

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 3010 - L2 Version 001
Chandra X-Ray Center

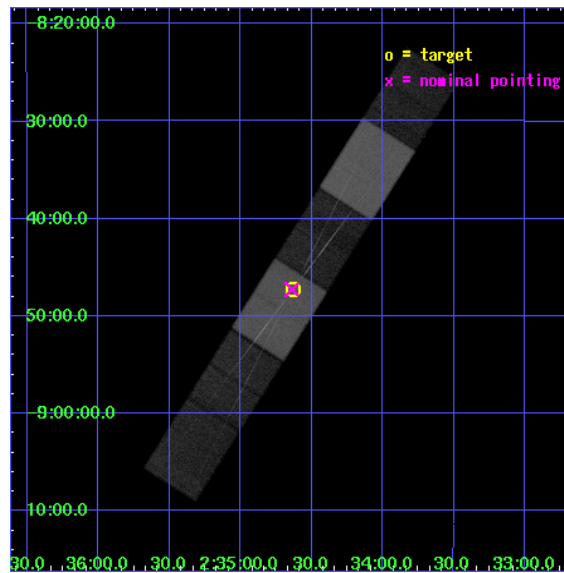
L2 Processing Date : Sep 21 2006

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1 Front

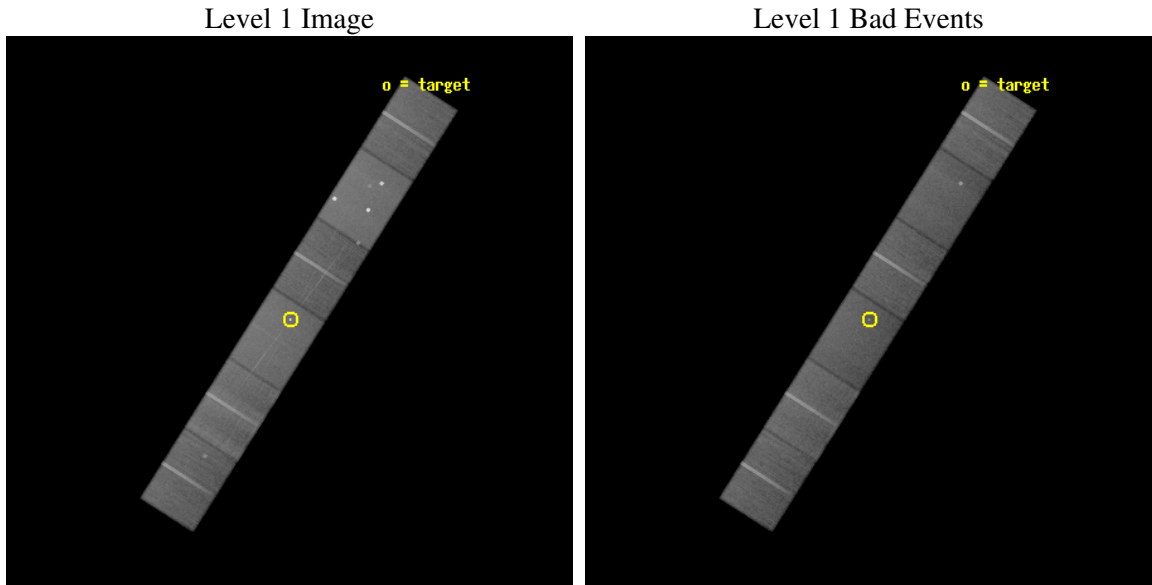
seq_num	700449
obs_id	3010
title	THE HIGH RESOLUTION VIEW OF THE COMPLEX WARM ABSORBER/EMITTER OF NGC 985
observer	Dr. Fabrizio Nicastro
object	NGC 985
dtcycle	0
cycle	P
ra_targ	38.6575
dec_targ	-8.7875
ra_nom	38.659725437988
dec_nom	-8.7878343192371
roll_nom	122.43436350157
revision	2
ontime	77715.0
livetime	76459.835343009
ontime4	77712.459009826
ontime5	77715.0
ontime6	77715.0
ontime7	77715.0
ontime8	77715.0
ontime9	77715.0
l2events	607718



2 OBI

2.1 OBI

2.1.1 Images

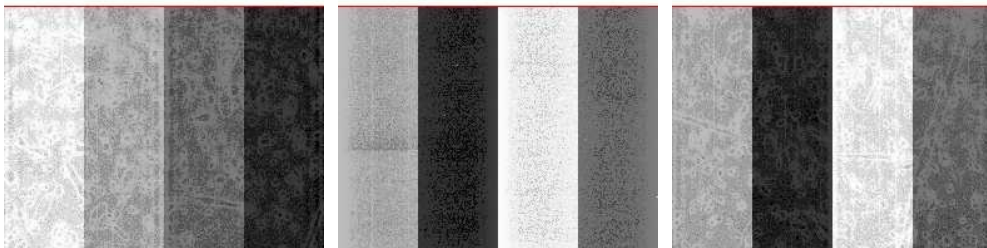


2.1.2 Bias

Chip 4

Chip 5

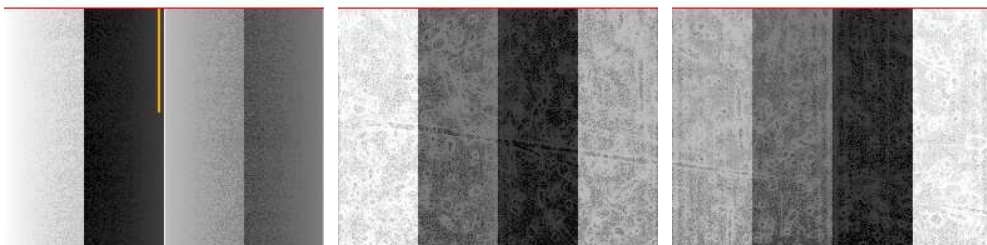
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldbver	3.2.3
date	2006-09-21T04:09:06
revision	2

sched_exp_time	77552.304000
ontime	77719.269124895
ontime4	77716.728134722
ontime5	77719.269124895
ontime6	77719.269124895
ontime7	77719.269124895
ontime8	77719.269124895
ontime9	77719.269124895
l1events	2864458

2.1.4 Events

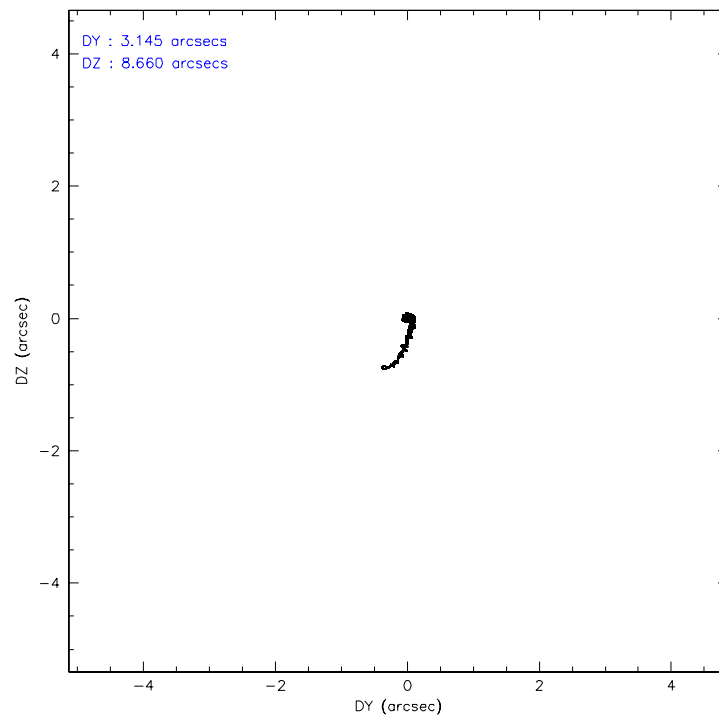
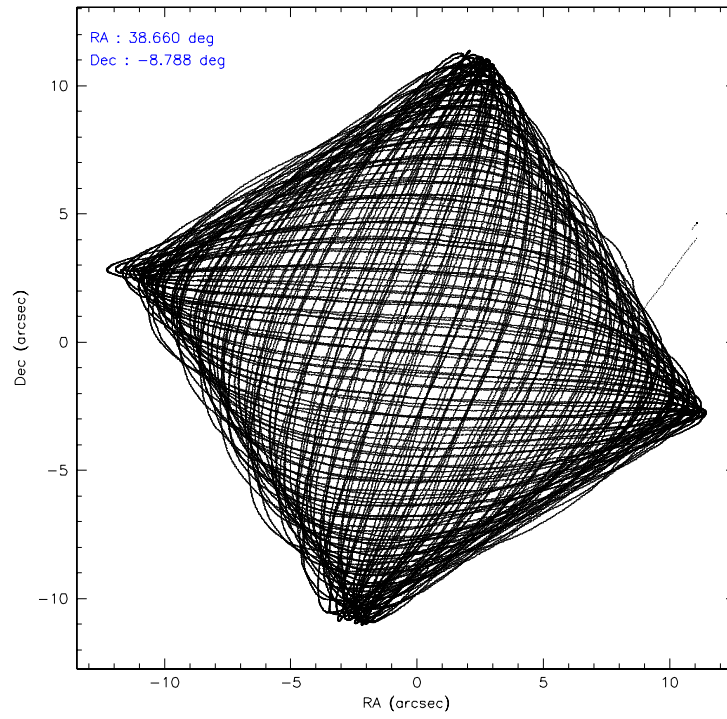
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	438698	608122	402935	520465	501824	392414
rejected events	390071	313707	351884	309729	396992	343624
rejected %	88%	51%	87%	59%	79%	87%

