

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 12378 - L2 Version 2  
Chandra X-Ray Center

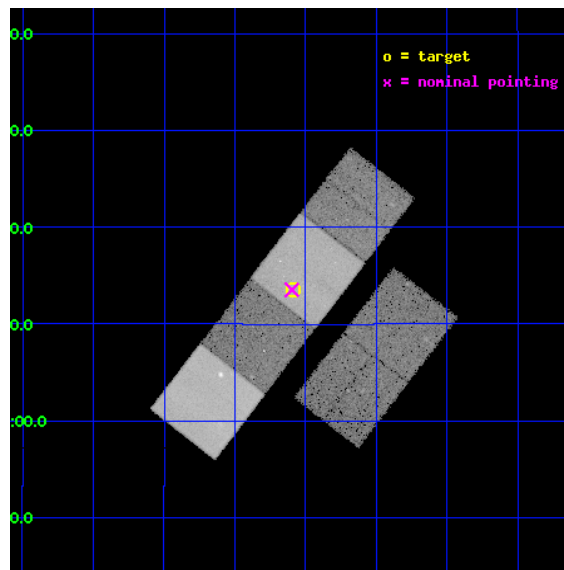
L2 Processing Date : Feb 27 2012

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# 1 Front

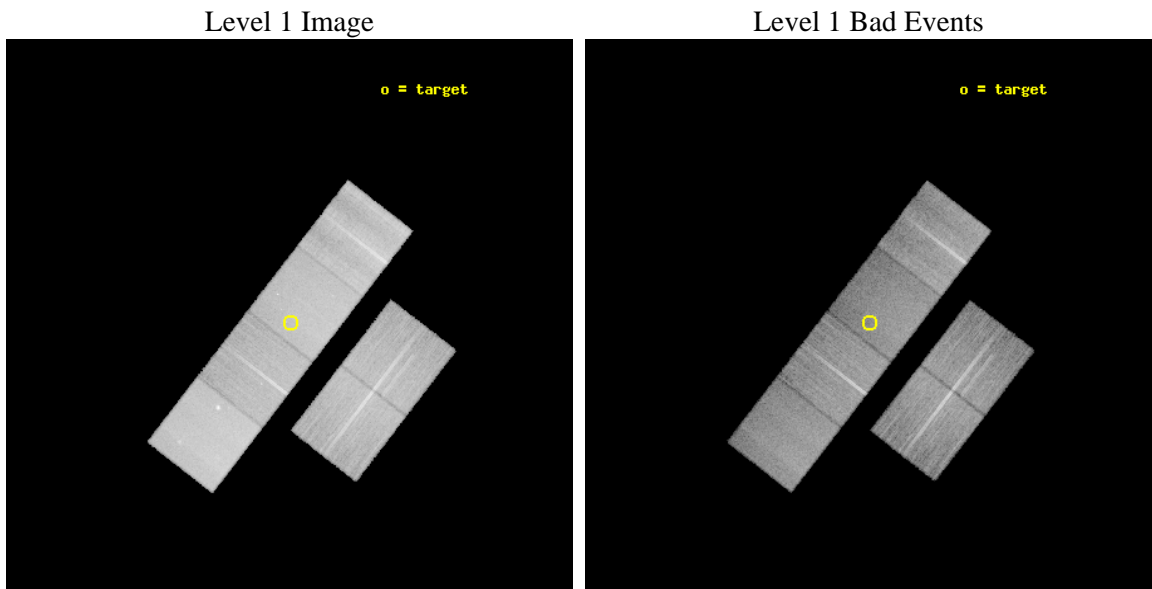
seq_num	200712	Sequence number
obs_id	12378	Observation id
title	X-rays from Planetary Nebulae: Unveiling Binarity, Magnetic Fields, and Wind Collisions	Proposal title
observer	Dr. Joel Kastner	Principal investigator
object	NGC 6804	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	292.89625	Observer's specified target RA [deg]
dec_targ	9.225389	Observer's specified target Dec [deg]
ra_nom	292.8993154769	Nominal RA [deg]
dec_nom	9.2256639486661	Nominal Dec [deg]
roll_nom	307.71330918215	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29957.492623925	Sum of GTIs [s]
livetime	29578.152814085	Livetime [s]
ontime2	29957.533663929	Sum of GTIs [s]
ontime3	29957.369503915	Sum of GTIs [s]
ontime5	29957.451583922	Sum of GTIs [s]
ontime6	29957.410543919	Sum of GTIs [s]
ontime7	29957.492623925	Sum of GTIs [s]
ontime8	29954.087493598	Sum of GTIs [s]
l2events	320275	Number of level 2 events



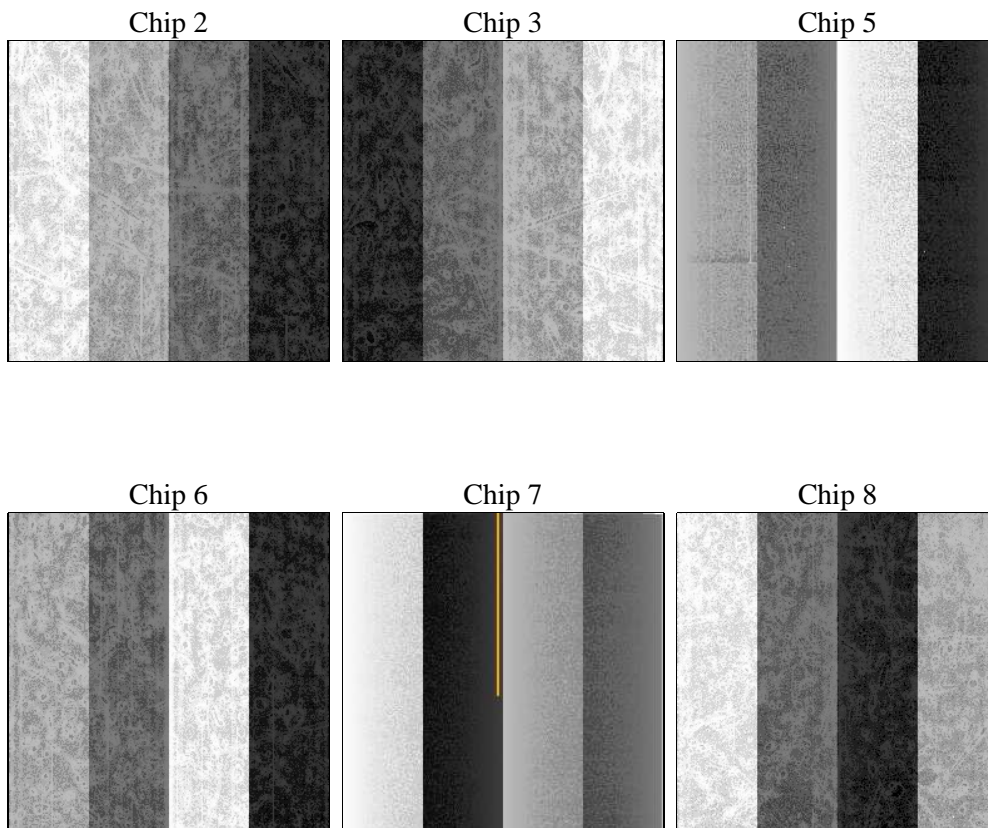
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	29957.492623925	Sum of GTIs [s]
caldbver	4.4.8	&#160	ontime2	29957.533663929	Sum of GTIs [s]
date	2012-02-28T01:39:45	Date and time of file creation	ontime3	29957.369503915	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	29957.451583922	Sum of GTIs [s]
			ontime6	29957.410543919	Sum of GTIs [s]
			ontime7	29957.492623925	Sum of GTIs [s]
			ontime8	29954.087493598	Sum of GTIs [s]
			l1events	1339994	Number of level 1 events

