

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 9238 - L2 Version 3  
Chandra X-Ray Center

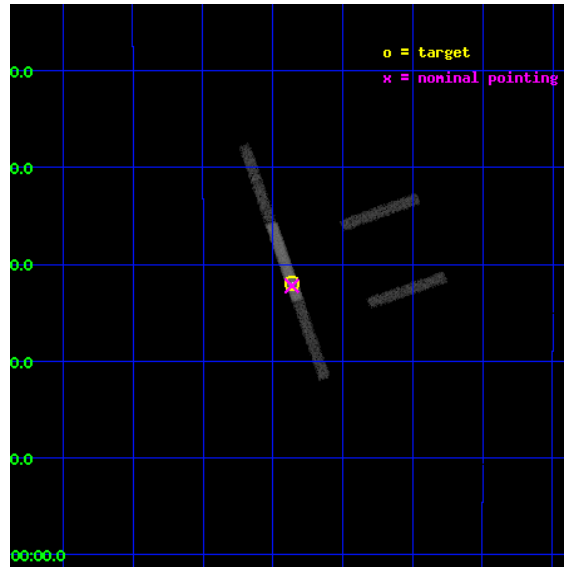
L2 Processing Date : Jun 12 2012

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# 1 Front

seq_num	701679	Sequence number
obs_id	9238	Observation id
title	Dissecting Accretion Disks	Proposal title
observer	Prof. Christopher Kochanek	Principal investigator
object	RXJ1131-1231	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	172.965	Observer's specified target RA [deg]
dec_targ	-12.5325	Observer's specified target Dec [deg]
ra_nom	172.96609504619	Nominal RA [deg]
dec_nom	-12.537219219155	Nominal Dec [deg]
roll_nom	250.69189610229	Nominal Roll [deg]
revision	3	Processing version of data
ontime	15071.699743271	Sum of GTIs [s]
livetime	14237.00450757	Livetime [s]
ontime2	15071.699743271	Sum of GTIs [s]
ontime3	15071.699743271	Sum of GTIs [s]
ontime6	15071.699743271	Sum of GTIs [s]
ontime7	15071.699743271	Sum of GTIs [s]
ontime8	15070.958703279	Sum of GTIs [s]
l2events	28495	Number of level 2 events

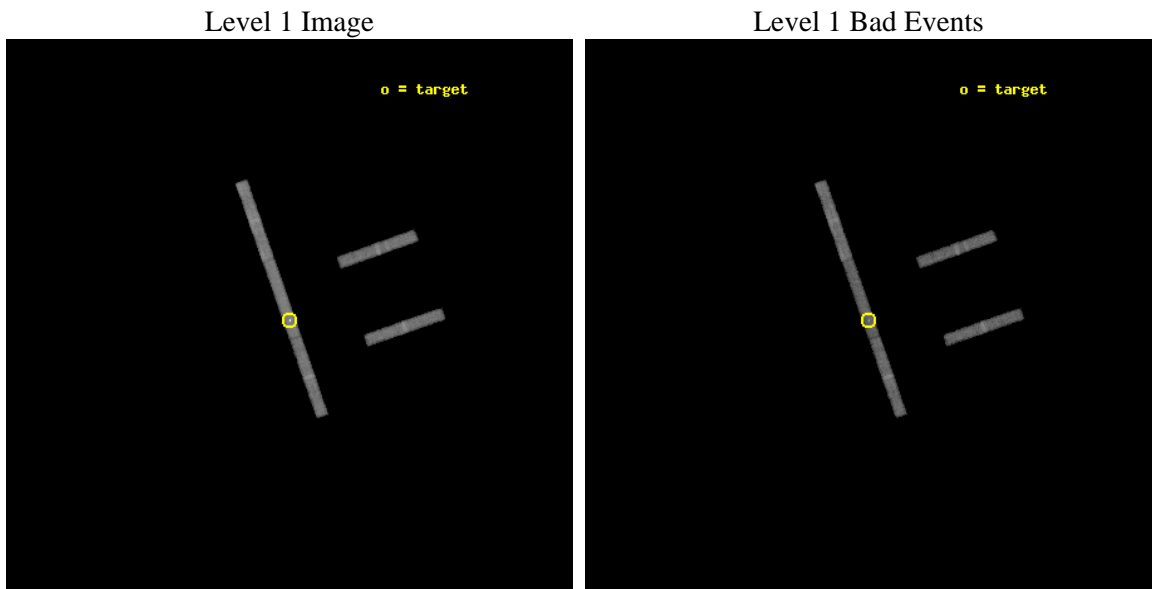




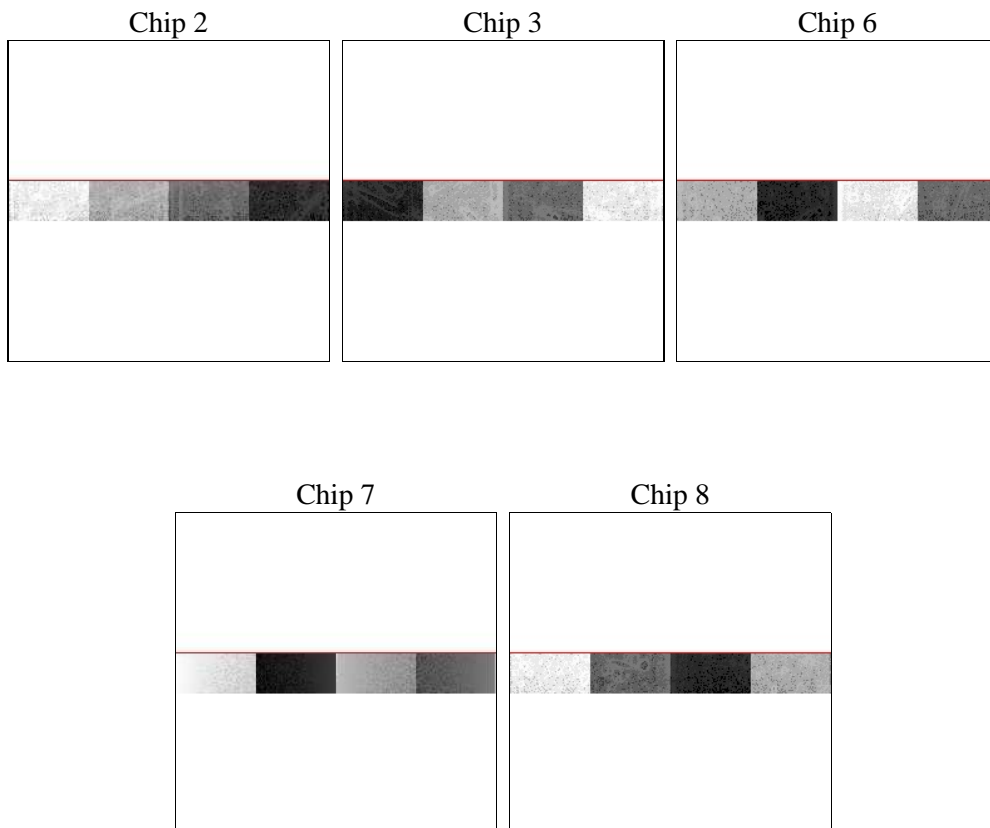
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	15071.699743271	Sum of GTIs [s]
caldbver	4.4.10	&#160	ontime2	15071.699743271	Sum of GTIs [s]
date	2012-06-12T16:43:51	Date and time of file creation	ontime3	15071.699743271	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	15071.699743271	Sum of GTIs [s]
			ontime7	15071.699743271	Sum of GTIs [s]
			ontime8	15070.958703279	Sum of GTIs [s]
			l1events	133146	Number of level 1 events