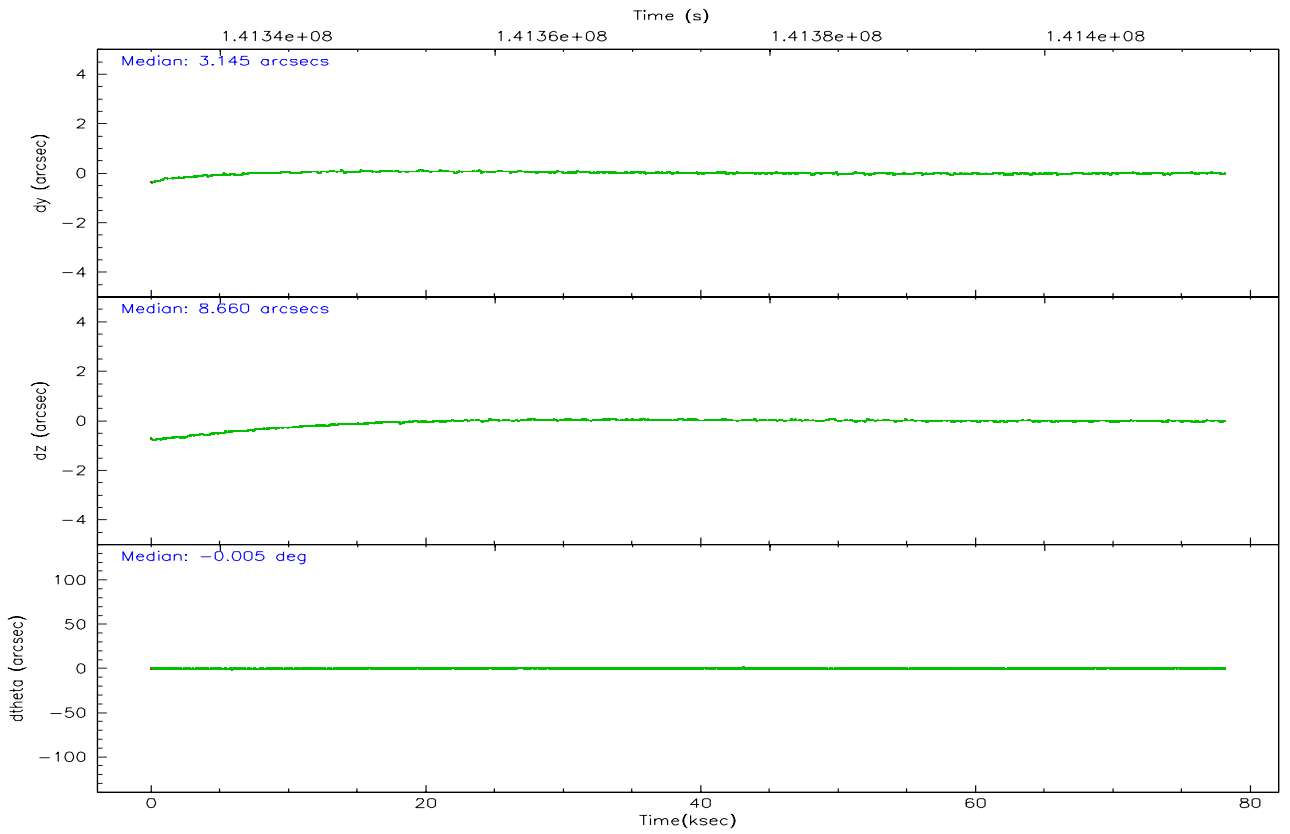
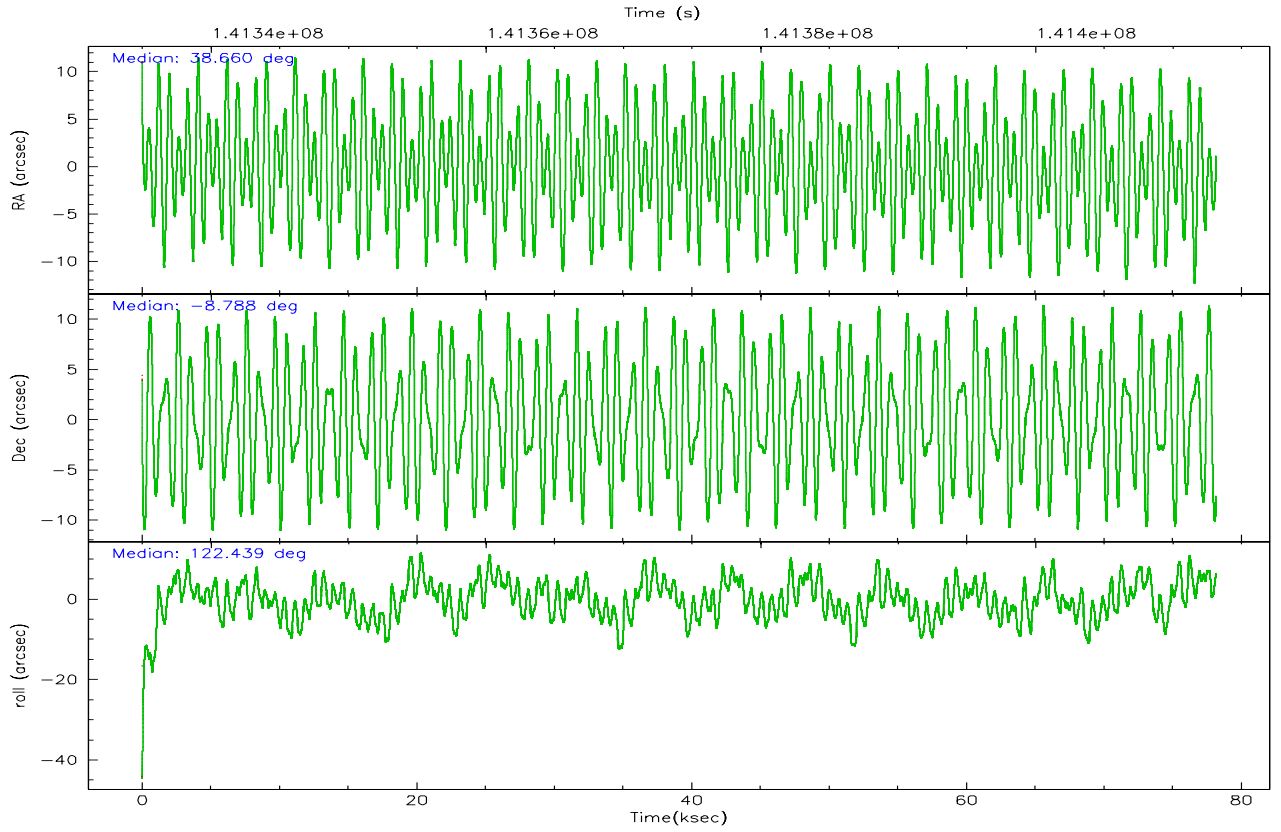
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	19408	58019	21834	14426	33119	20024
	4%	9%	5%	2%	6%	5%
grade 1 events	187	497	180	382	274	161
	0%	0%	0%	0%	0%	0%
grade 2 events	11466	83756	9877	51407	22230	9593
	2%	13%	2%	9%	4%	2%
grade 3 events	4780	6774	5113	13039	11247	5018
	1%	1%	1%	2%	2%	1%
grade 4 events	4536	6260	4886	12639	10584	4764
	1%	1%	1%	2%	2%	1%
grade 5 events	14139	28915	16593	36275	21300	17024
	3%	4%	4%	6%	4%	4%
grade 6 events	8440	139614	9342	119234	27654	9393
	1%	22%	2%	22%	5%	2%
grade 7 events	375742	284287	335110	273063	375416	326437
	85%	46%	83%	52%	74%	83%

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	38.684317	38.65972543798777	Subarray requested	CUSTOM	CUSTOM
Pointing Dec	-8.800126	-8.787834319237144	Subarray start row	1	1
Pointing Roll	122.281506	122.4343635015729	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	141335606.184000	141334425.09956			
Observation start date	2002-06-24T19:52:22	2002-06-24T19:33:45			
Observation end time	141413158.184000	141413472.5903			
Observation end date	2002-06-25T17:24:54	2002-06-25T17:31:12			
Read mode	TIMED	TIMED			

2.3 Aspect



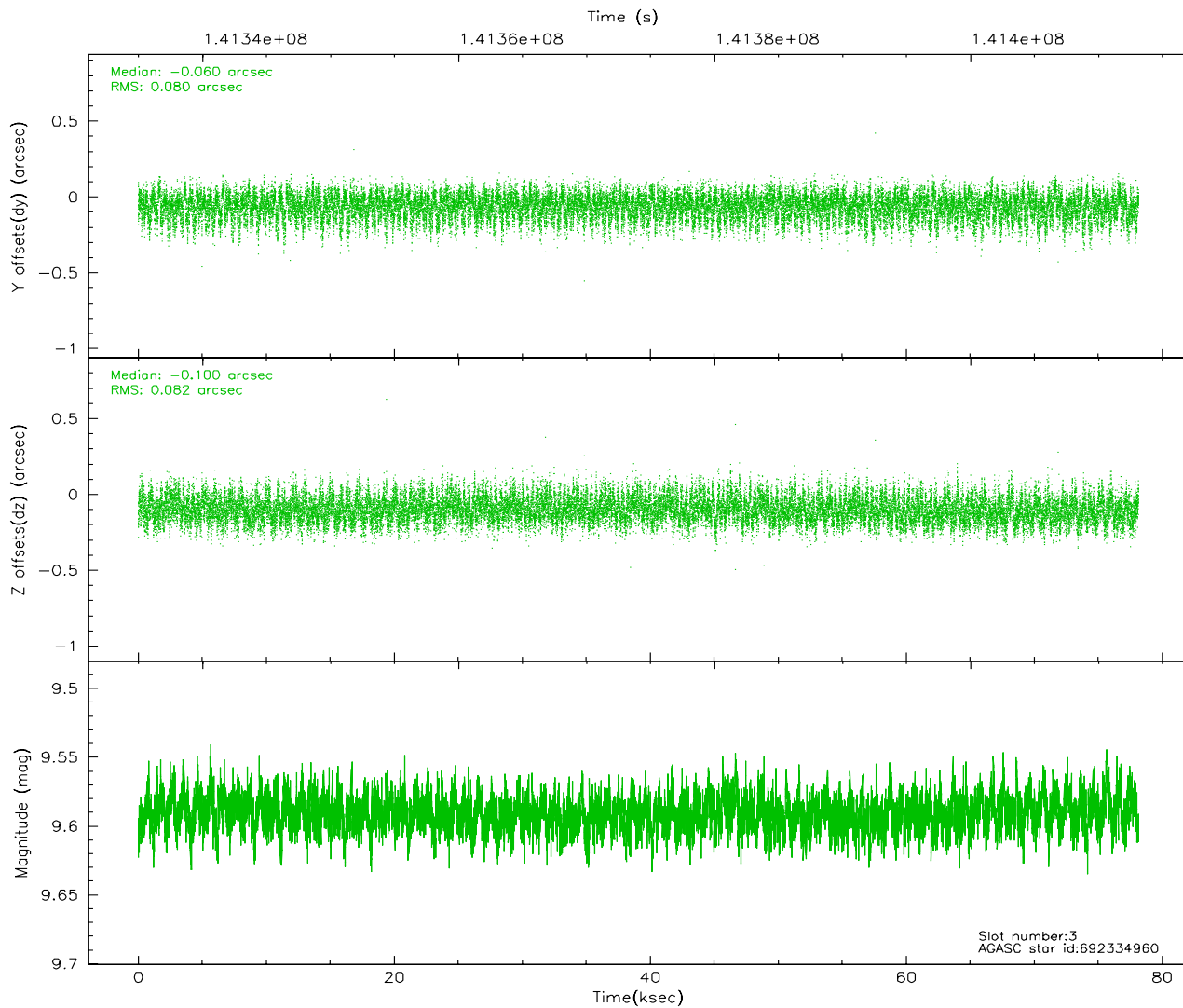
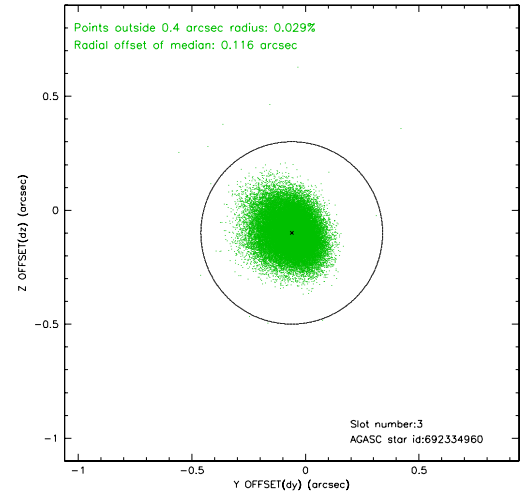
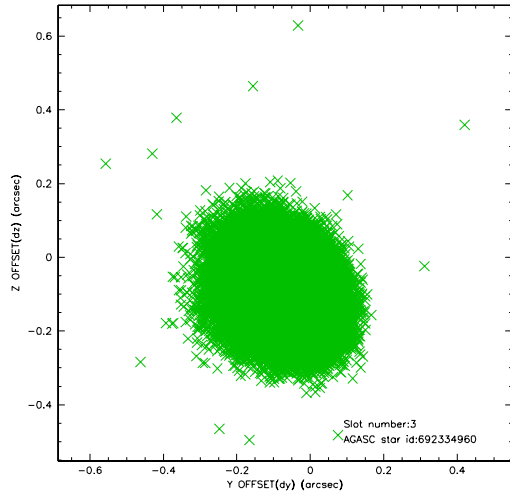