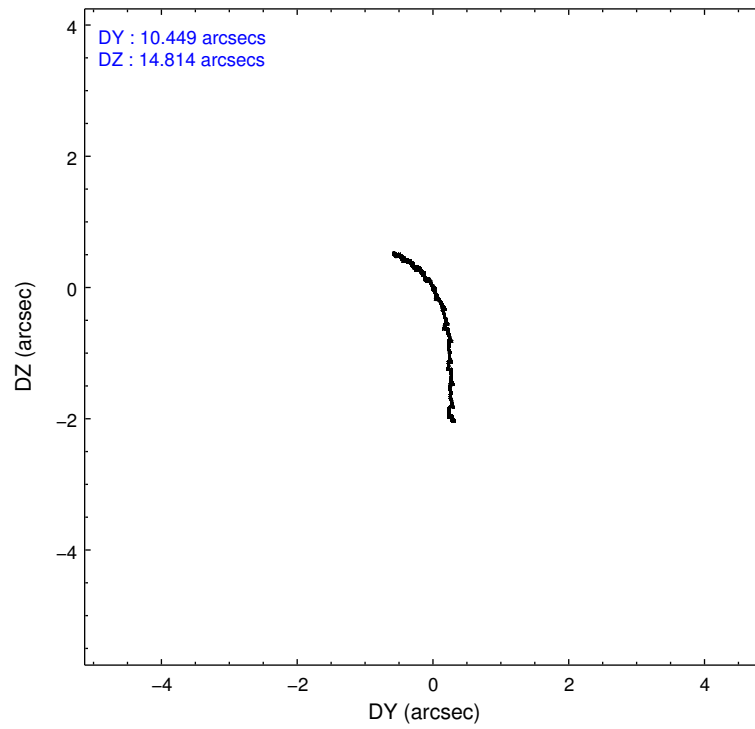
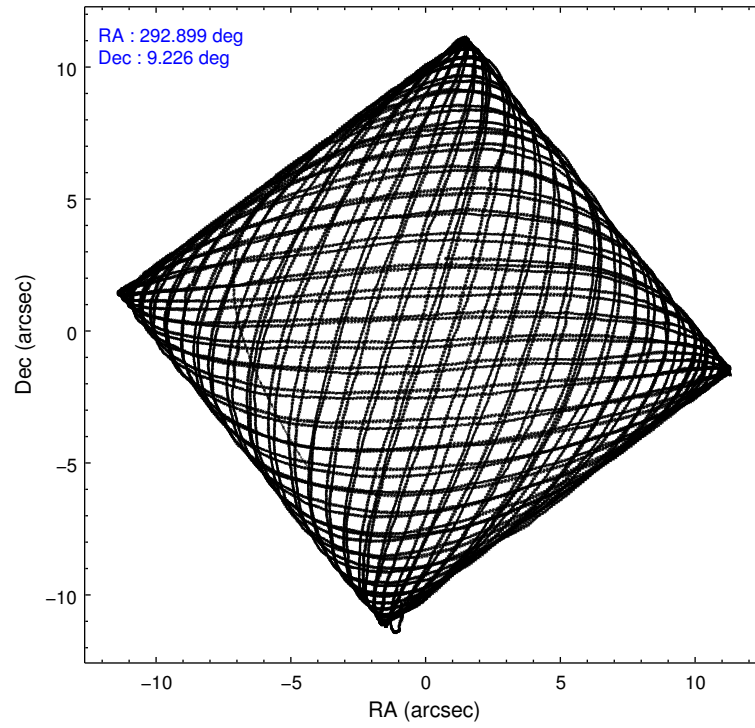
### 2.1.4 Events

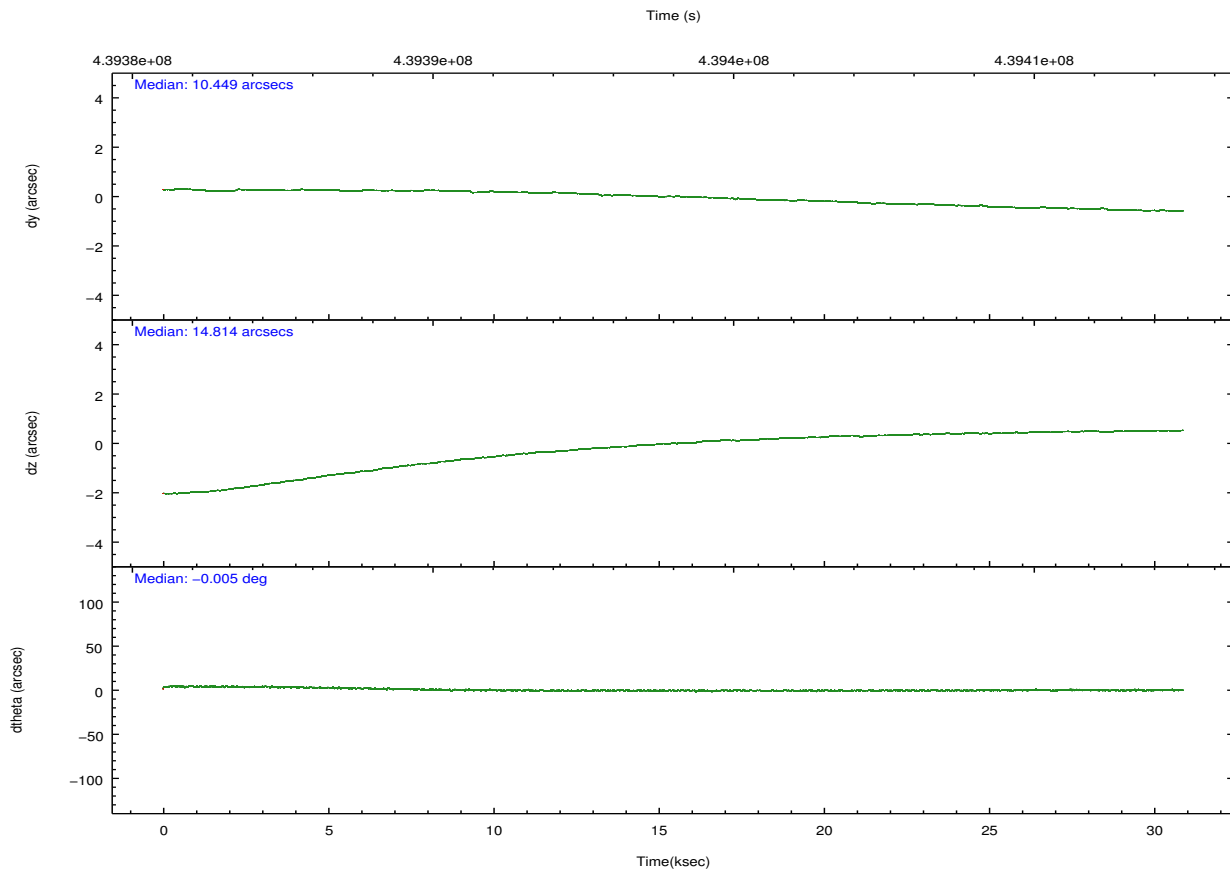
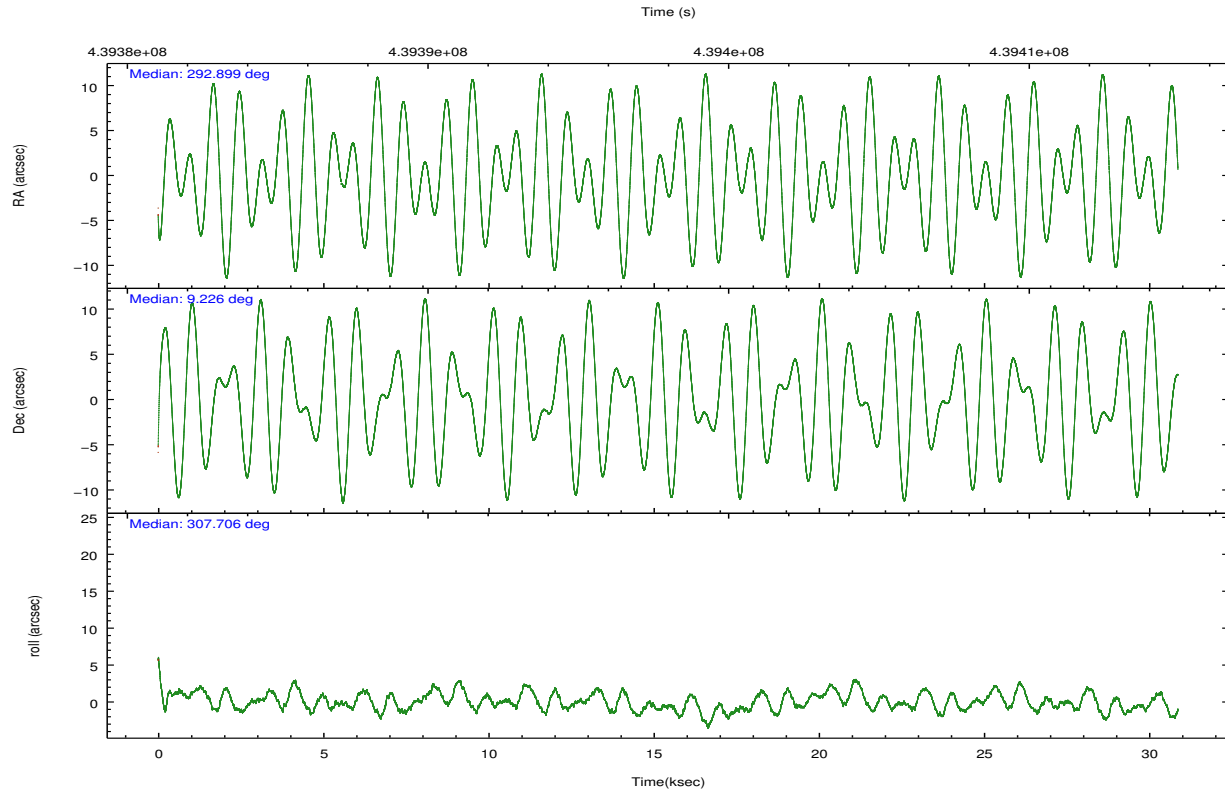
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	193316	177924	290806	191225	240194	246529	grade 0 events	7555	7097	9325	7862	9755	19731
rejected events	172359	158170	150454	169005	132674	180837		3%	3%	3%	4%	4%	8%
rejected %	89%	88%	51%	88%	55%	73%	grade 1 events	117	110	480	104	248	201
								0%	0%	0%	0%	0%	0%
							grade 2 events	5103	4335	43098	4908	21925	15328
								2%	2%	14%	2%	9%	6%
							grade 3 events	2054	2200	5453	2288	9423	6922
								1%	1%	1%	1%	3%	2%
							grade 4 events	2219	2090	5370	2230	9475	6416
								1%	1%	1%	1%	3%	2%
							grade 5 events	7994	8759	22414	9142	24985	12940
								4%	4%	7%	4%	10%	5%
							grade 6 events	4030	4038	77139	4933	56965	17299
								2%	2%	26%	2%	23%	7%
							grade 7 events	164244	149295	127527	159758	107418	167692
								84%	83%	43%	83%	44%	68%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	292.873530	292.8993154768976	CCD I2 on	O4	Y
[deg] Pointing Dec	9.235682	9.225663948666137	CCD I3 on	O5	Y
[deg] Pointing Roll	307.560819	307.713309182148	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	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	O2	Y
[s] Observation start time (MET)	439383413.184000	439381449.1826	CCD S5 on	N	N
Observation start date	2011-12-04T10:55:47	2011-12-04T10:24:09	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	439413413.184000	439414443.93434	On-chip summing requested	N	N
Observation end date	2011-12-04T19:15:47	2011-12-04T19:34:03	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