### 2.1.4 Events

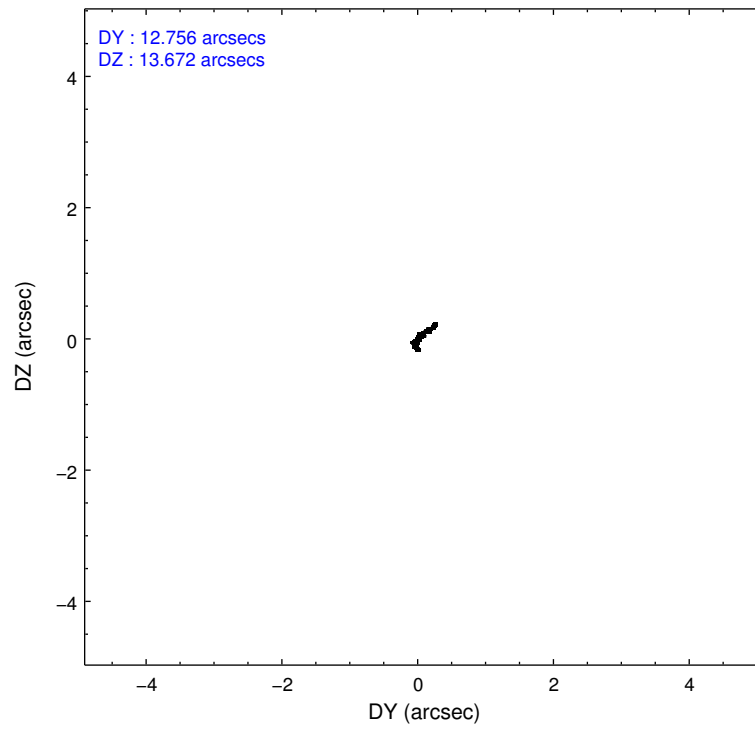
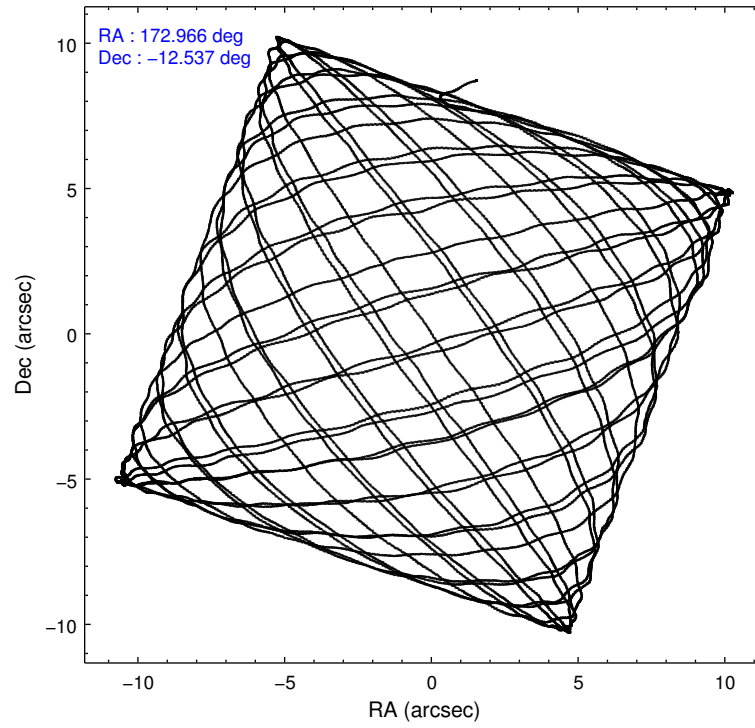
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	21098	20799	22901	36090	32258
rejected events	18454	18292	20176	15863	25809
rejected %	87%	87%	88%	43%	80%

