

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 13771 - L2 Version 1  
Chandra X-Ray Center

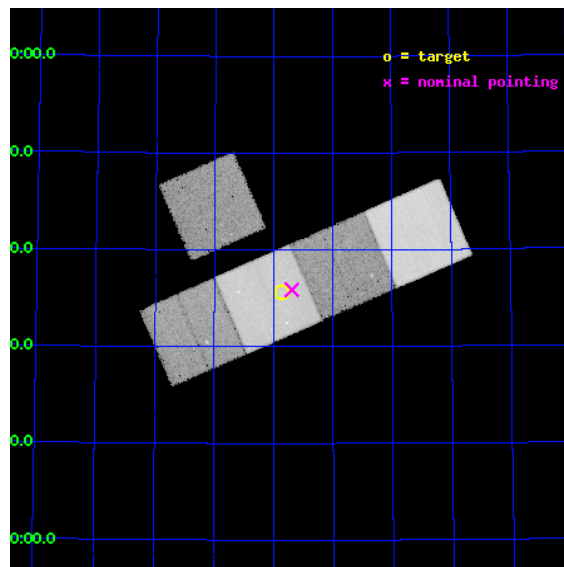
L2 Processing Date : Aug 1 2012

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# 1 Front

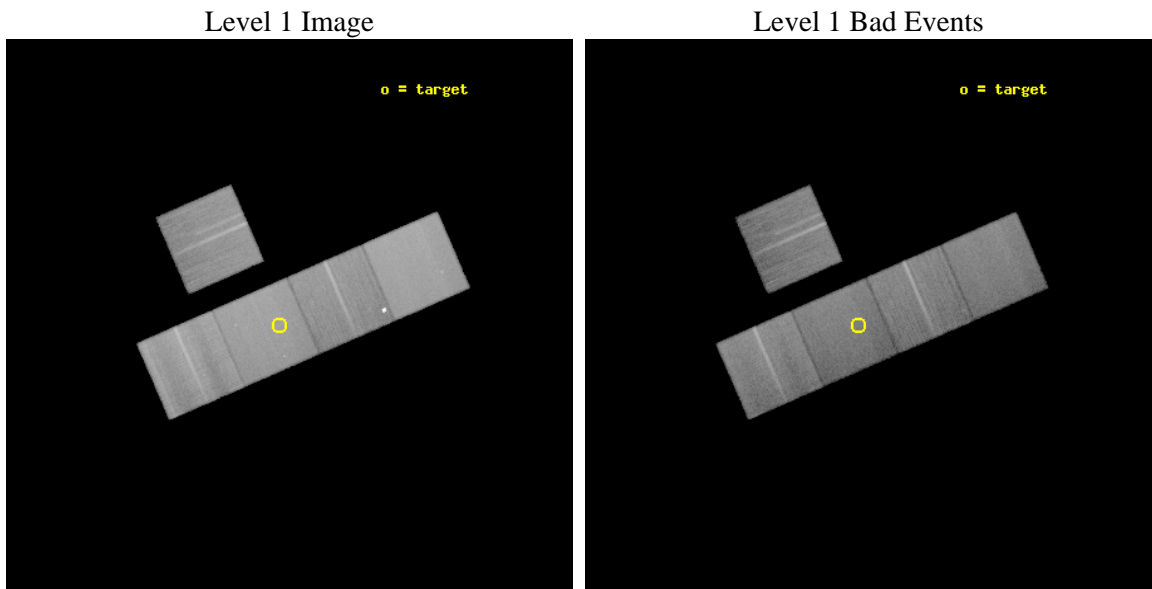
seq_num	501603	Sequence number
obs_id	13771	Observation id
title	Guitar with a bow: a jet-like X-ray-emitting feature associated a fast-moving pulsar	Proposal title
observer	Prof. Q. Daniel Wang	Principal investigator
object	B2224+65	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	336.46625	Observer's specified target RA [deg]
dec_targ	65.593083	Observer's specified target Dec [deg]
ra_nom	336.4232261511	Nominal RA [deg]
dec_nom	65.598091165124	Nominal Dec [deg]
roll_nom	156.49042812222	Nominal Roll [deg]
revision	1	Processing version of data
ontime	50065.000385046	Sum of GTIs [s]
livetime	49410.864297698	Livetime [s]
ontime3	50065.000385046	Sum of GTIs [s]
ontime5	50065.000385046	Sum of GTIs [s]
ontime6	50055.577344239	Sum of GTIs [s]
ontime7	50065.000385046	Sum of GTIs [s]
ontime8	50065.000385046	Sum of GTIs [s]
l2events	435407	Number of level 2 events



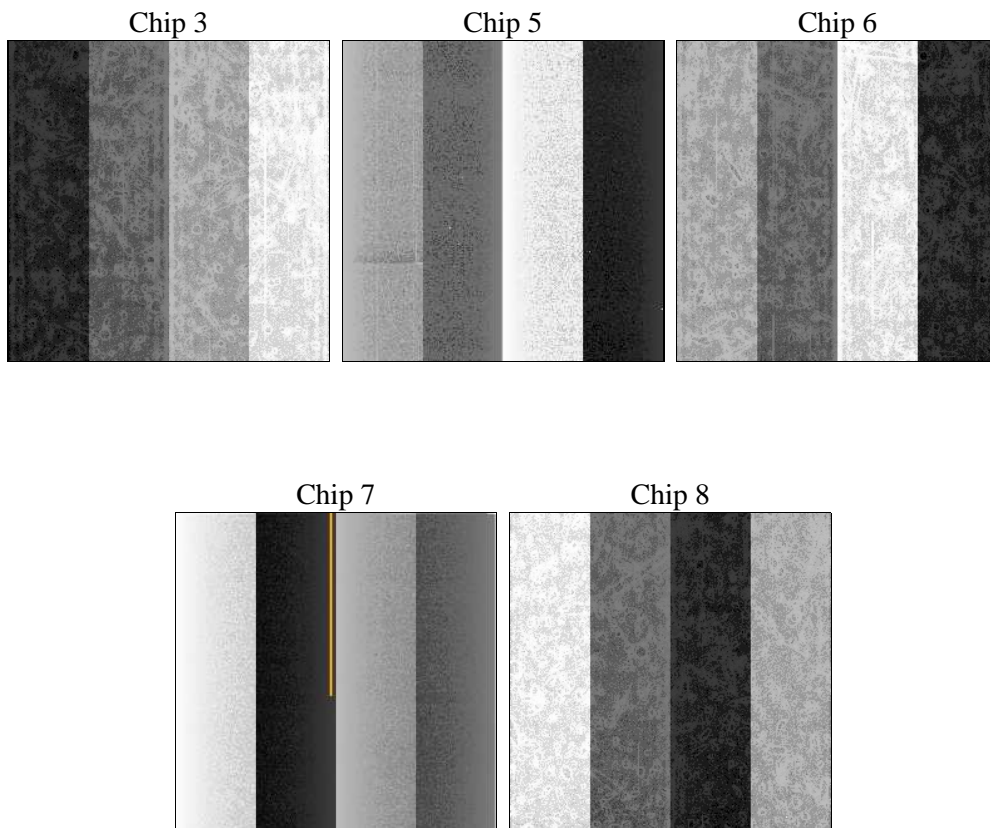
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	50000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	50065.000385046	Sum of GTIs [s]
caldbver	4.5.1	&#160	ontime3	50065.000385046	Sum of GTIs [s]
date	2012-08-02T02:21:03	Date and time of file creation	ontime5	50065.000385046	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	50055.577344239	Sum of GTIs [s]
			ontime7	50065.000385046	Sum of GTIs [s]
			ontime8	50065.000385046	Sum of GTIs [s]
			l1events	1630906	Number of level 1 events