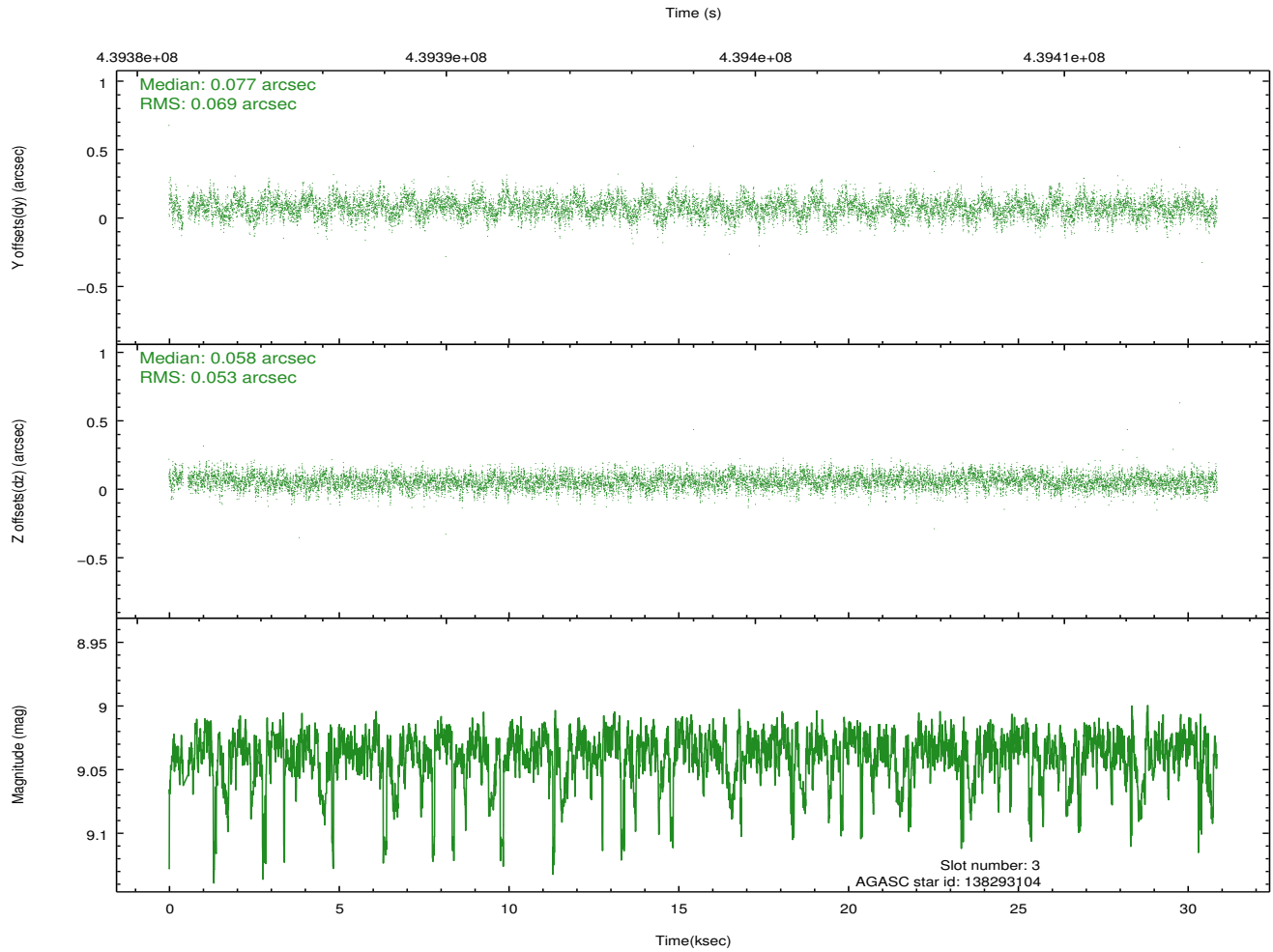
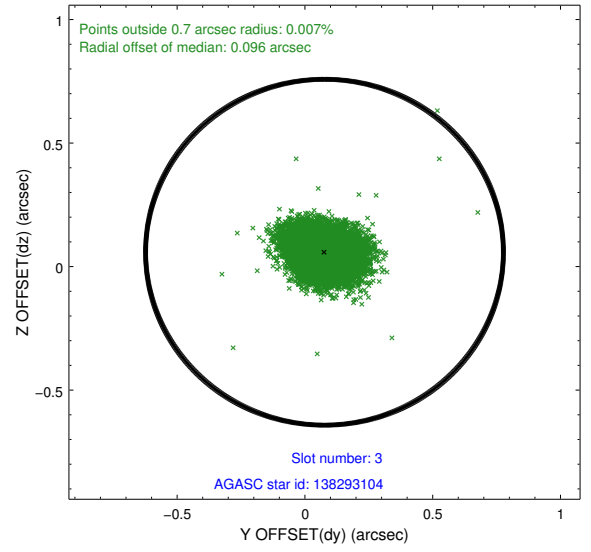
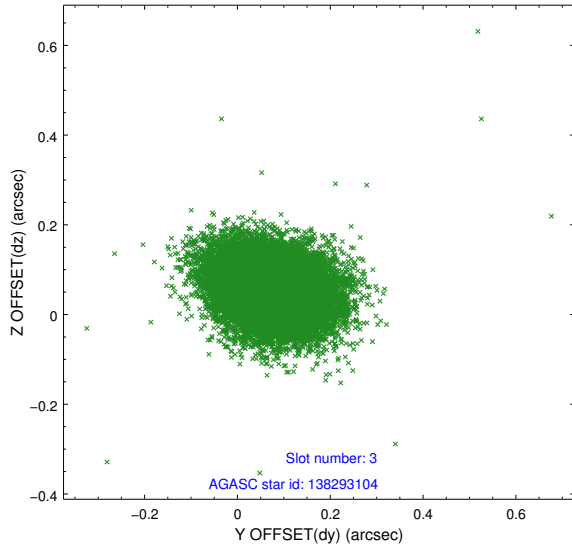