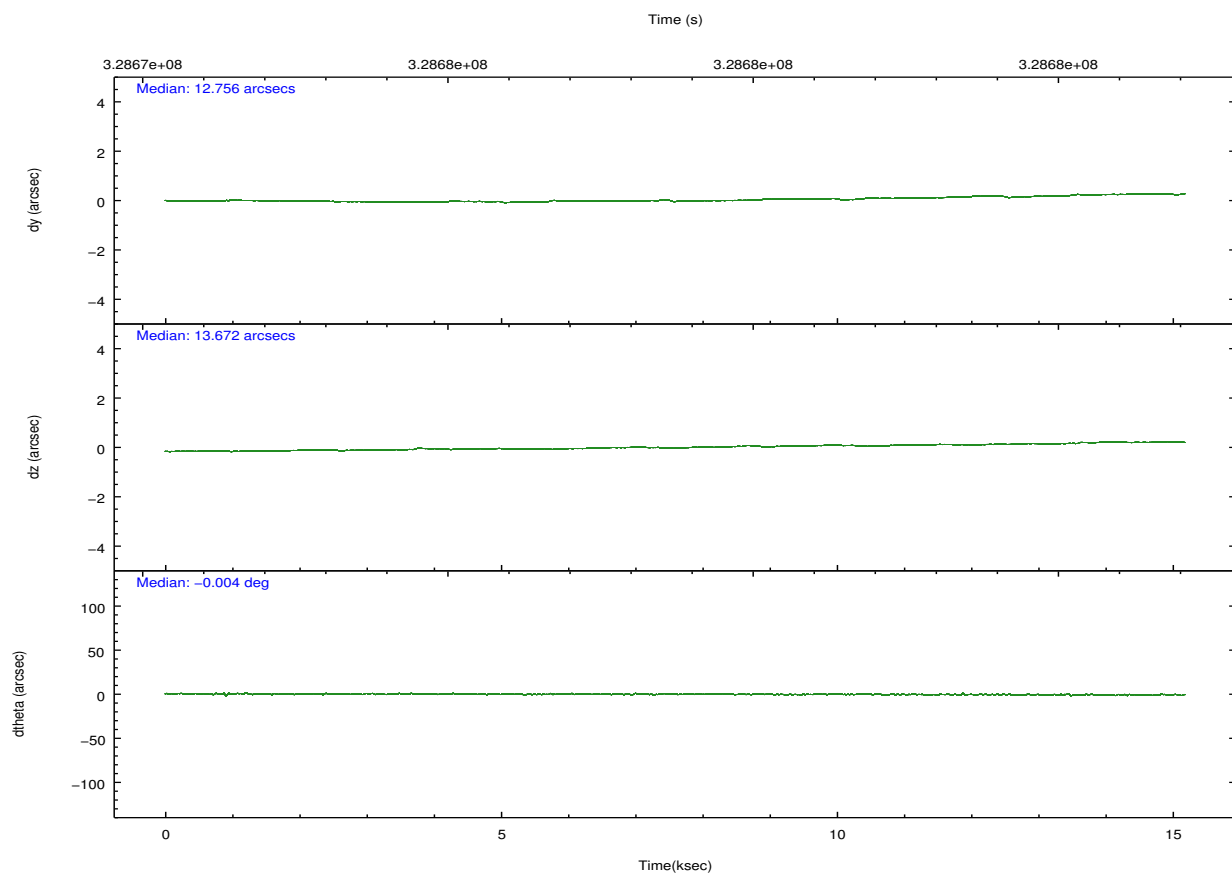
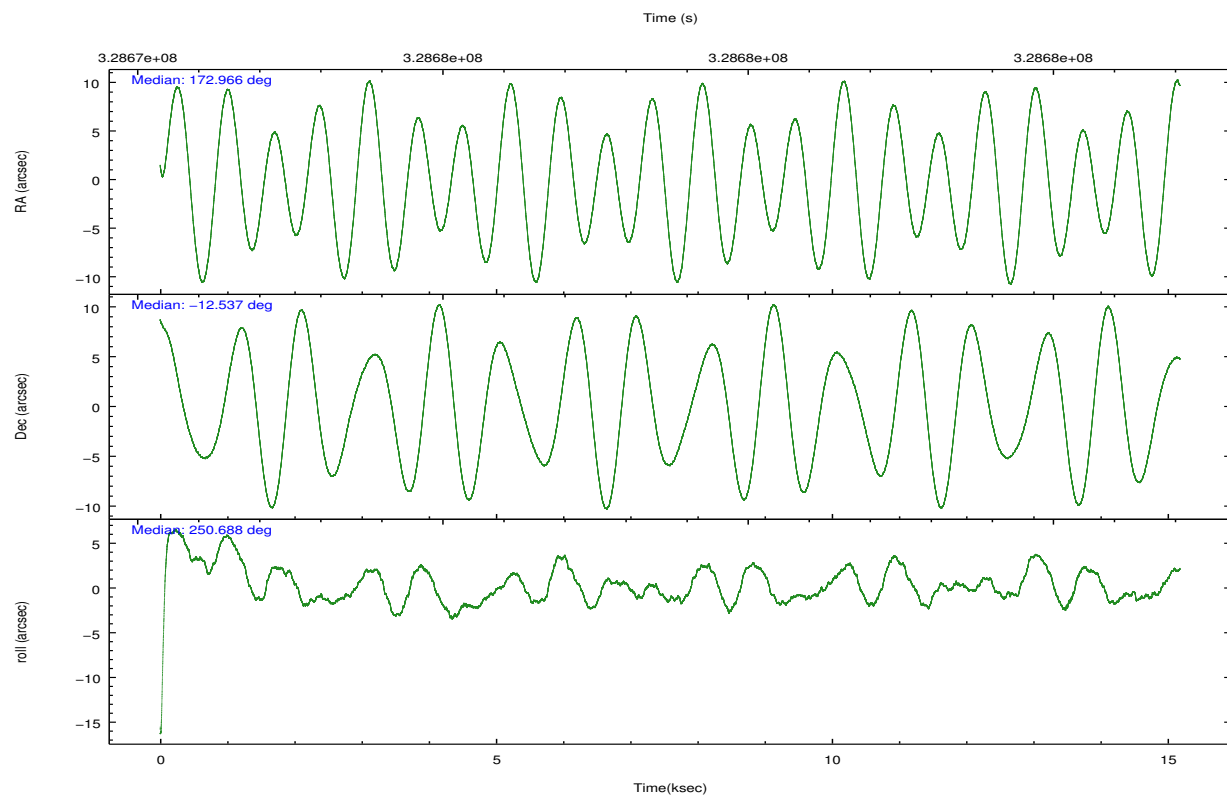
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	998	939	891	3655	1717
	4%	4%	3%	10%	5%
grade 1 events	4	6	6	73	20
	0%	0%	0%	0%	0%
grade 2 events	454	445	509	4594	1349
	2%	2%	2%	12%	4%
grade 3 events	396	410	419	2243	749
	1%	1%	1%	6%	2%
grade 4 events	401	358	415	2176	719
	1%	1%	1%	6%	2%
grade 5 events	675	857	926	2747	1206
	3%	4%	4%	7%	3%
grade 6 events	395	355	491	7559	1915
	1%	1%	2%	20%	5%
grade 7 events	17775	17429	19244	13043	24583
	84%	83%	84%	36%	76%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	172.960489	172.9660950461943	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-12.510439	-12.53721921915523	Subarray start row	449	449
[deg] Pointing Roll	250.534069	250.6918961022857	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.7
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	328671308.184000	328670582.96664			
Observation start date	2008-06-01T01:34:03	2008-06-01T01:23:02			
[s] Observation end time (MET)	328686308.184000	328687221.79245			
Observation end date	2008-06-01T05:44:03	2008-06-01T06:00:21			
Read mode	TIMED	TIMED			