### 2.1.4 Events

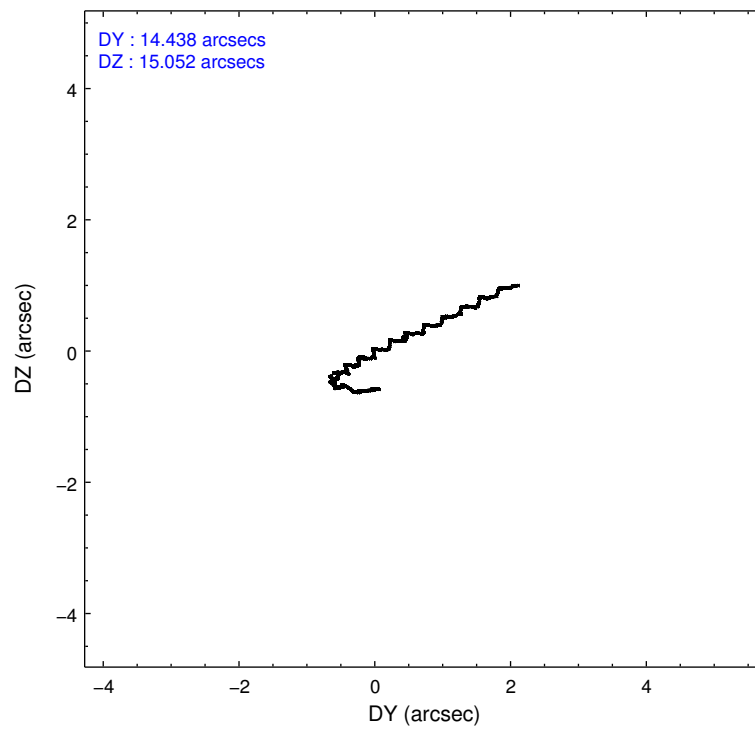
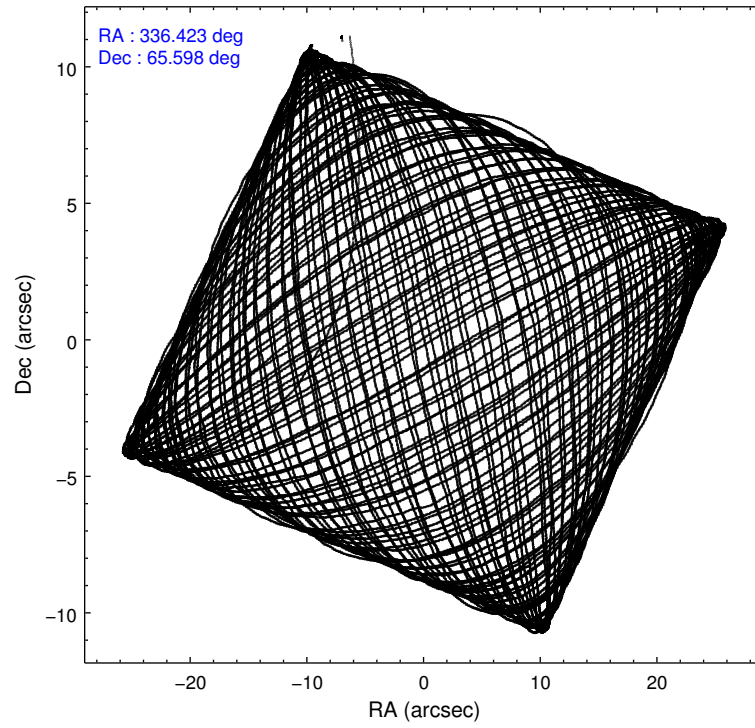
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	249325	416955	276885	347238	340503
rejected events	220740	217291	229694	192274	246533
rejected %	88%	52%	82%	55%	72%

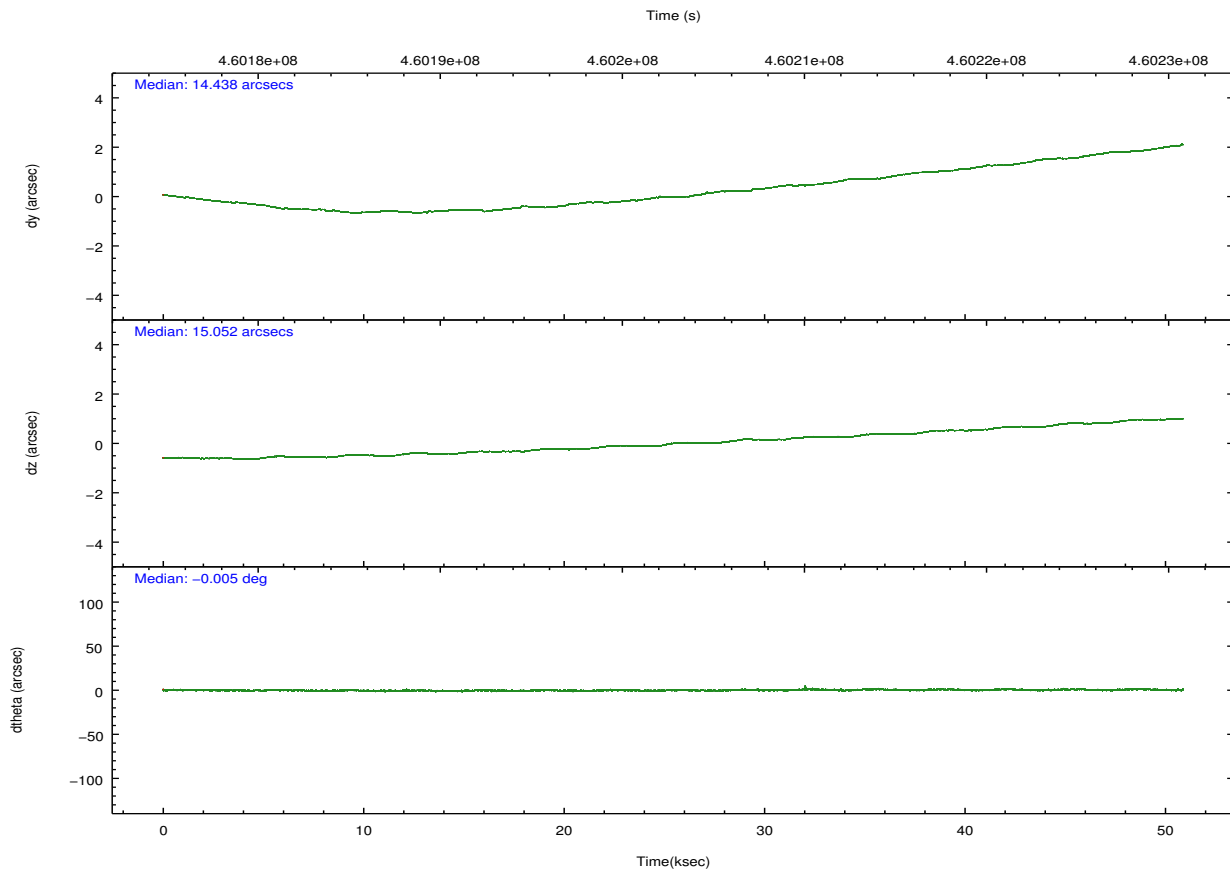
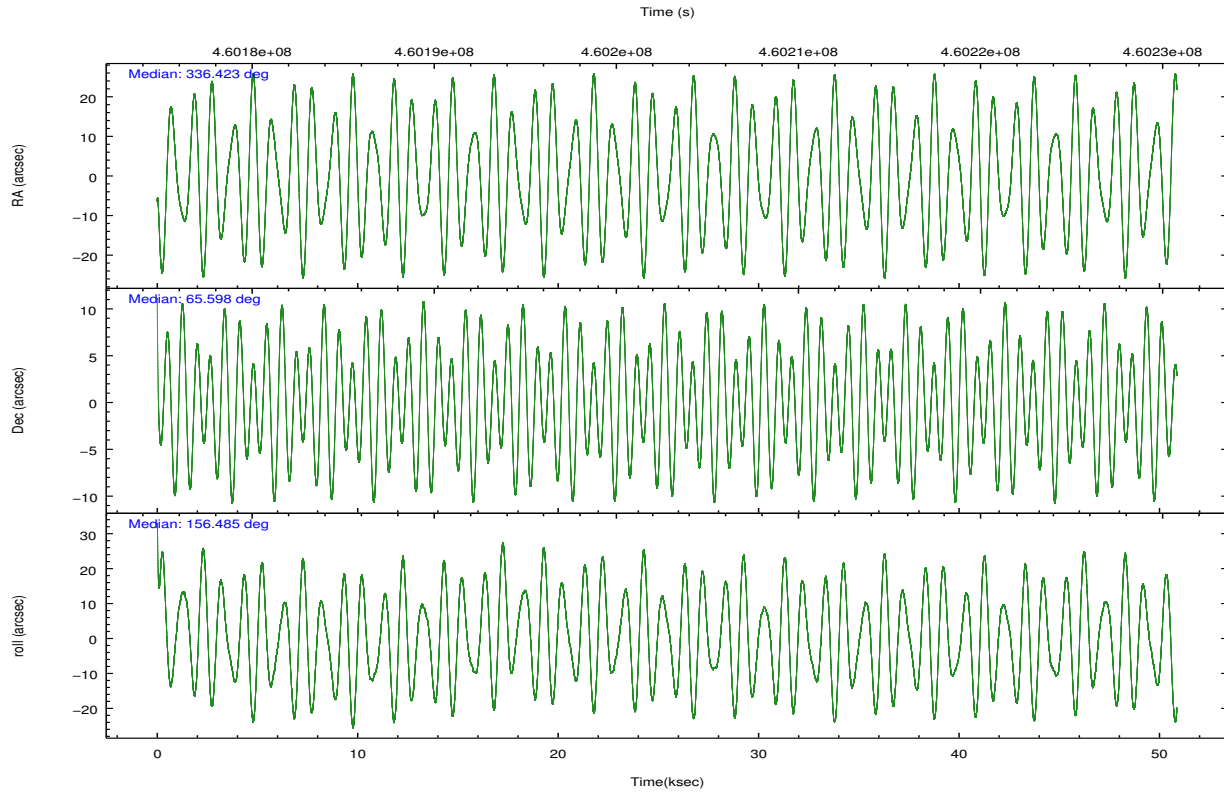
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	9842	12490	26109	14310	28050
	3%	2%	9%	4%	8%
grade 1 events	136	677	176	416	225
	0%	0%	0%	0%	0%
grade 2 events	6465	61398	7292	31657	21793
	2%	14%	2%	9%	6%
grade 3 events	3126	7523	3284	13607	10063
	1%	1%	1%	3%	2%
grade 4 events	3066	7314	3230	13440	9469
	1%	1%	1%	3%	2%
grade 5 events	13309	32235	13076	35744	19173
	5%	7%	4%	10%	5%
grade 6 events	6090	110947	7279	81953	24596
	2%	26%	2%	23%	7%
grade 7 events	207291	184371	216439	156111	227134
	83%	44%	78%	44%	66%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	336.488888	336.4232261511044	CCD I2 on	N	N
[deg] Pointing Dec	65.601538	65.59809116512449	CCD I3 on	O1	Y
[deg] Pointing Roll	156.273999	156.4904281222214	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O2	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	460178214.184000	460176516.00728	CCD S5 on	N	N
Observation start date	2012-08-01T03:15:47	2012-08-01T02:48:36	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	460228214.184000	460229432.6601	On-chip summing requested	N	N
Observation end date	2012-08-01T17:09:07	2012-08-01T17:30:32	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