### Slot Statistics

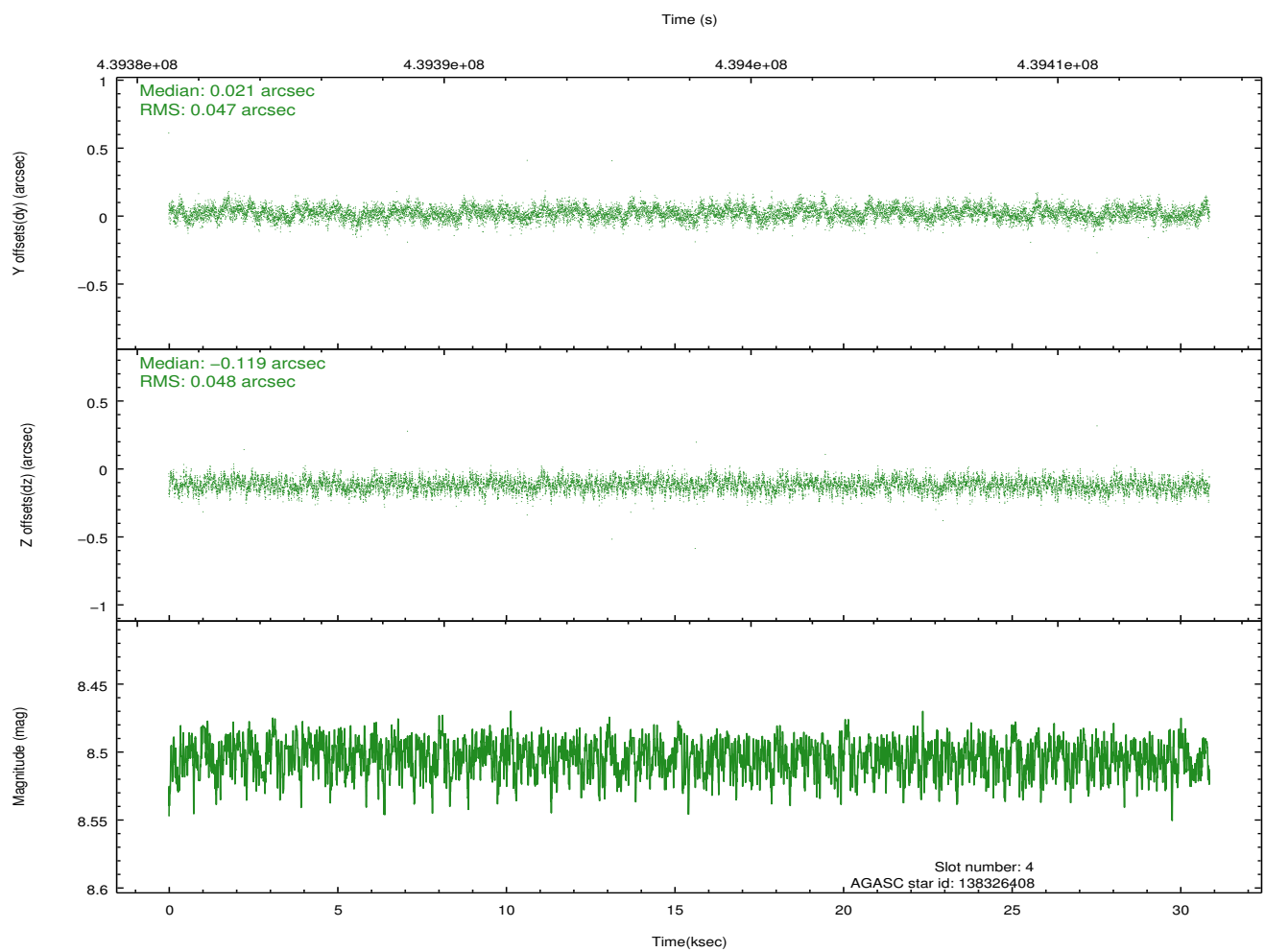
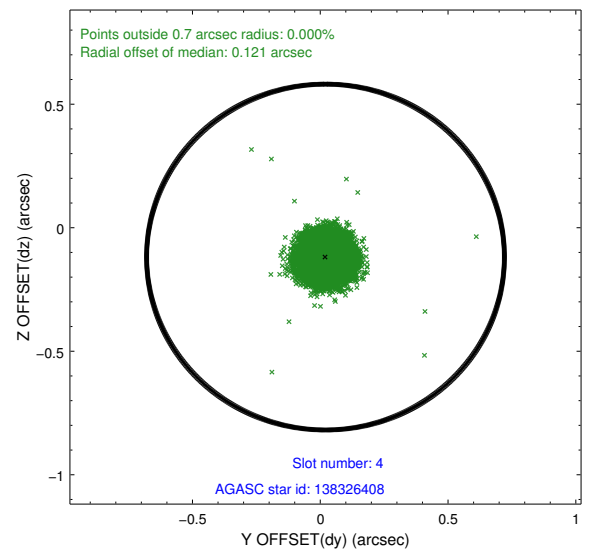
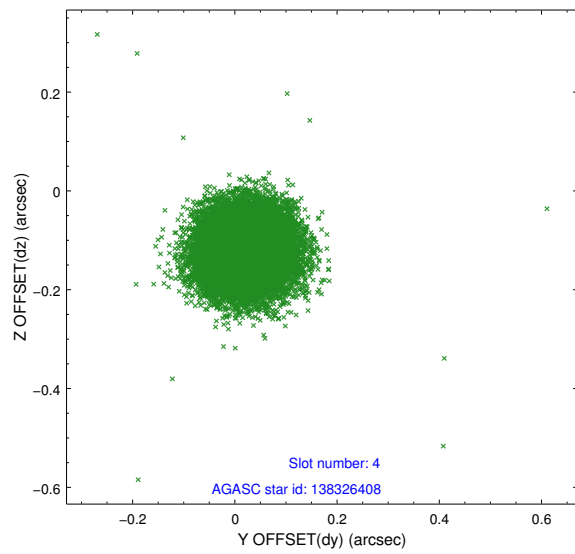
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.05	7530	0.076	-0.054	0.019	0.032	0.000000	0.000000	932.87	-1731.57
1	FID	ACIS-S-5	7.08	7528	-0.156	0.039	0.020	0.030	0.000000	0.000000	-1816.31	166.04
2	FID	ACIS-S-6	7.18	7530	0.064	0.028	0.033	0.047	0.000000	0.000000	398.35	810.04
3	GUIDE	138293104	9.04	14963	0.077	0.058	0.091	0.151	292.894537	8.730785	1487.84	-1049.60
4	GUIDE	138326408	8.50	15052	0.021	-0.119	0.071	0.114	292.842130	9.284423	-206.79	18.37
5	GUIDE	138427632	9.29	15044	-0.023	-0.125	0.108	0.169	293.301518	8.851041	2025.15	363.43
6	GUIDE	138422320	9.23	14999	0.048	0.048	0.083	0.133	293.606793	9.086867	2011.79	1741.74
7	GUIDE	138951160	7.25	15056	-0.117	0.139	0.073	0.122	293.121969	10.016758	-1692.46	2412.67