Slot Statistics

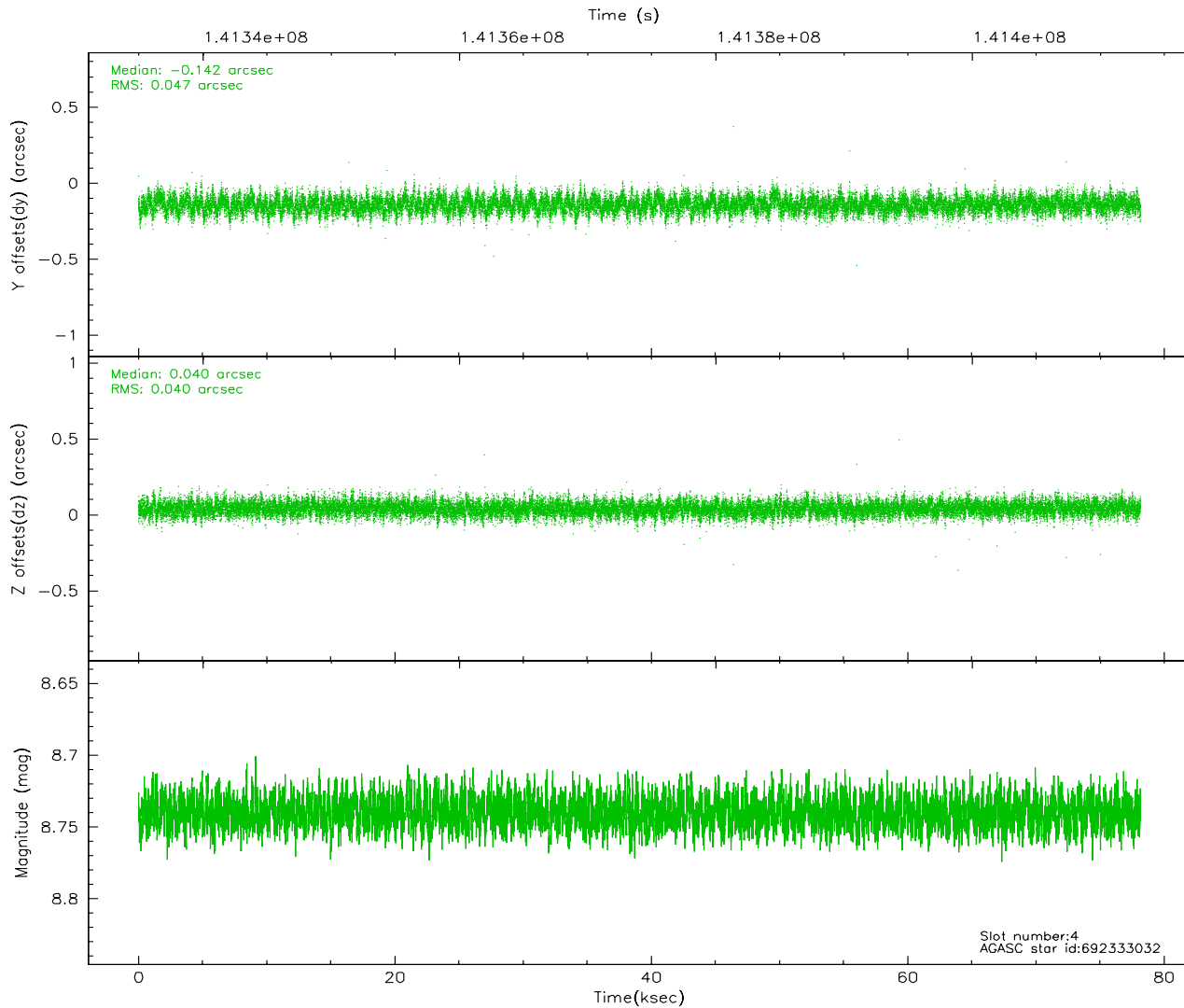
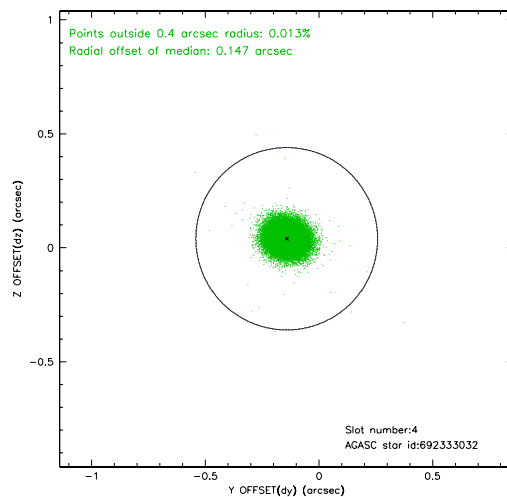
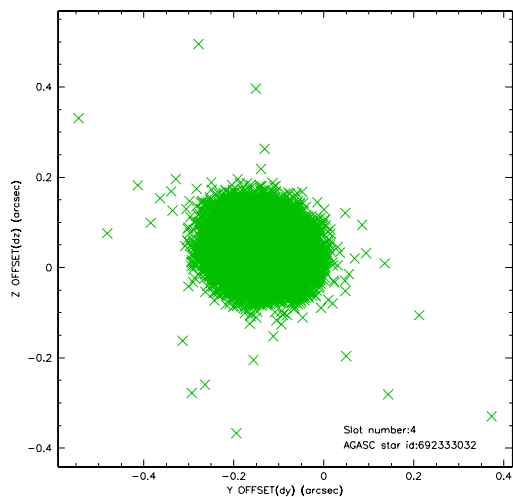
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	19065	-0.037	0.006	0.008	0.013	0.000000	0.000000	-755.58	-1791.89
1	FID	ACIS-S-4	7.20	19061	-0.033	0.016	0.007	0.011	0.000000	0.000000	2157.69	116.72
2	FID	ACIS-S-5	7.23	19063	0.039	-0.014	0.007	0.012	0.000000	0.000000	-1808.47	110.20
3	GUIDE	692334960	9.59	38053	-0.060	-0.100	0.122	0.194	38.103081	-8.961434	611.33	2058.96
4	GUIDE	692333032	8.74	38124	-0.142	0.040	0.065	0.106	38.230649	-8.700316	1164.86	1173.88
5	GUIDE	692717464	9.06	38118	-0.076	0.061	0.073	0.120	38.968454	-8.565552	172.98	-1305.50
6	GUIDE	692719216	9.90	37851	0.008	0.040	0.104	0.170	39.254652	-9.102098	-2003.53	-1132.01
7	GUIDE	692716920	10.19	37693	0.277	-0.042	0.135	0.227	38.802594	-9.416913	-2101.60	831.17