## 2.3 Aspect



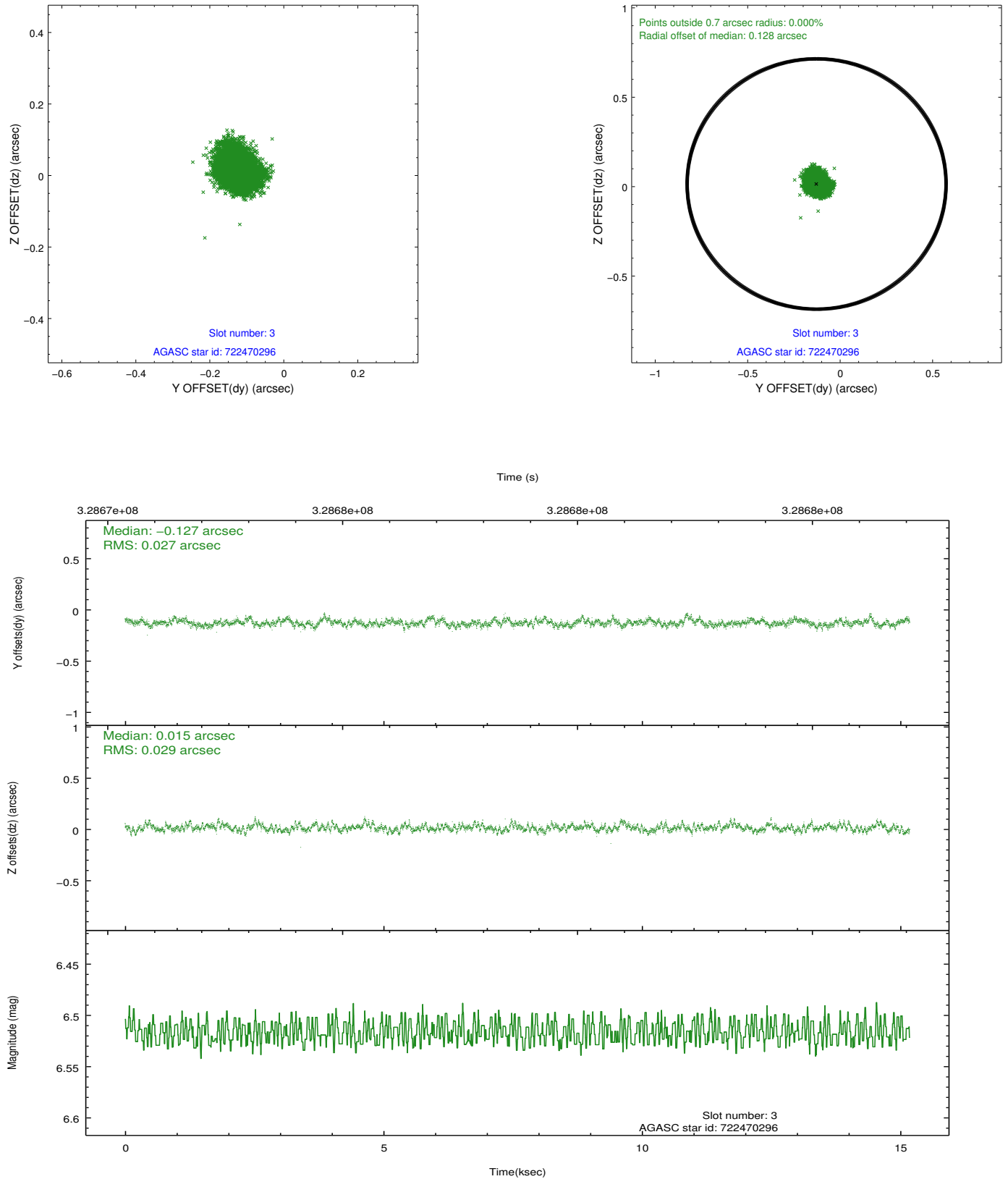


### Slot Statistics

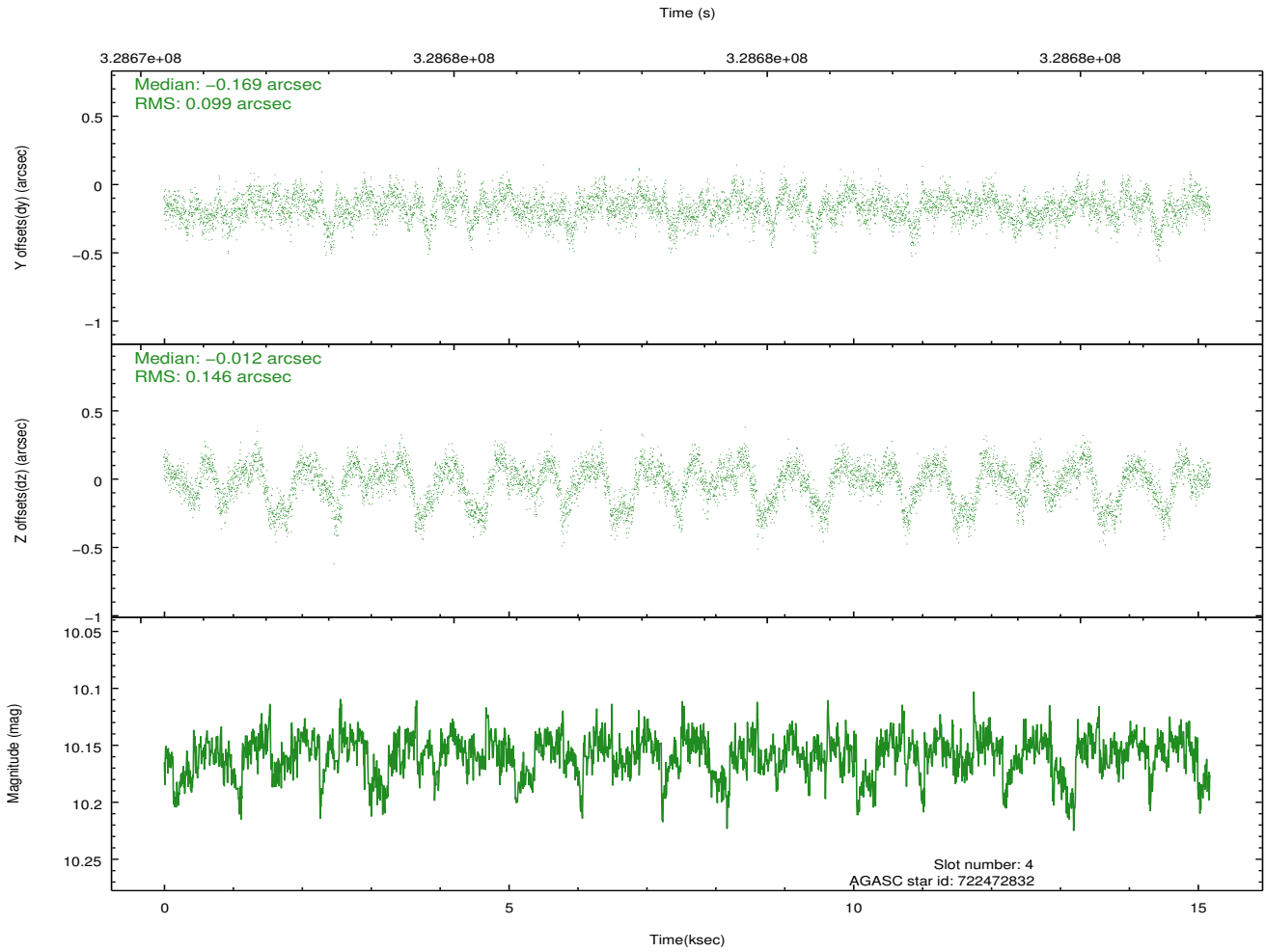
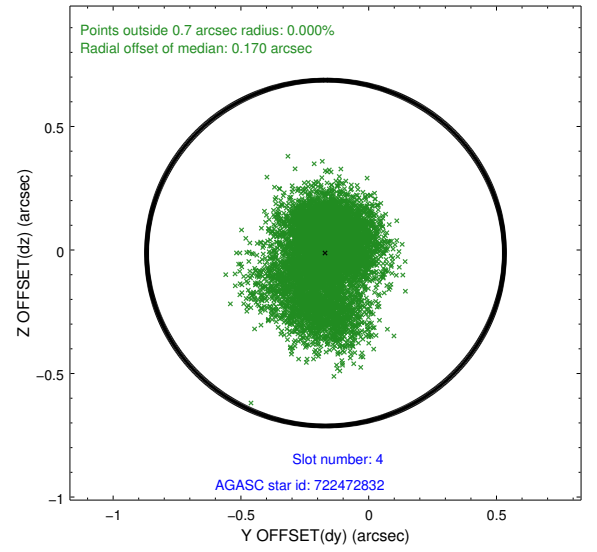
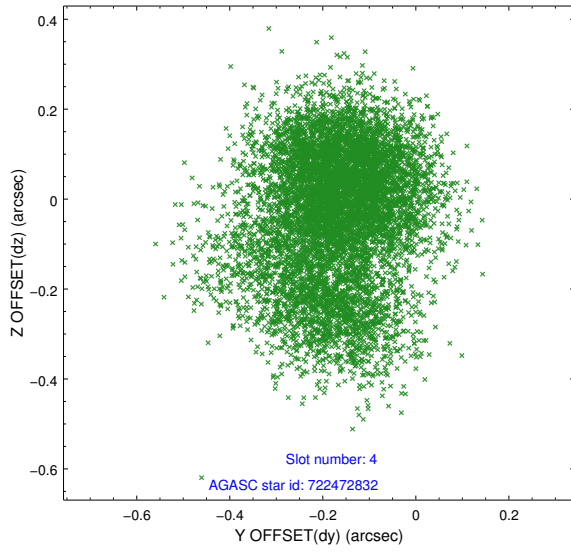
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.90	3703	-0.032	-0.039	0.008	0.012	0.000000	0.000000	-765.75	-1735.01
1	FID	ACIS-S-4	6.98	3703	0.148	0.026	0.009	0.017	0.000000	0.000000	2147.58	173.22
2	FID	ACIS-S-5	7.02	3703	-0.147	0.021	0.007	0.012	0.000000	0.000000	-1818.32	167.23
3	GUIDE	722470296	6.52	7406	-0.127	0.015	0.042	0.070	172.921689	-12.381367	-392.40	-283.63
4	GUIDE	722472832	10.16	7395	-0.169	-0.012	0.188	0.313	173.078970	-12.015349	-1819.25	-200.69
5	GUIDE	722473176	9.46	7400	-0.078	-0.161	0.160	0.282	172.599746	-12.066793	-1081.52	-1729.65
6	GUIDE	722871728	9.66	7400	0.216	0.090	0.112	0.180	173.202235	-12.568355	-85.74	870.29
7	GUIDE	722873464	7.33	7404	0.158	0.066	0.061	0.095	172.661543	-13.050266	2183.09	-339.90

