

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 5423 - L2 Version 002  
Chandra X-Ray Center

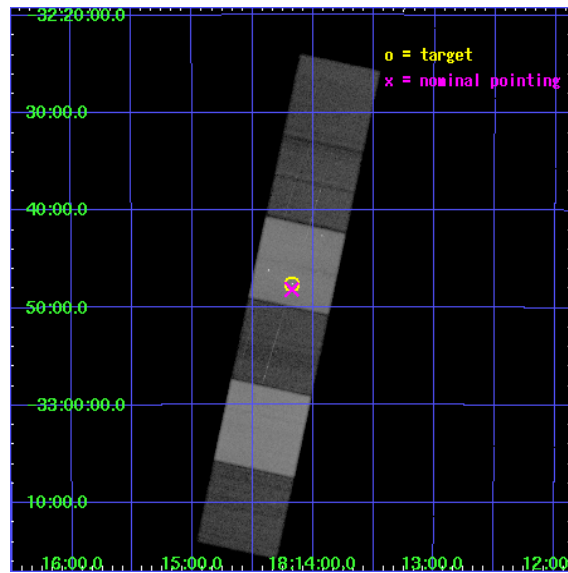
L2 Processing Date : Mar 19 2006

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# 1 Front

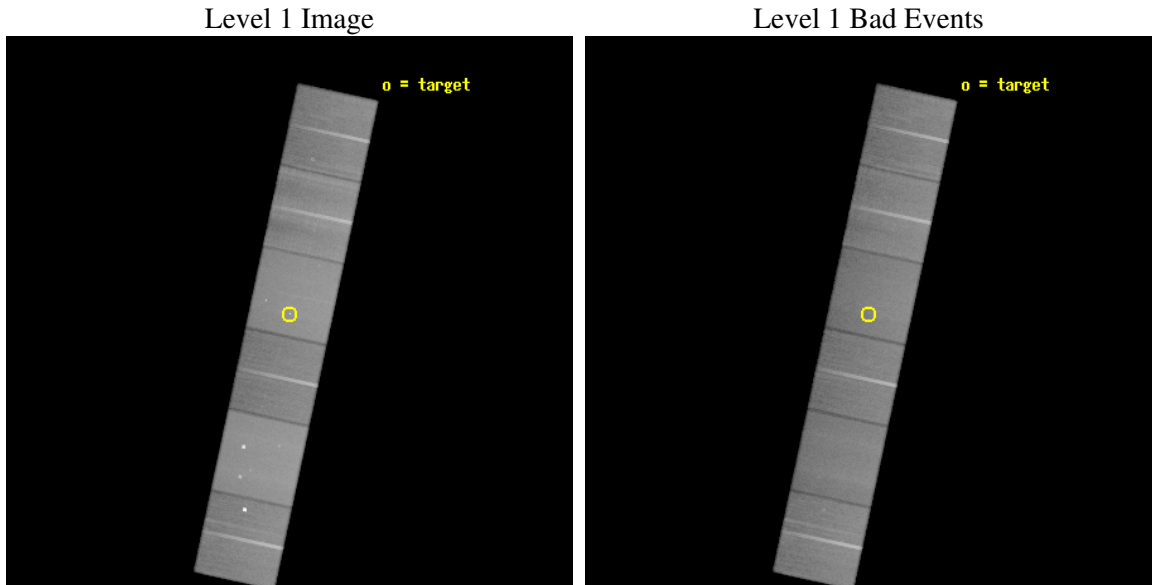
seq_num	200356
obs_id	5423
title	The Production of X-ray Emission in Classical T Tauri Stars
observer	Mr. Gregory Herczeg
object	V4046 Sgr
dtcycle	0
cycle	P
ra_targ	273.54375
dec_targ	-32.792917
ra_nom	273.54415539035
dec_nom	-32.802562121122
roll_nom	282.13282521595
revision	2
ontime	98982.399631262
livetime	97729.024887085
ontime4	98979.158640981
ontime5	98982.399631262
ontime6	98982.399631262
ontime7	98982.399631262
ontime8	98982.399631262
ontime9	98975.917730212
l2events	1047511



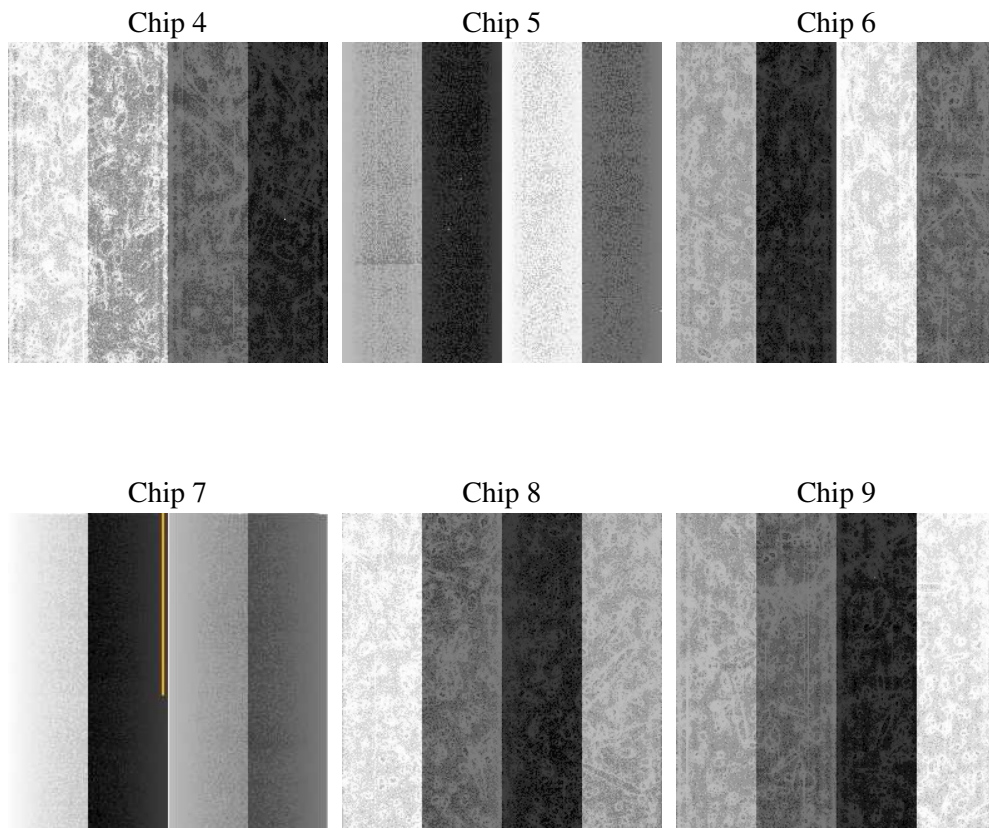
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1
ascdsver	7.6.7.1
caldbver	3.2.1
date	2006-03-19T01:30:34
revision	2

sched_exp_time	98800.000000
ontime	100075.9896661
ontime4	100072.74867582
ontime5	100075.98968601
ontime6	100075.9896661
ontime7	100075.9896661
ontime8	100075.9896661
ontime9	100069.50776505
l1events	4928021

### 2.1.4 Events

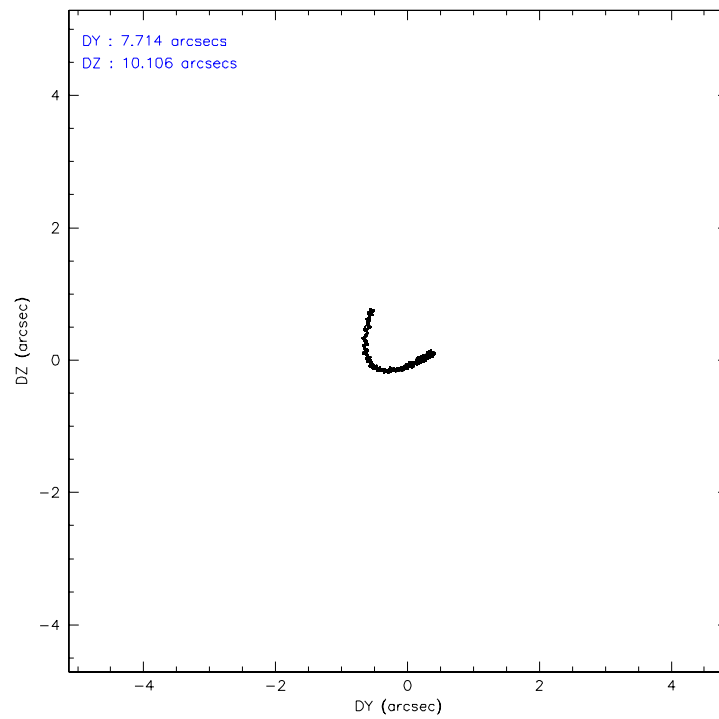
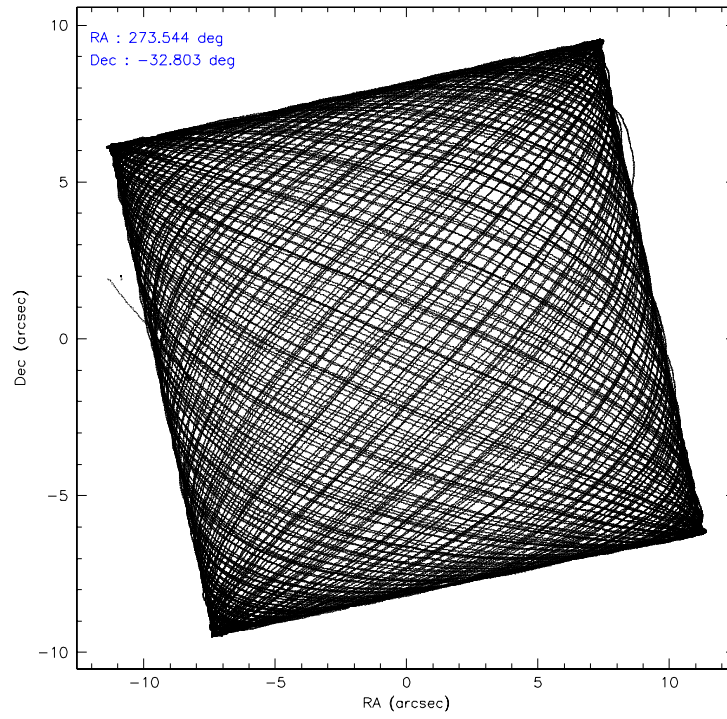
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	773126	1012034	674779	929497	856838	681747
rejected events	666278	577571	593517	579449	672654	598253
rejected %	86%	57%	87%	62%	78%	87%