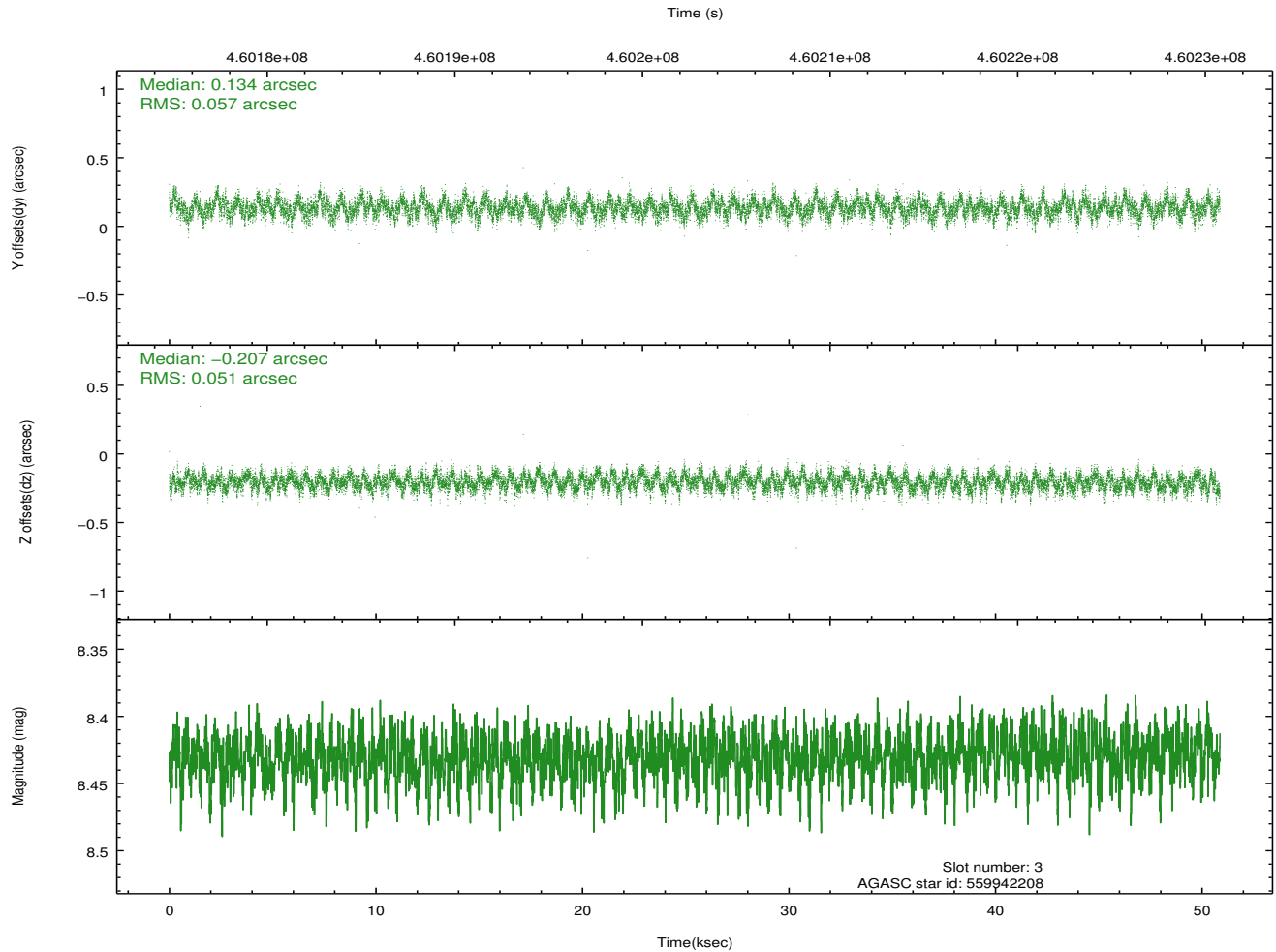
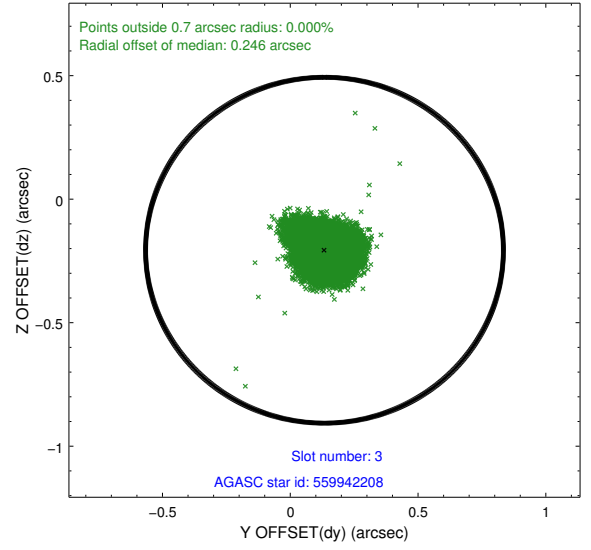
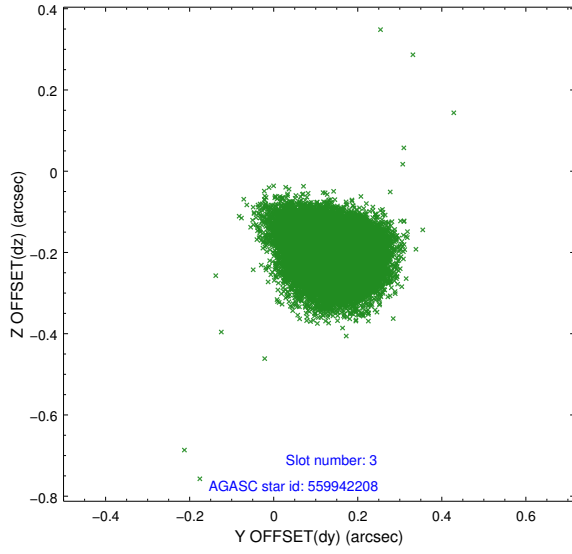


