

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3204 - L2 Version 3  
Chandra X-Ray Center

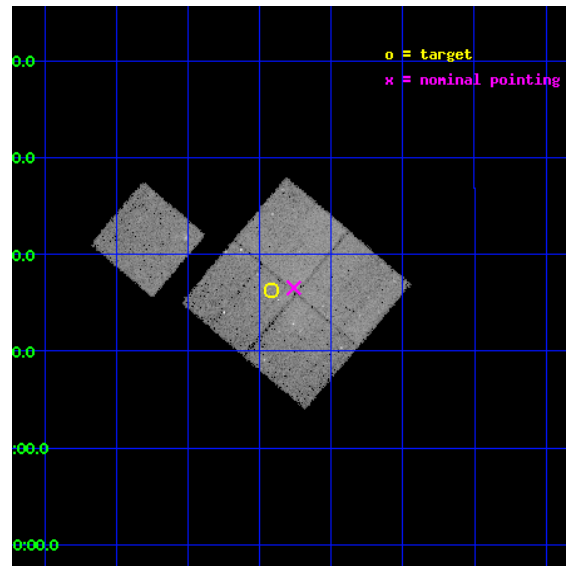
L2 Processing Date : Oct 17 2012

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# 1 Front

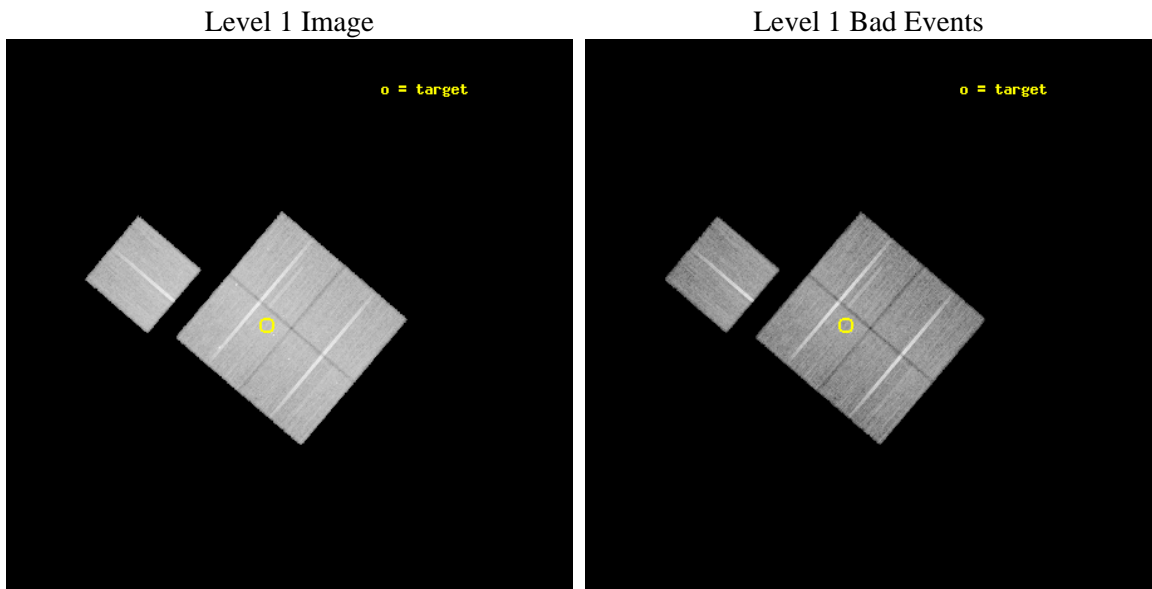
seq_num	800204	Sequence number
obs_id	3204	Observation id
title	ABELL 168, A RARE MERGER WITH THE SIMPLEST GEOMETRY	Proposal title
observer	Dr Maxim Markevitch	Principal investigator
object	A168_OFFSET2	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	18.854167	Observer's specified target RA [deg]
dec_targ	0.270833	Observer's specified target Dec [deg]