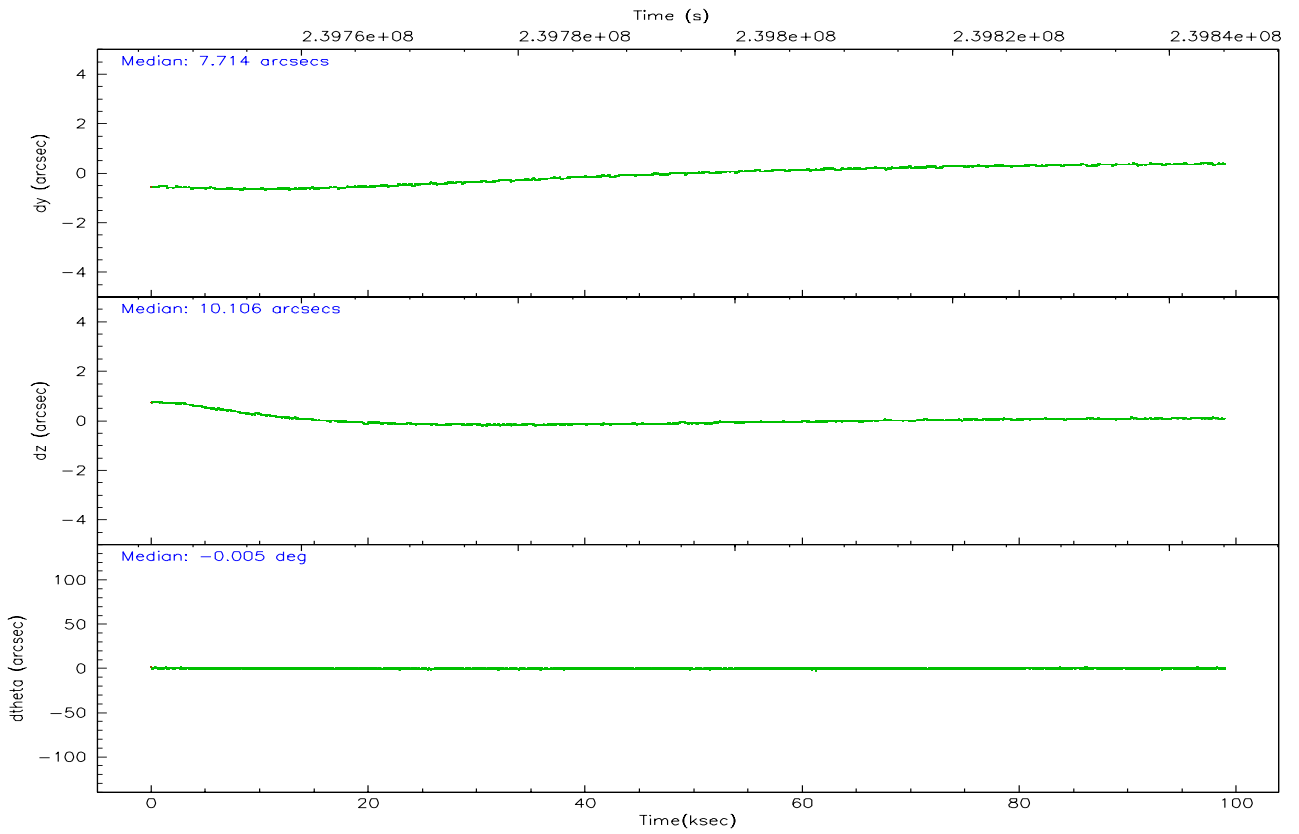
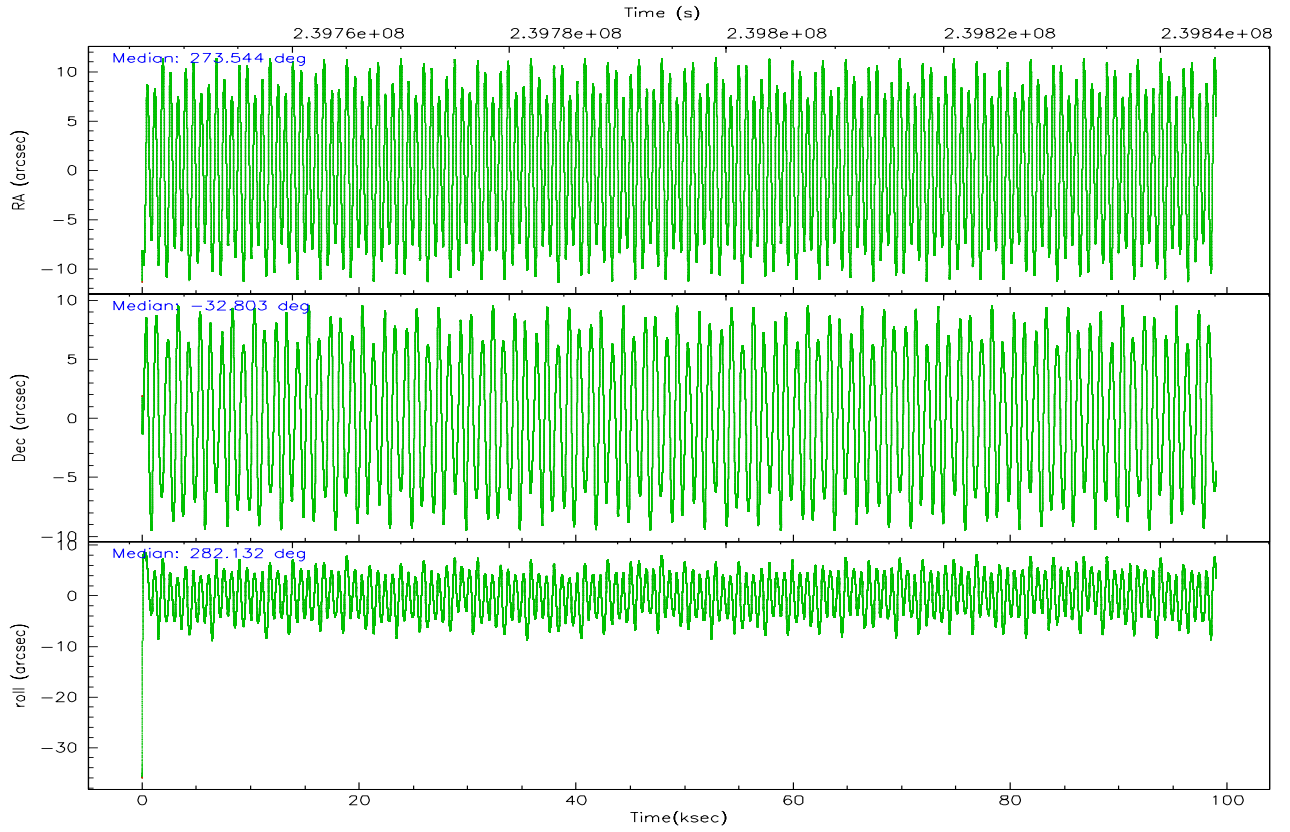
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	60159	30166	32647	19766	59368	35280
	7%	2%	4%	2%	6%	5%
grade 1 events	836	806	322	599	601	397
	0%	0%	0%	0%	0%	0%
grade 2 events	17645	134609	17275	88140	41332	16250
	2%	13%	2%	9%	4%	2%
grade 3 events	8738	9258	7800	17384	19488	8392
	1%	0%	1%	1%	2%	1%
grade 4 events	8312	8852	7724	17190	18216	7942
	1%	0%	1%	1%	2%	1%
grade 5 events	31069	47882	31928	61414	42018	34465
	4%	4%	4%	6%	4%	5%
grade 6 events	13125	256777	16744	211279	47787	16587
	1%	25%	2%	22%	5%	2%
grade 7 events	633242	523684	560339	513725	628028	562434
	81%	51%	83%	55%	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	NONE	NONE
Pointing RA	273.522105	273.5441553903496	Alternating exposures requested	N	N
Pointing Dec	-32.782640	-32.8025621211225	Primary exposure time	0.000000	3.2
Pointing Roll	281.964261	282.132825215951			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	239746343.184000	239744578.93007			
Observation start date	2005-08-06T20:11:19	2005-08-06T19:42:58			
Observation end time	239845143.184000	239846591.03475			
Observation end date	2005-08-07T23:37:59	2005-08-08T00:03:11			
Read mode	TIMED	TIMED			