### Slot Statistics

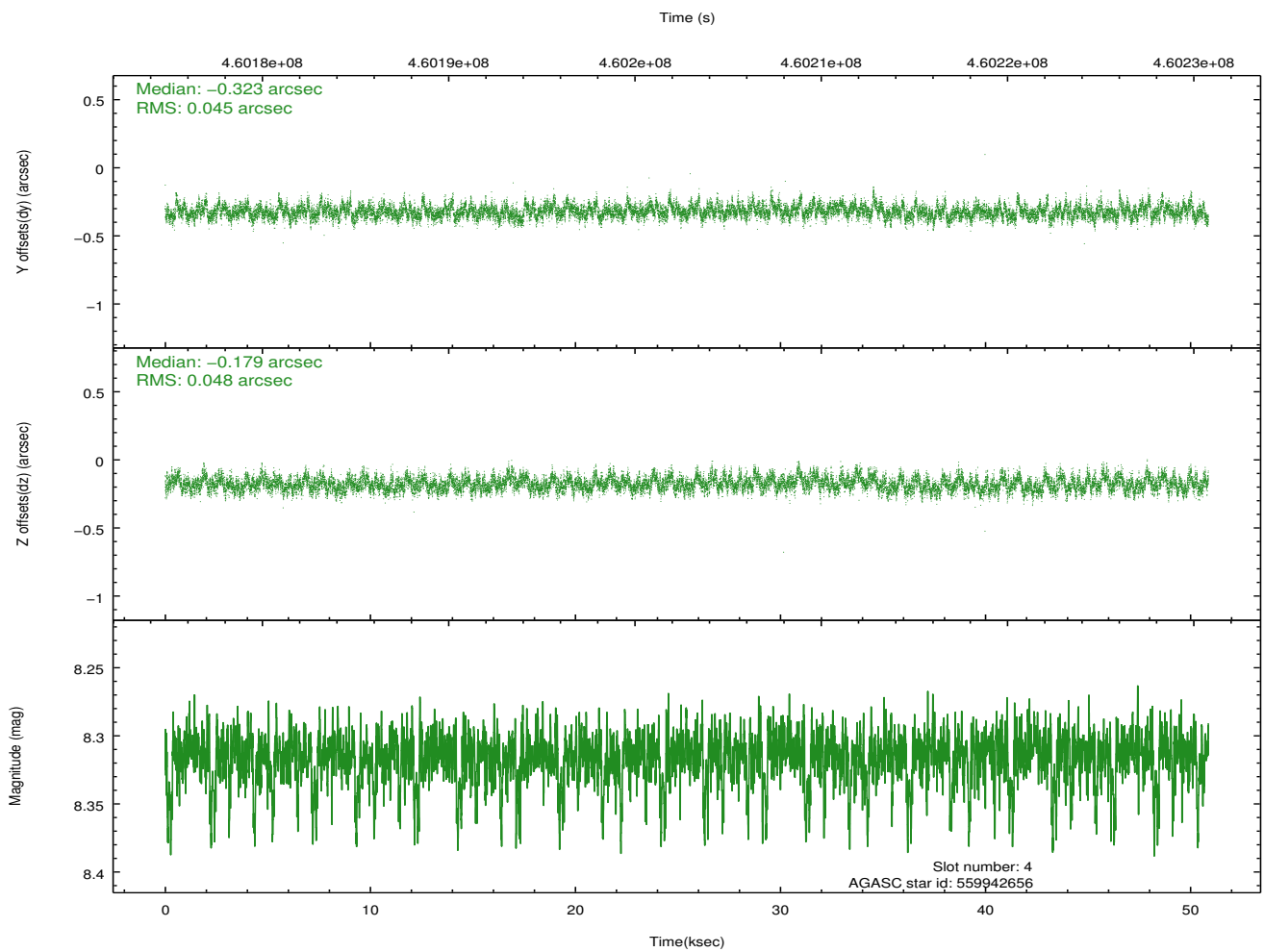
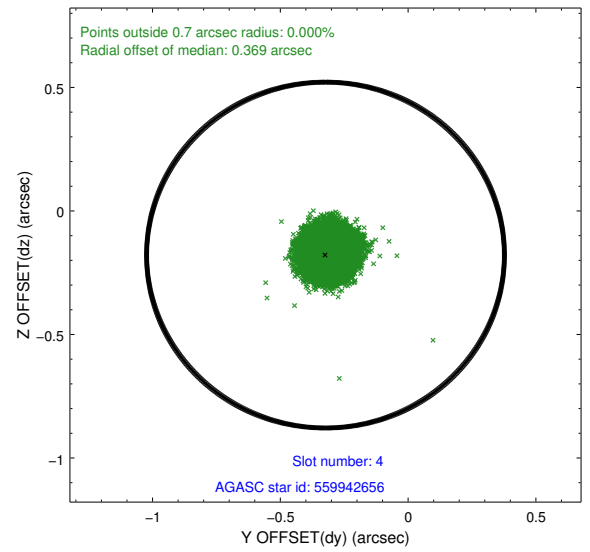
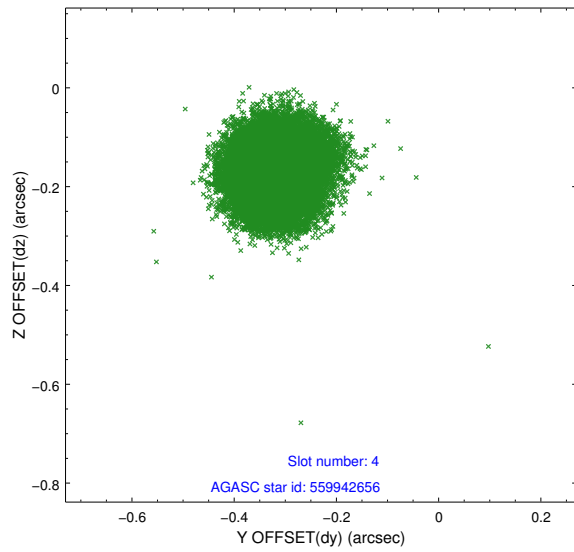
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.93	12409	-0.108	-0.016	0.020	0.026	0.000000	0.000000	-767.79	-1736.50
1	FID	ACIS-S-4	7.02	12409	0.246	0.056	0.015	0.026	0.000000	0.000000	2145.83	172.11
2	FID	ACIS-S-5	7.05	12409	-0.179	-0.030	0.026	0.047	0.000000	0.000000	-1820.74	165.63
3	GUIDE	559942208	8.43	24810	0.134	-0.207	0.082	0.131	336.508890	65.529699	-131.11	224.62
4	GUIDE	559942656	8.32	24808	-0.323	-0.179	0.070	0.114	335.233249	65.304591	1306.13	1721.91
5	GUIDE	559944168	8.13	24807	-0.017	-0.104	0.080	0.136	337.323055	65.113328	-1860.50	1093.02
6	GUIDE	560470752	8.22	24814	0.116	0.265	0.076	0.116	338.199817	65.999376	-1703.00	-2350.04
7	GUIDE	560464080	7.12	24811	0.085	0.224	0.054	0.090	338.477679	65.831661	-2331.30	-1980.53

