

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 15351 - L2 Version 2  
Chandra X-Ray Center

L2 Processing Date : Dec 1 2014

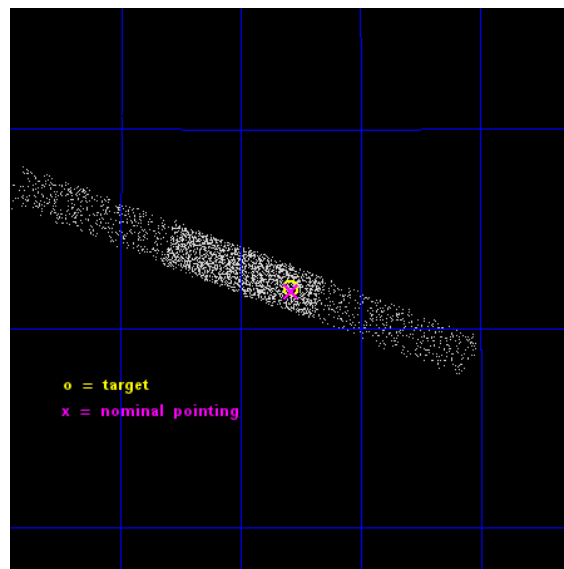
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# 1 Front

seq_num	702911	Sequence number
obs_id	15351	Observation id
title	Clarifying the Nature of Weak-Line Quasars with Chandra Spectroscopy and Snapshots	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	SDSS J1005+3312	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	151.322917	Observer's specified target RA [deg]
dec_targ	33.200778	Observer's specified target Dec [deg]
ra_nom	151.32208796703	Nominal RA [deg]
dec_nom	33.197791055497	Nominal Dec [deg]
roll_nom	199.81689601157	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3093.8632206321	Sum of GTIs [s]
livetime	2958.9357504132	Livetime [s]
ontime6	3093.8221806288	Sum of GTIs [s]
ontime7	3093.8632206321	Sum of GTIs [s]
ontime8	3093.7811406255	Sum of GTIs [s]
l2events	3401	Number of level 2 events

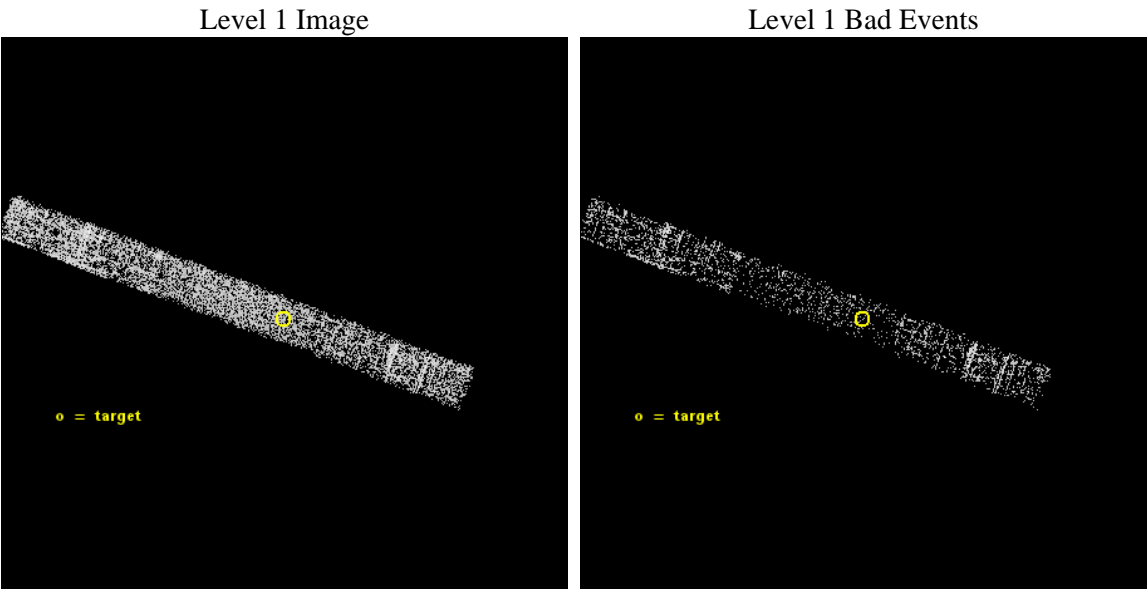




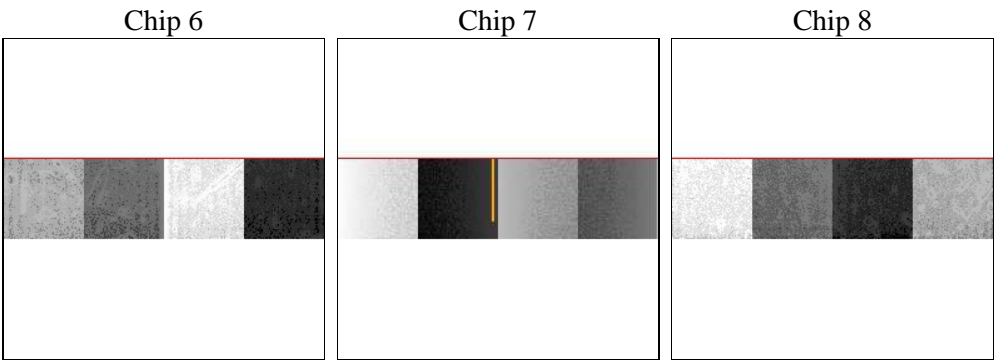
# 2 OBI

## 2.1 OBI

### 2.1.1 Images



### 2.1.2 Bias





### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	3093.8632206321	Sum of GTIs [s]
caldbver	4.6.4	&#160	ontime6	3093.8221806288	Sum of GTIs [s]
date	2014-12-01T19:08:36	Date and time of file creation	ontime7	3093.8632206321	Sum of GTIs [s]
revision	2	Processing version of data	ontime8	3093.7811406255	Sum of GTIs [s]
			l1events	16014	Number of level 1 events

### 2.1.4 Events

	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
level 1 events	4559	4987	6468
rejected events	4008	2489	4864
rejected %	87%	49%	75%

	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
grade 0 events	162	266	379
	3%	5%	5%
grade 1 events	1	7	5
	0%	0%	0%
grade 2 events	103	555	386
	2%	11%	5%
grade 3 events	88	261	158
	1%	5%	2%
grade 4 events	84	266	166
	1%	5%	2%
grade 5 events	213	509	249
	4%	10%	3%
grade 6 events	114	1151	515
	2%	23%	7%
grade 7 events	3794	1972	4610
	83%	39%	71%