## 2.3 Aspect



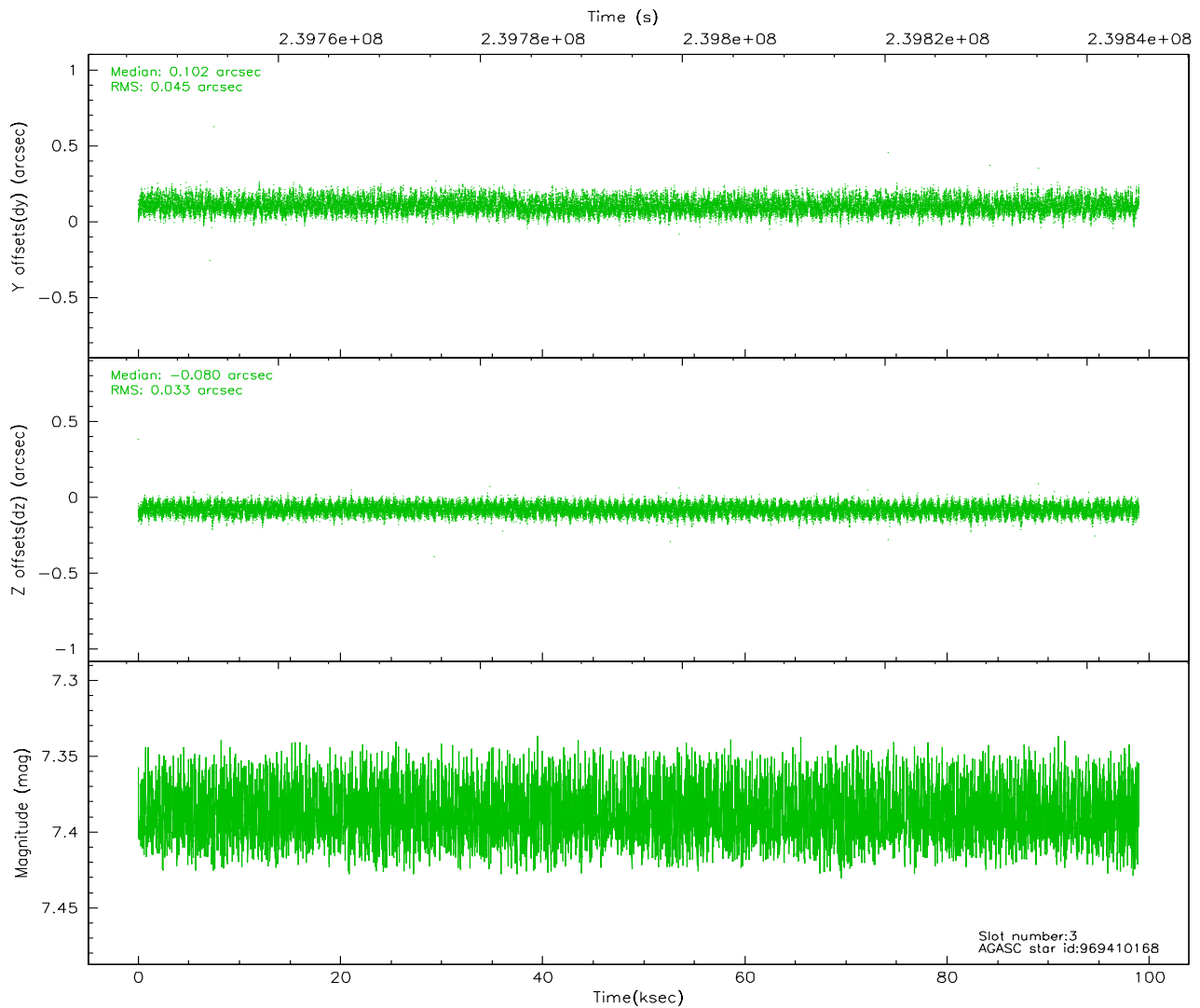
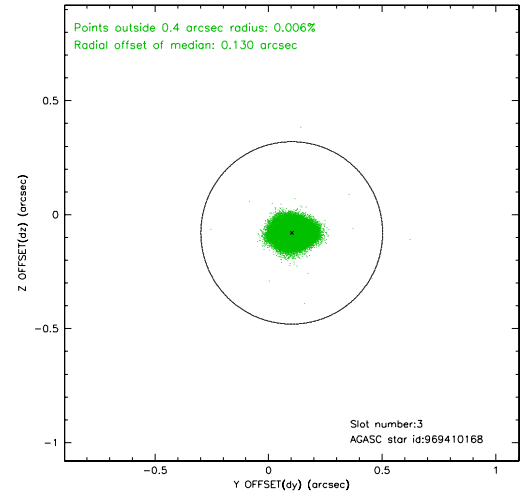
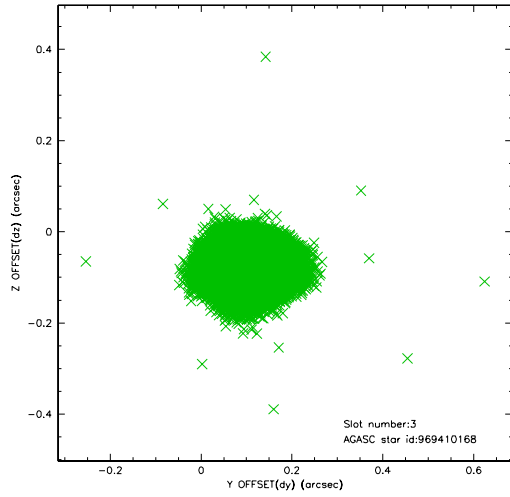


### Slot Statistics

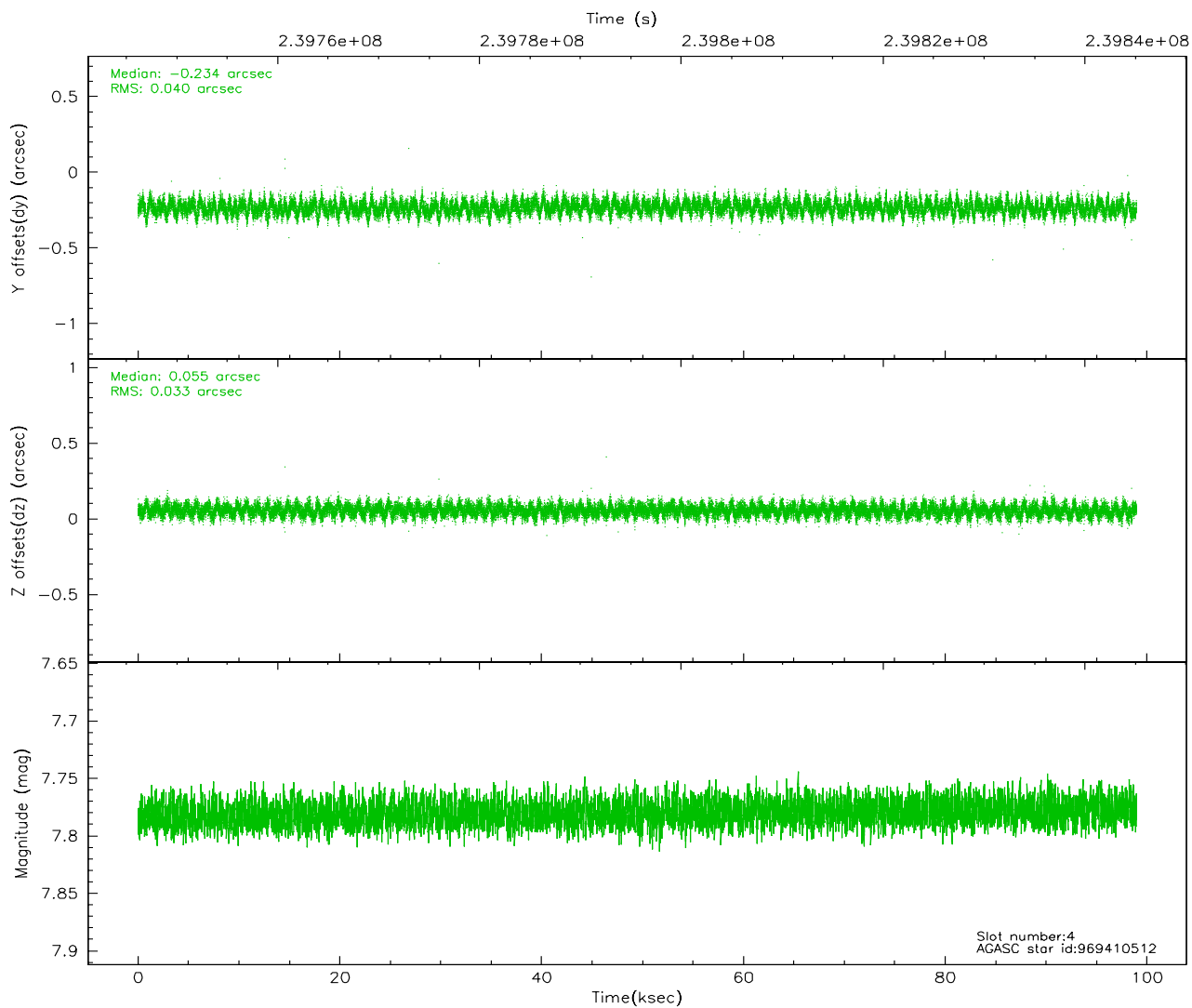
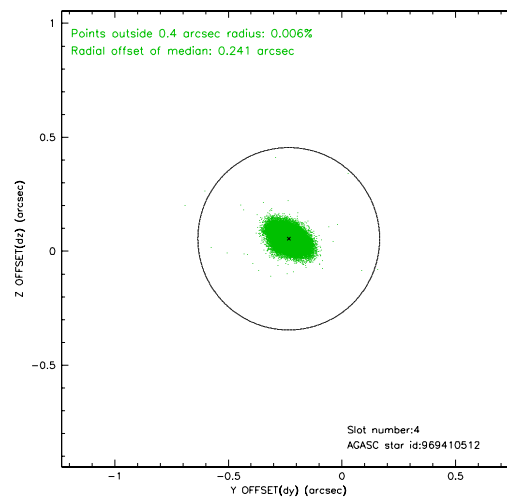
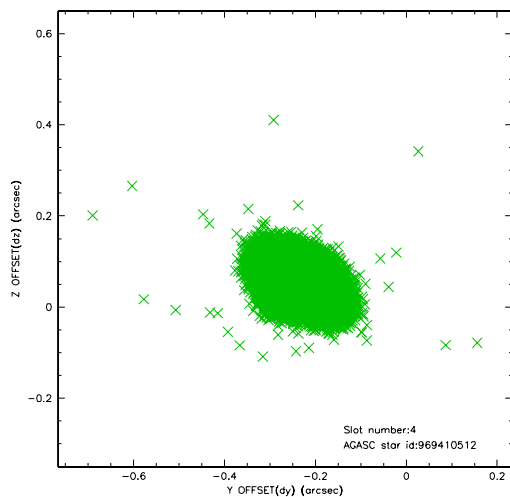
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	24144	-0.045	-0.021	0.009	0.017	0.000000	0.000000	-760.42	-1731.42
1	FID	ACIS-S-4	7.21	24144	0.047	0.023	0.008	0.014	0.000000	0.000000	2152.96	177.24
2	FID	ACIS-S-6	7.35	24144	-0.029	0.005	0.008	0.014	0.000000	0.000000	401.43	814.49
3	GUIDE	969410168	7.39	48279	0.102	-0.080	0.060	0.095	273.917435	-33.091571	1337.64	935.49
4	GUIDE	969410512	7.78	48281	-0.234	0.055	0.055	0.092	273.701392	-32.213017	-1892.42	959.34
5	GUIDE	969412944	8.60	48199	0.073	-0.031	0.067	0.109	273.273913	-32.720895	-372.19	-689.41
6	GUIDE	969415768	9.12	48262	-0.095	-0.091	0.102	0.169	272.909685	-32.404195	-1713.34	-1539.74
7	GUIDE	969423304	9.16	48258	0.147	0.147	0.093	0.150	274.359501	-33.253694	2191.76	2112.86