## 2.4 Star Slots

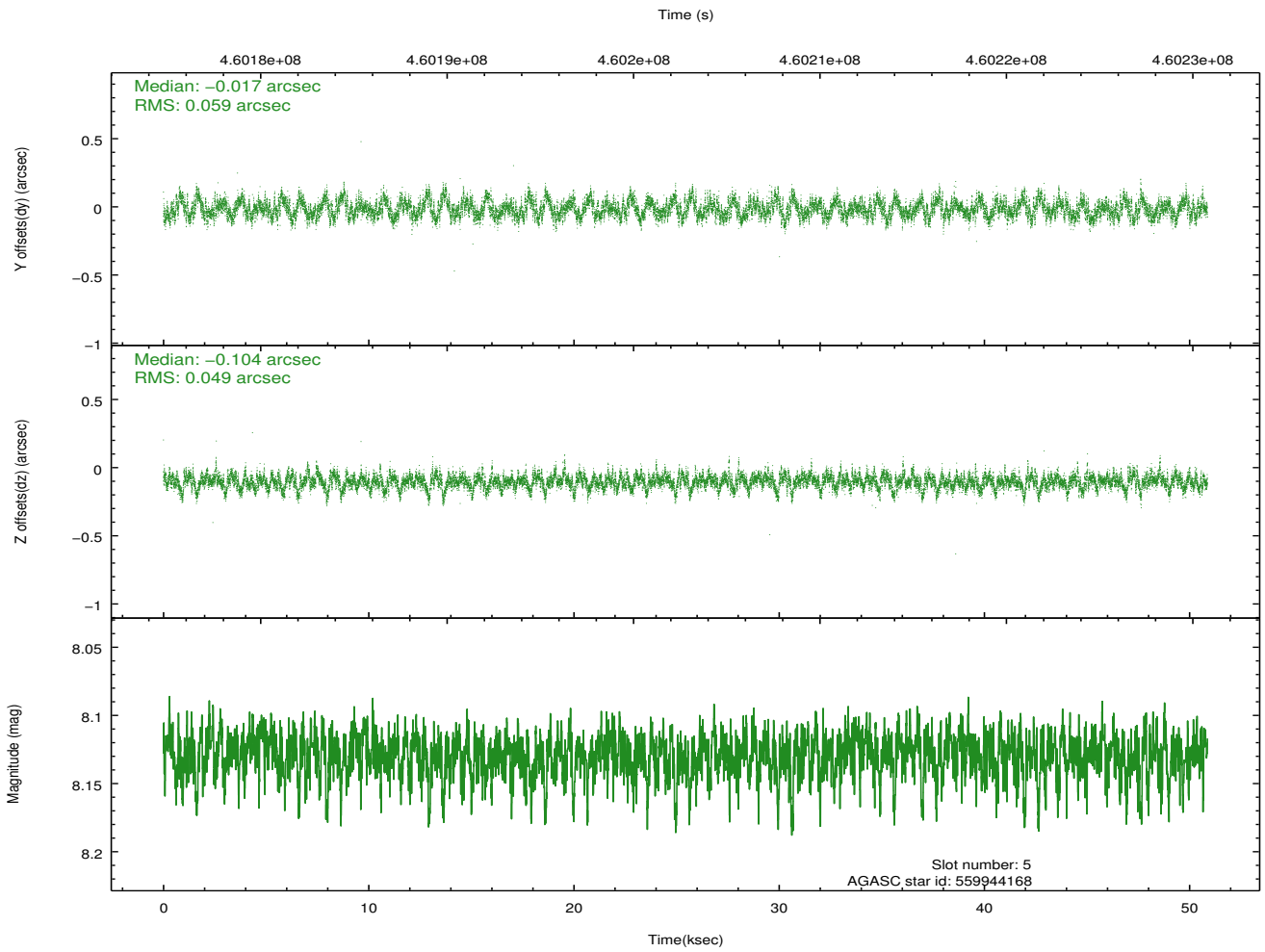
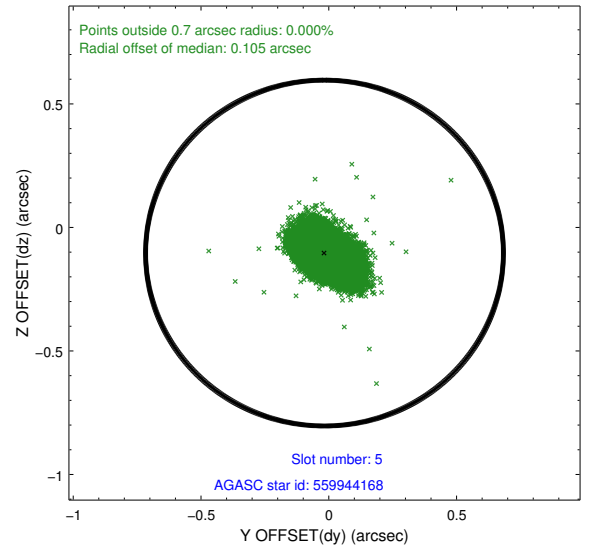
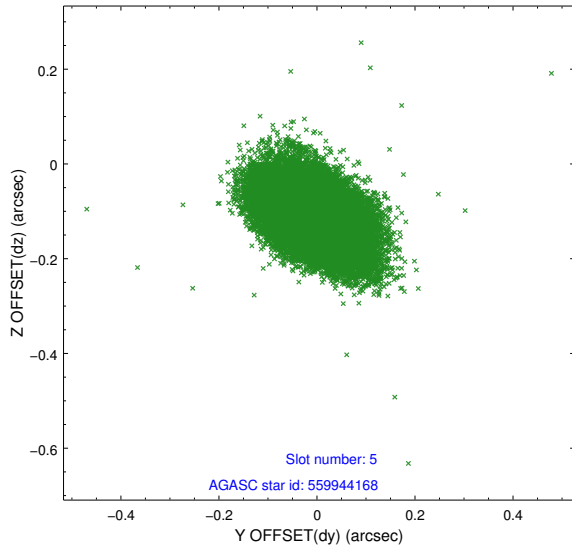
### 2.4.1 Slot 3



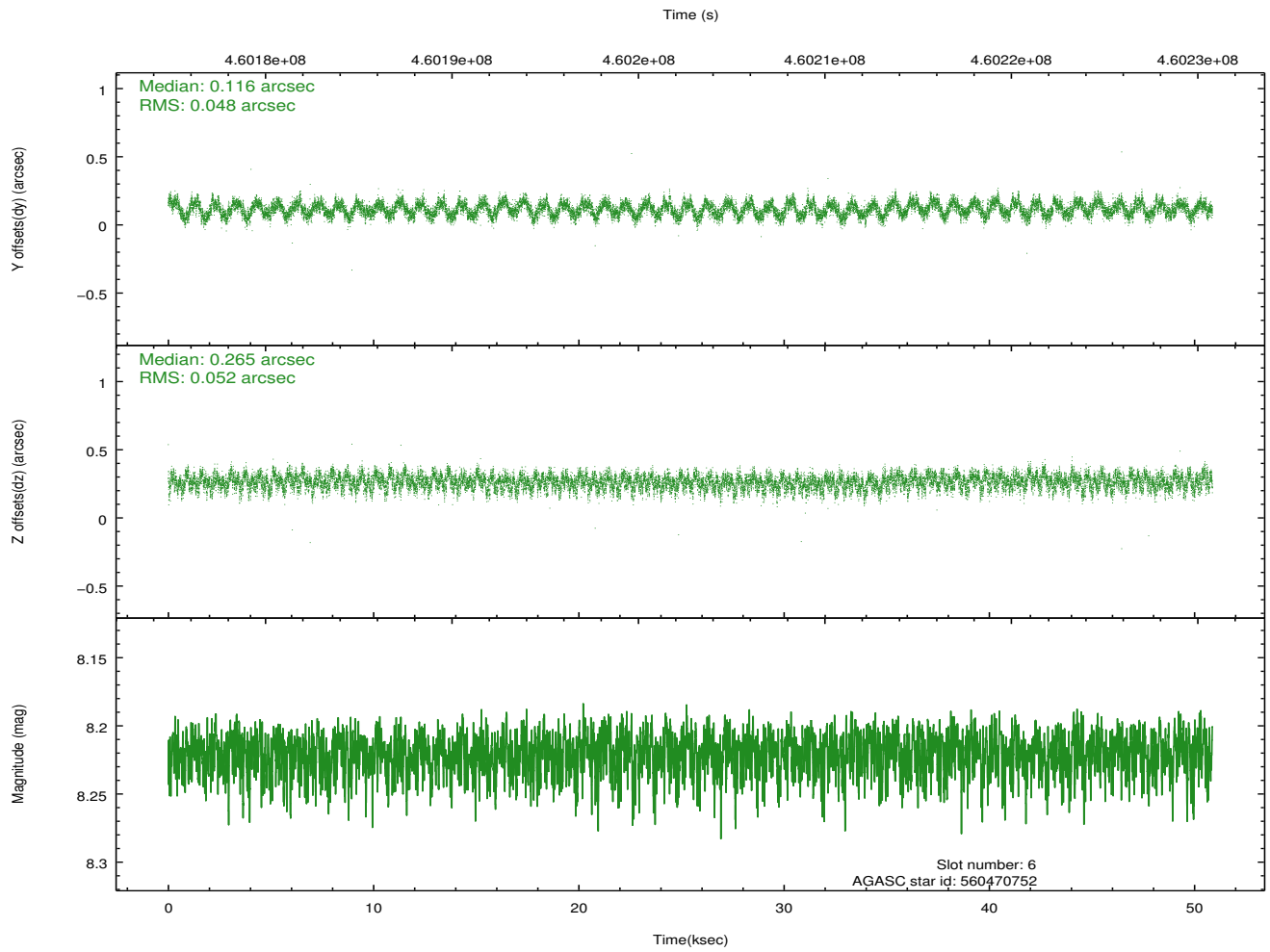
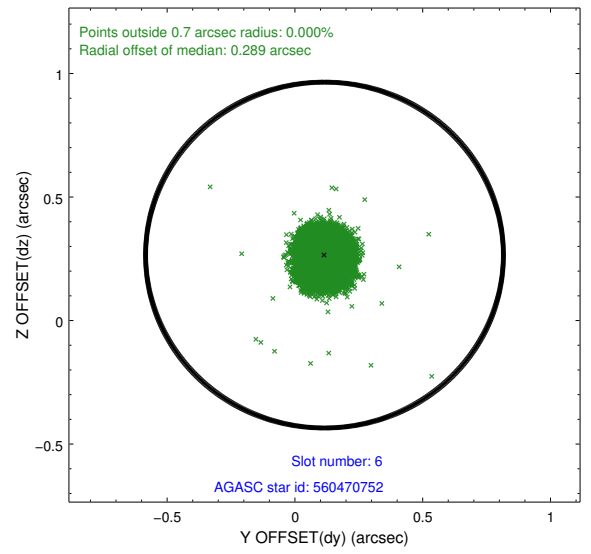
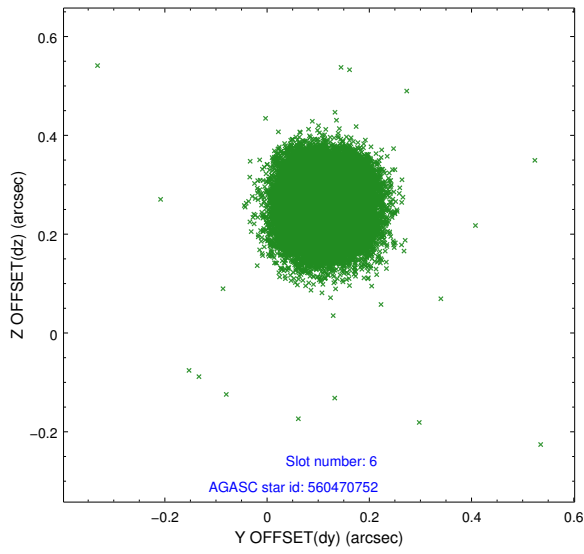
## 2.4.2 Slot 4