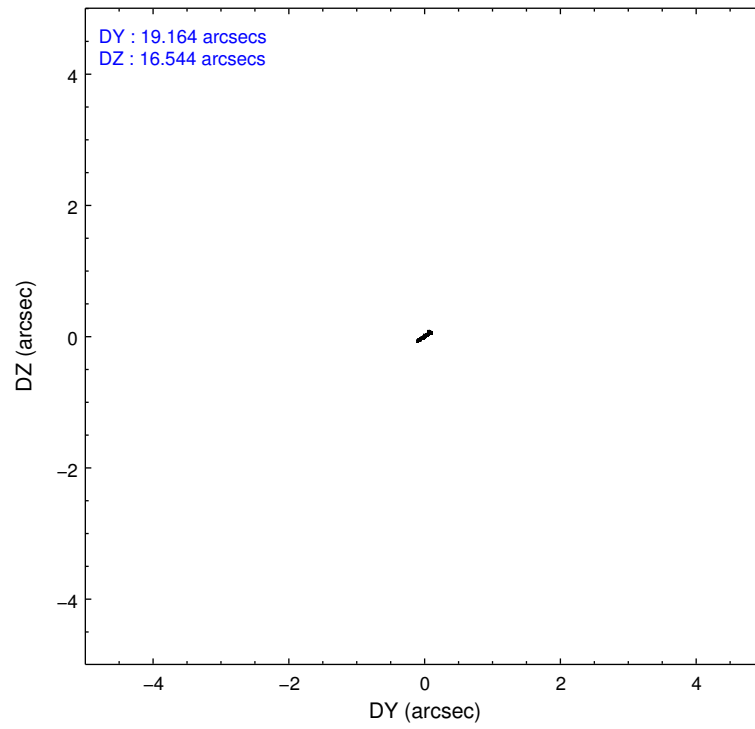
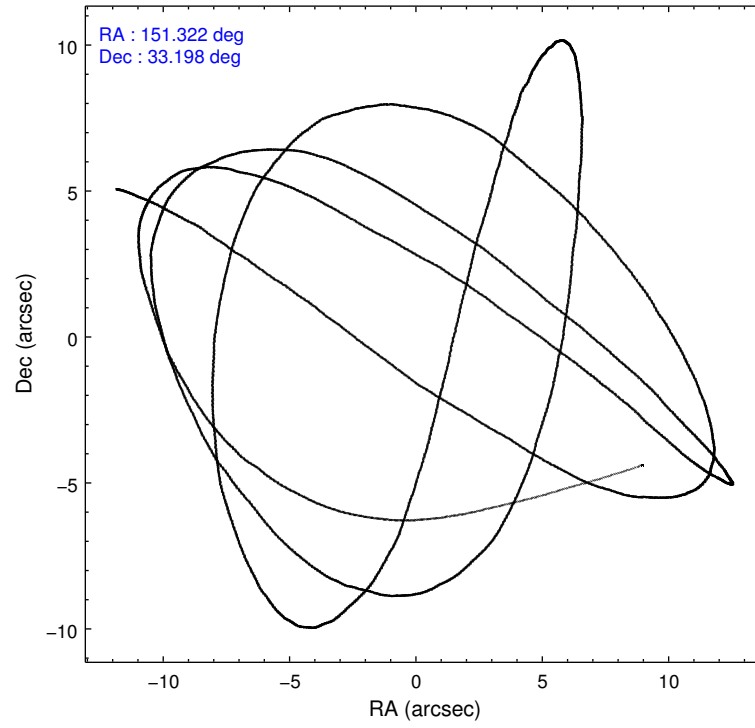


## 2.2 Compared Parameters

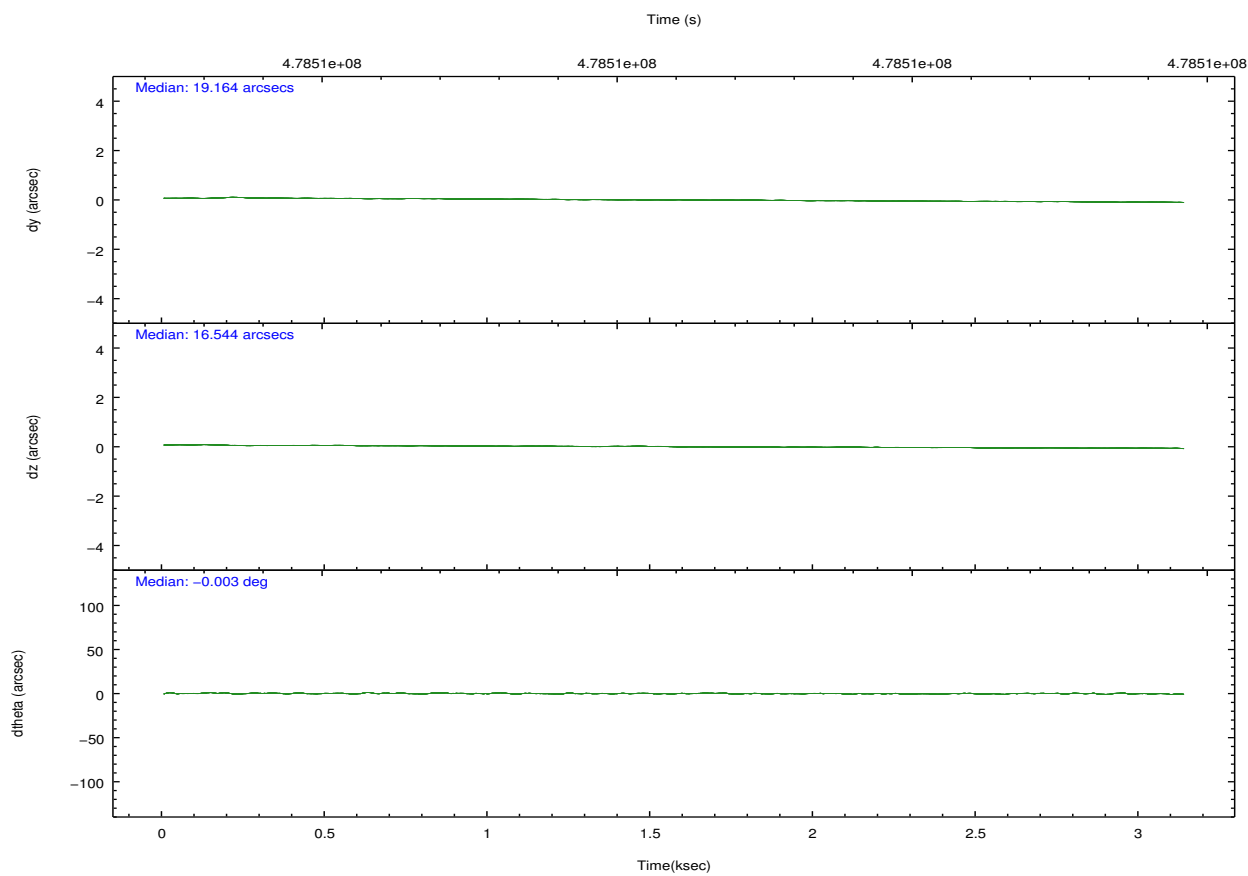
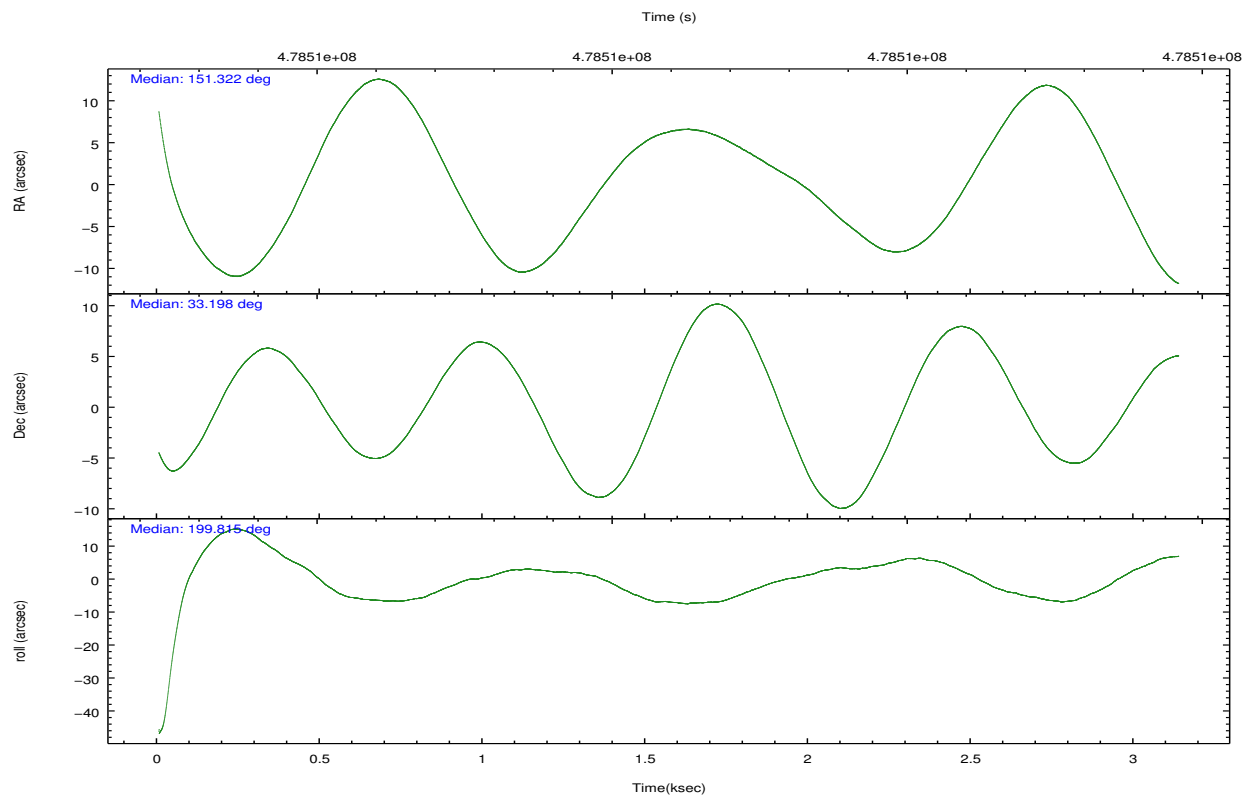
Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-678	ACIS-678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	151.342863	151.3220879670283	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	33.218955	33.19779105549711	Subarray start row	385	385
[deg] Pointing Roll	199.649071	199.8168960115709	Subarray row count	256	256
[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	0.9
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	478506765.184000	478505020.66762			
Observation start date	2013-03-01T06:31:38	2013-03-01T06:03:40			
[s] Observation end time (MET)	478509765.184000	478510064.1804			
Observation end date	2013-03-01T07:21:38	2013-03-01T07:27:44			
Read mode	TIMED	TIMED			