2.4 Star Slots

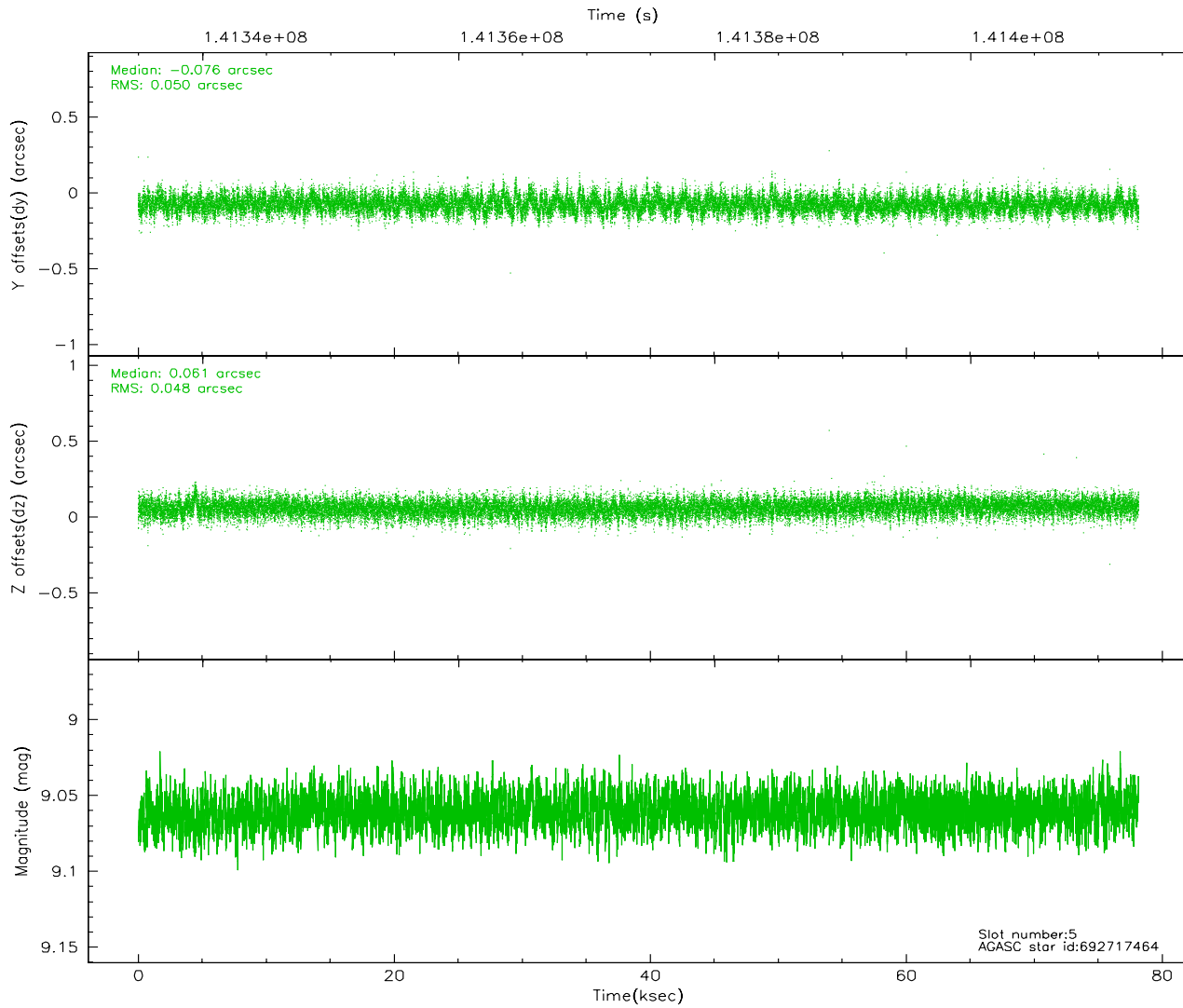
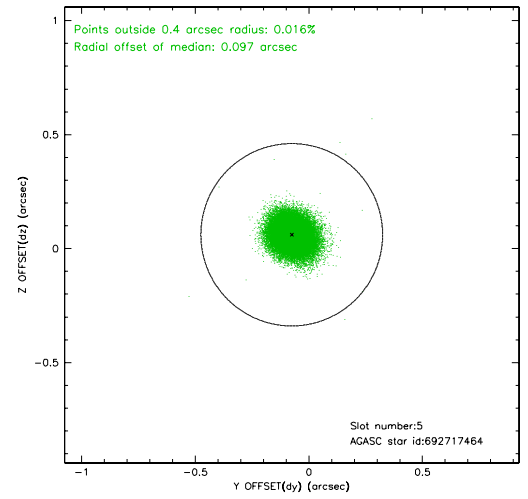
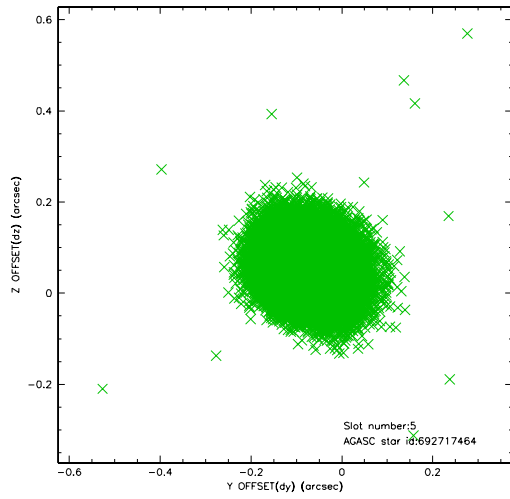
2.4.1 Slot 3



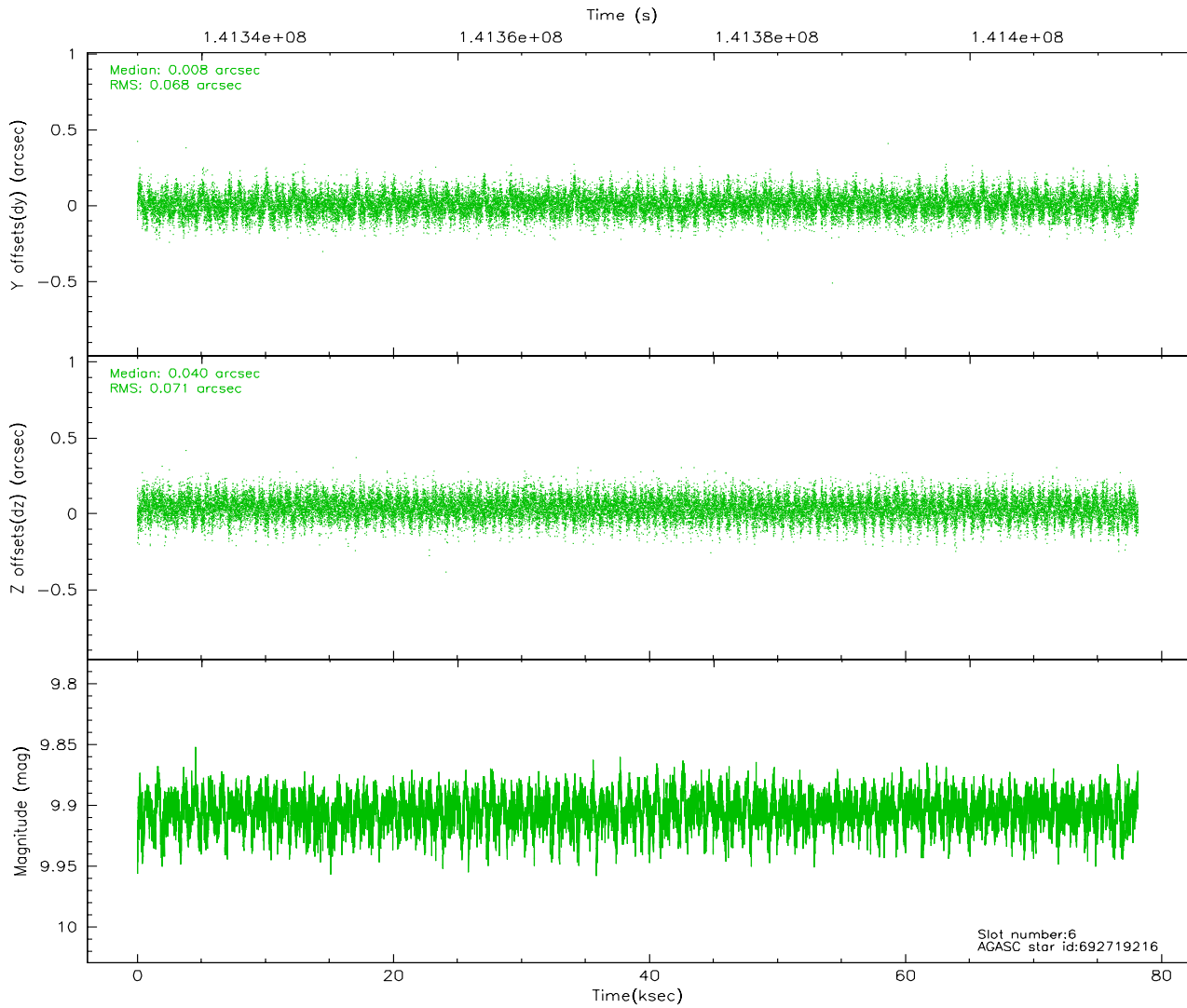
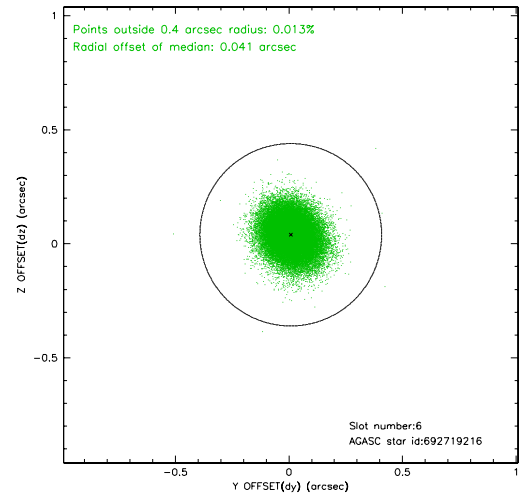
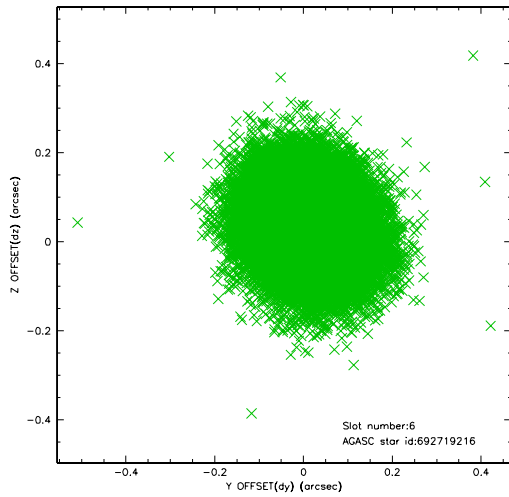
2.4.2 Slot 4