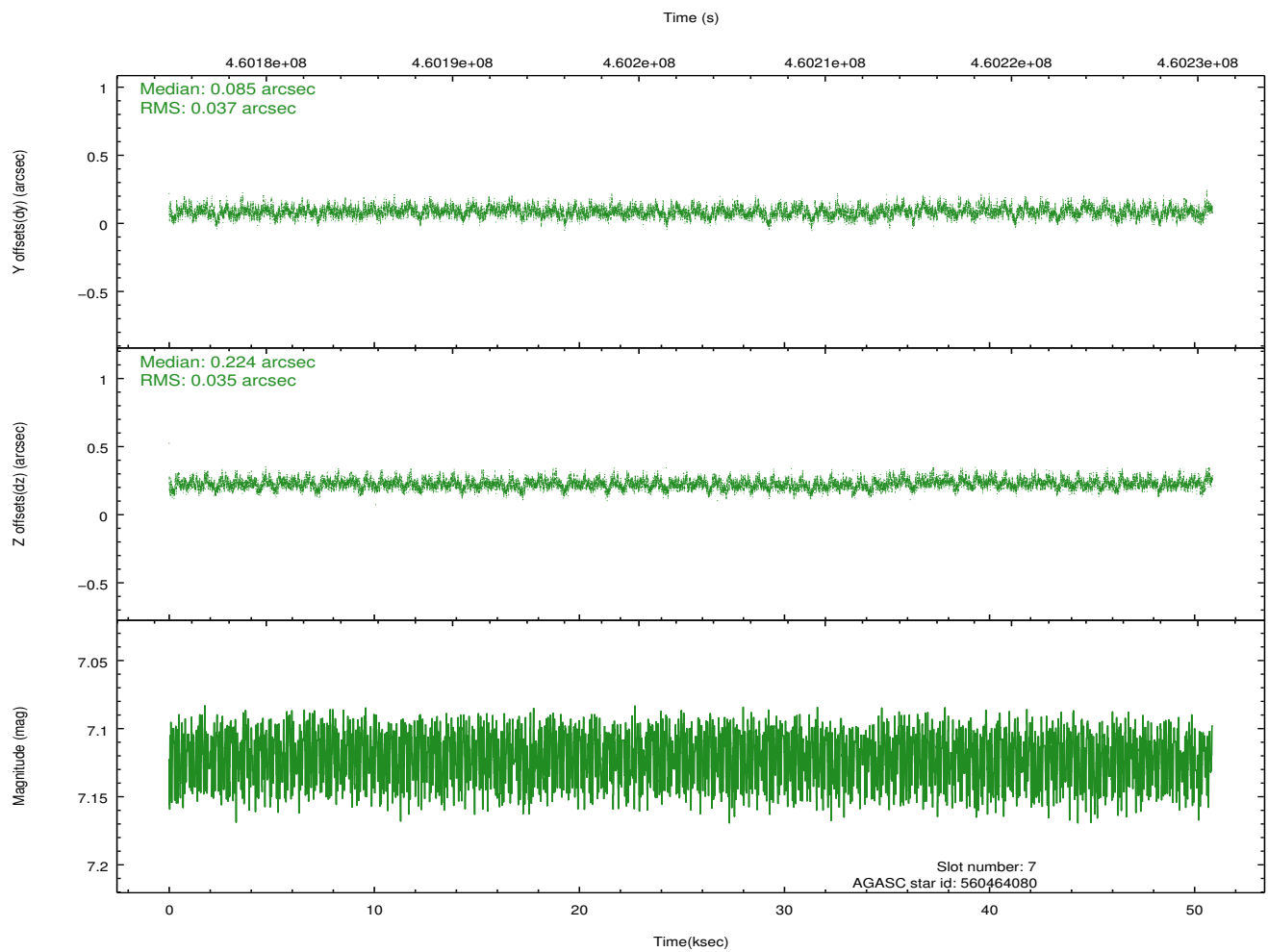
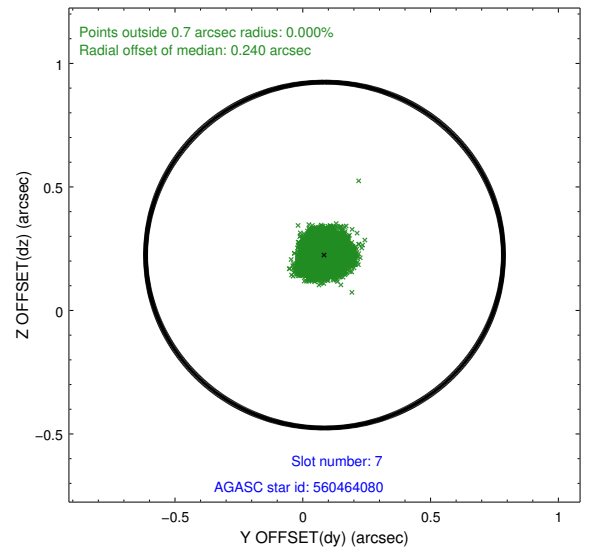
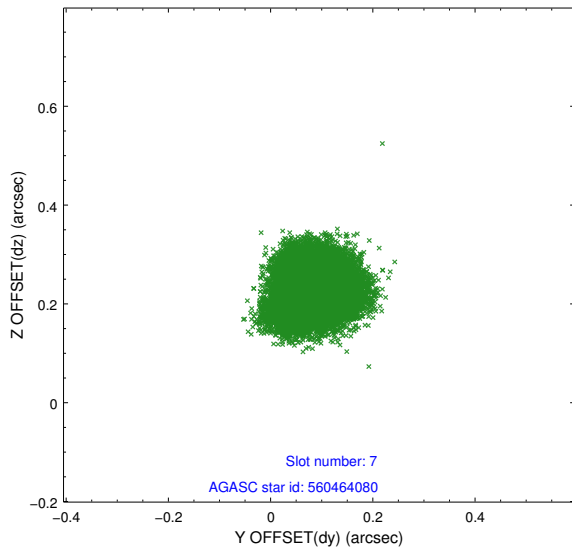
### 2.4.3 Slot 5