## 2.4 Star Slots

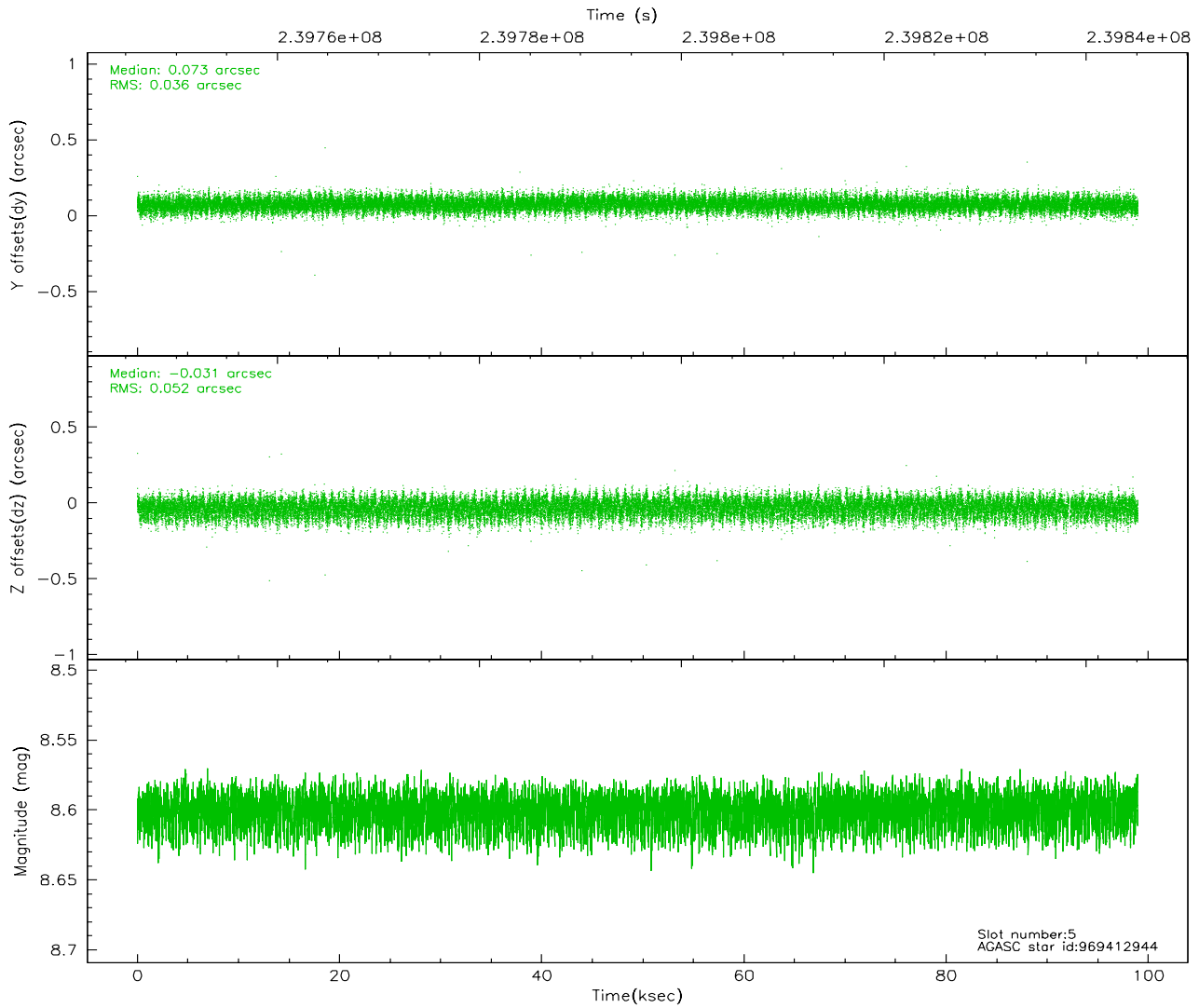
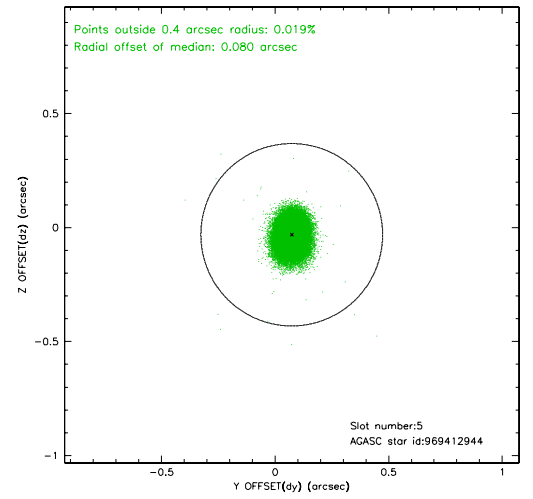
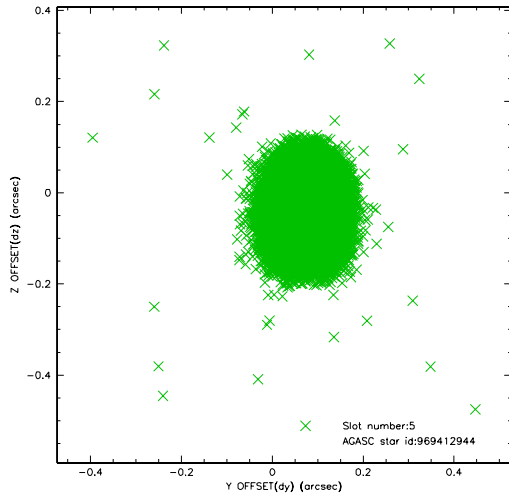
### 2.4.1 Slot 3



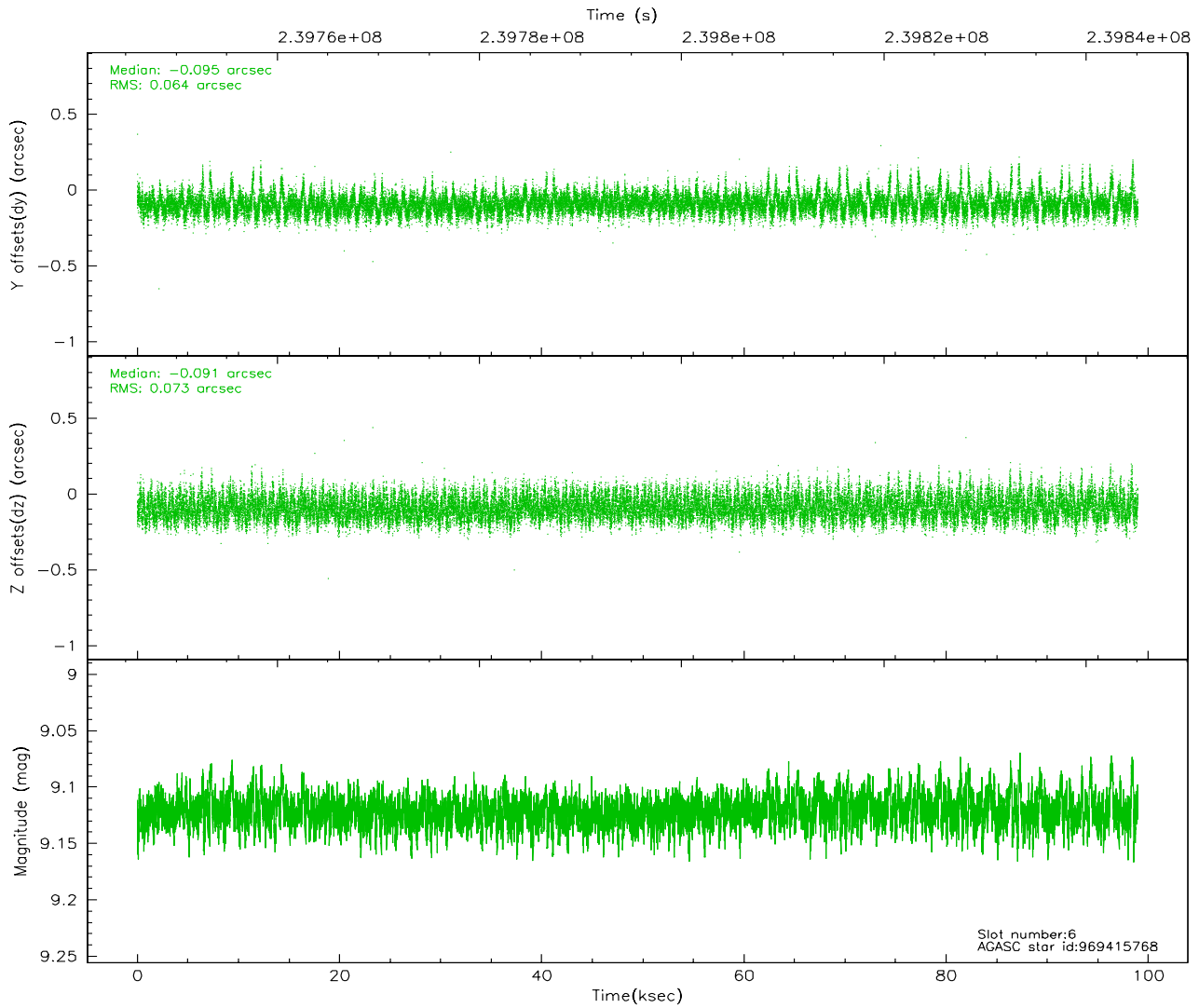
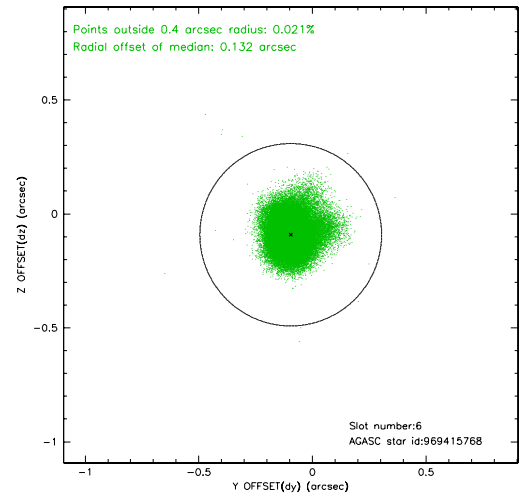
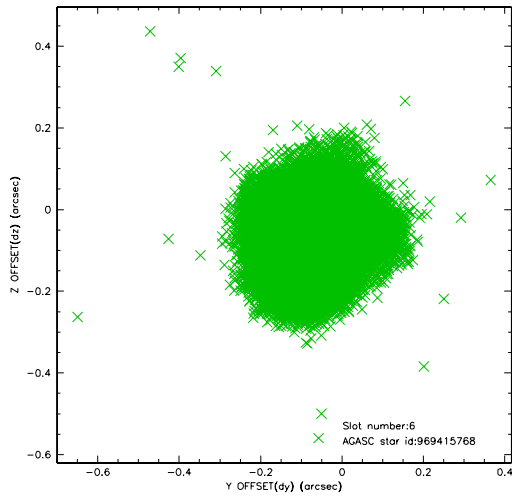
## 2.4.2 Slot 4