## 2.3 Aspect









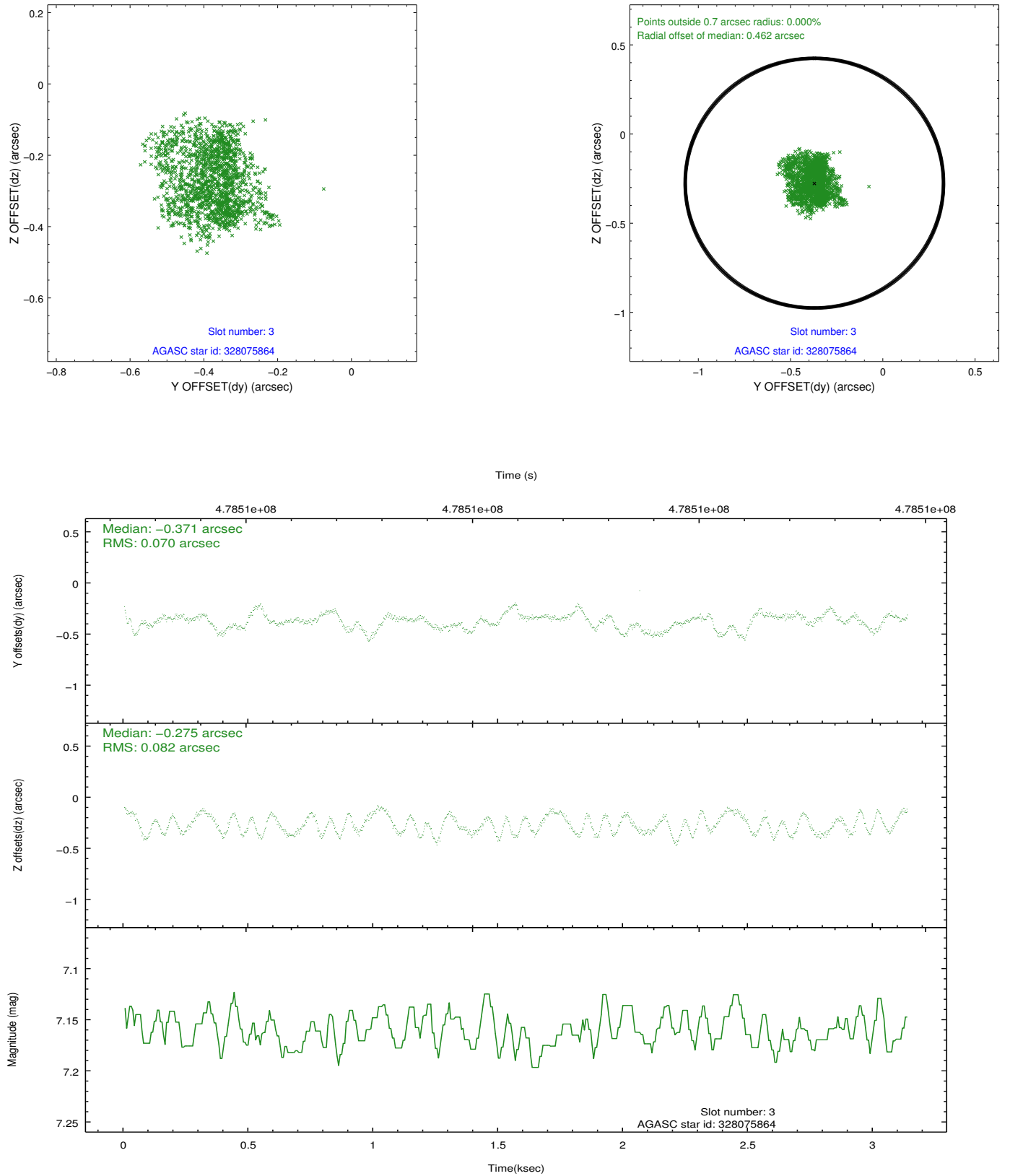
Slot Statistics

lot	status	used	id	mag	n_pts	med_dy	med_dz	drl	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	6.96	765	-0.116	-0.011	0.007	0.010	0.000000	0.000000	-772.38	-1737.92
1	FID		ACIS-S-4	7.04	765	0.281	0.059	0.005	0.011	0.000000	0.000000	2140.38	168.45
2	FID		ACIS-S-5	7.07	765	-0.196	-0.039	0.006	0.010	0.000000	0.000000	-1822.68	164.42
3	GUIDE	used	328075864	7.16	1530	-0.371	-0.275	0.119	0.176	151.066991	32.452445	1716.89	2316.01
4	BAD	used	328470520	10.43	1452	-0.290	-0.091	0.279	0.436	150.804470	33.245373	1494.54	-636.31
5	GUIDE	used	328473048	10.26	1499	0.308	0.039	0.214	0.322	151.463625	33.583793	-782.16	-1114.82
6	GUIDE	used	328474112	9.50	1529	0.205	0.214	0.167	0.257	152.019164	33.516504	-2274.25	-333.07
7	GUIDE	used	328474248	9.71	1528	0.142	0.095	0.152	0.249	151.627670	33.531708	-1184.80	-774.00