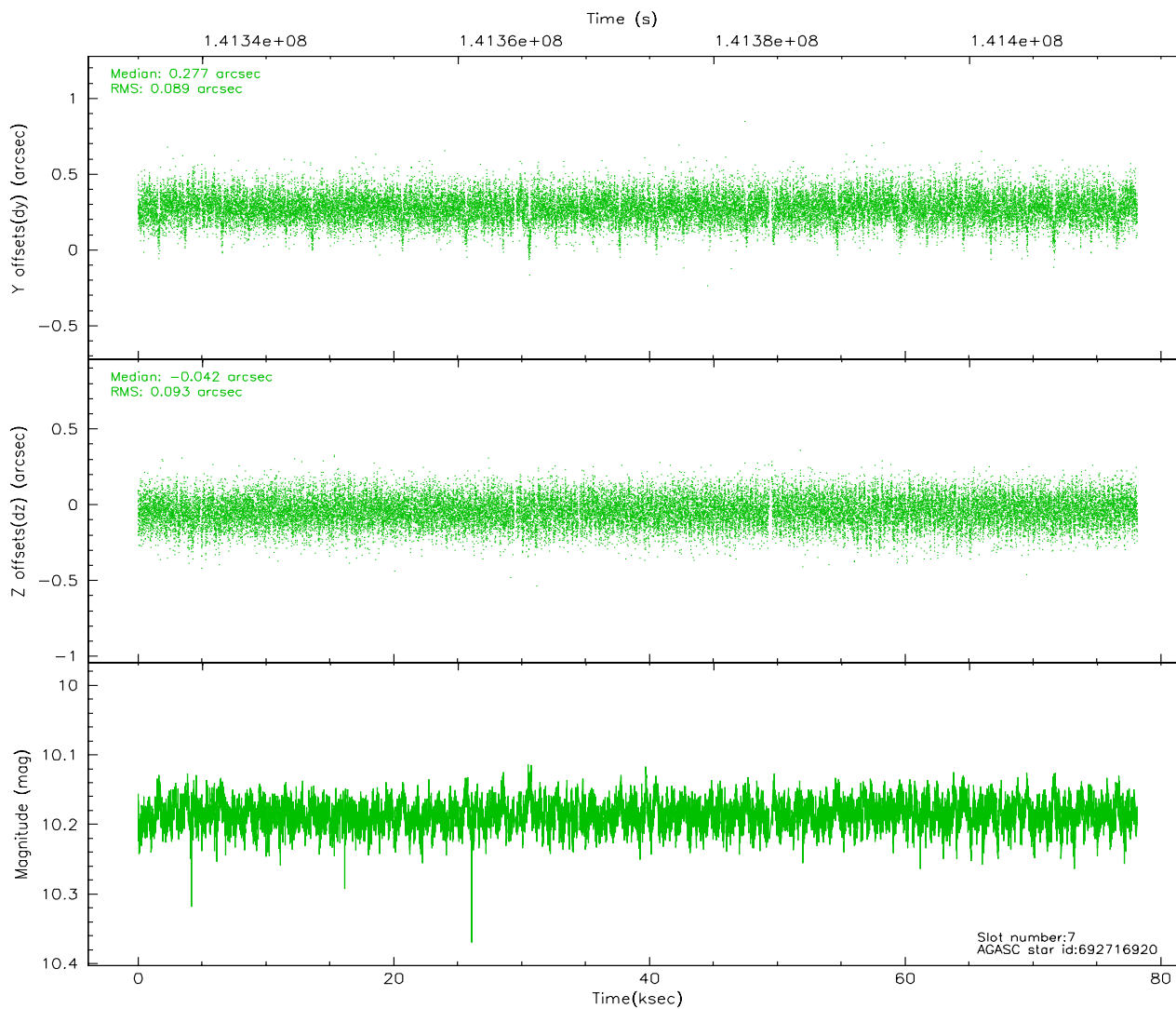
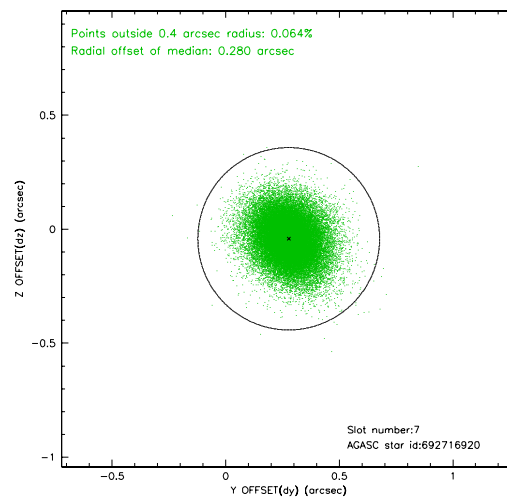
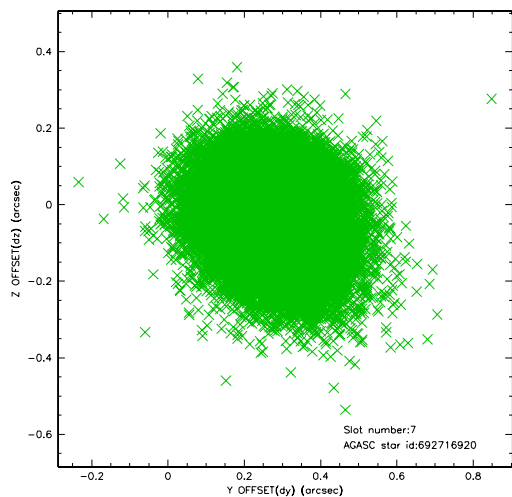
2.4.3 Slot 5



2.4.4 Slot 6

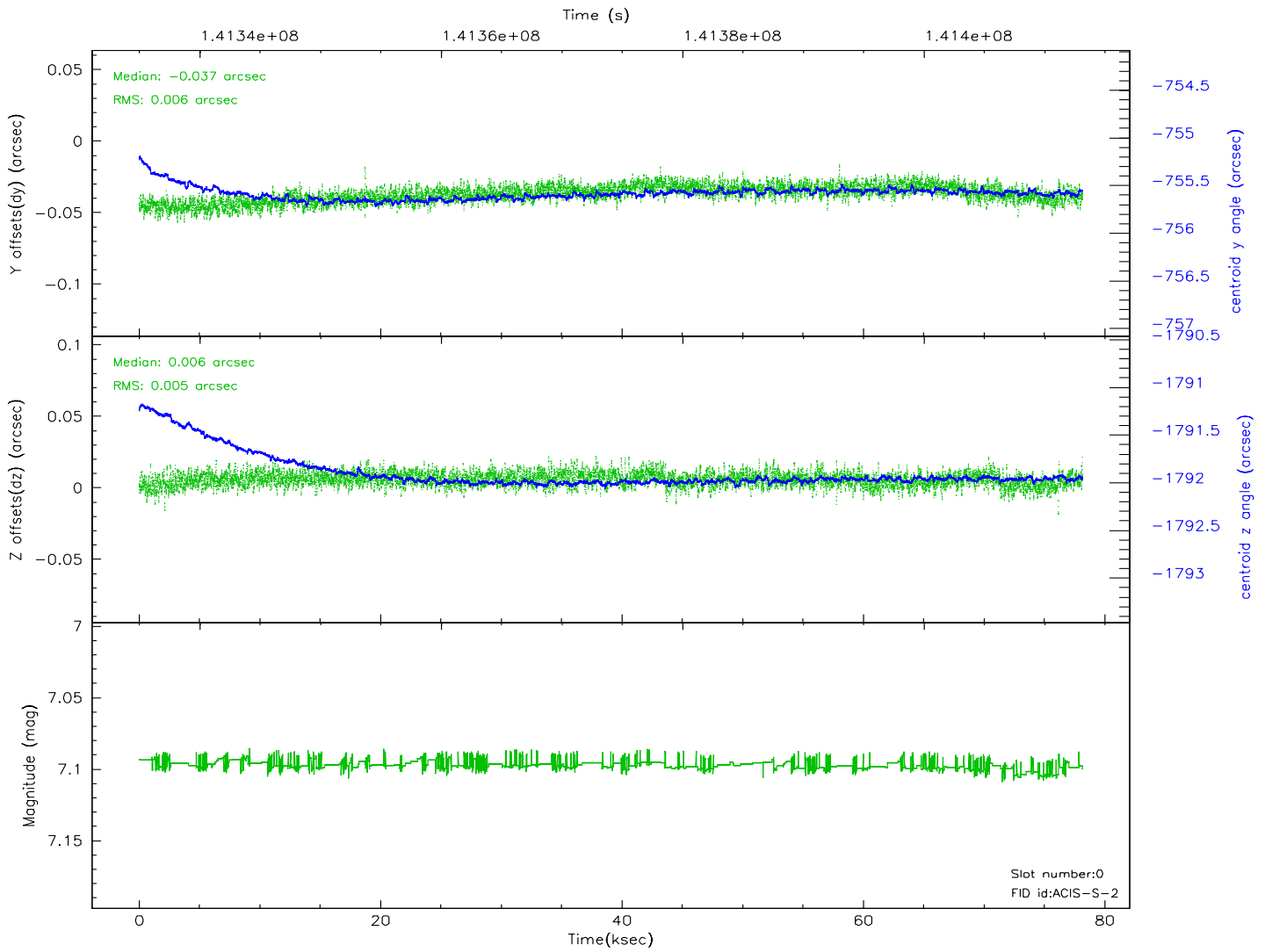
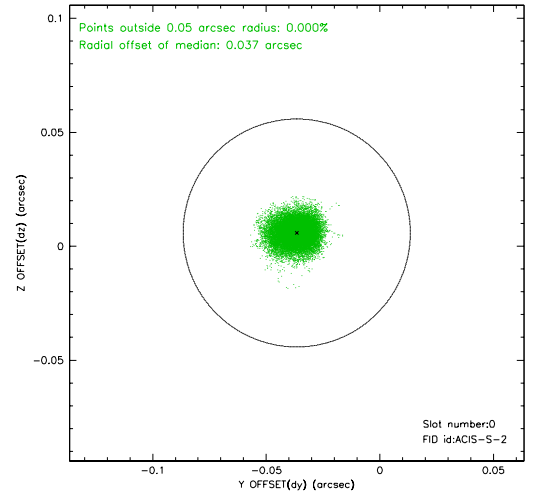
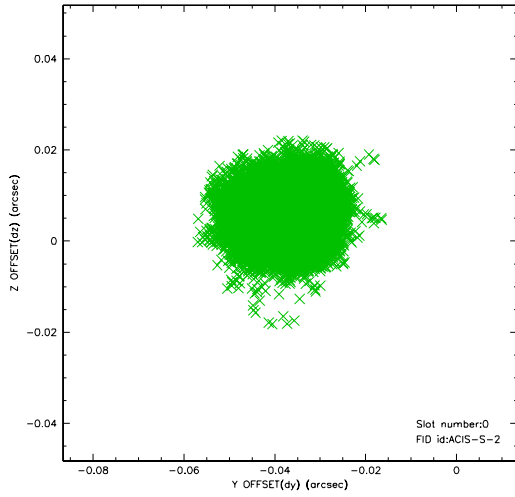