## 2.4 Star Slots

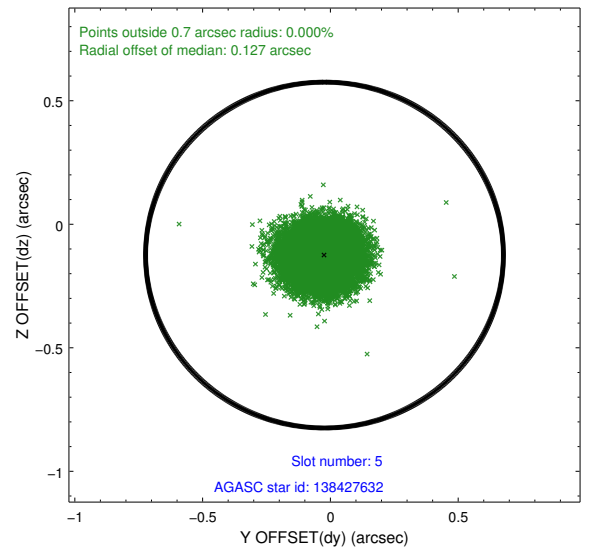
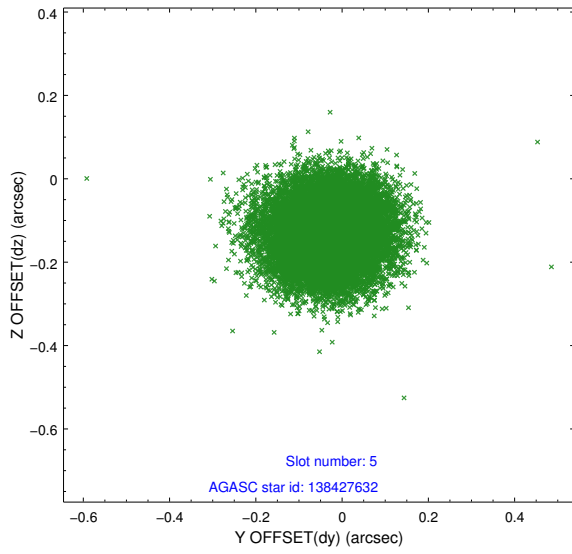
### 2.4.1 Slot 3