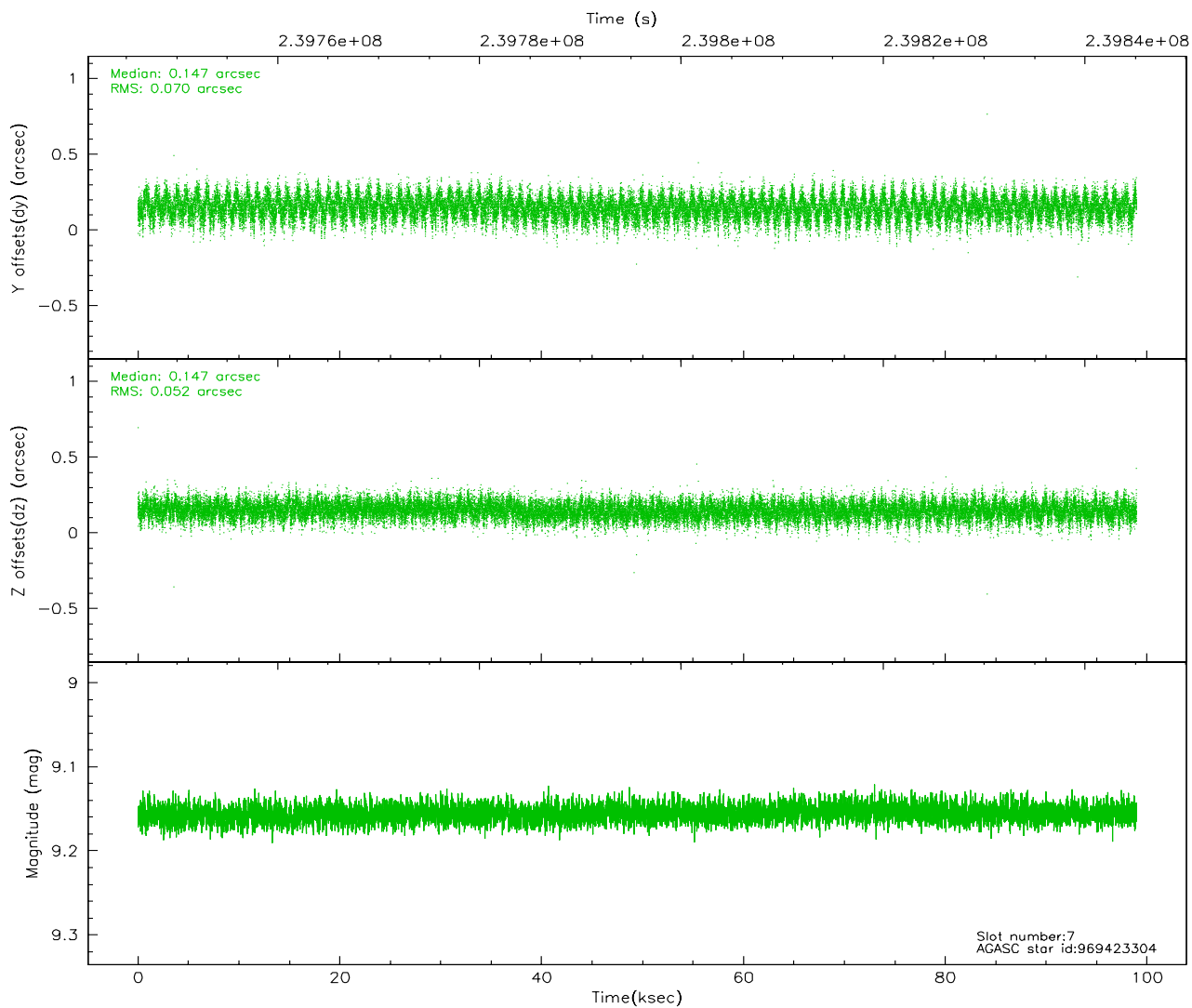
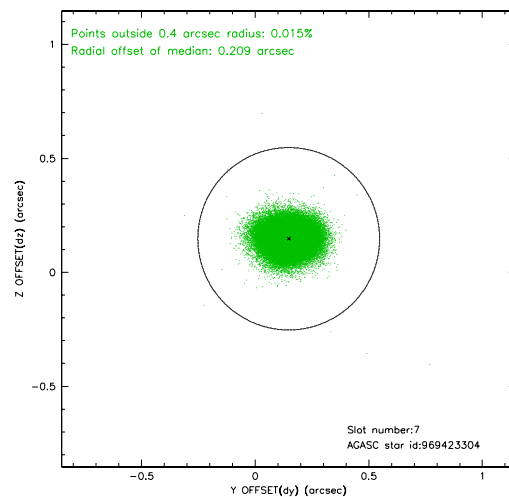
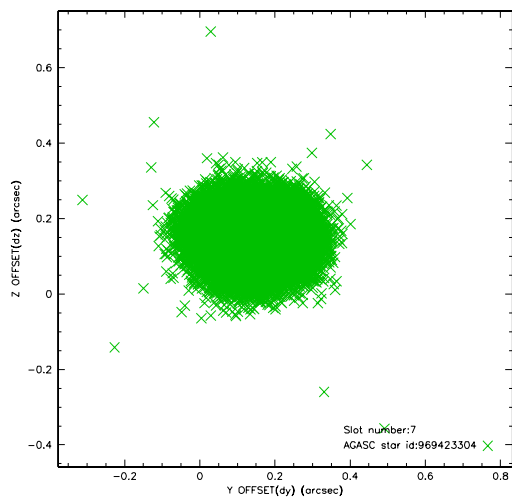
### 2.4.3 Slot 5



### 2.4.4 Slot 6

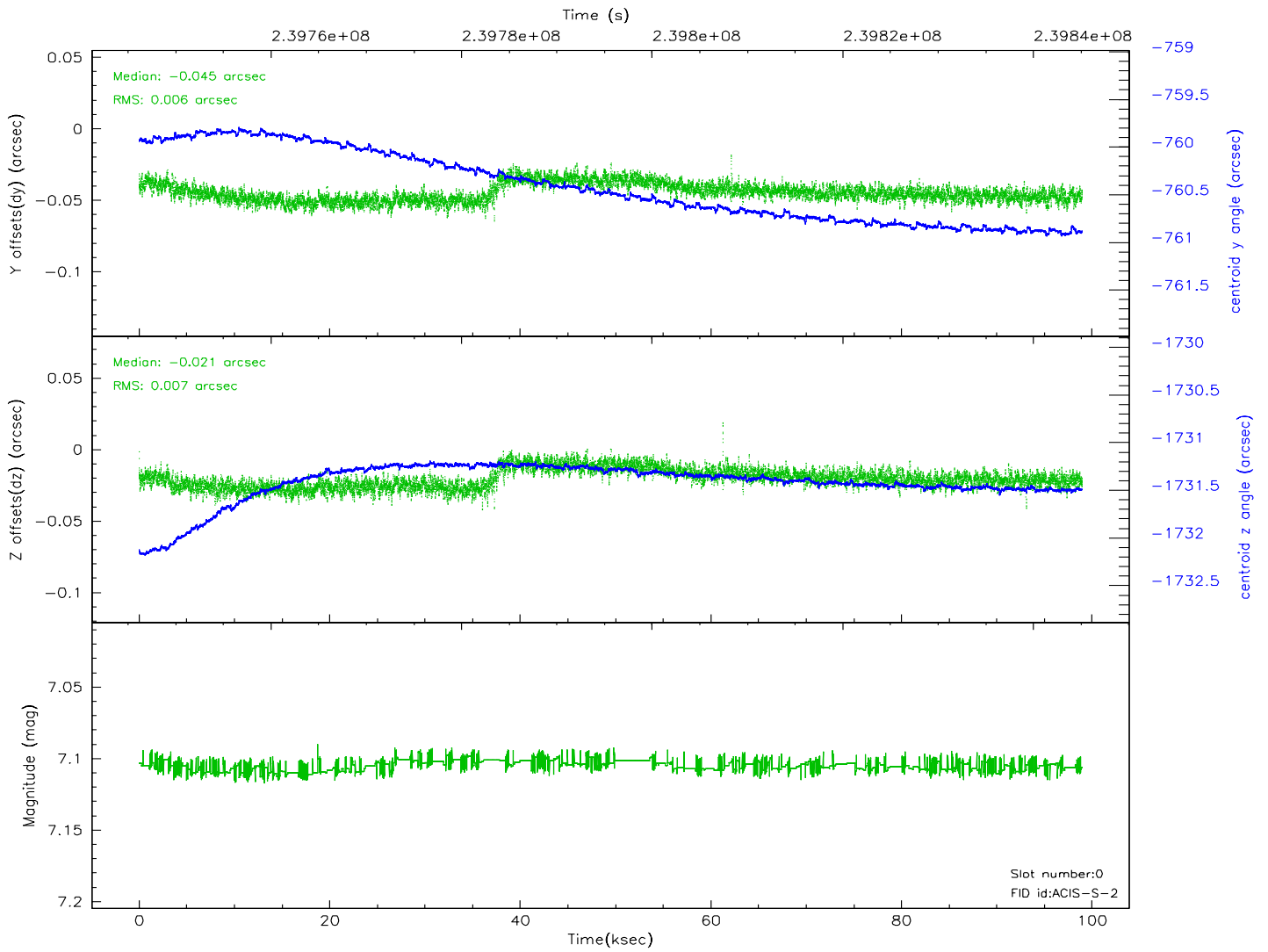
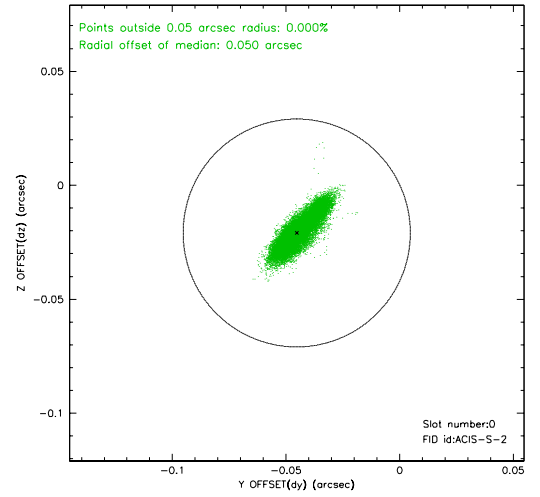
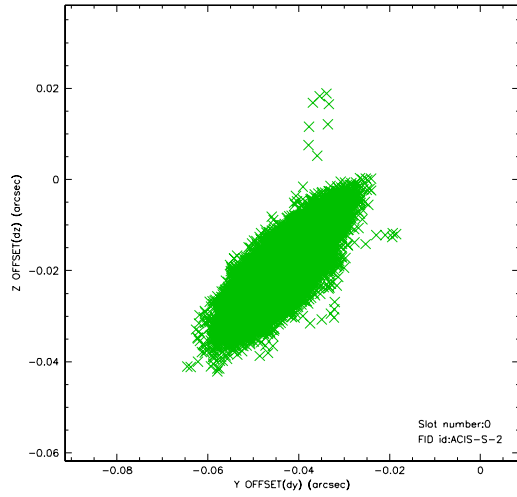