2.4.5 Slot 7

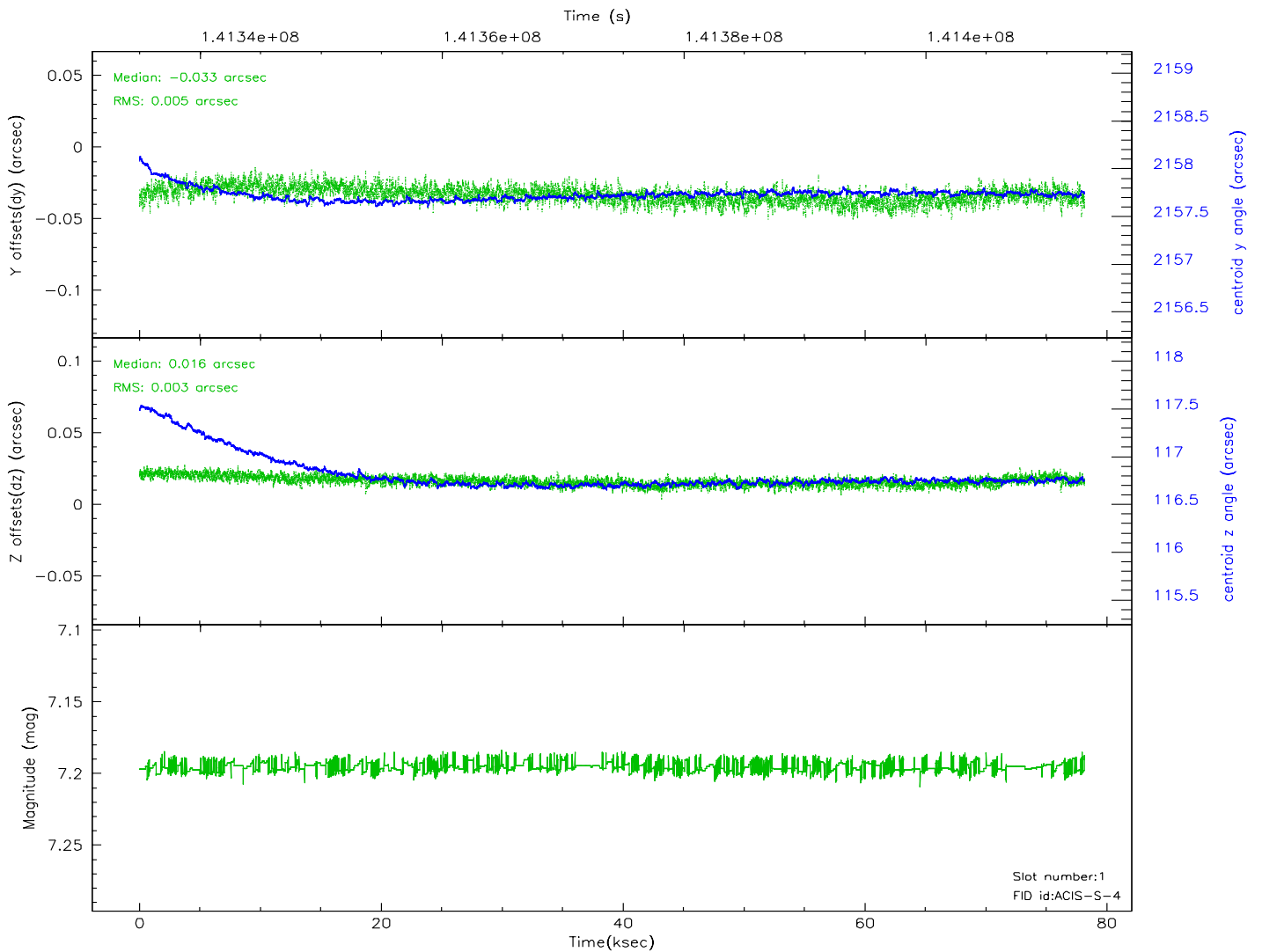
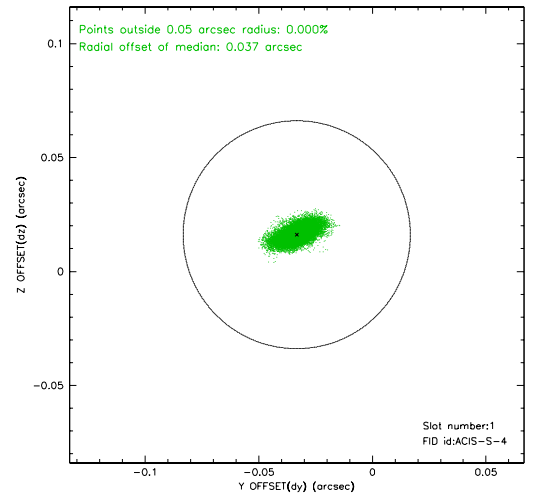
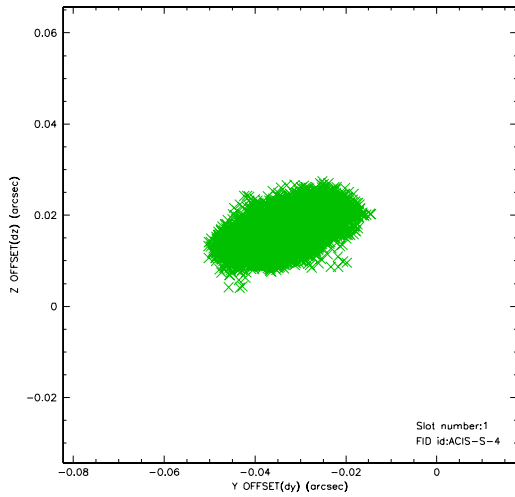


2.5 FID Slots

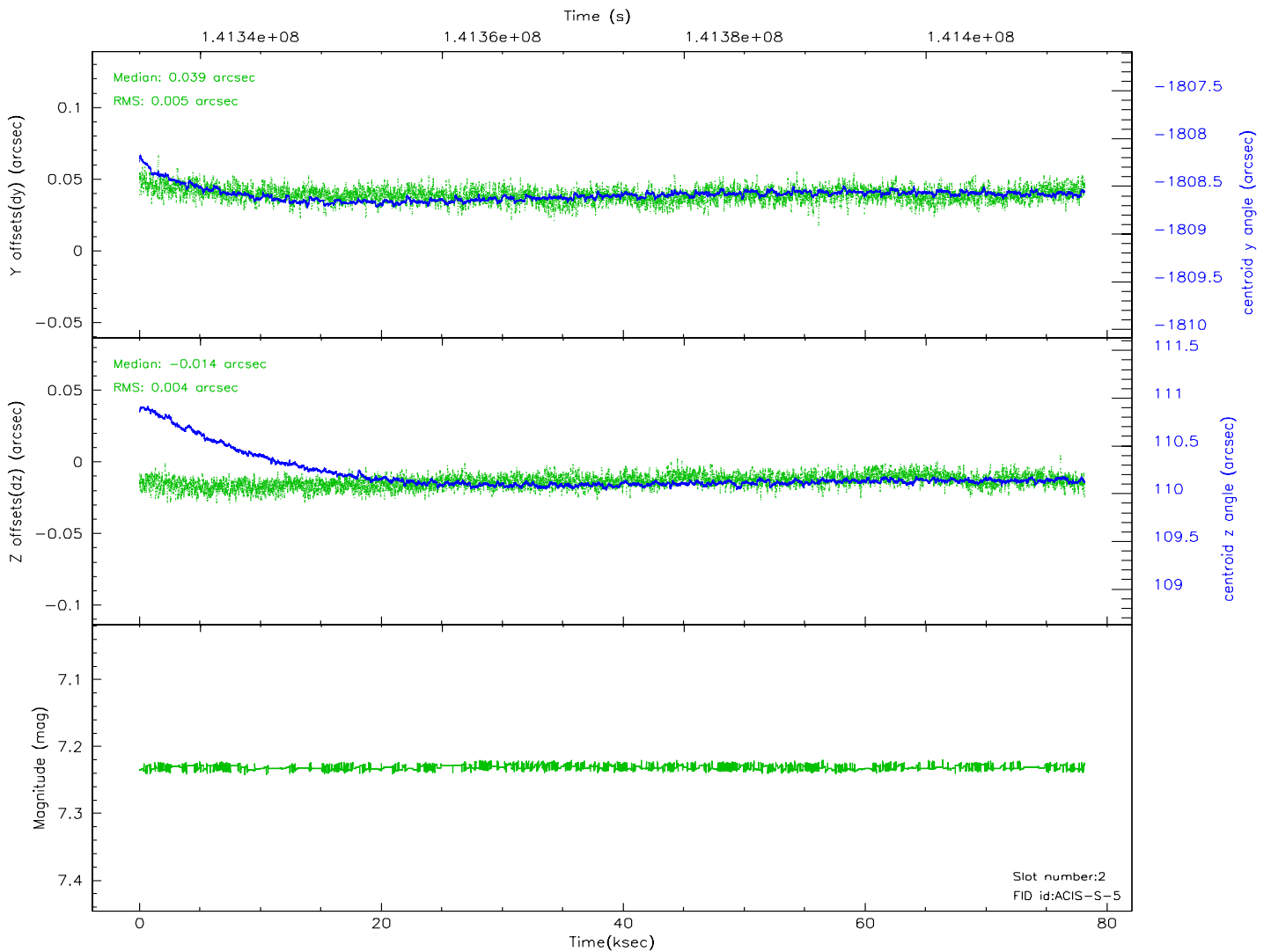
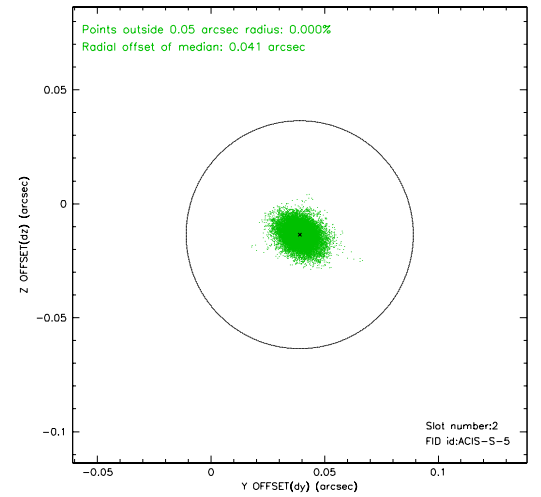
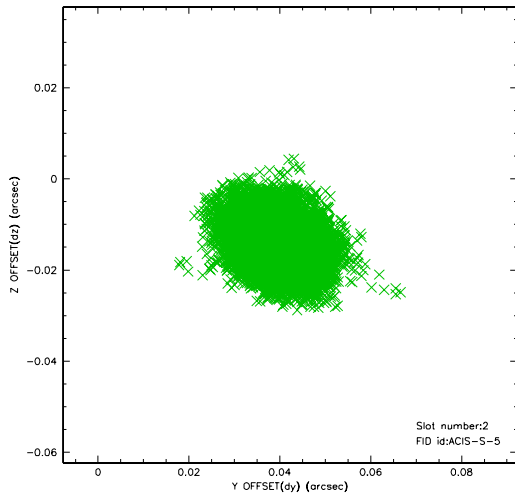
2.5.1 Slot 0