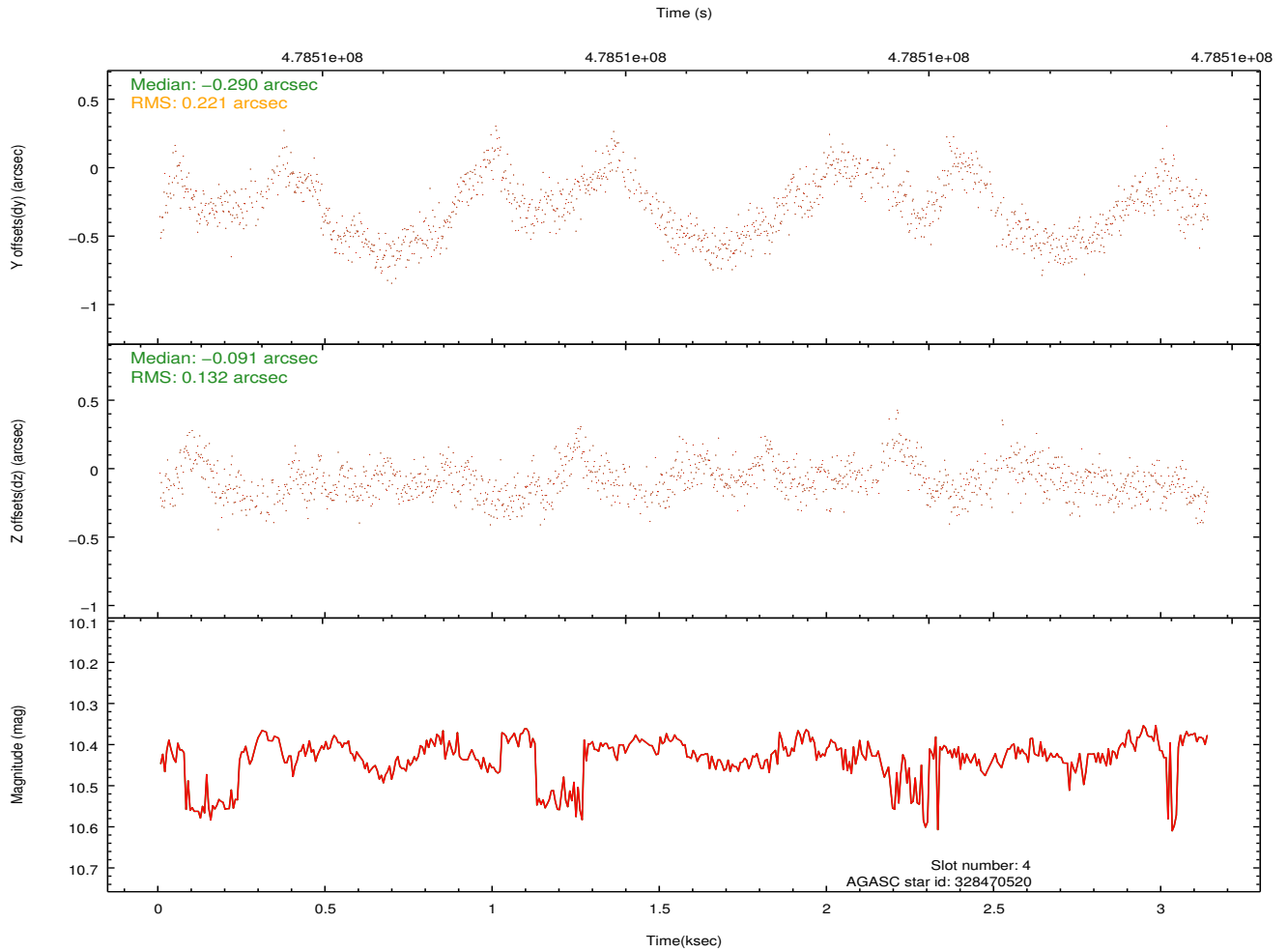
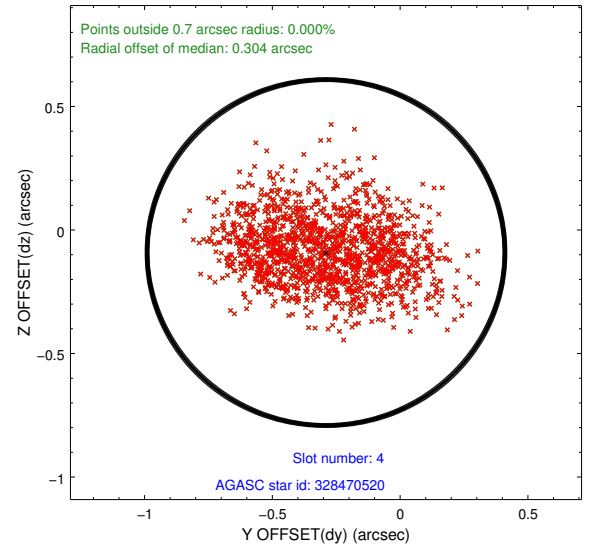
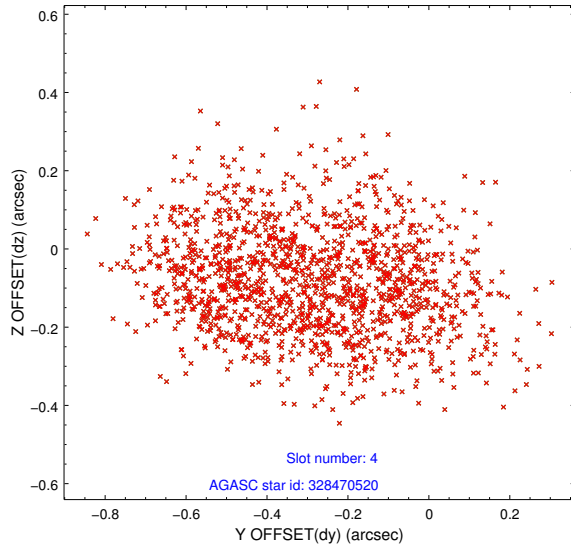
## 2.4 Star Slots