## 2.4.5 Slot 7

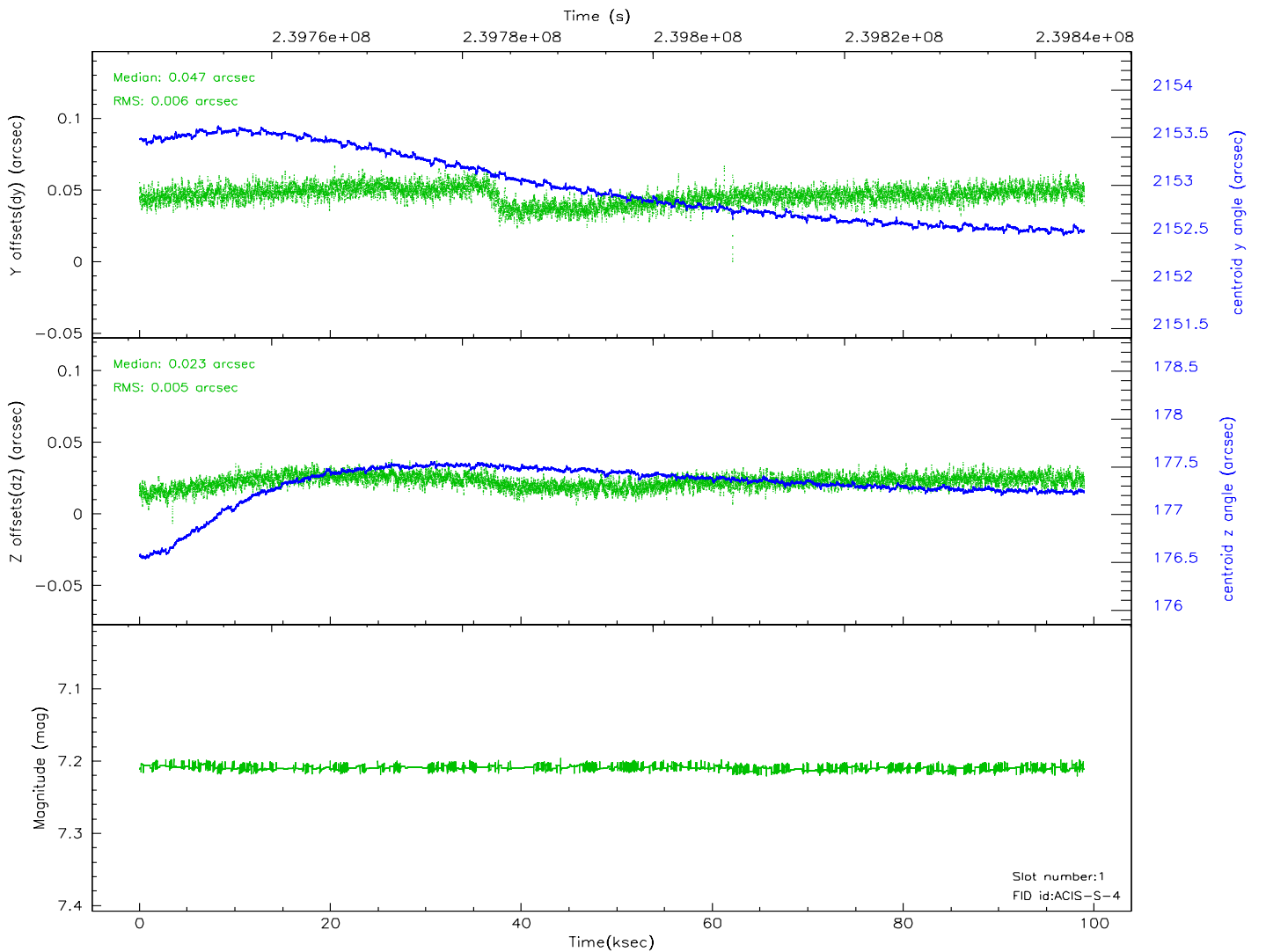
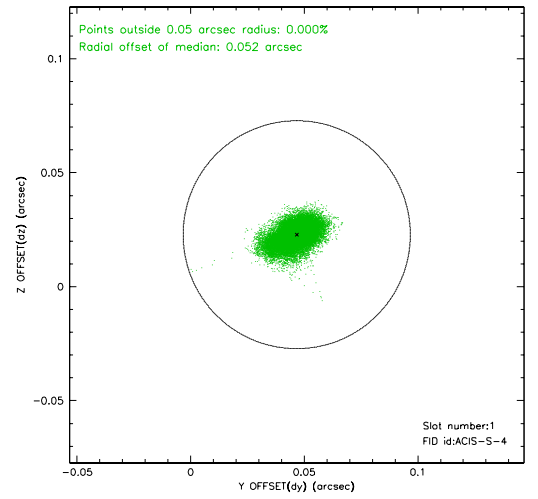
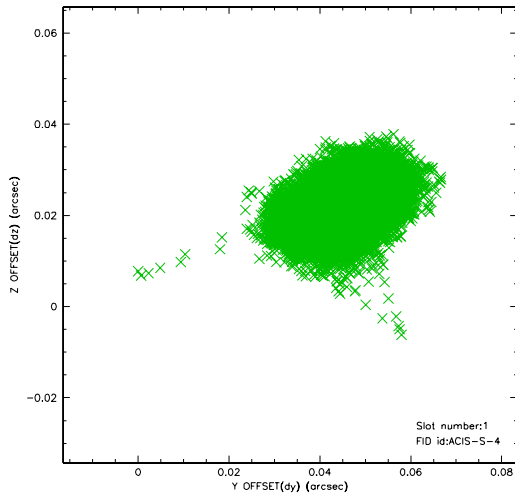


## 2.5 FID Slots

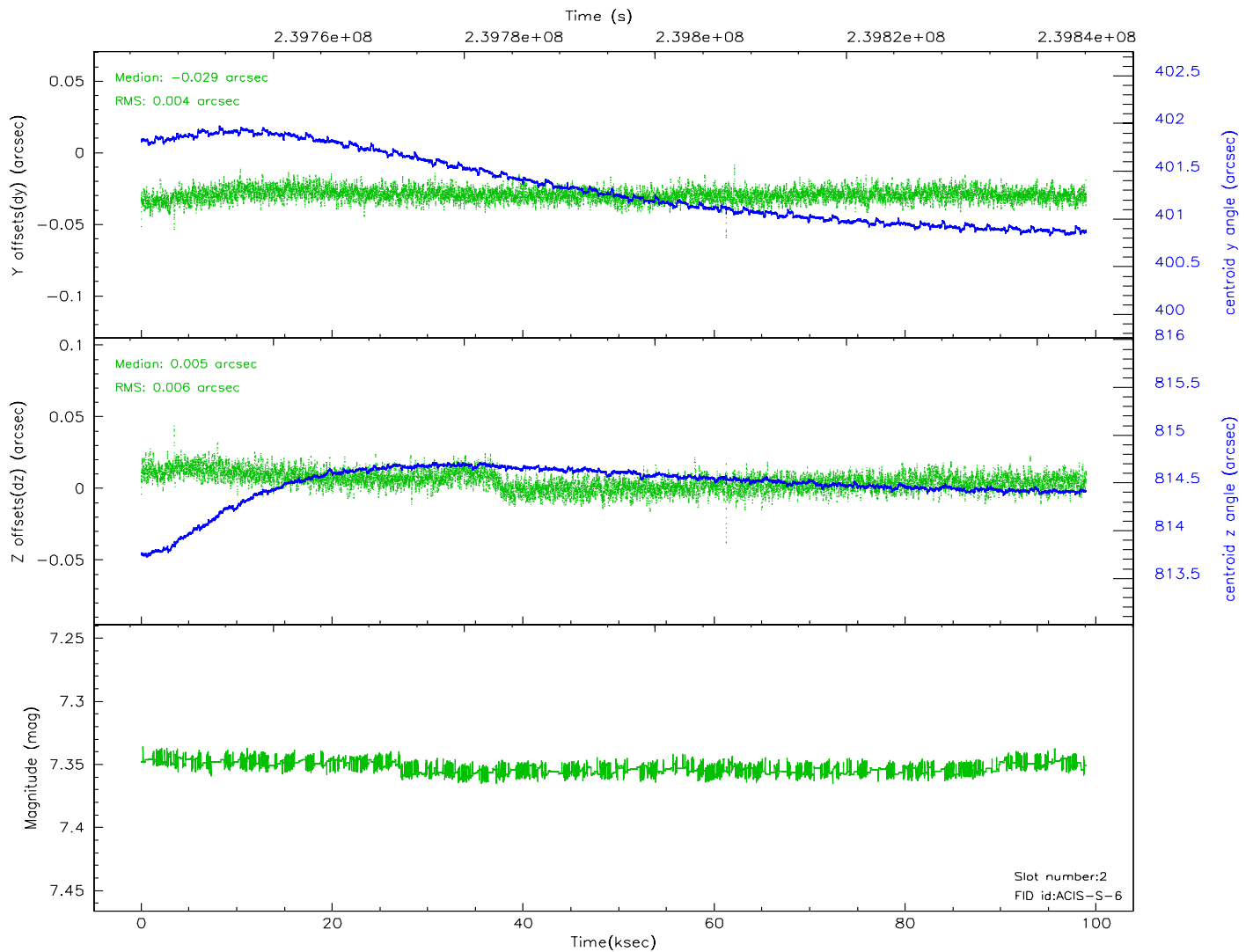
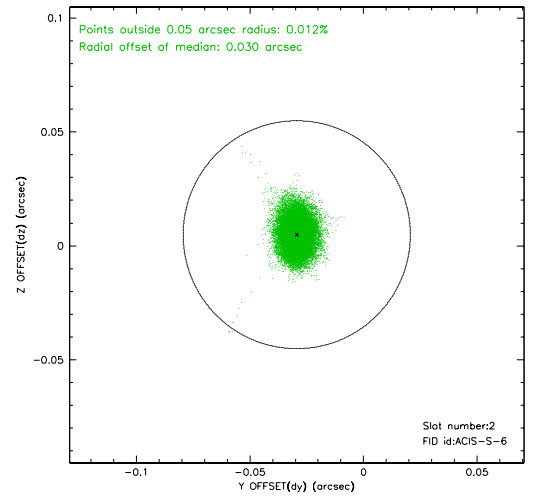
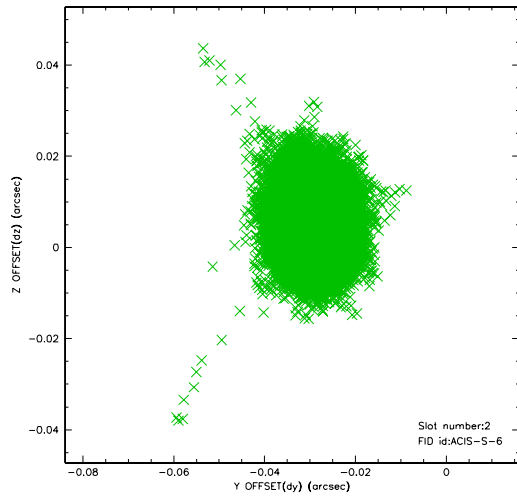
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2