### 2.4.4 Slot 6

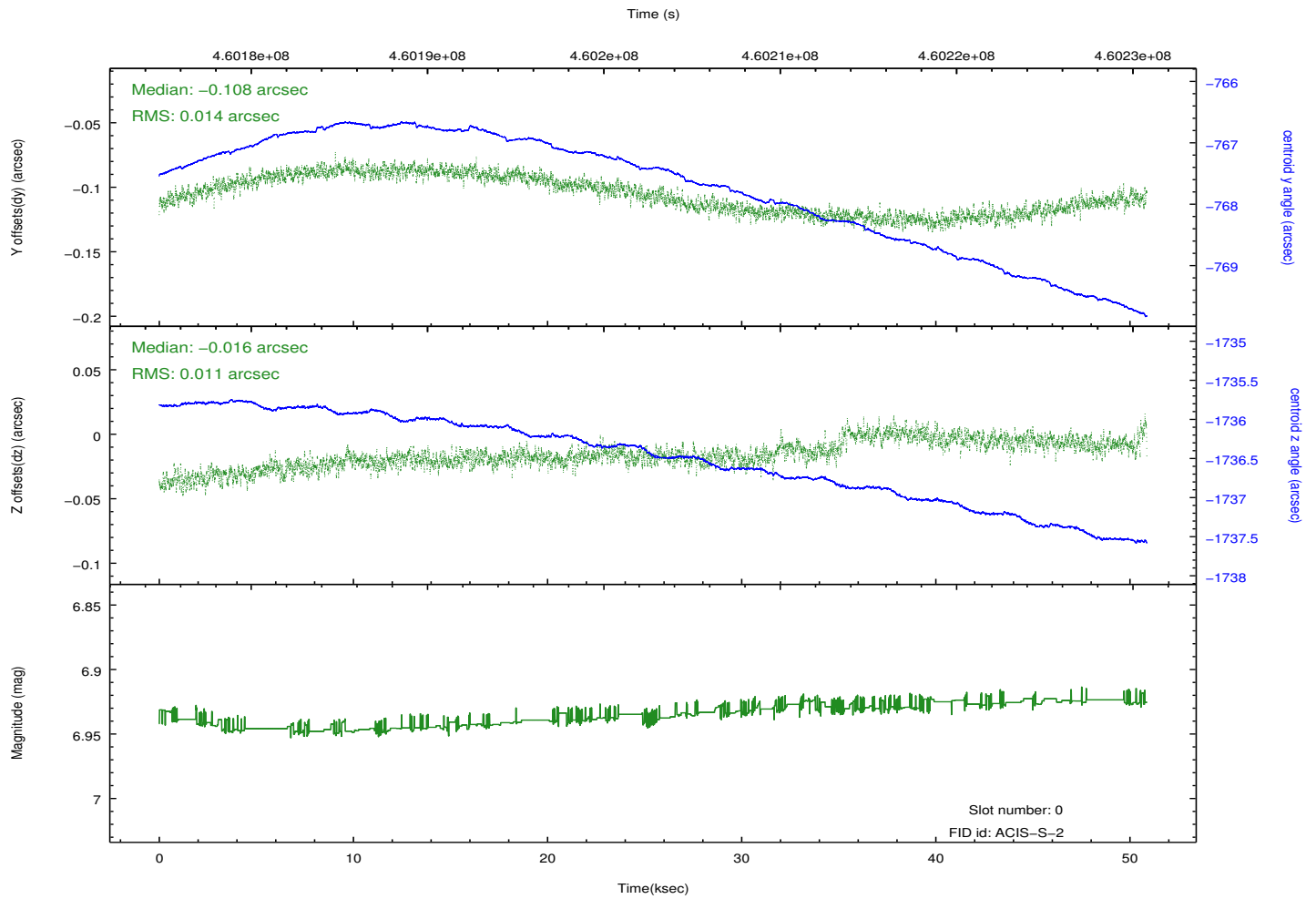
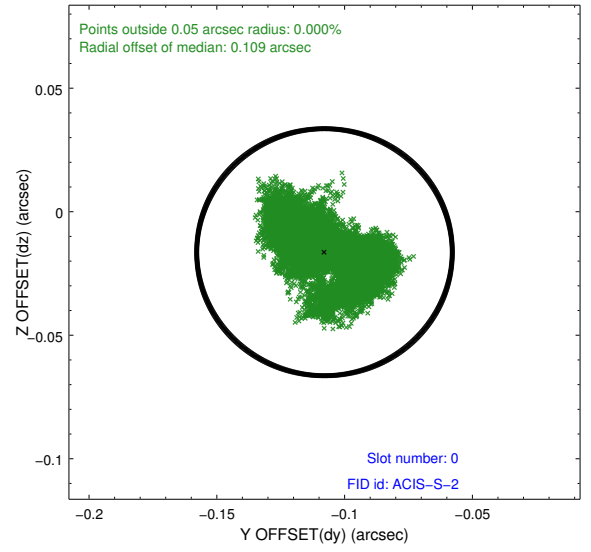
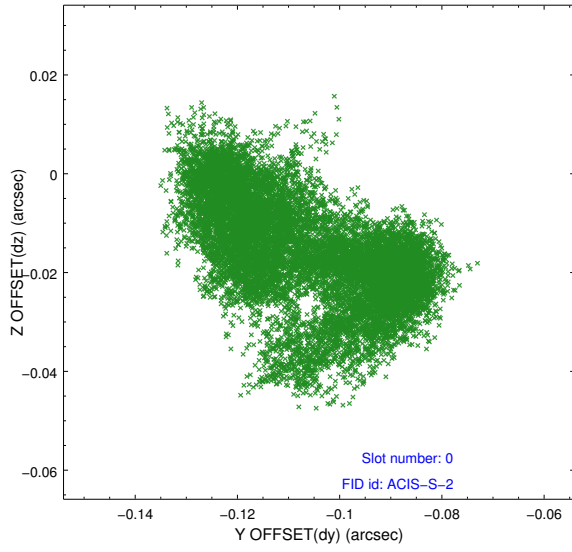


## 2.4.5 Slot 7

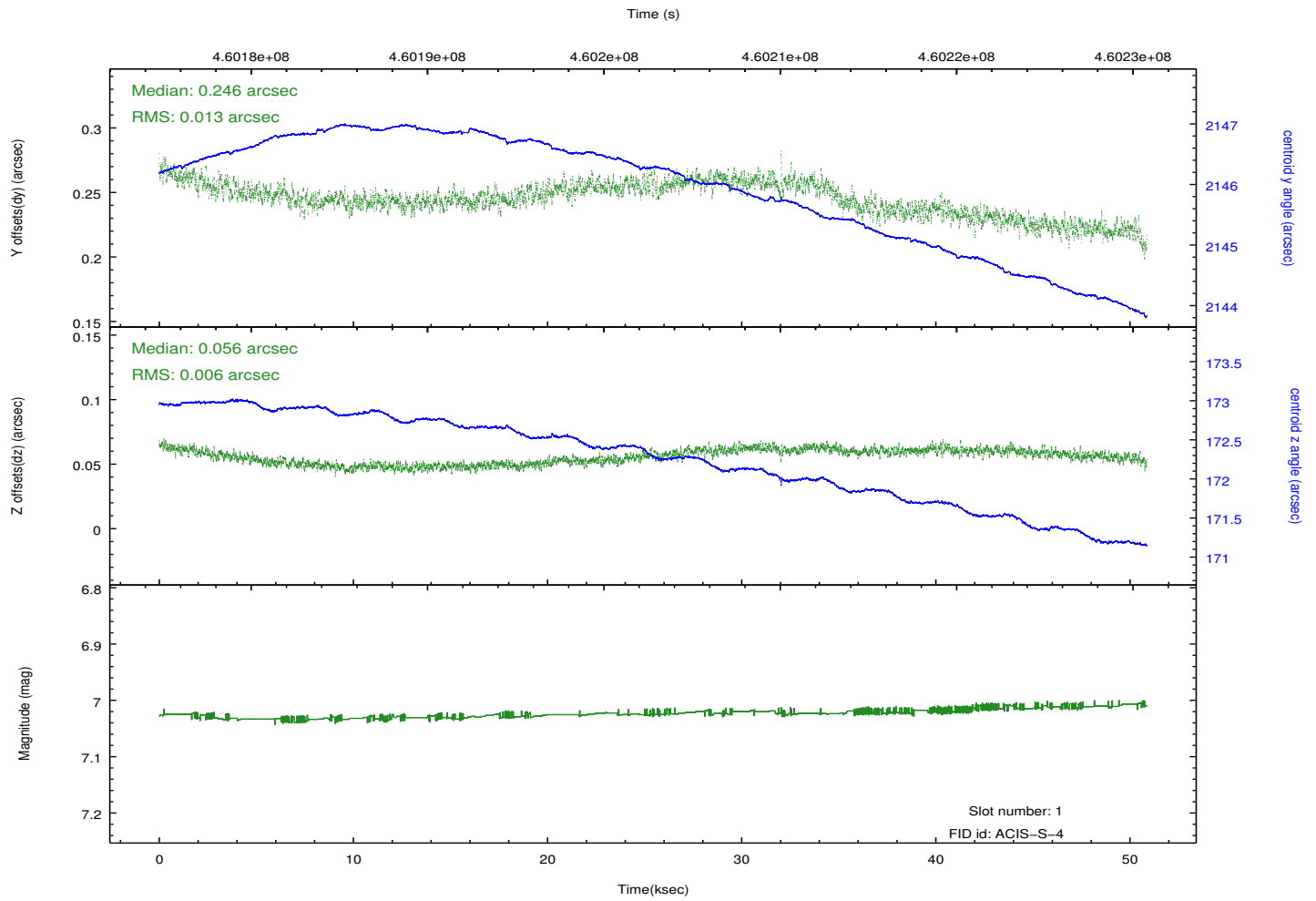
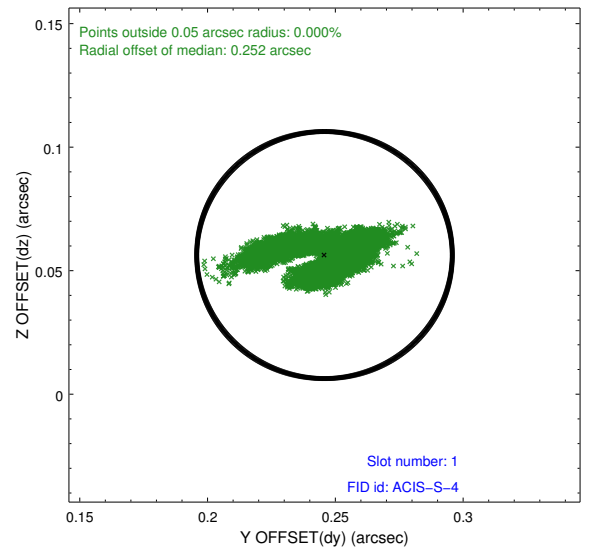
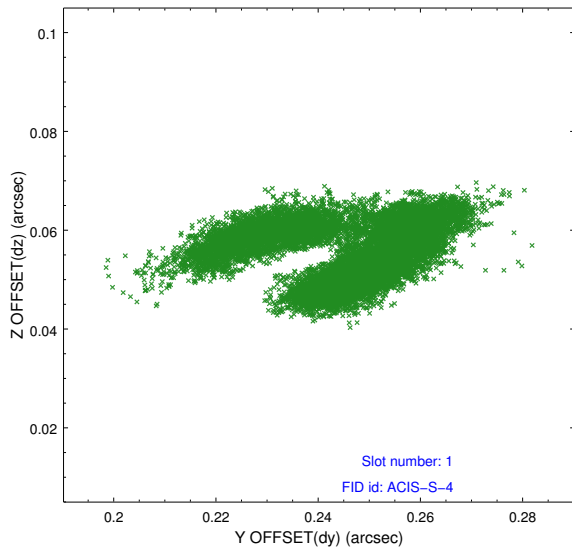