## 2.4 Star Slots

### 2.4.1 Slot 3

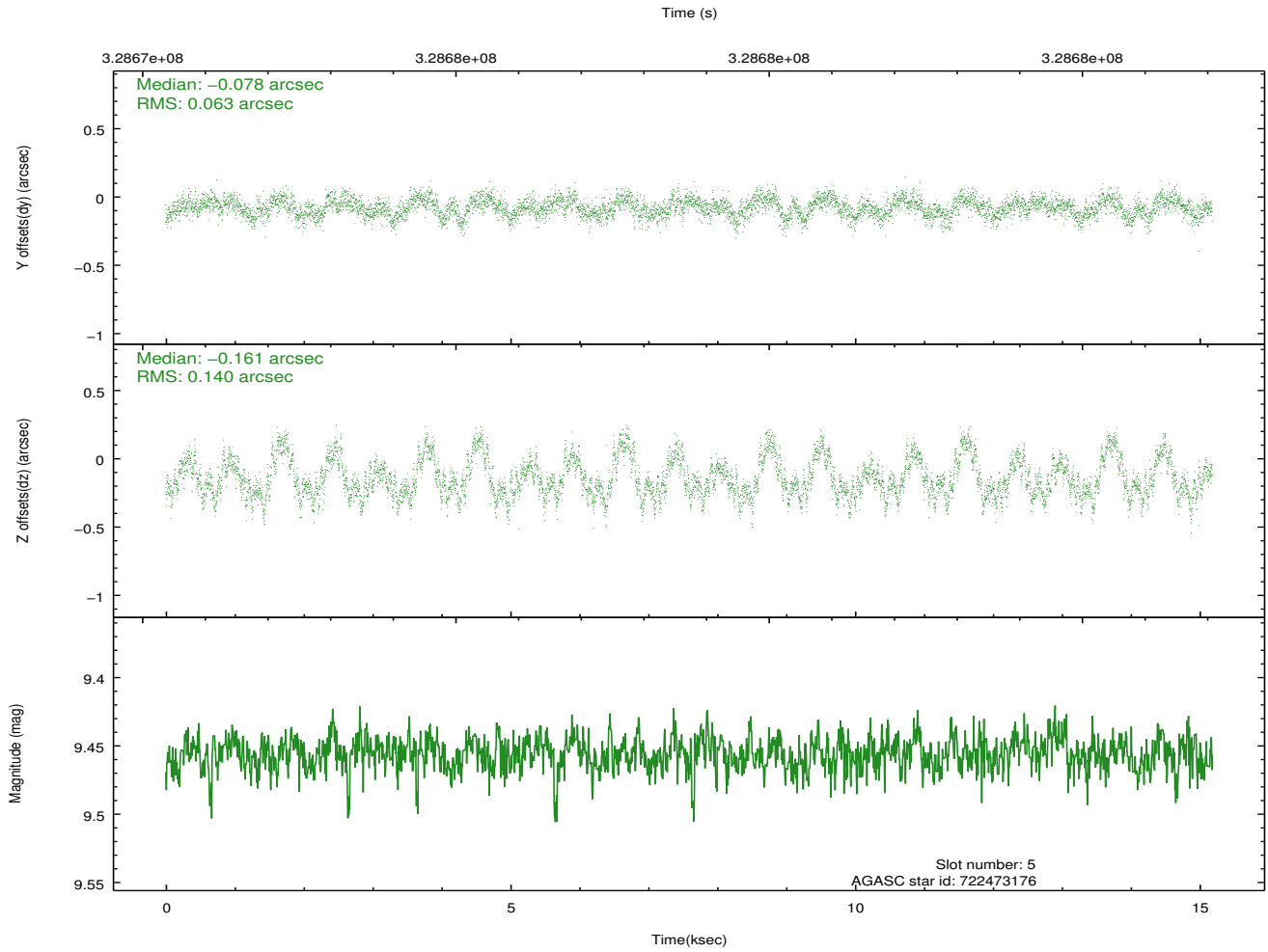
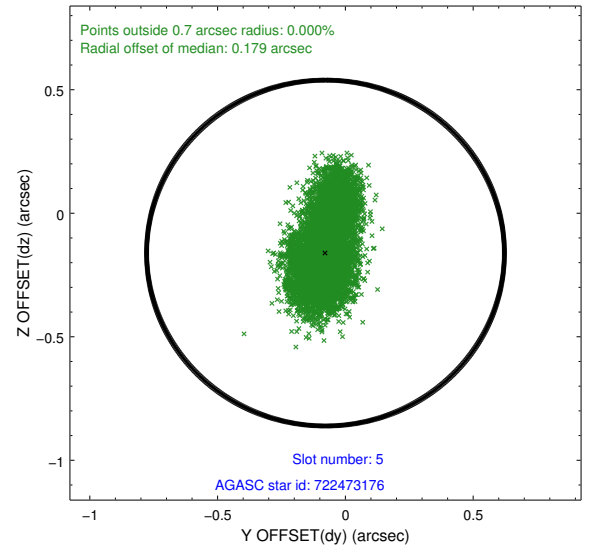
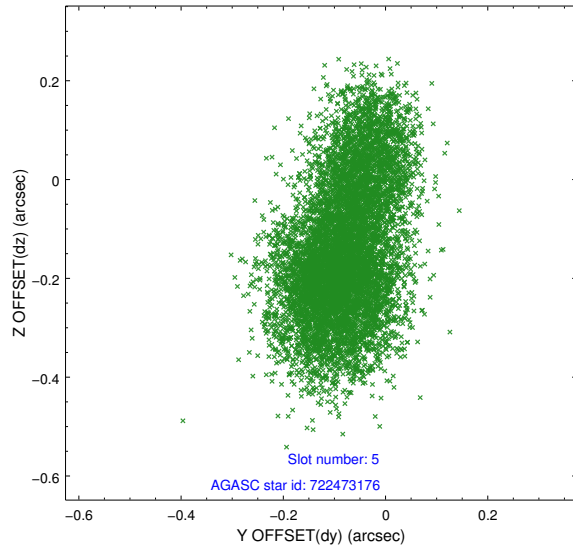