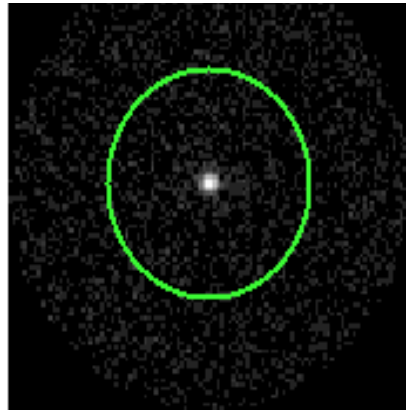


# 3 Gratings

## 3.1 HEG Arm



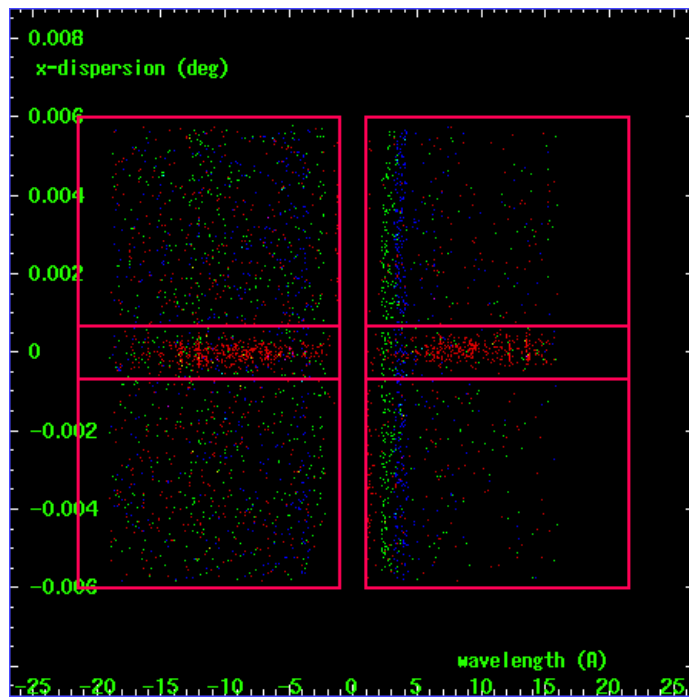
HEG Order Sort 123



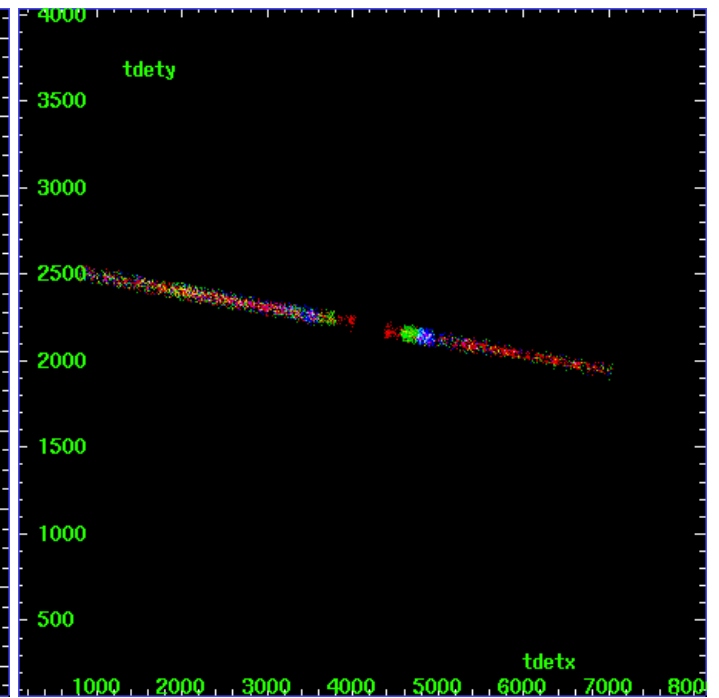
HEG Zero Order



HEG Order Sort ALL

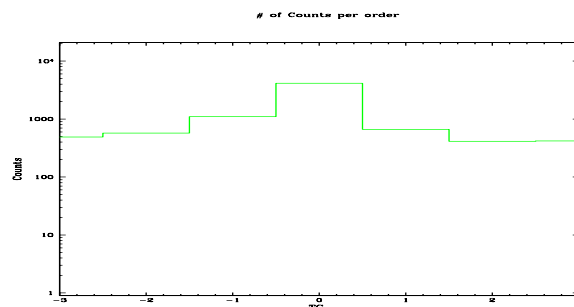


Spot Image HEG

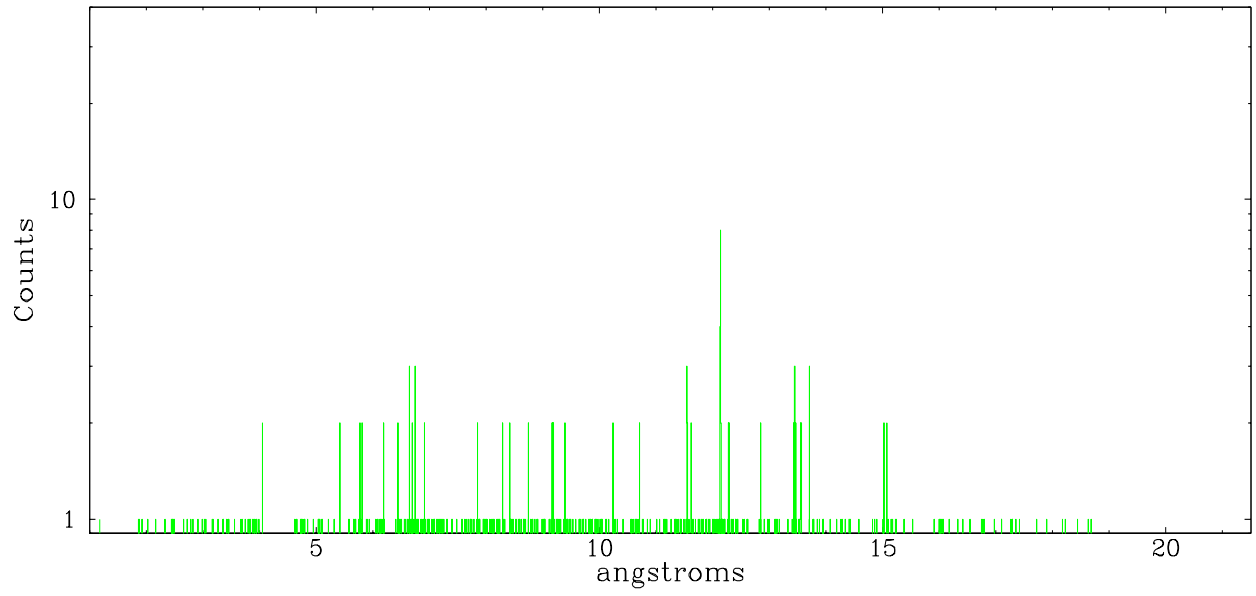


Full Detector HEG

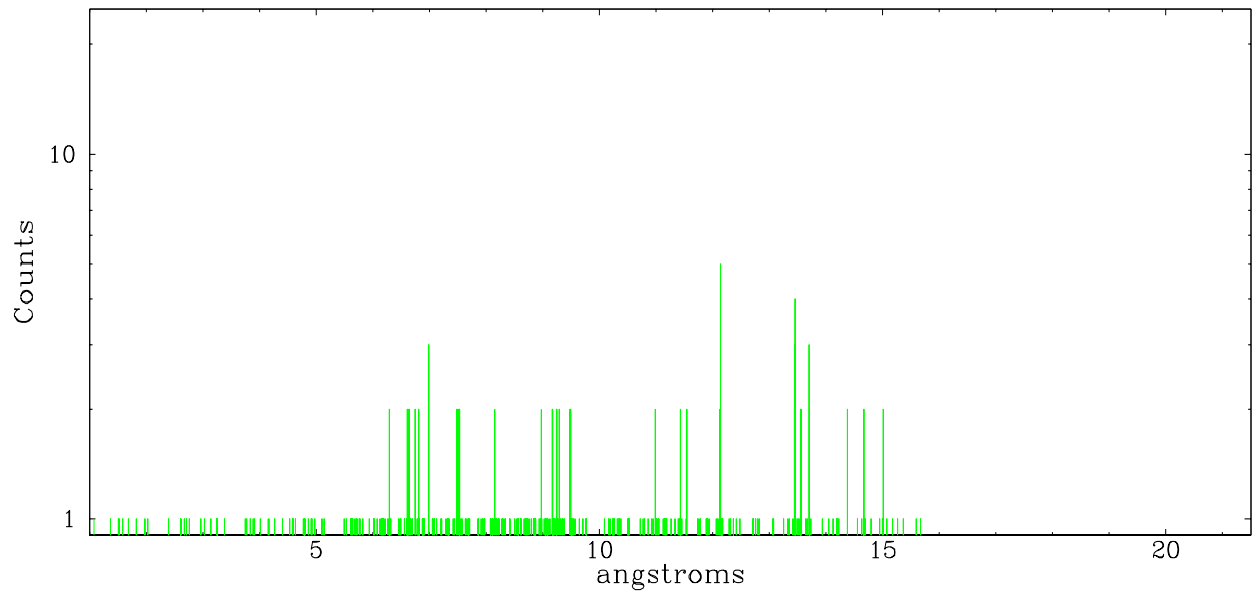
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	492	575	1100	4165	664	415	420