2.5.2 Slot 1

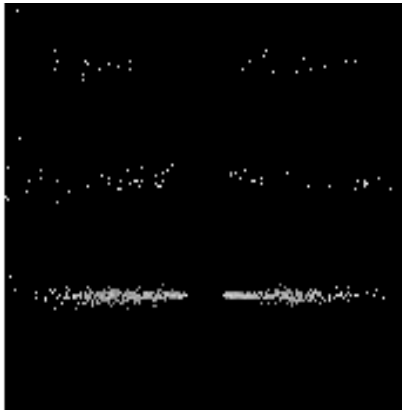


2.5.3 Slot 2

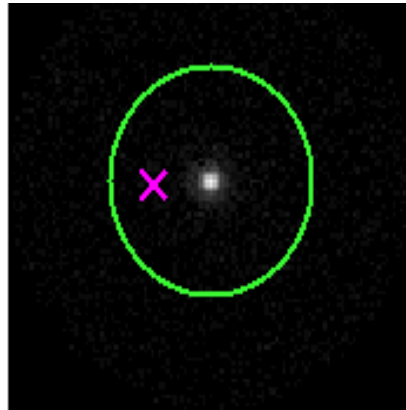


3 Gratings

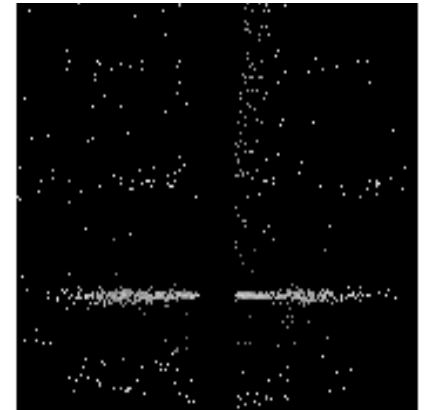
3.1 HEG Arm



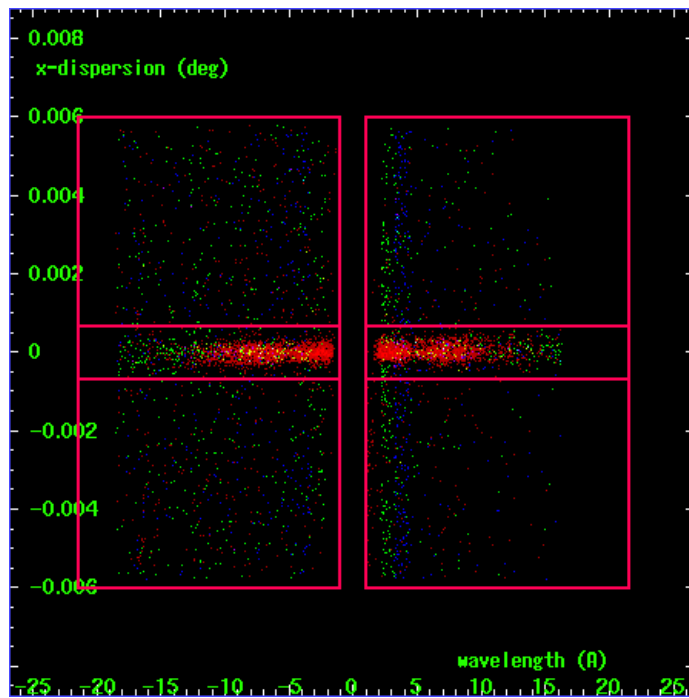
HEG Order Sort 123



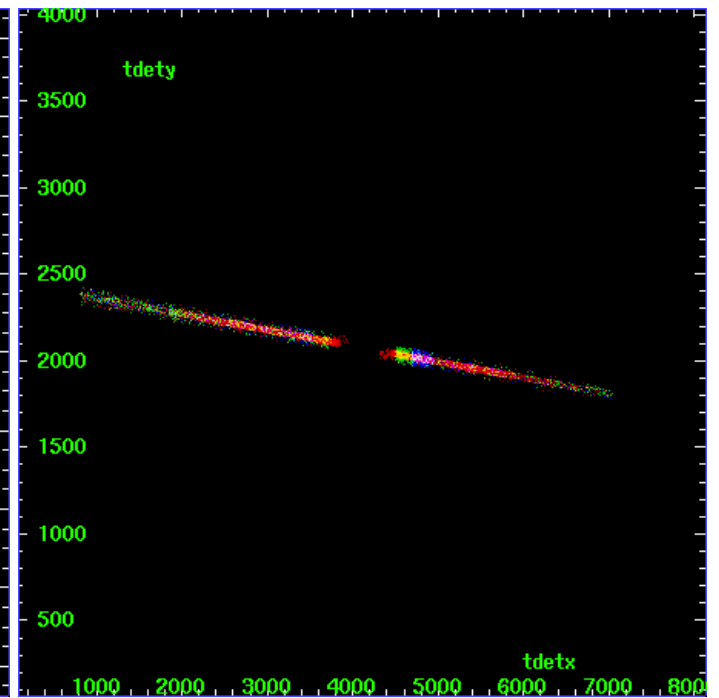
HEG Zero Order



HEG Order Sort ALL

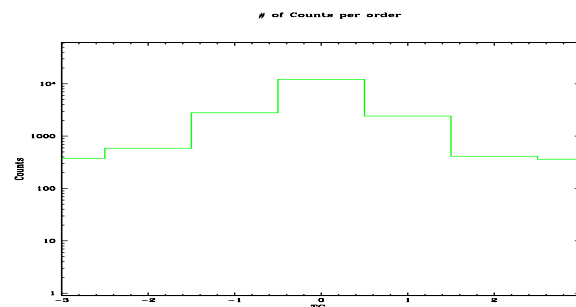


Spot Image HEG

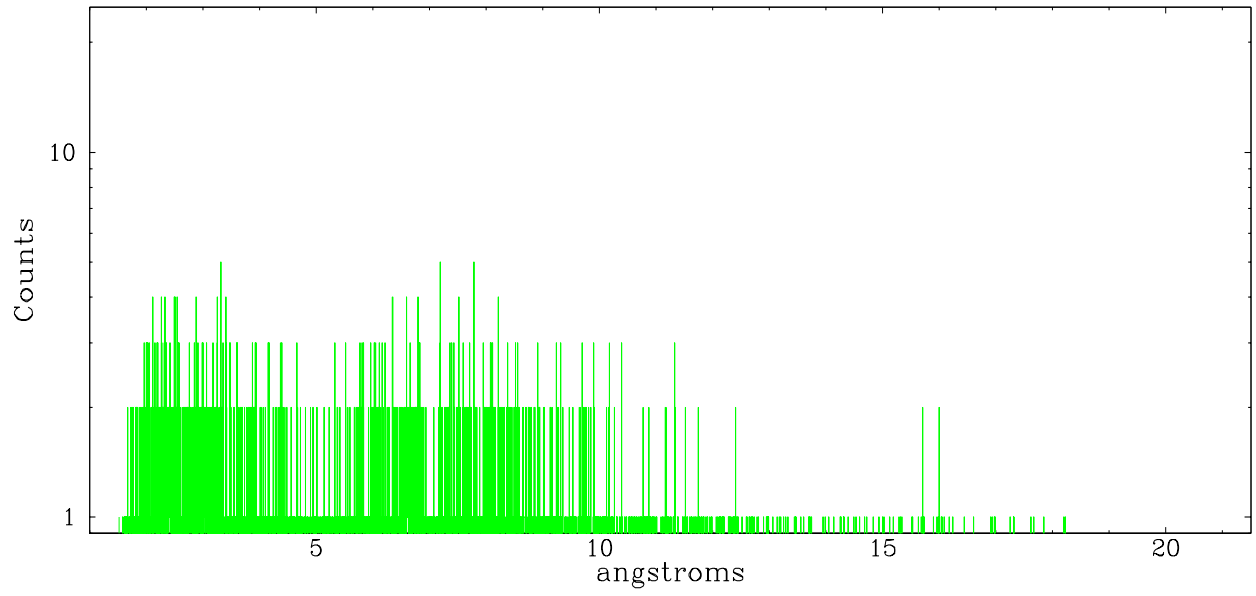


Full Detector HEG

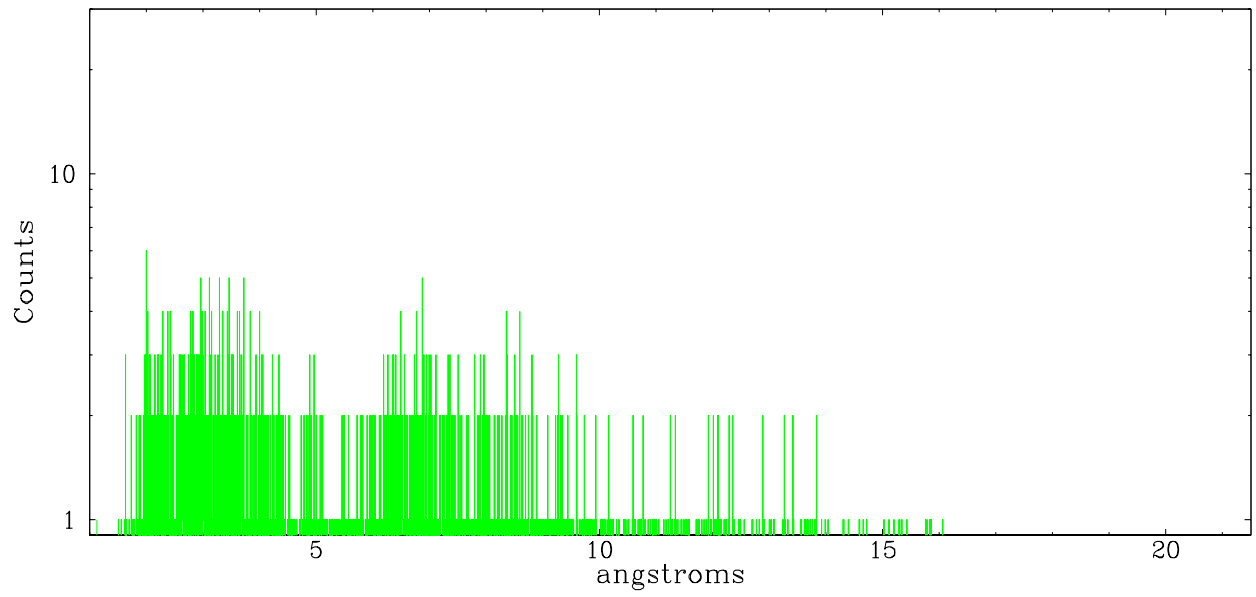
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	377	589	2795	12213	2424	413	363



