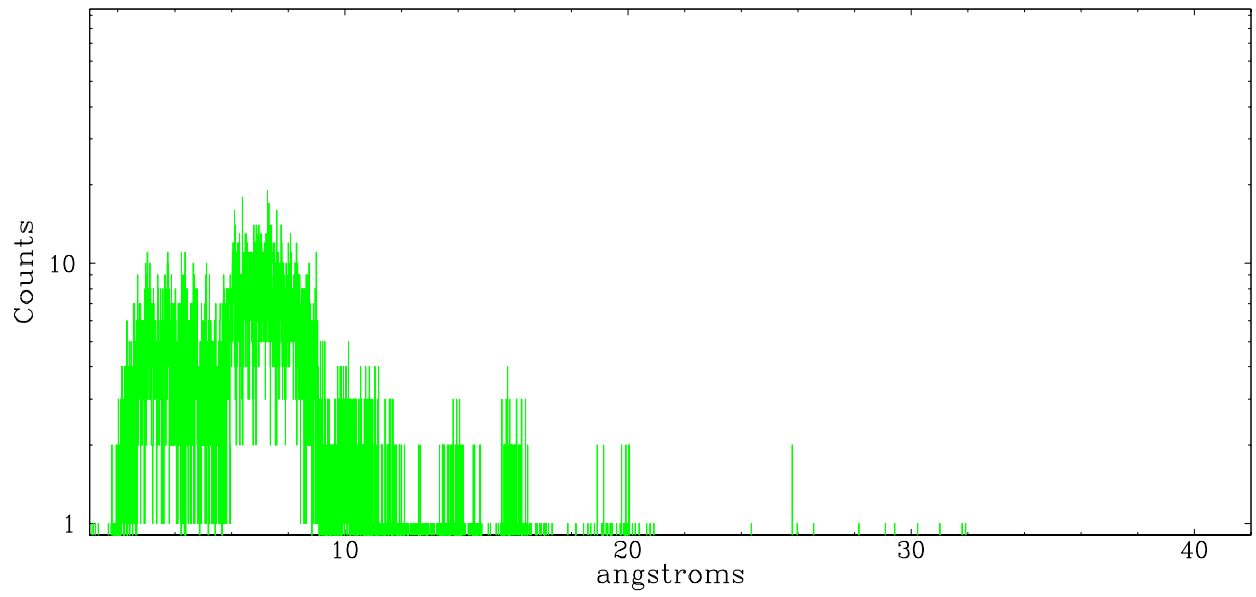
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1016	464	7744	12955	11589	638	865



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	51.092

A.2 Comments

Zeroth order is not at the exact position specified by the observer. Observer provided coordinates ra=18:36:58.00, dec=-59:24:10.00. The zeroth order was correctly found at ra=18:36:58.242, dec=-59:24:08.16.

CCD chip S4 has a higher level of background streaking than usual for this chip. The software has a tool called destreak that removes the streaked background in Level 2 data in most cases, but the high level of counts in the streaks for this image have not been completely removed. The user should use caution when analyzing the dispersed spectra on chip S4.