### 2.4.1 Slot 3



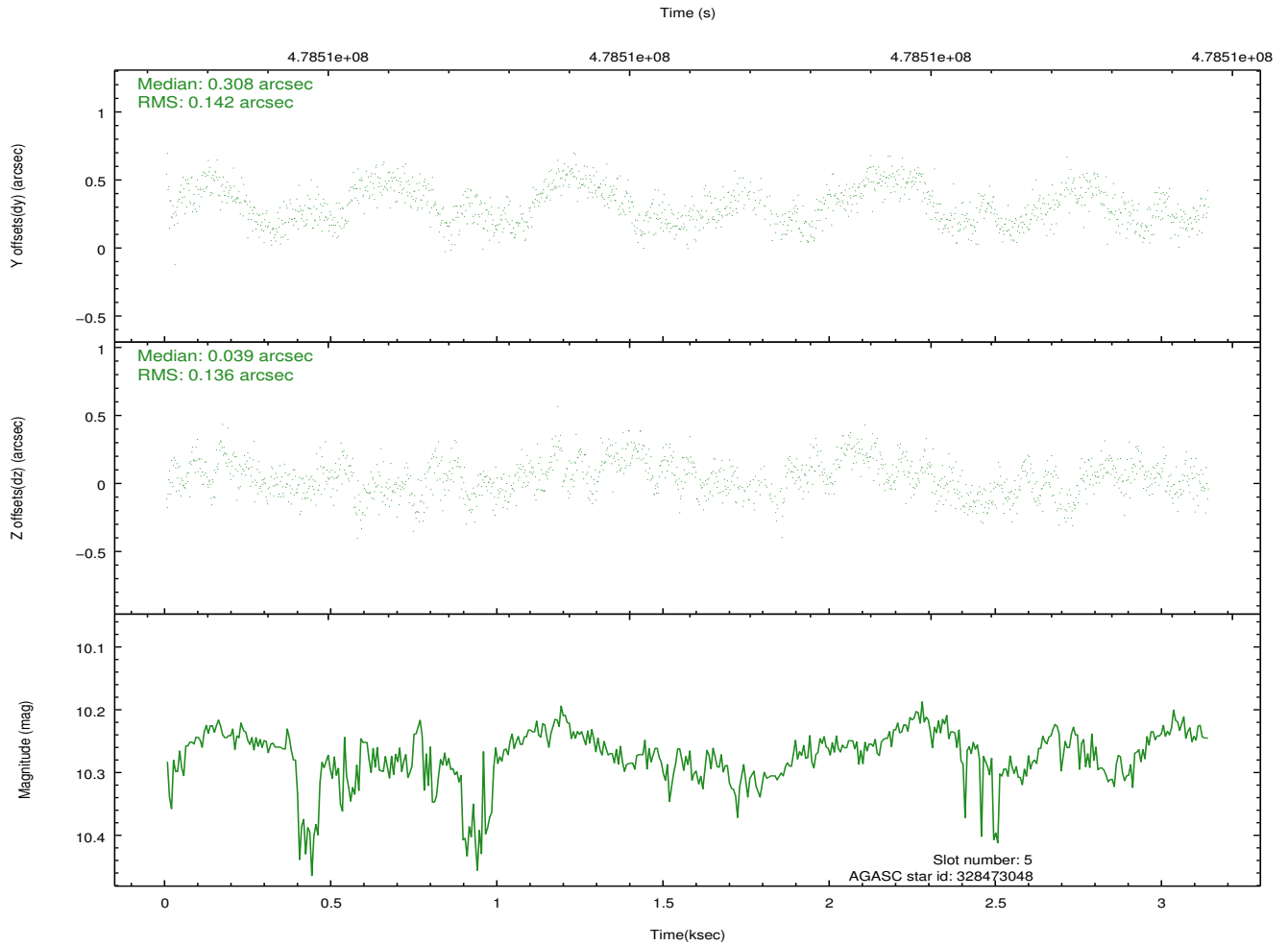
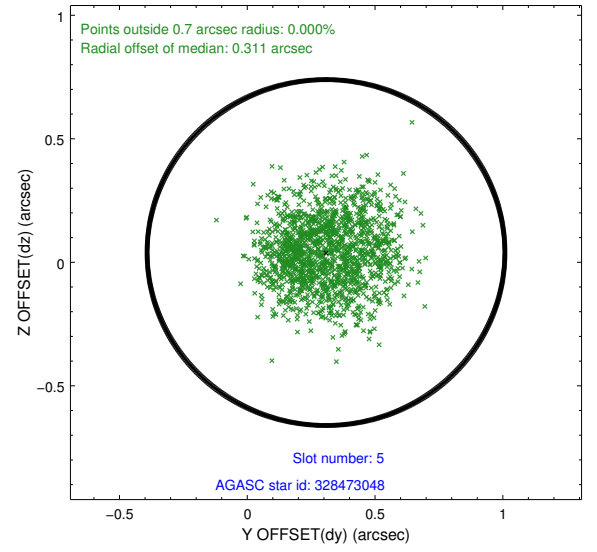
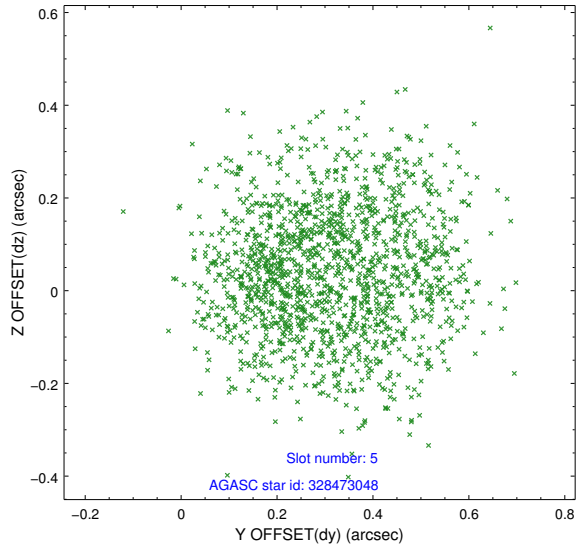


## 2.4.2 Slot 4



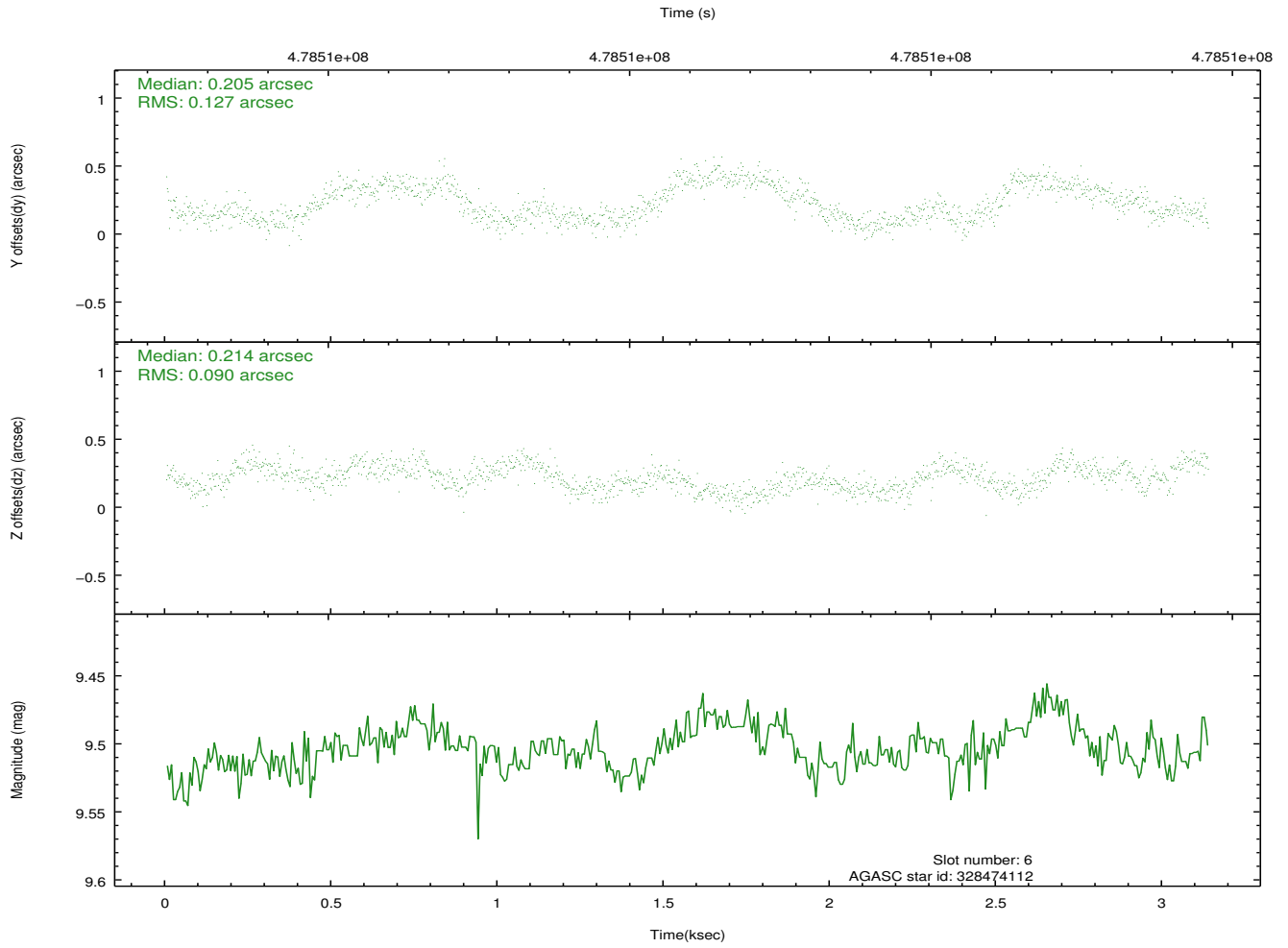
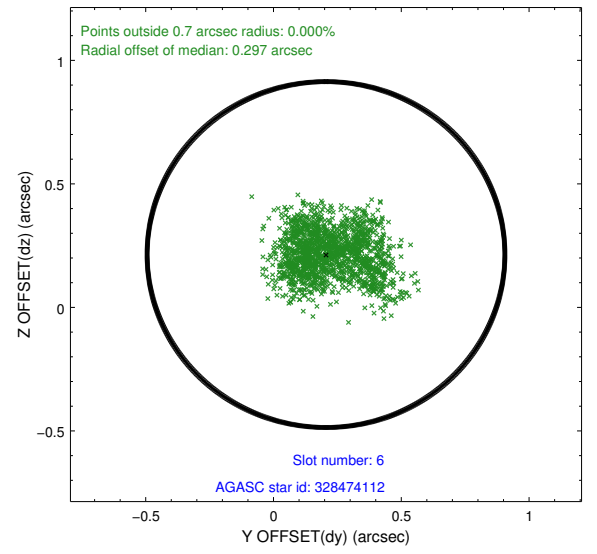
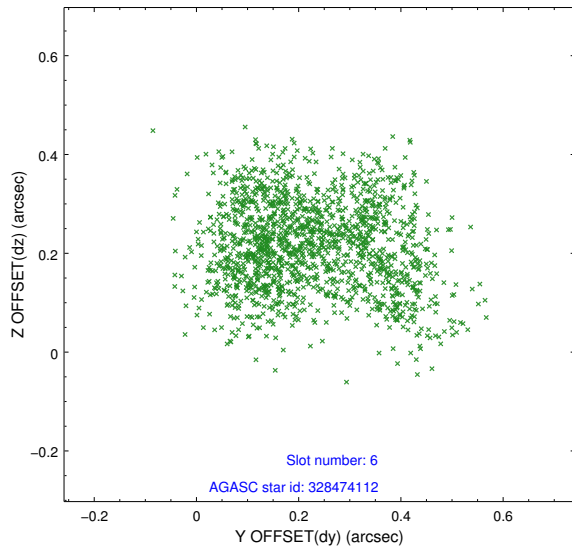