## 2.4.2 Slot 4

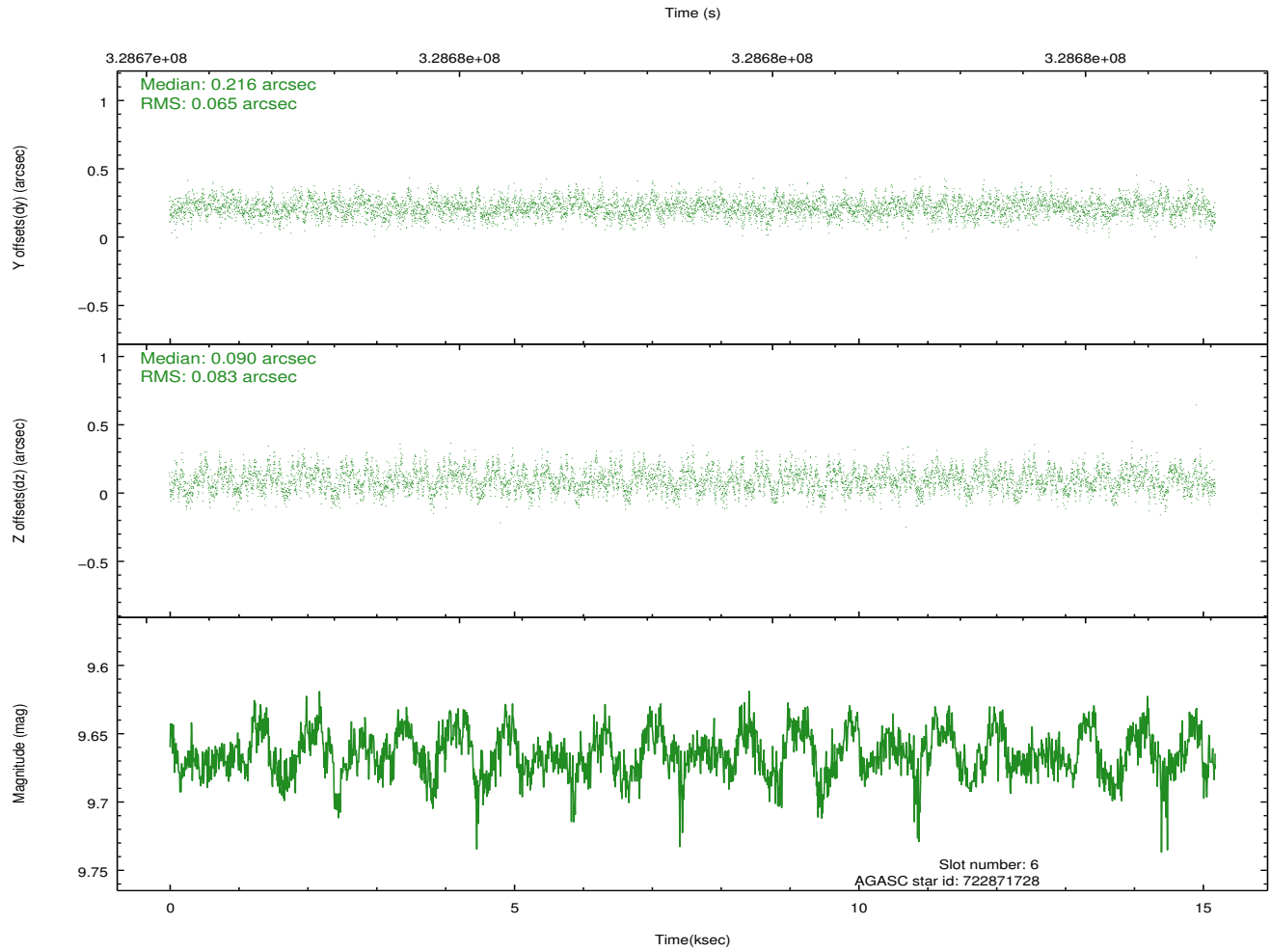
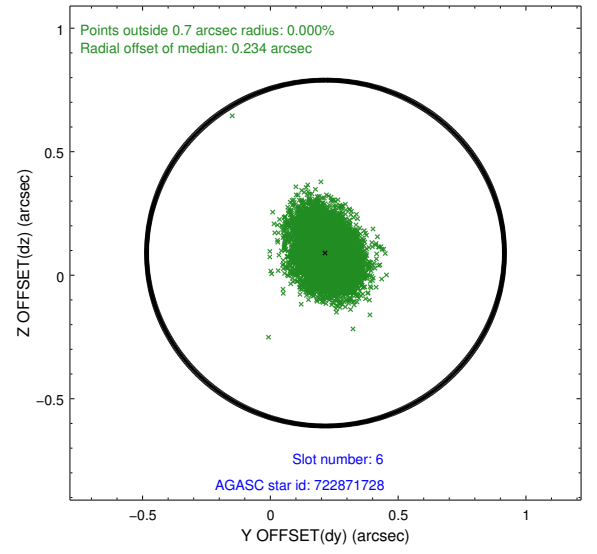
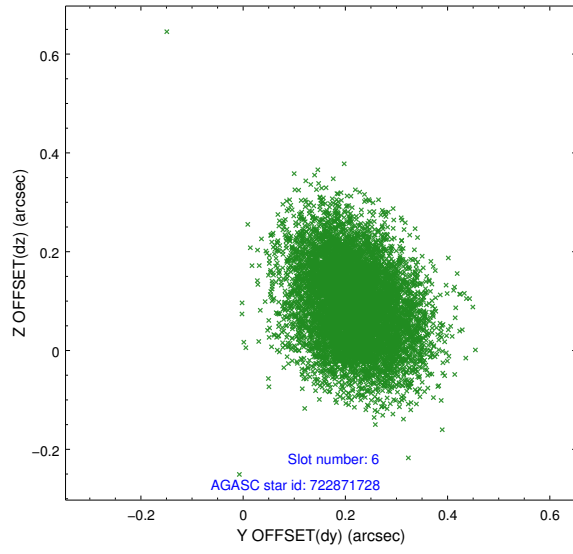