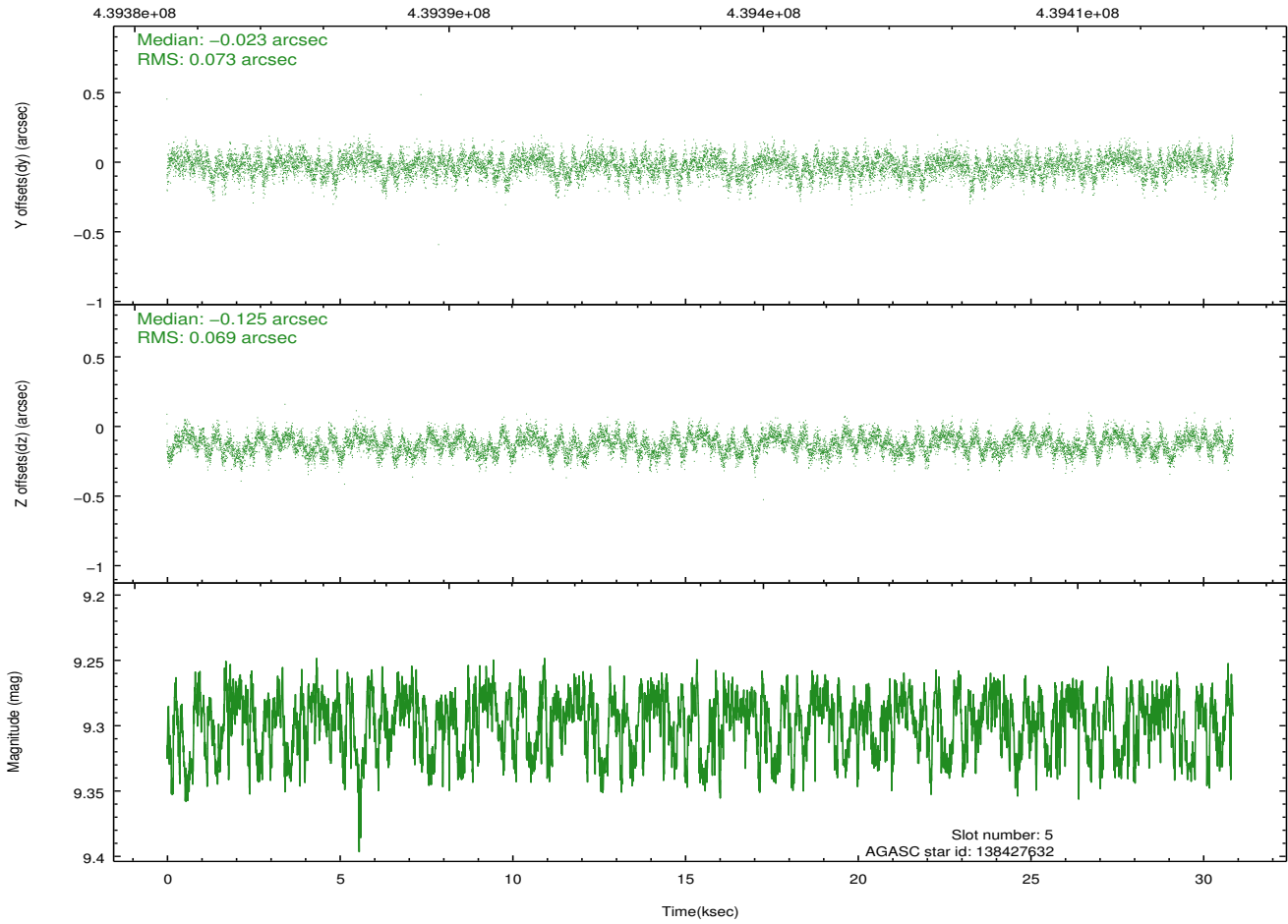
## 2.4.2 Slot 4



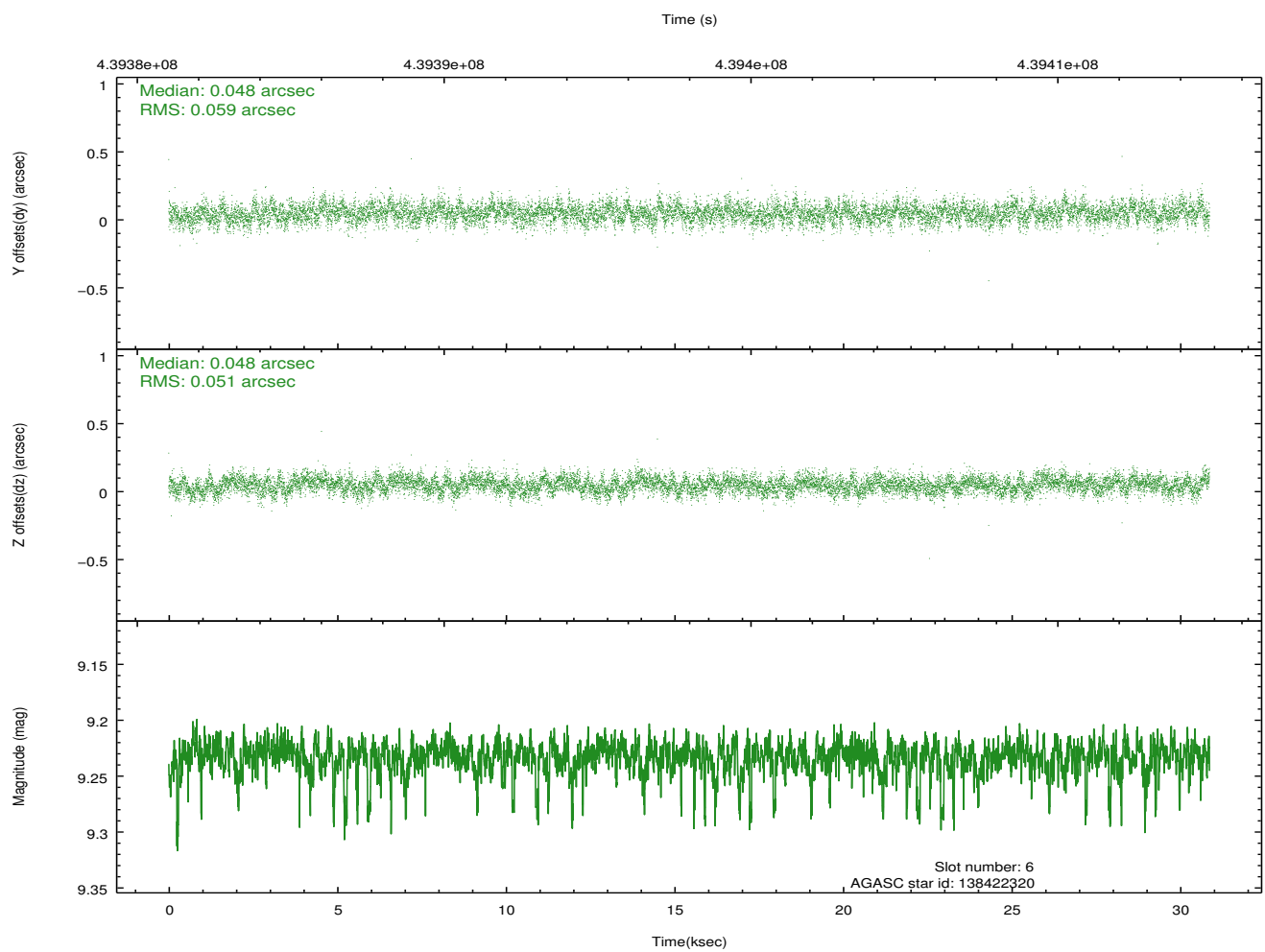
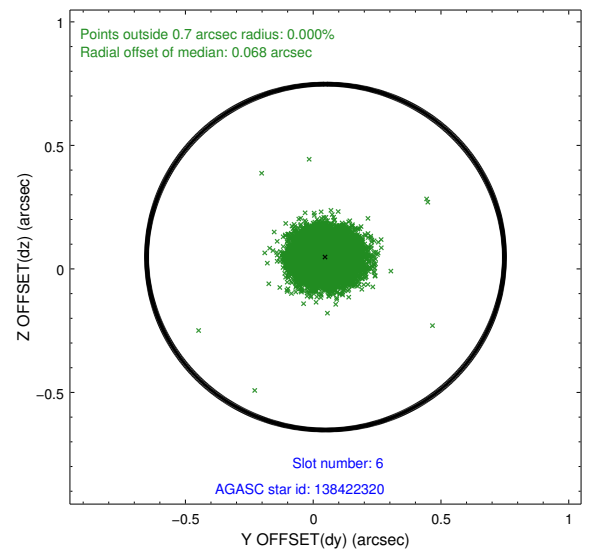
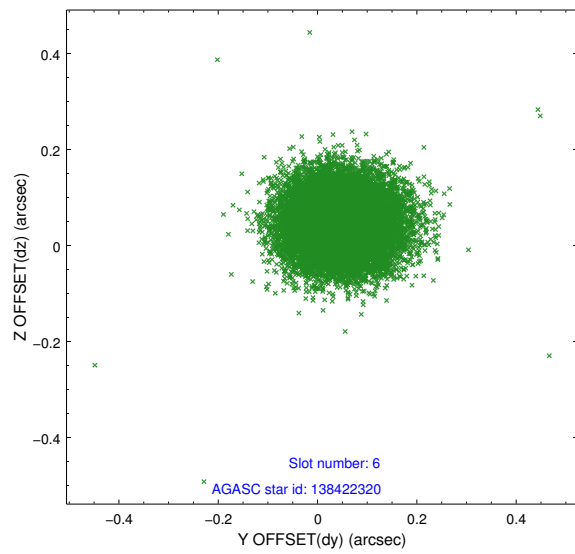
### 2.4.3 Slot 5



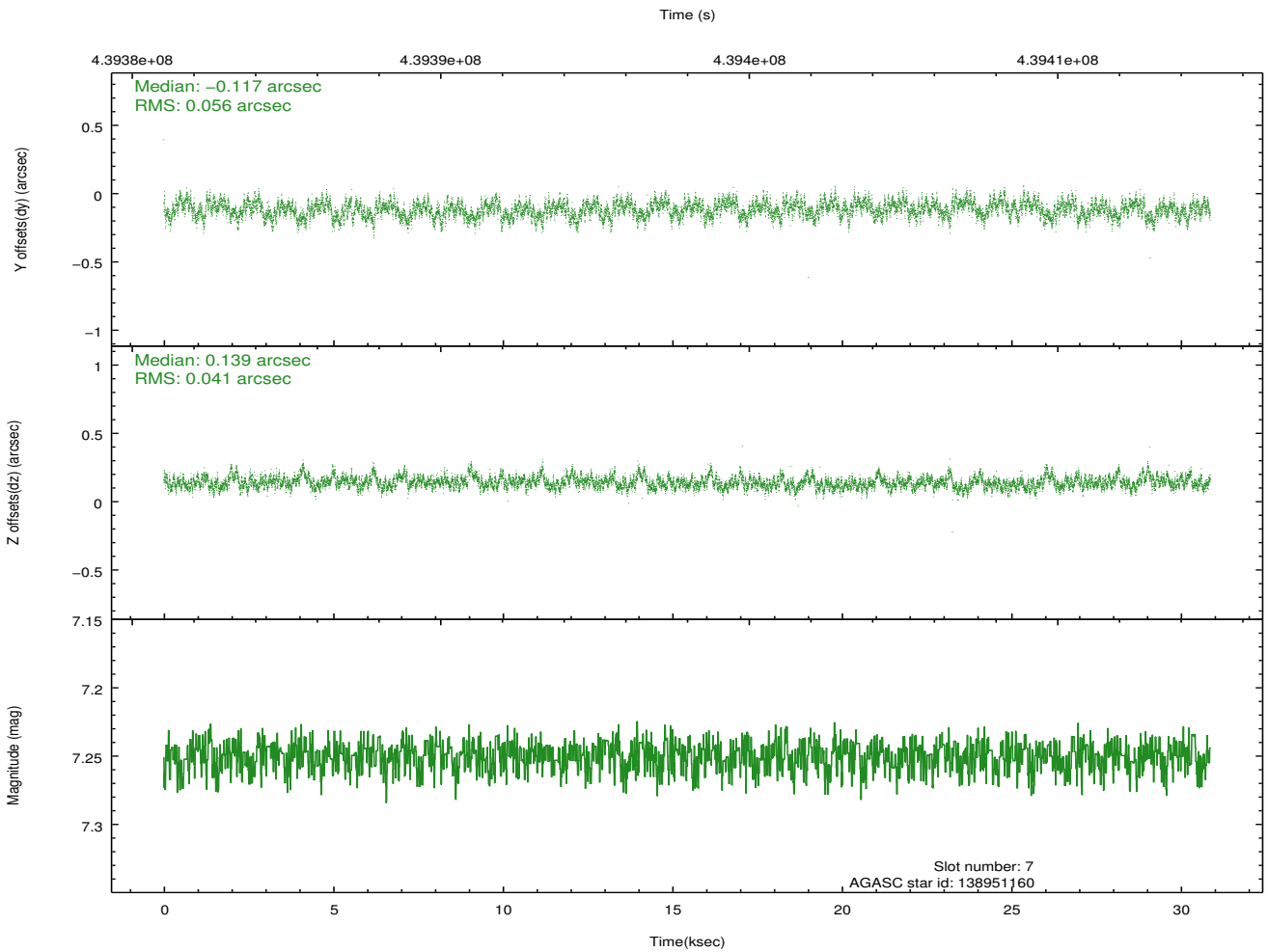
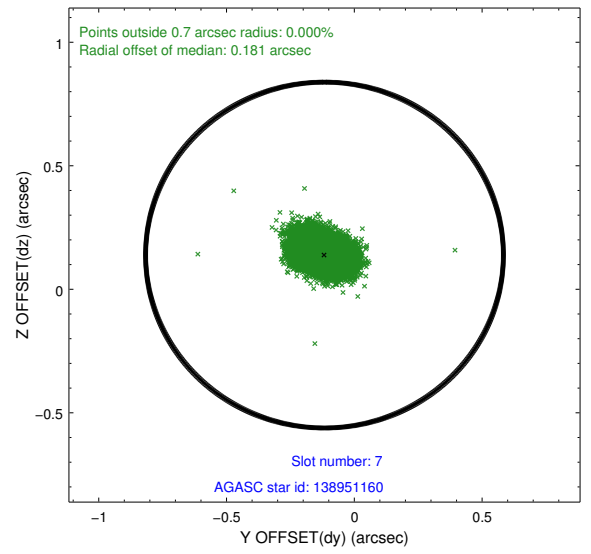
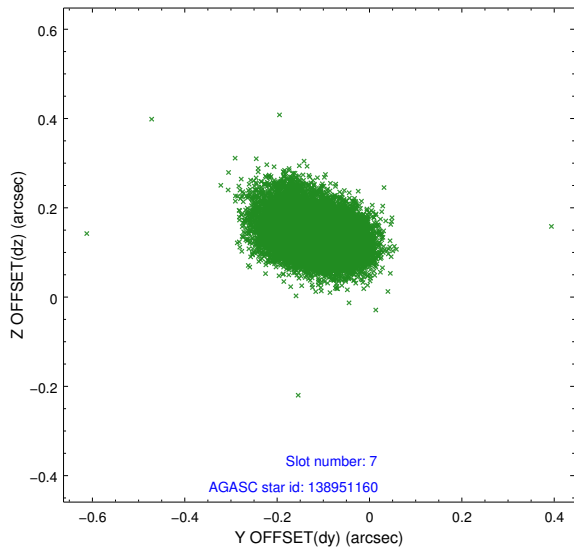
Time (s)