### 2.4.3 Slot 5



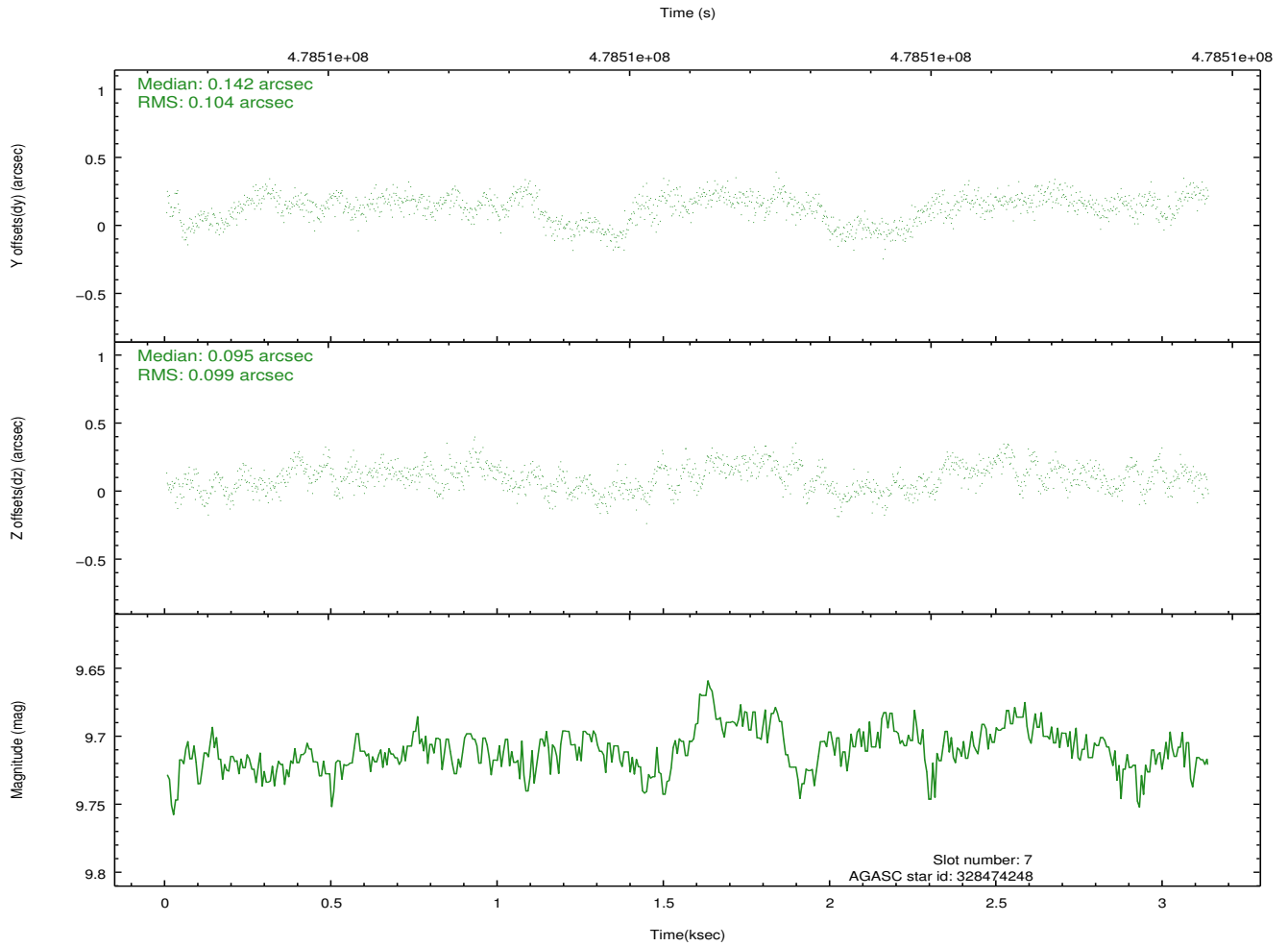
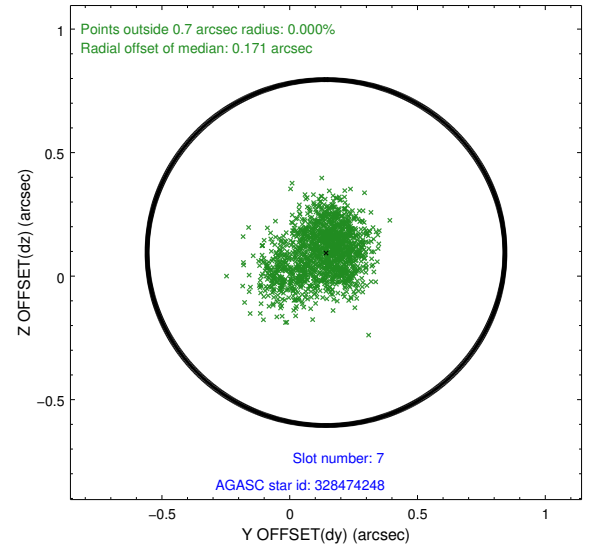
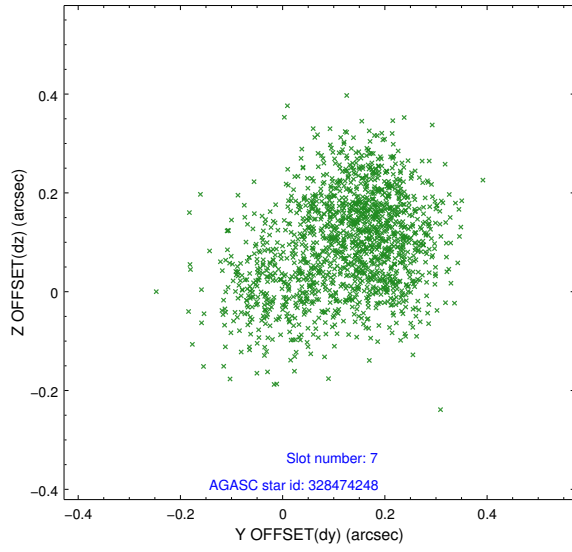