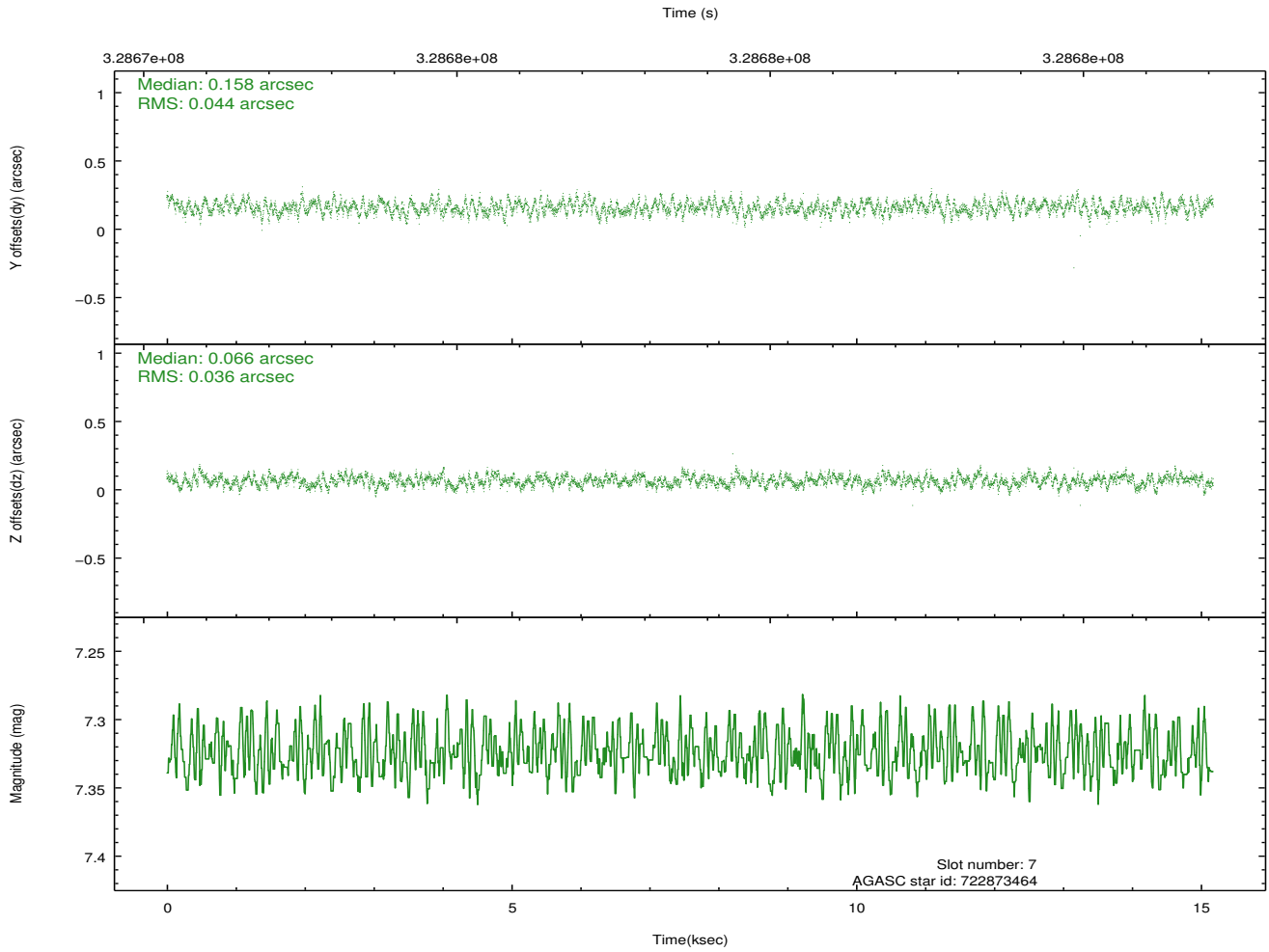
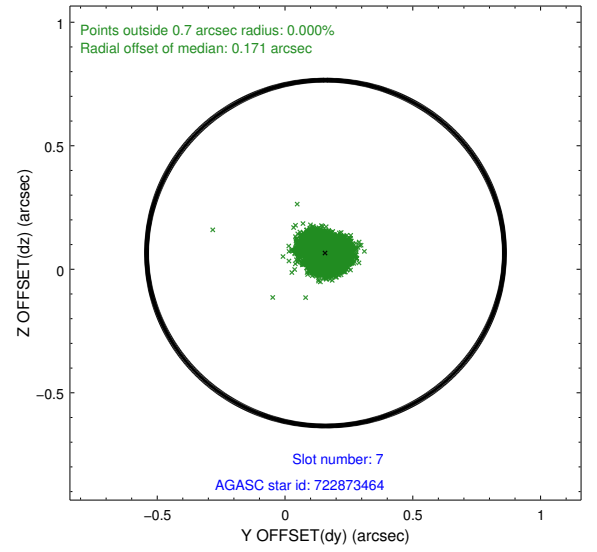
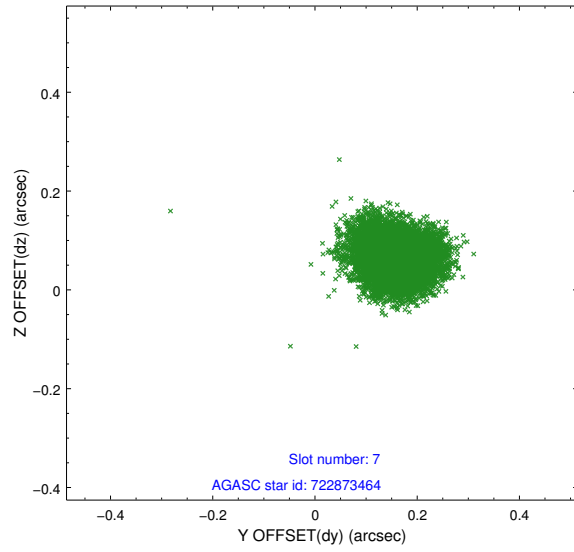
### 2.4.3 Slot 5