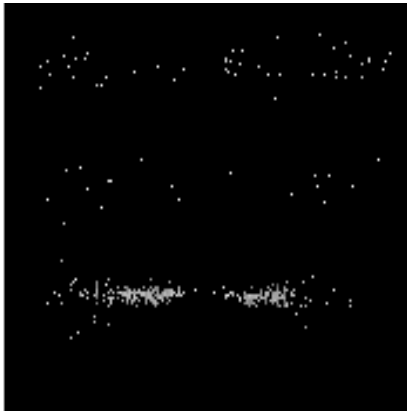
heg order -1



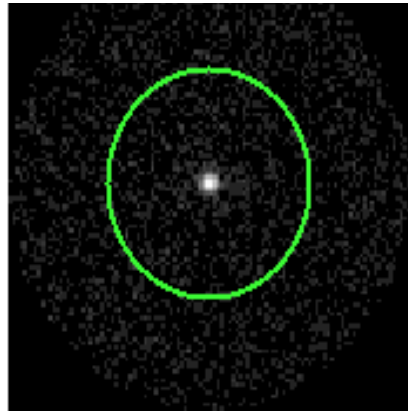
heg order +1



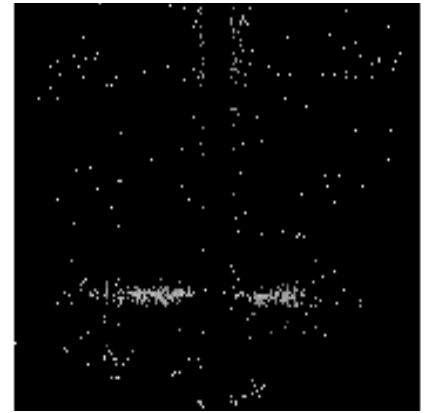
### 3.2 MEG Arm



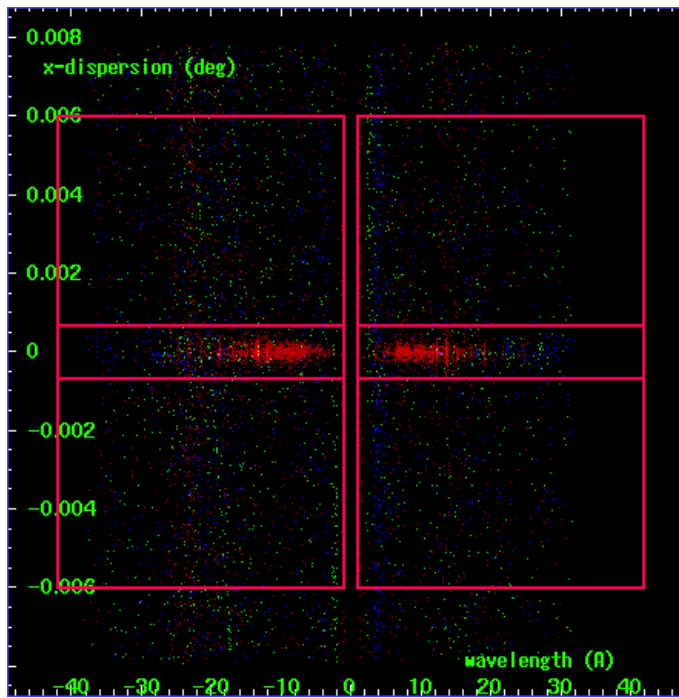
MEG Order Sort 123



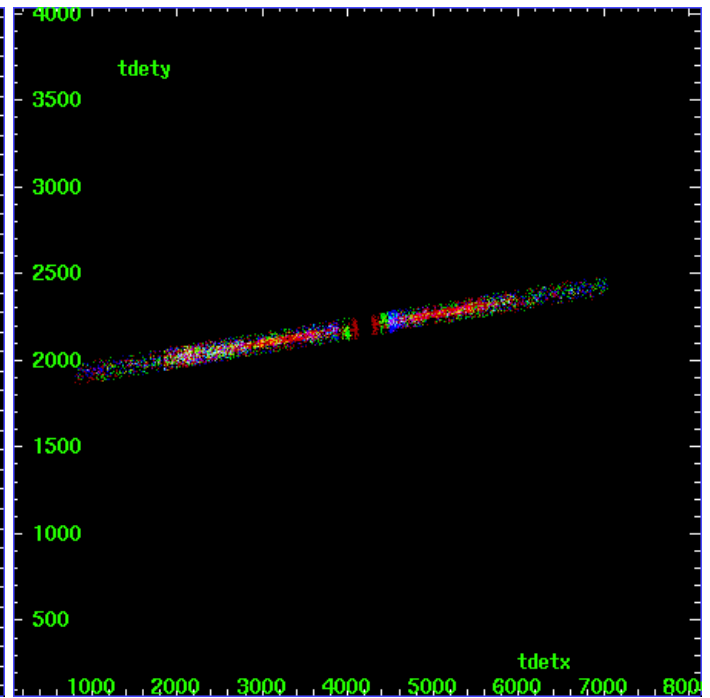
MEG Zero Order



MEG Order Sort ALL

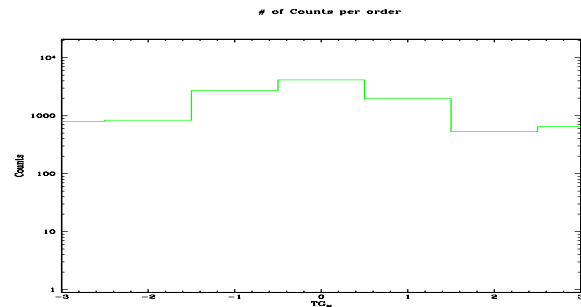


Spot Image MEG

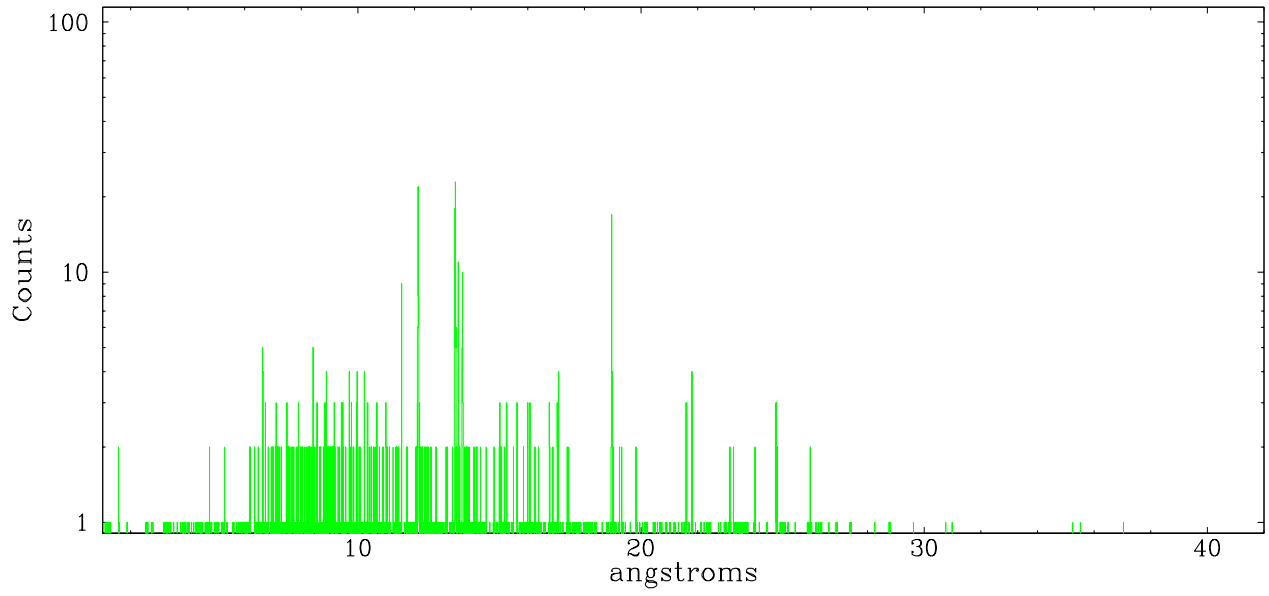


Full Detector MEG

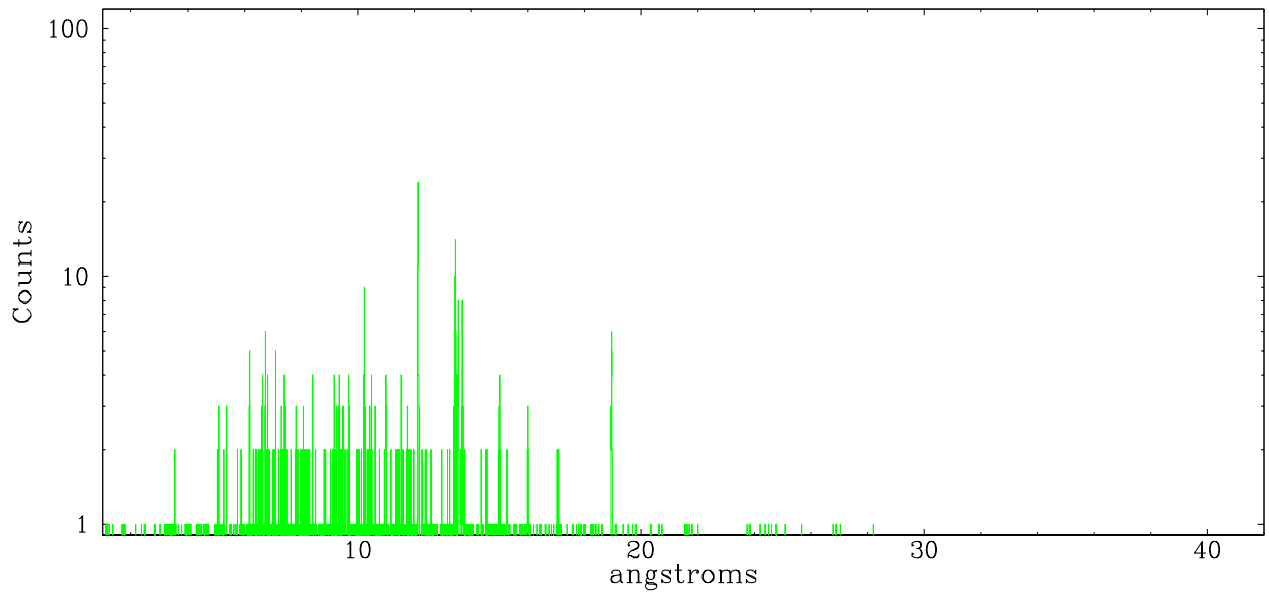
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	800	835	2722	4165	1970	533	650



meg order -1



meg order +1



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.03.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	98.9824

## A.2 Comments

Additional source on same chip also has dispersed spectrum that intersects the dispersed spectrum of the target. User should beware of the intersection points on the targets dispersed spectrum.