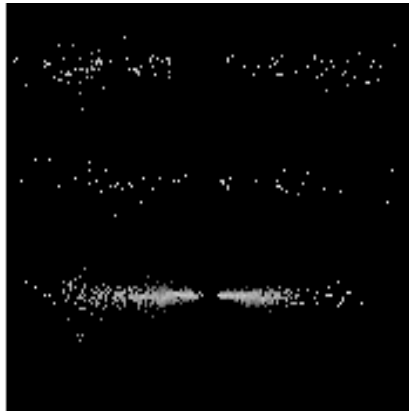
heg order -1



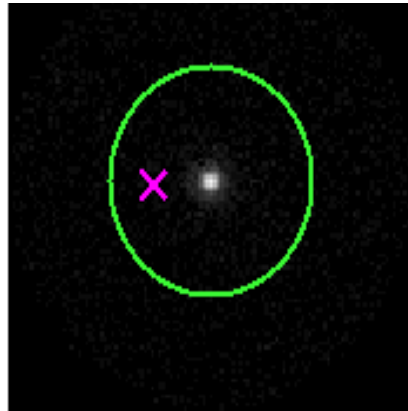
heg order +1



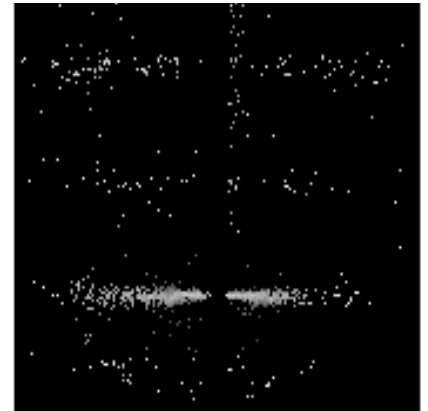
3.2 MEG Arm



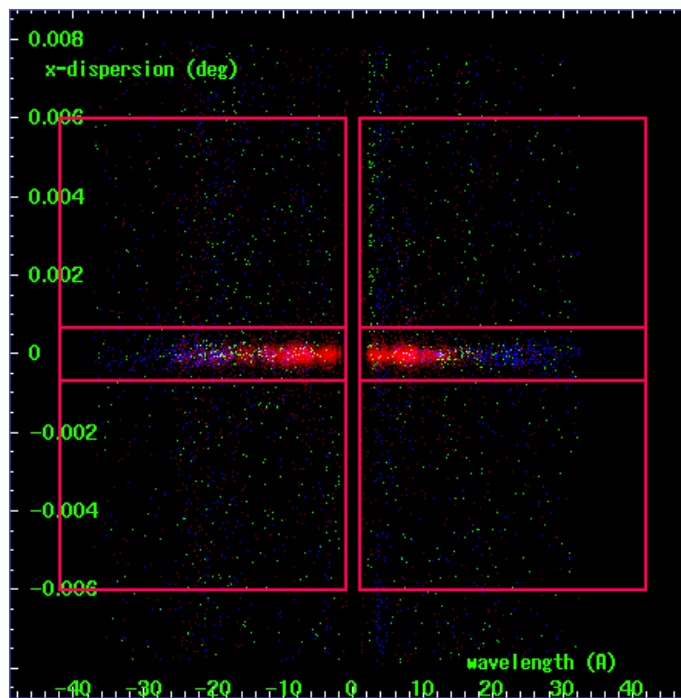
MEG Order Sort 123



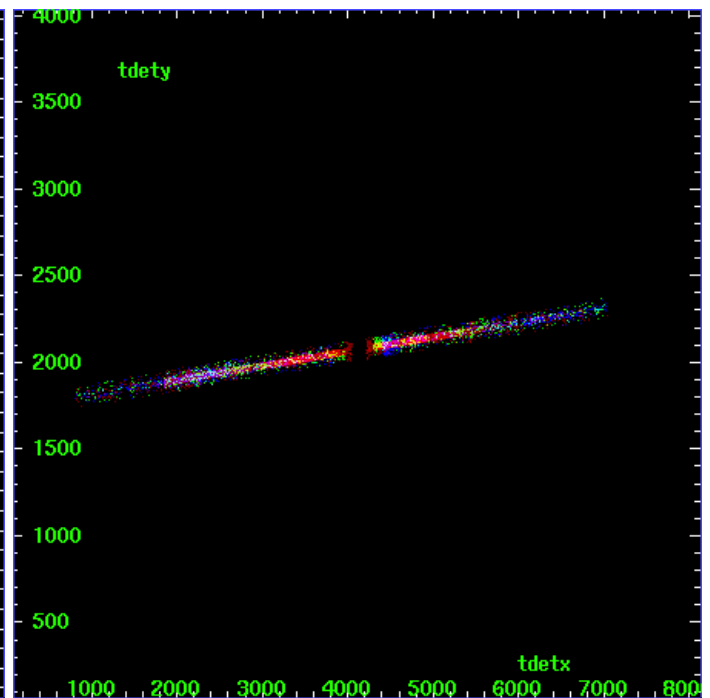
MEG Zero Order



MEG Order Sort ALL

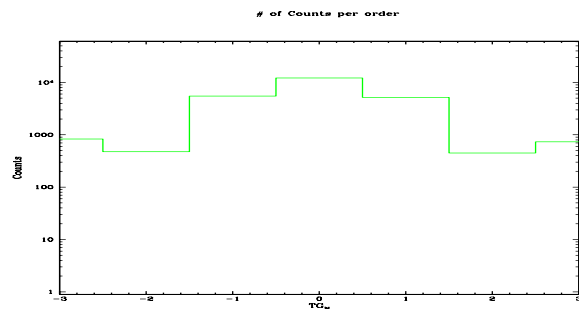


Spot Image MEG

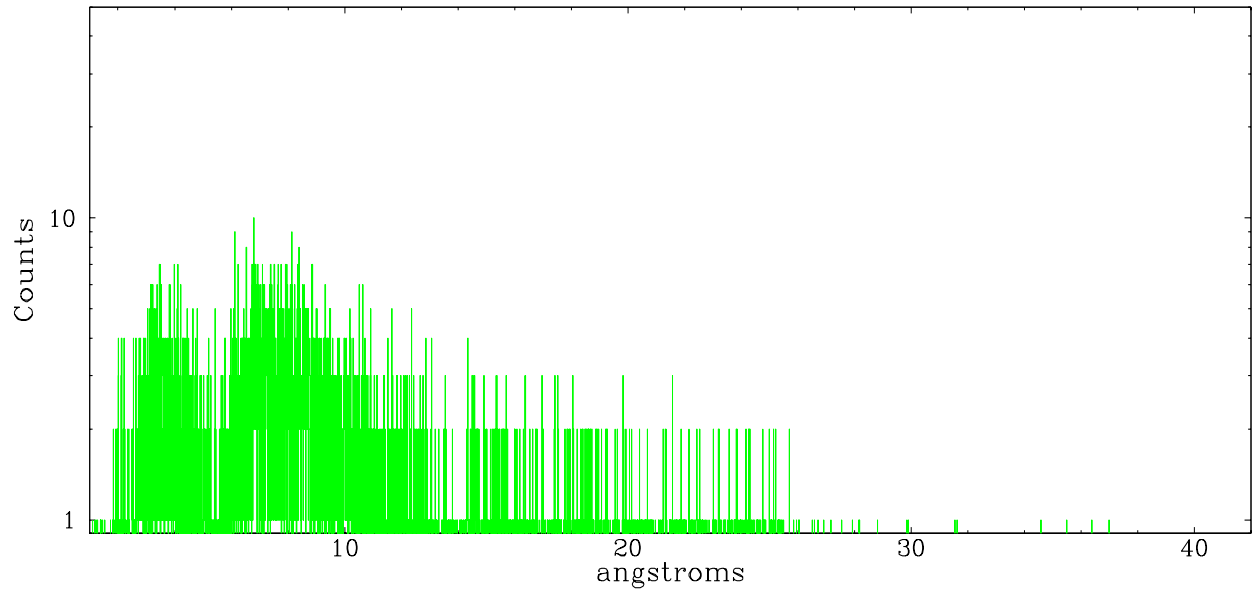


Full Detector MEG

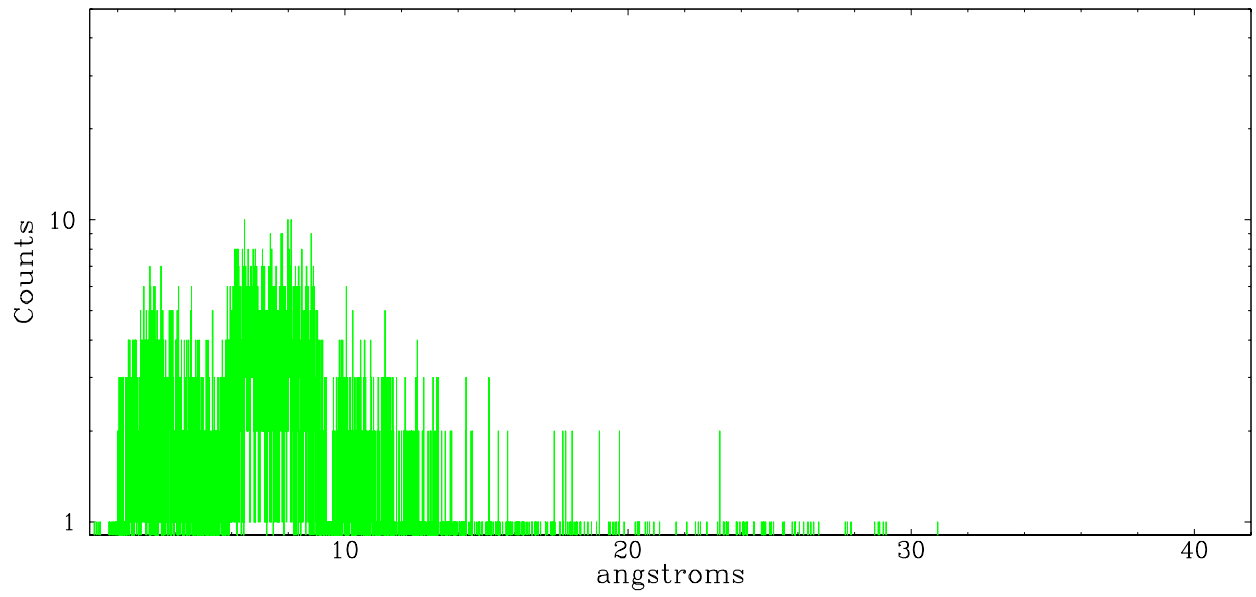
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	831	476	5474	12213	5167	447	732



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.09.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	77.715

A.2 Comments

Observer specified target at 02:34:37.80, -08:47:15.00. Target found at 02:34:37.831, -08:47:16.12.