ra_nom	18.81495296099	Nominal RA [deg]
dec_nom	0.2756844012389	Nominal Dec [deg]
roll_nom	310.44868275554	Nominal Roll [deg]
revision	3	Processing version of data
ontime	38113.086582601	Sum of GTIs [s]
livetime	37615.111047953	Livetime [s]
ontime0	38113.004462719	Sum of GTIs [s]
ontime1	38103.622552127	Sum of GTIs [s]
ontime2	38113.086582601	Sum of GTIs [s]
ontime3	38109.986682117	Sum of GTIs [s]
ontime6	38119.245423019	Sum of GTIs [s]
l2events	116846	Number of level 2 events



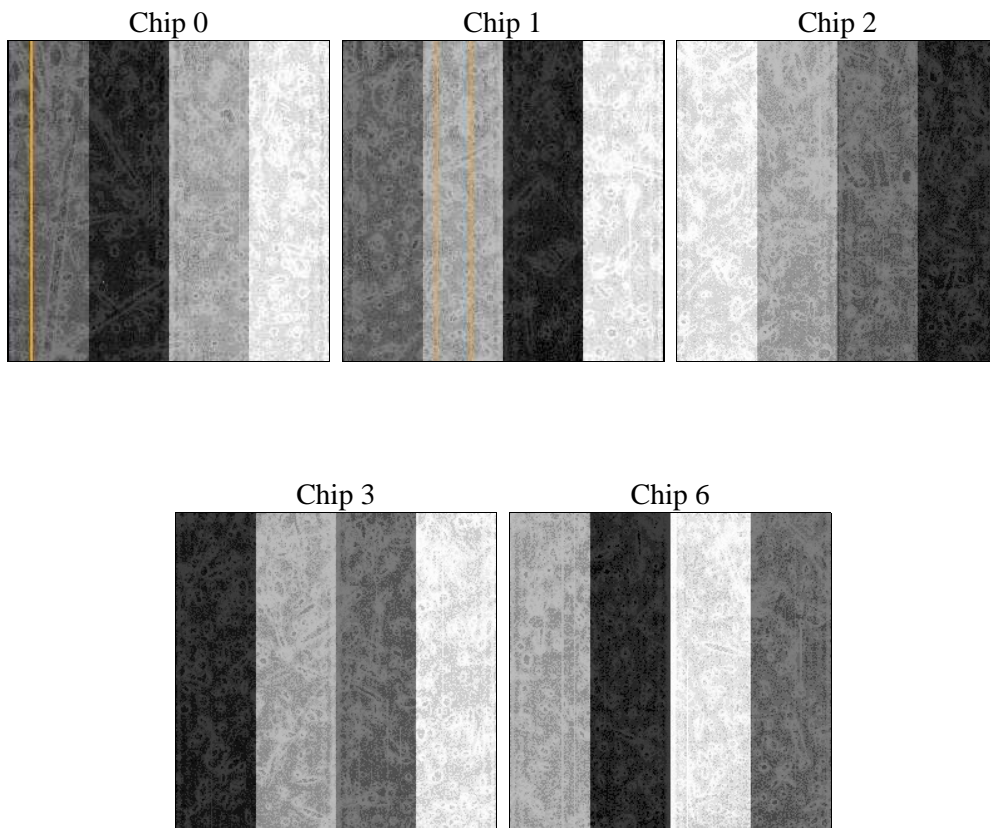