## 2.4.4 Slot 6

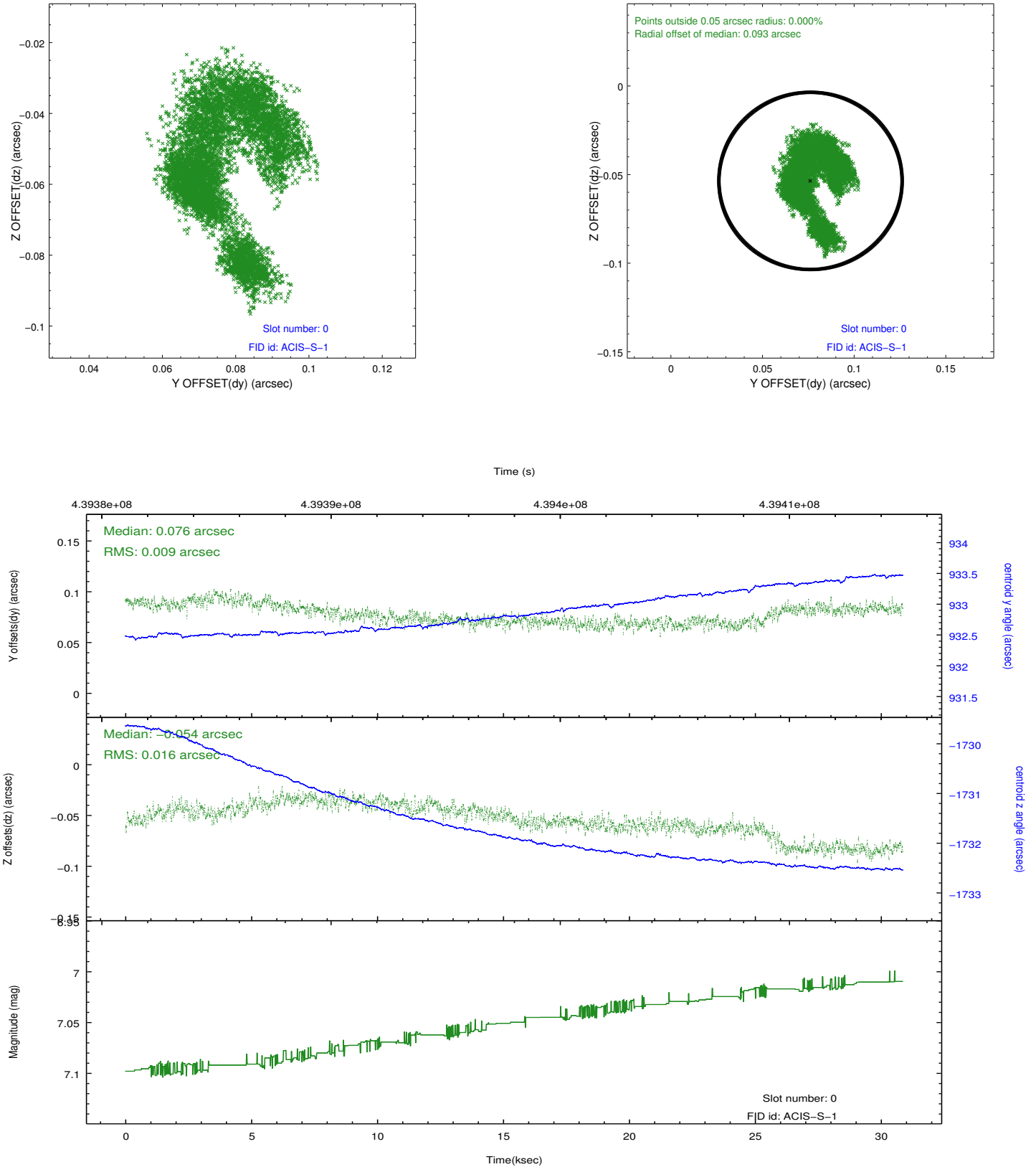


### 2.4.5 Slot 7

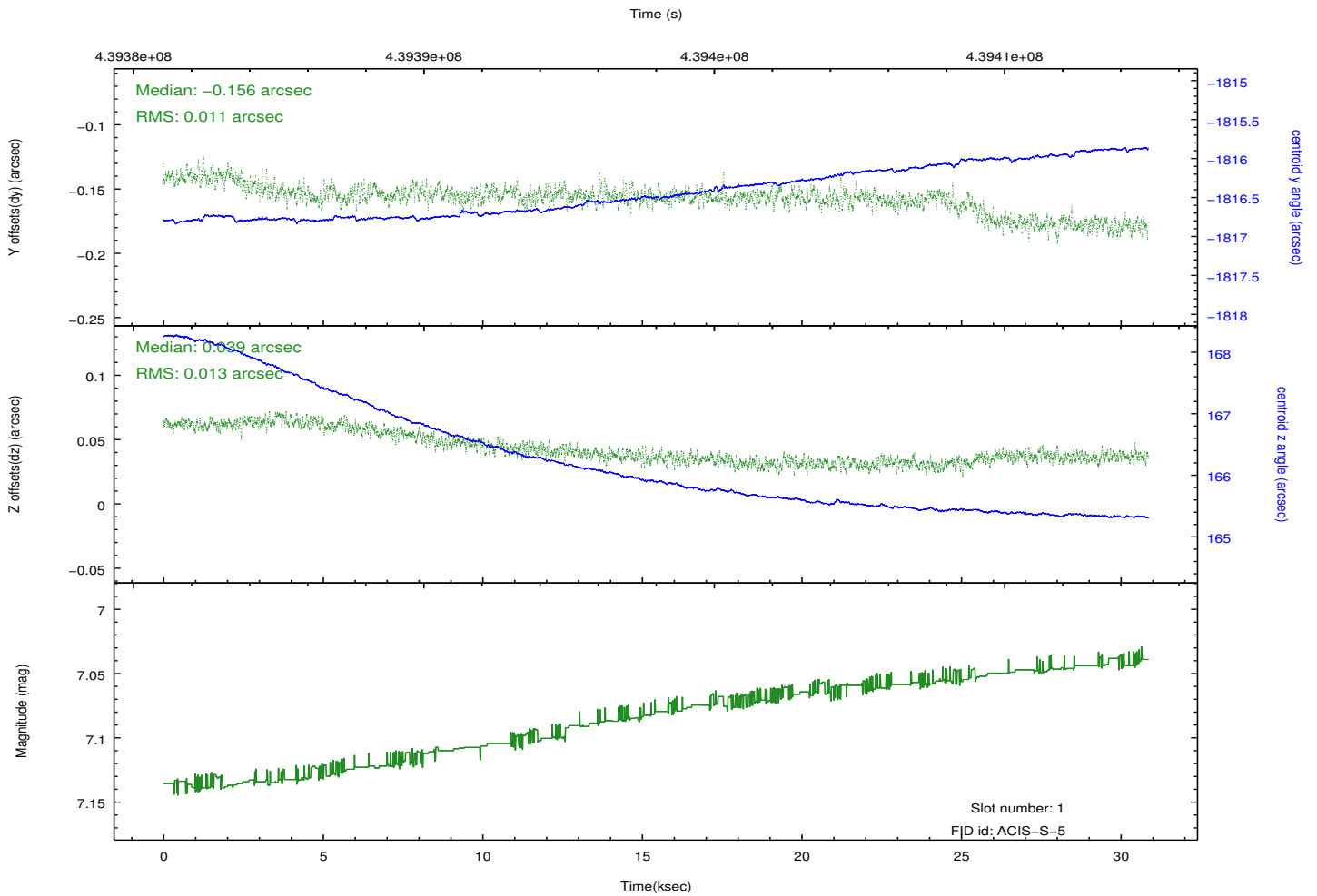
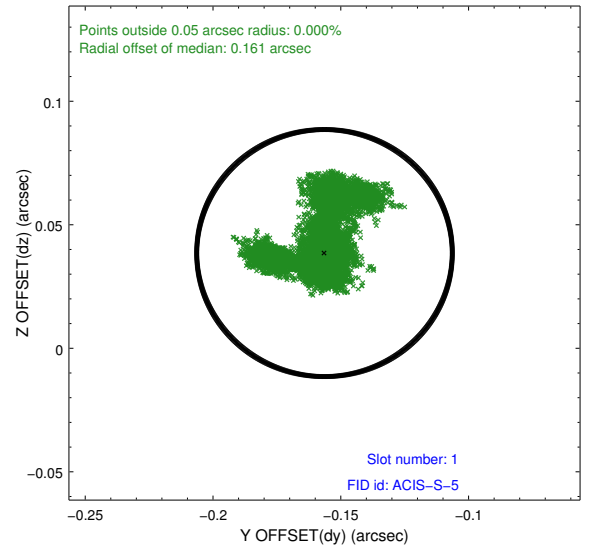
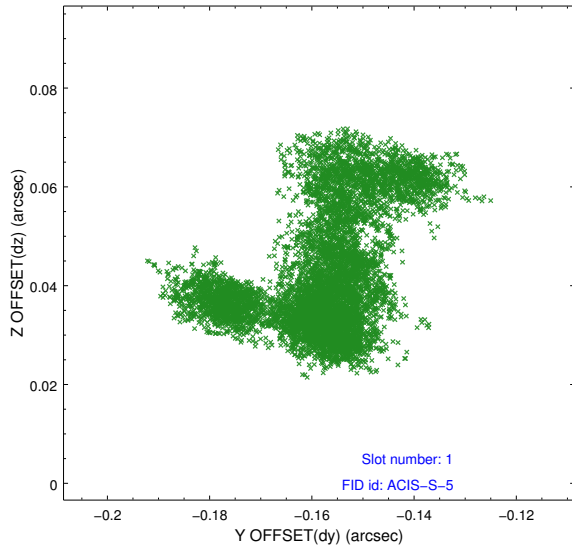