## 2.4.4 Slot 6

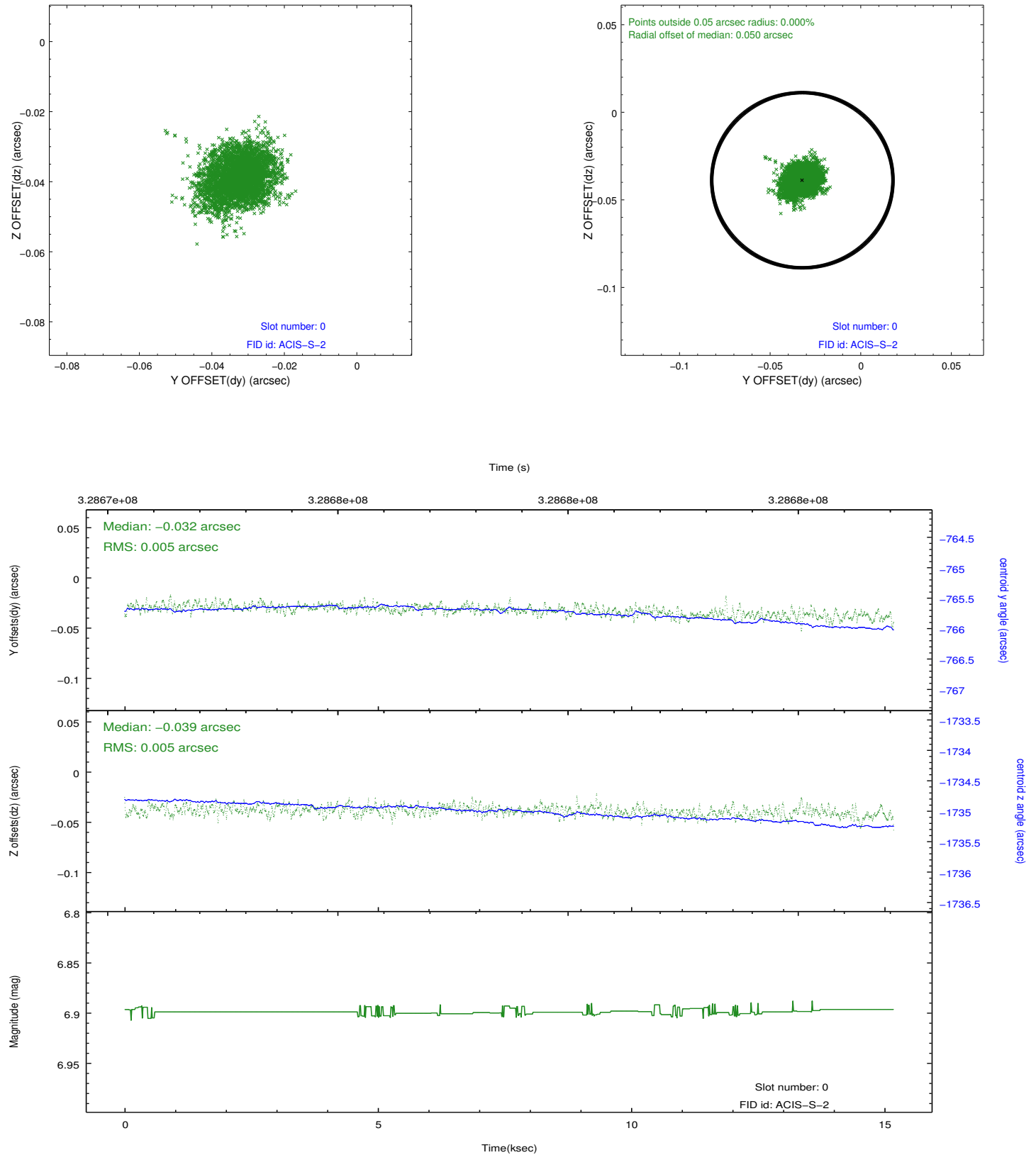


## 2.4.5 Slot 7

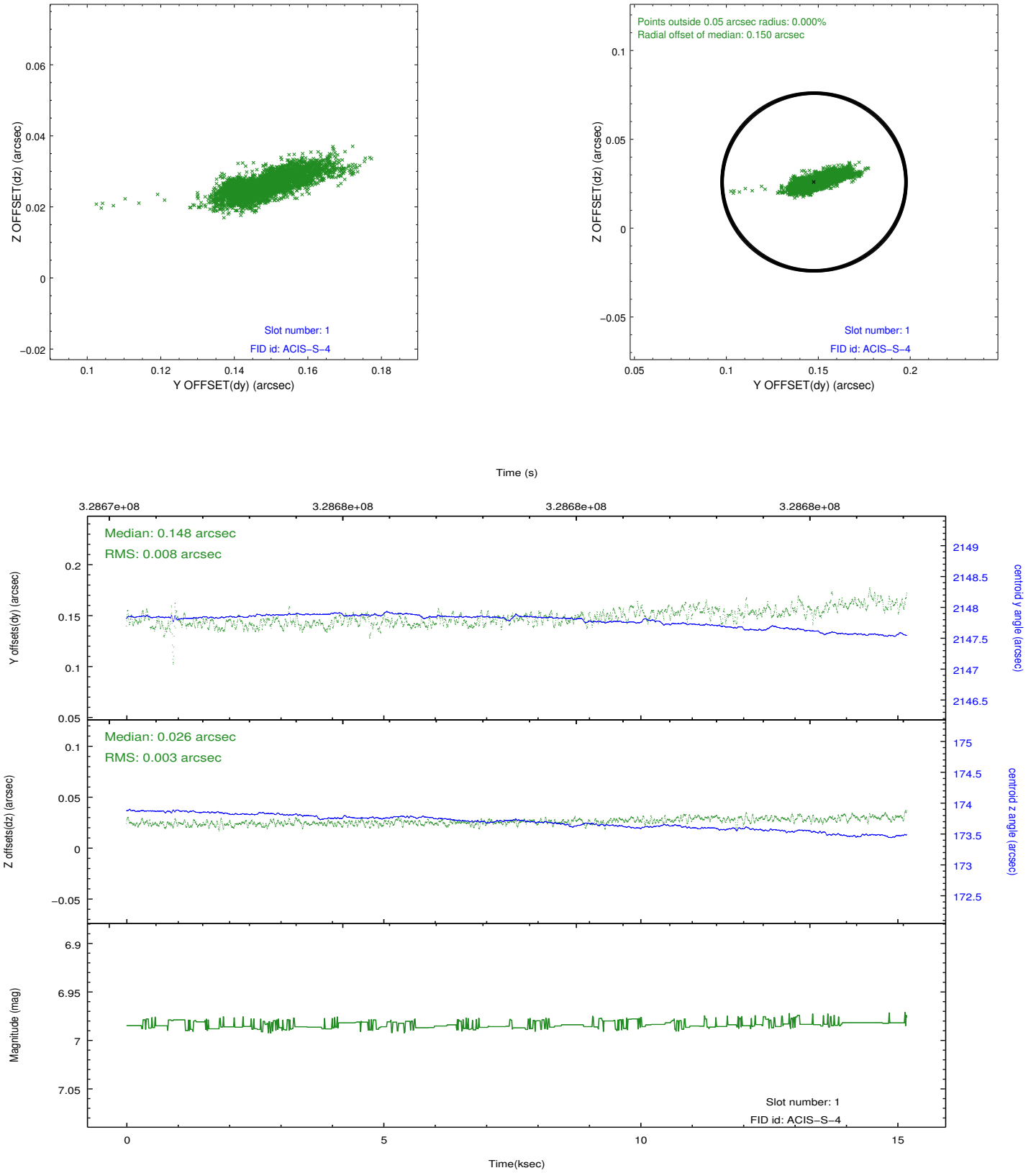


## 2.5 FID Slots

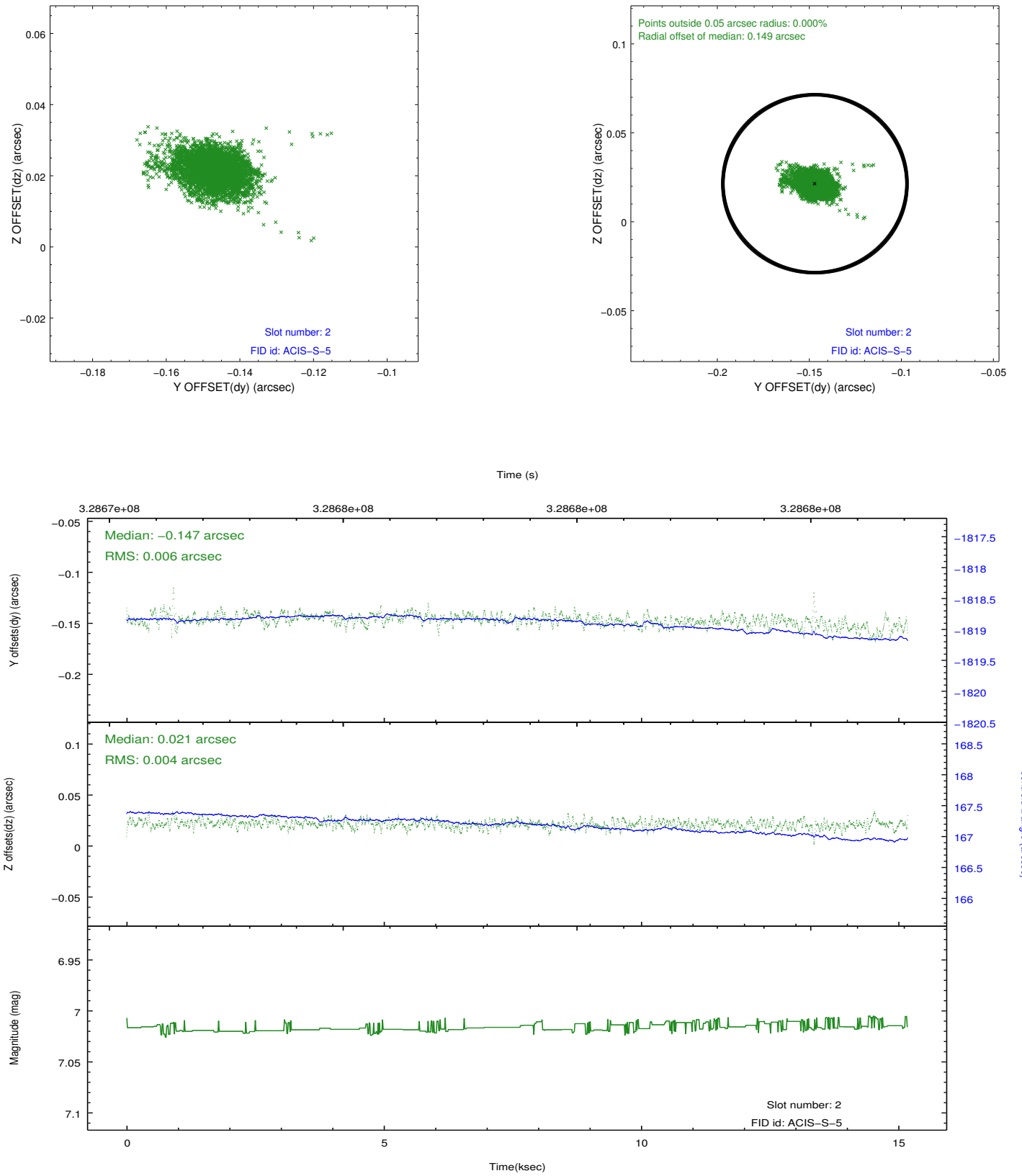
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.06.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.07

## A.2 Comments

A spatial region of the original bias map for CCD = 3 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small ( $\sim 20$  eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 3 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:  
(172.85635, -12.41725), (172.85069, -12.41529), (172.84482, -12.43163), (172.85048, -12.43359)