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	38000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	38113.086582601	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime0	38113.004462719	Sum of GTIs [s]
date	2012-10-17T01:21:10	Date and time of file creation	ontime1	38103.622552127	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	38113.086582601	Sum of GTIs [s]
			ontime3	38109.986682117	Sum of GTIs [s]
			ontime6	38119.245423019	Sum of GTIs [s]
			l1events	1054604	Number of level 1 events

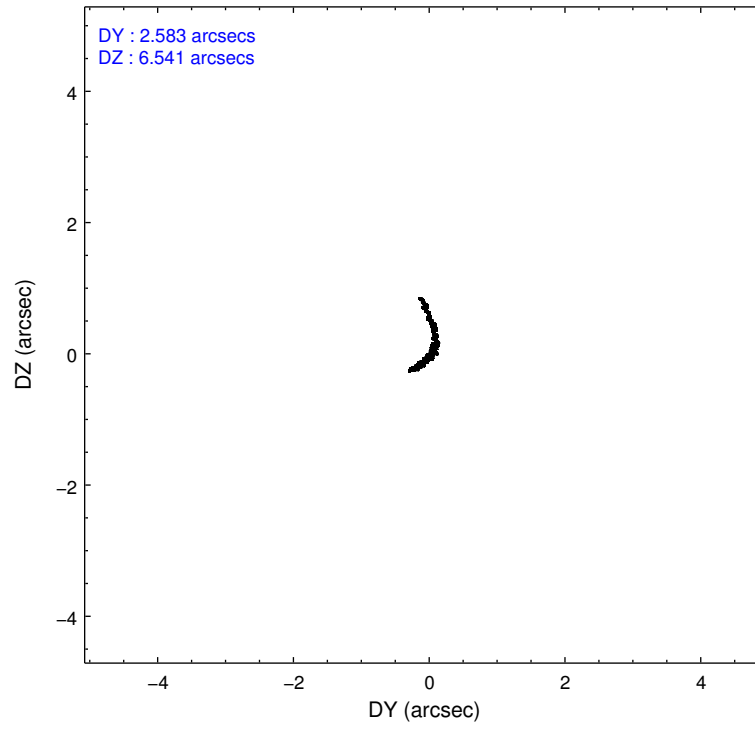
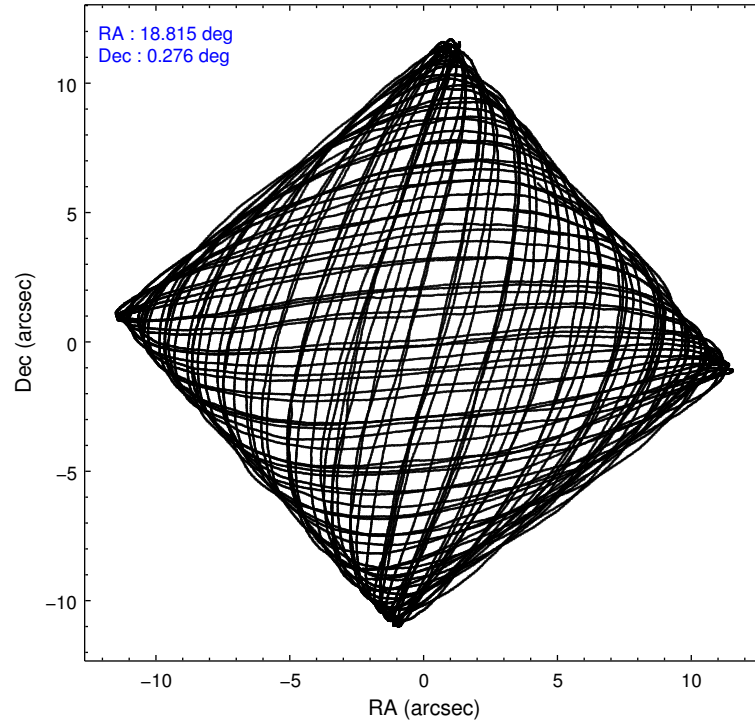
### 2.1.4 Events

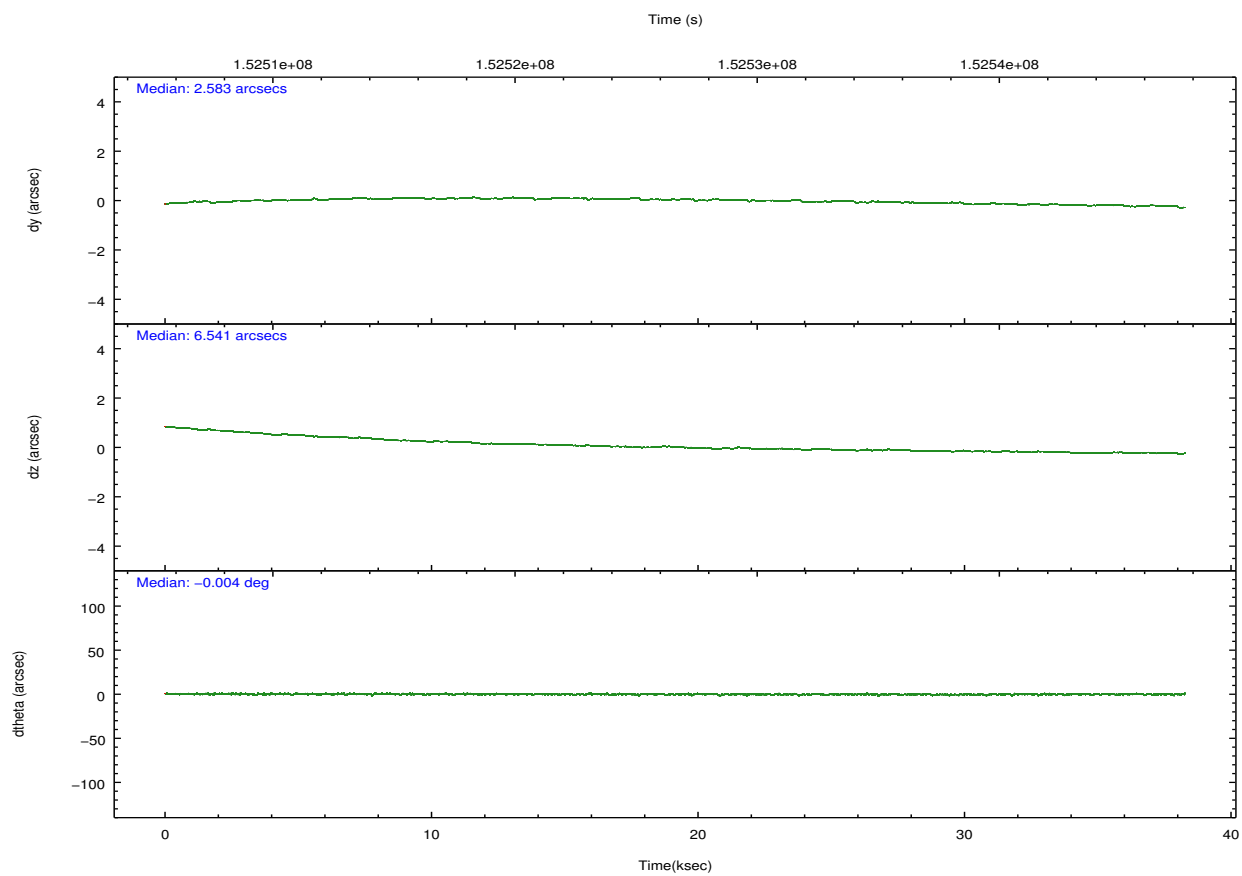
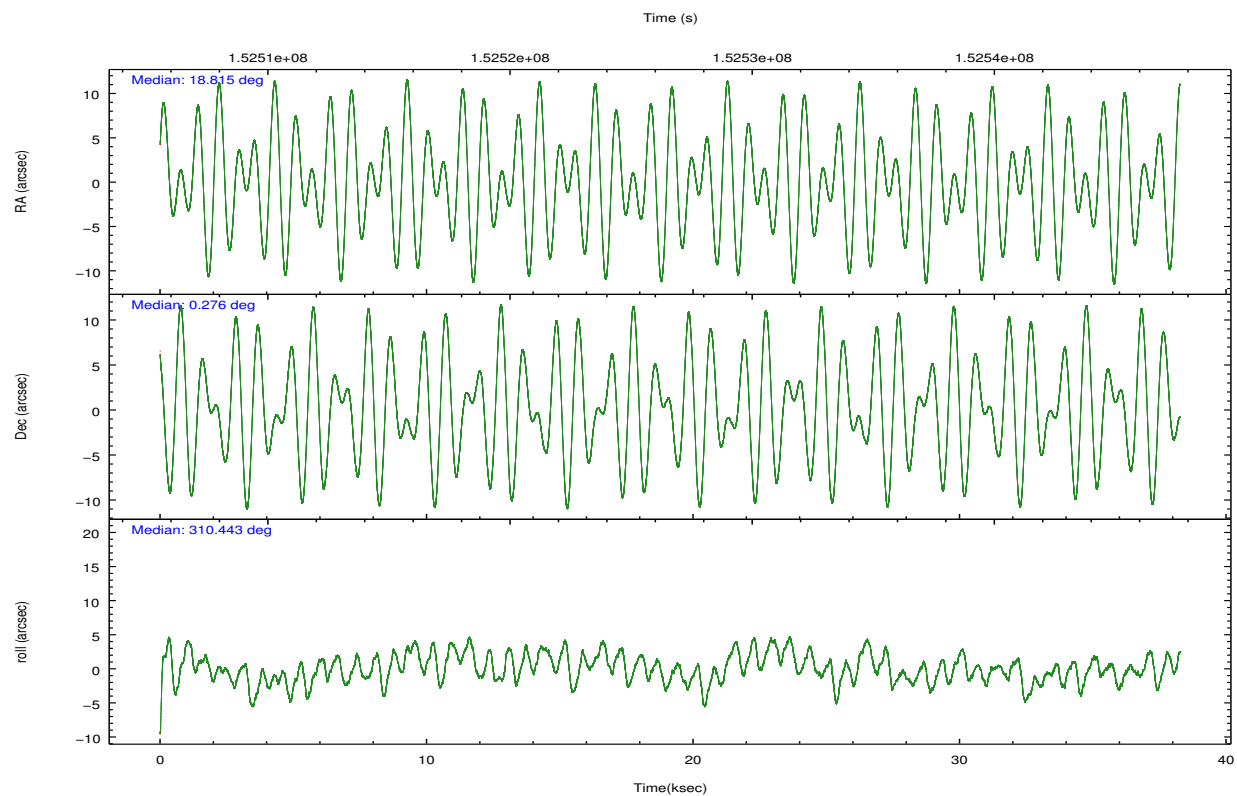