## 2.5 FID Slots

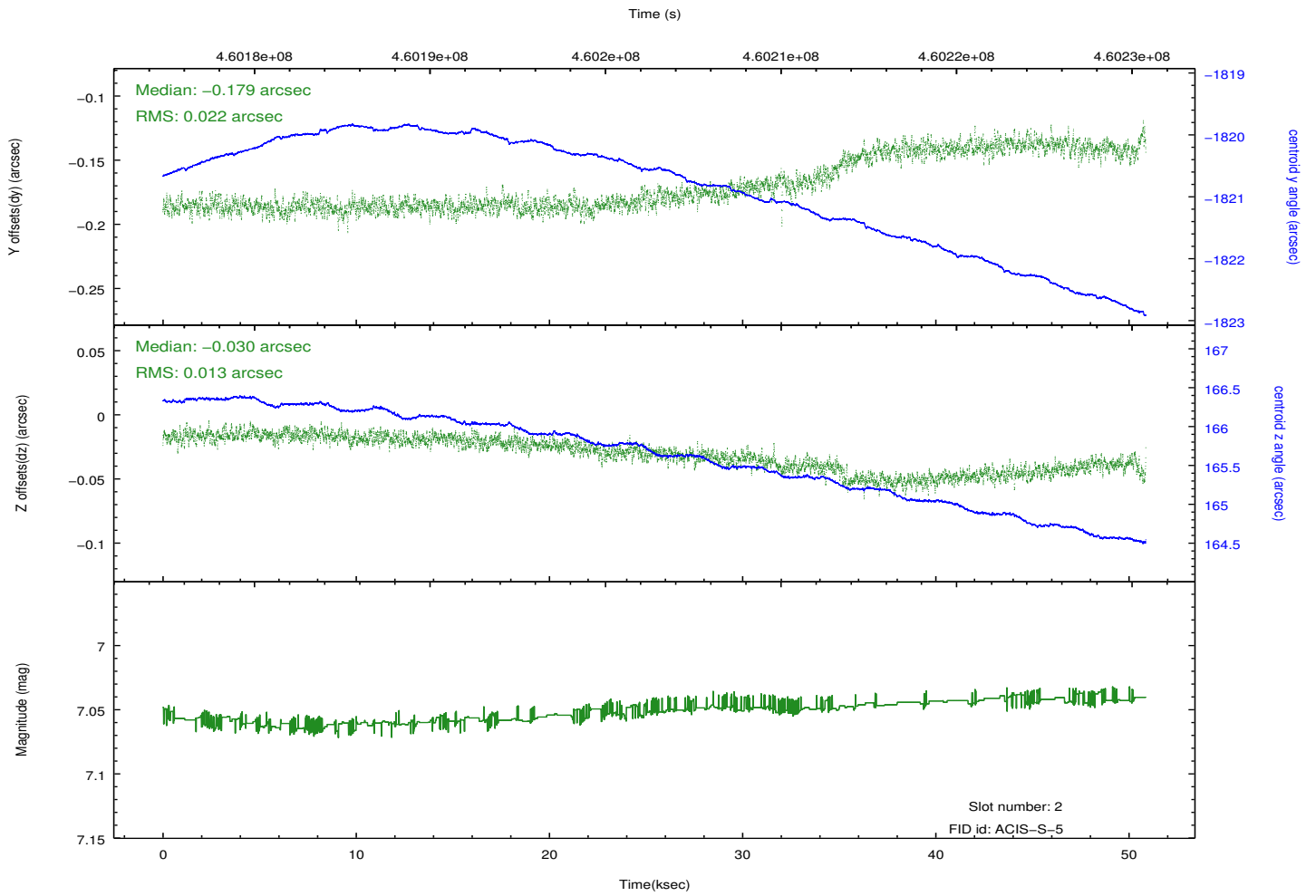
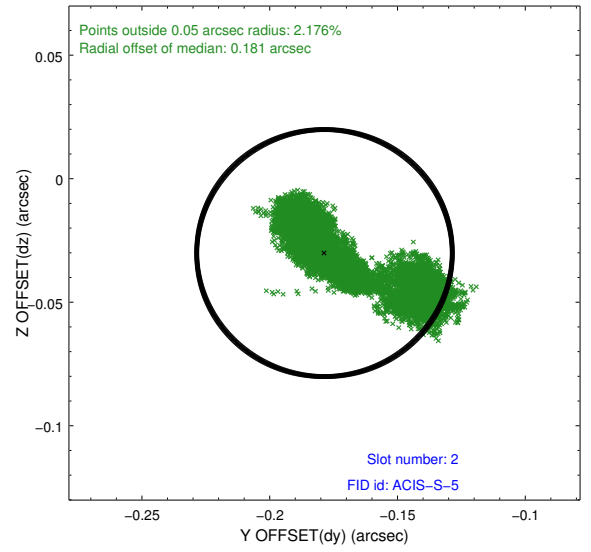
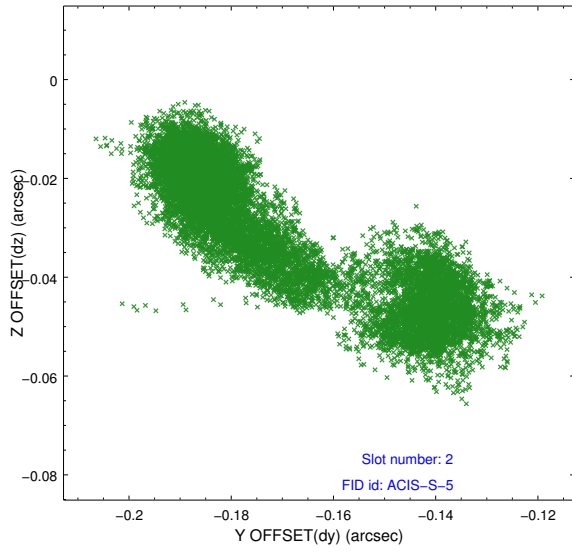
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.08.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	50.065000385046

### A.2 Comments