## 2.4.4 Slot 6





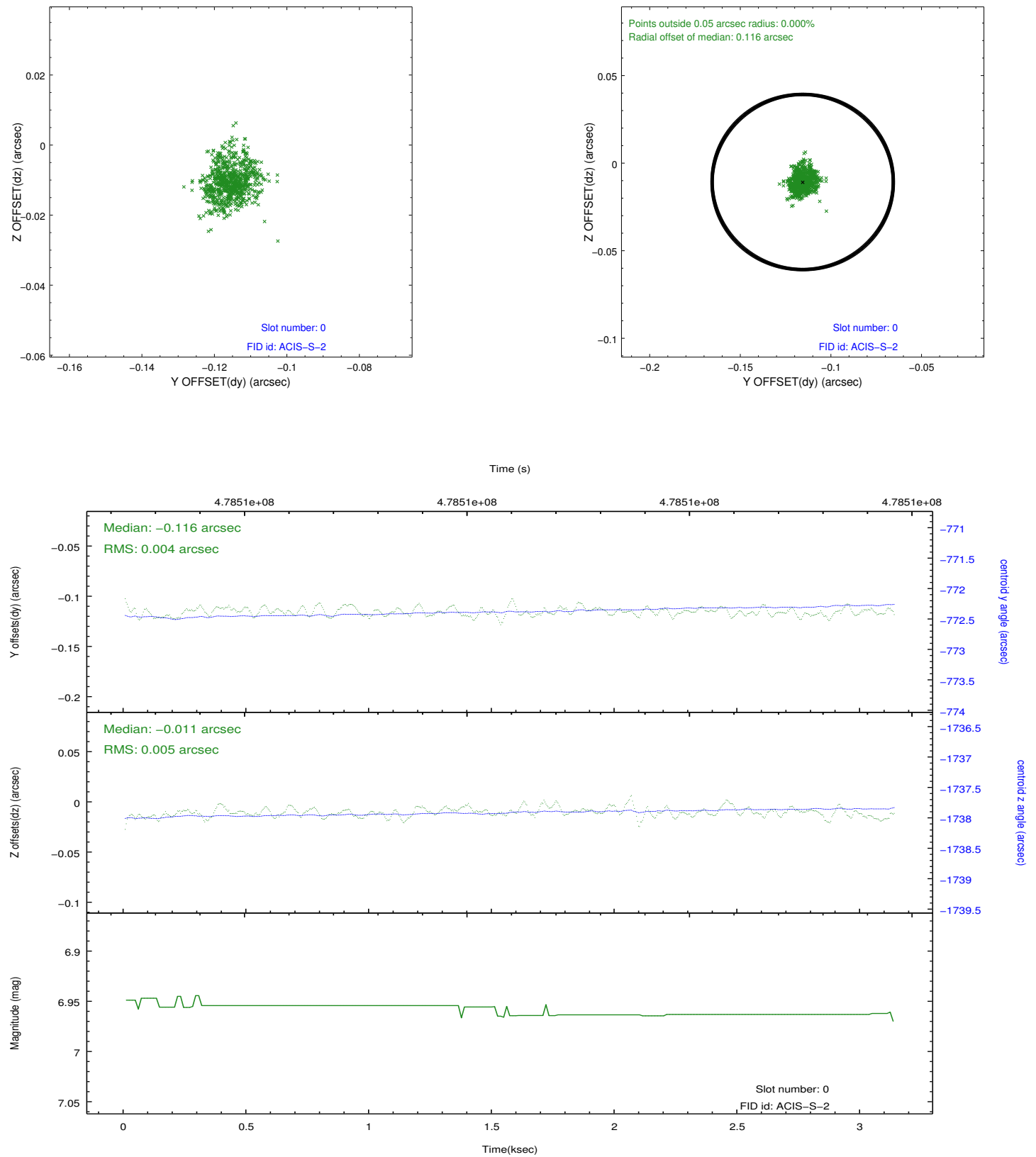
## 2.4.5 Slot 7





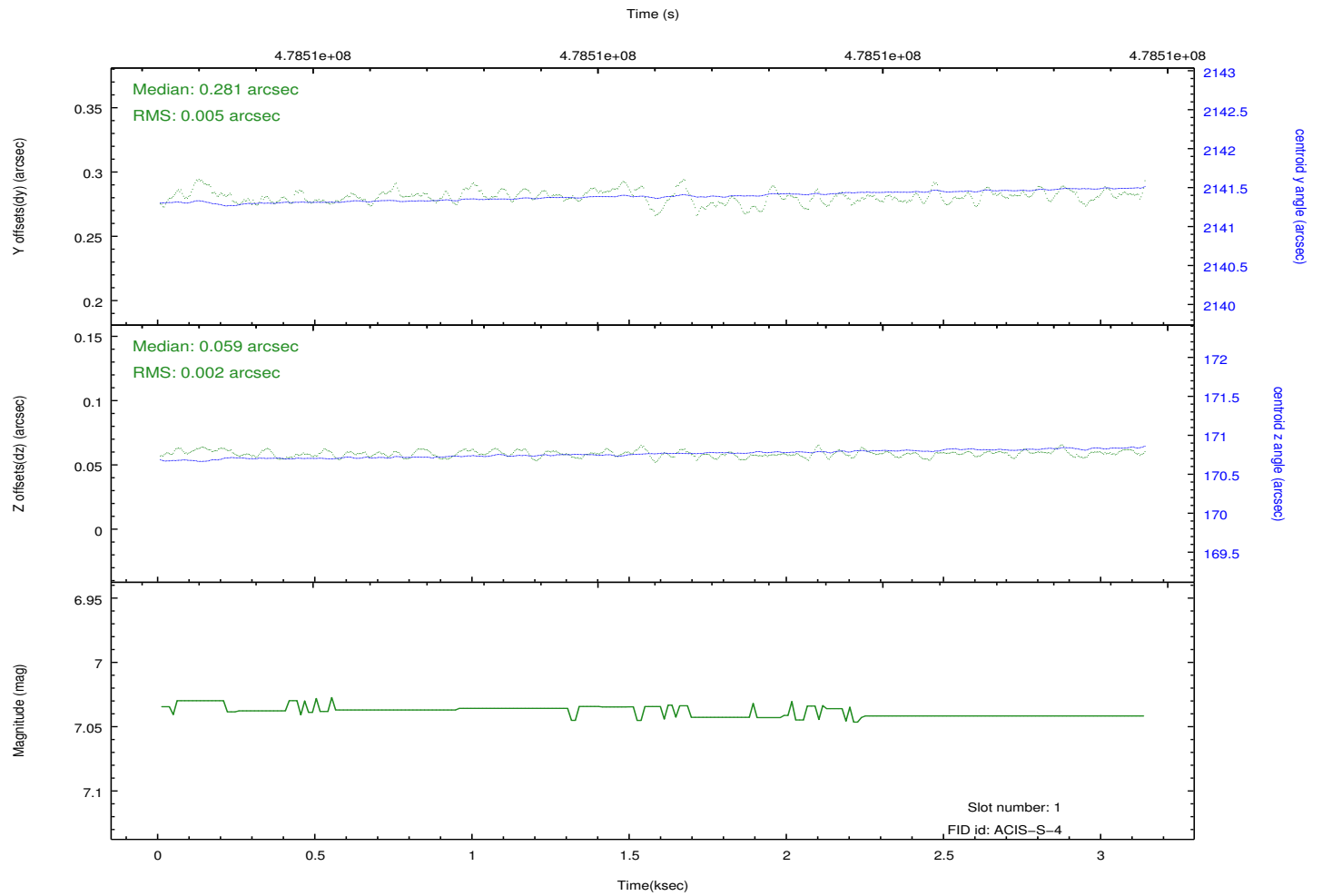
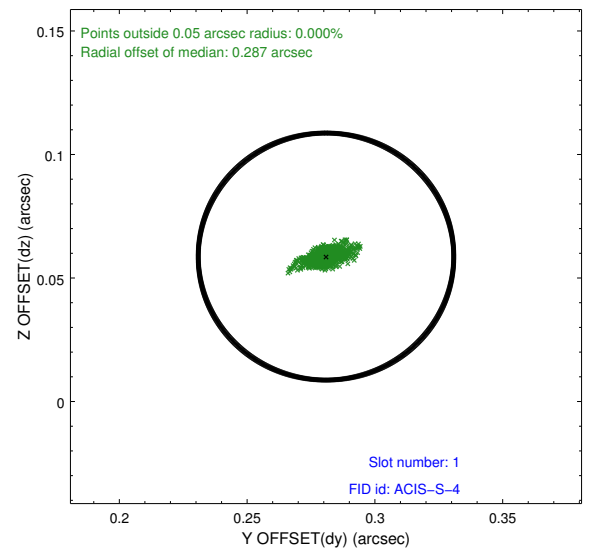
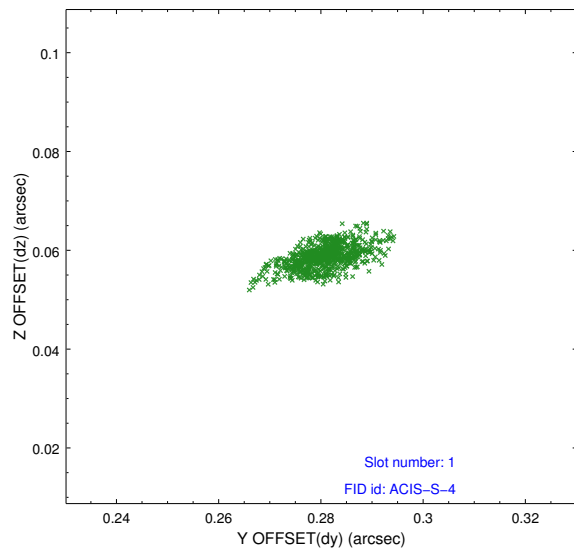