## 2.5 FID Slots

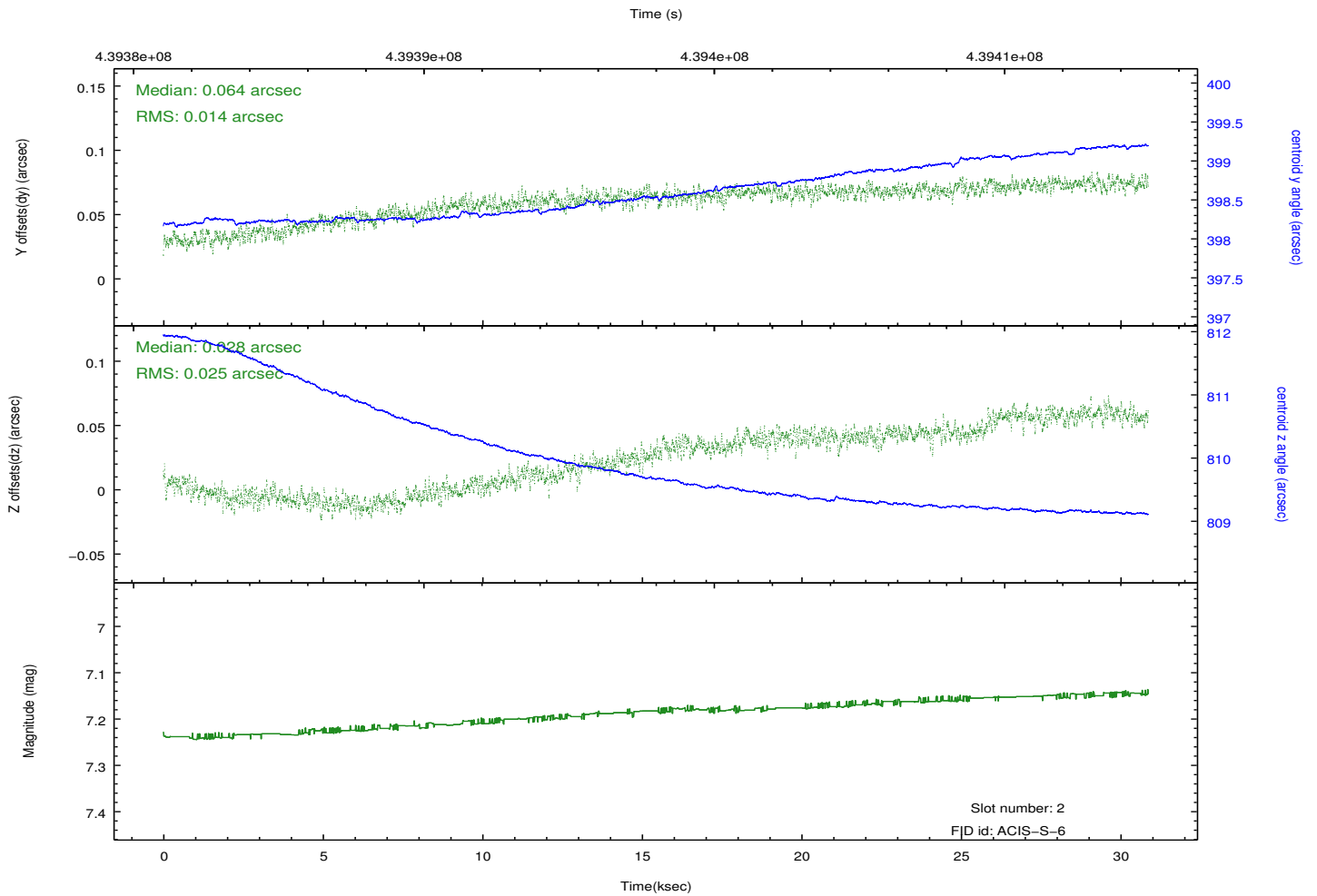
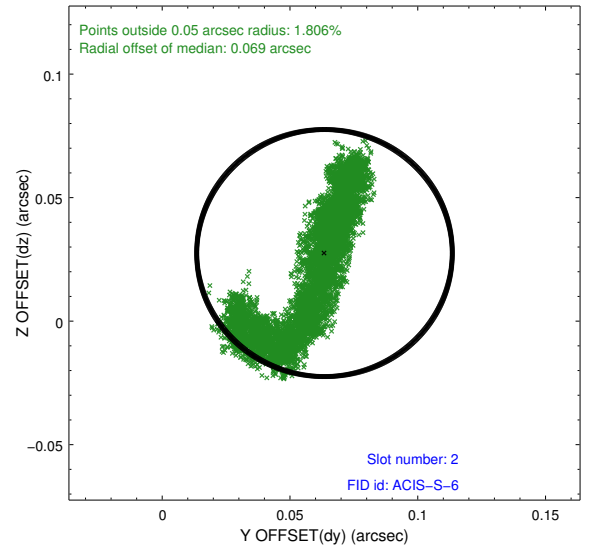
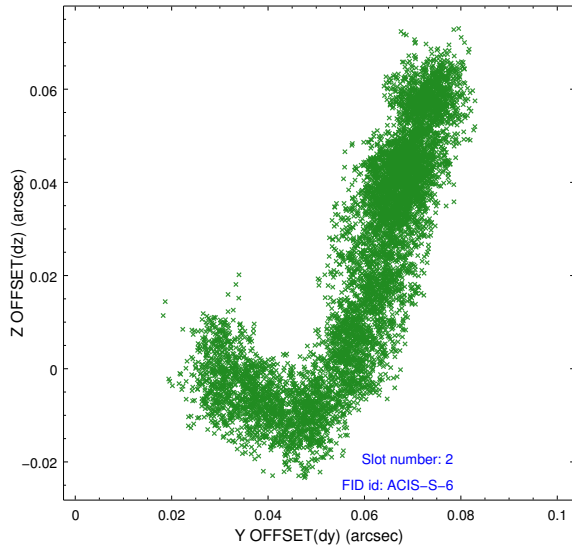
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.02.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.957492620945

### A.2 Comments