## 2.5 FID Slots

### 2.5.1 Slot 0



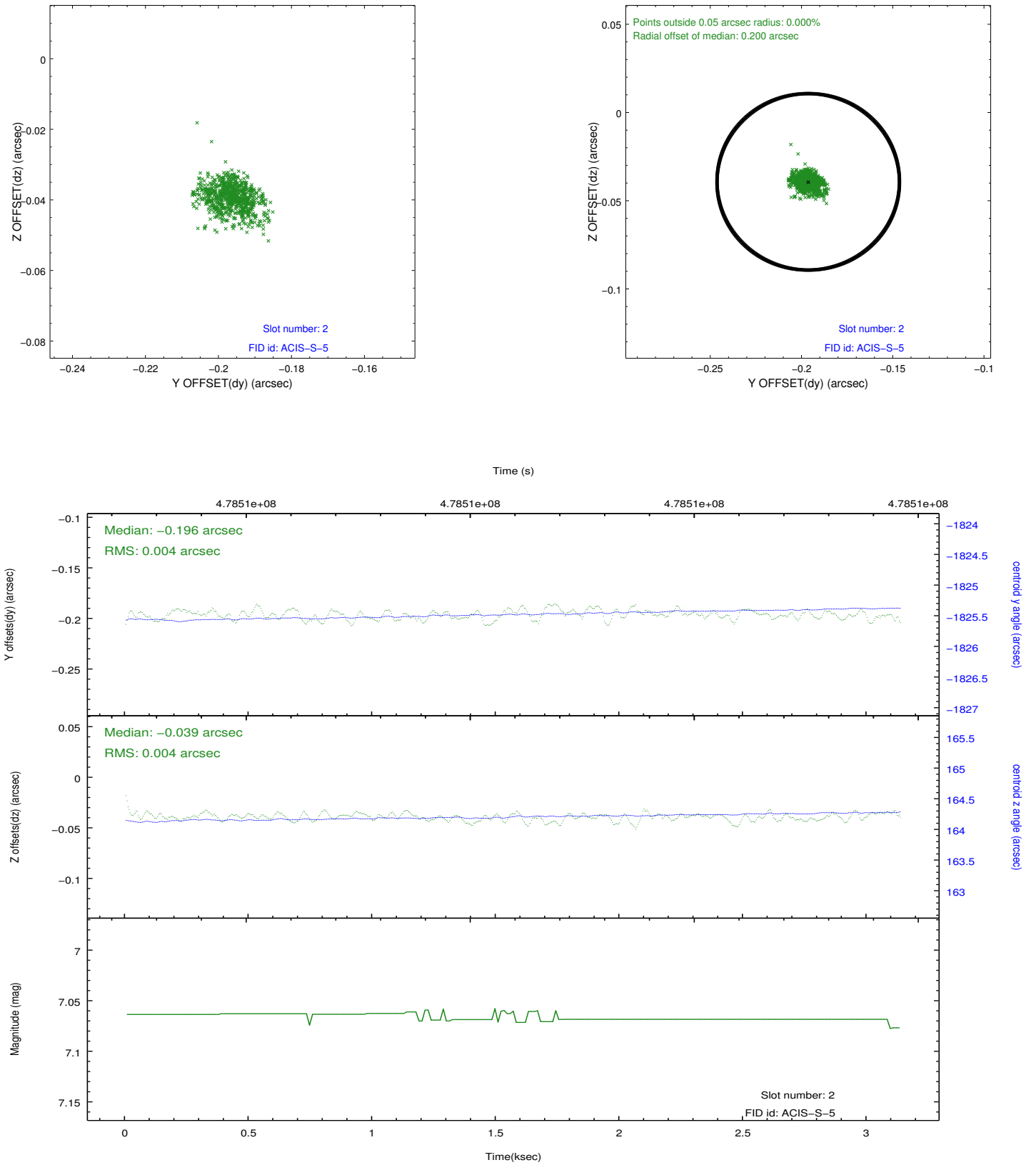


## 2.5.2 Slot 1





### 2.5.3 Slot 2





# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.0938632206321

## A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.