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	197160	203016	223055	220101	211272	grade 0 events	11458	15794	11967	16708	8163
rejected events	171445	170956	196983	188922	189010		5%	7%	5%	7%	3%
rejected %	86%	84%	88%	85%	89%	grade 1 events	97	129	125	128	77
							0%	0%	0%	0%	0%
						grade 2 events	5260	5838	5167	5252	4640
							2%	2%	2%	2%	2%
						grade 3 events	2582	2946	2508	2611	2431
							1%	1%	1%	1%	1%
						grade 4 events	2281	2748	2505	2603	2458
							1%	1%	1%	1%	1%
						grade 5 events	6928	7412	6674	7727	7680
							3%	3%	2%	3%	3%
						grade 6 events	4140	4735	3933	4009	4573
							2%	2%	1%	1%	2%
						grade 7 events	164414	163414	190176	181063	181250
							83%	80%	85%	82%	85%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	18.789098	18.81495296098996	Subarray requested	NONE	NONE
[deg] Pointing Dec	0.284769	0.2756844012389038	Alternating exposures requested	N	N
[deg] Pointing Roll	310.240122	310.4486827555448	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	152507742.184000	152506743.62307			
Observation start date	2002-11-01T03:14:38	2002-11-01T02:59:03			
[s] Observation end time (MET)	152545742.184000	152546628.93722			
Observation end date	2002-11-01T13:47:58	2002-11-01T14:03:48			
Read mode	TIMED	TIMED			

## 2.3 Aspect



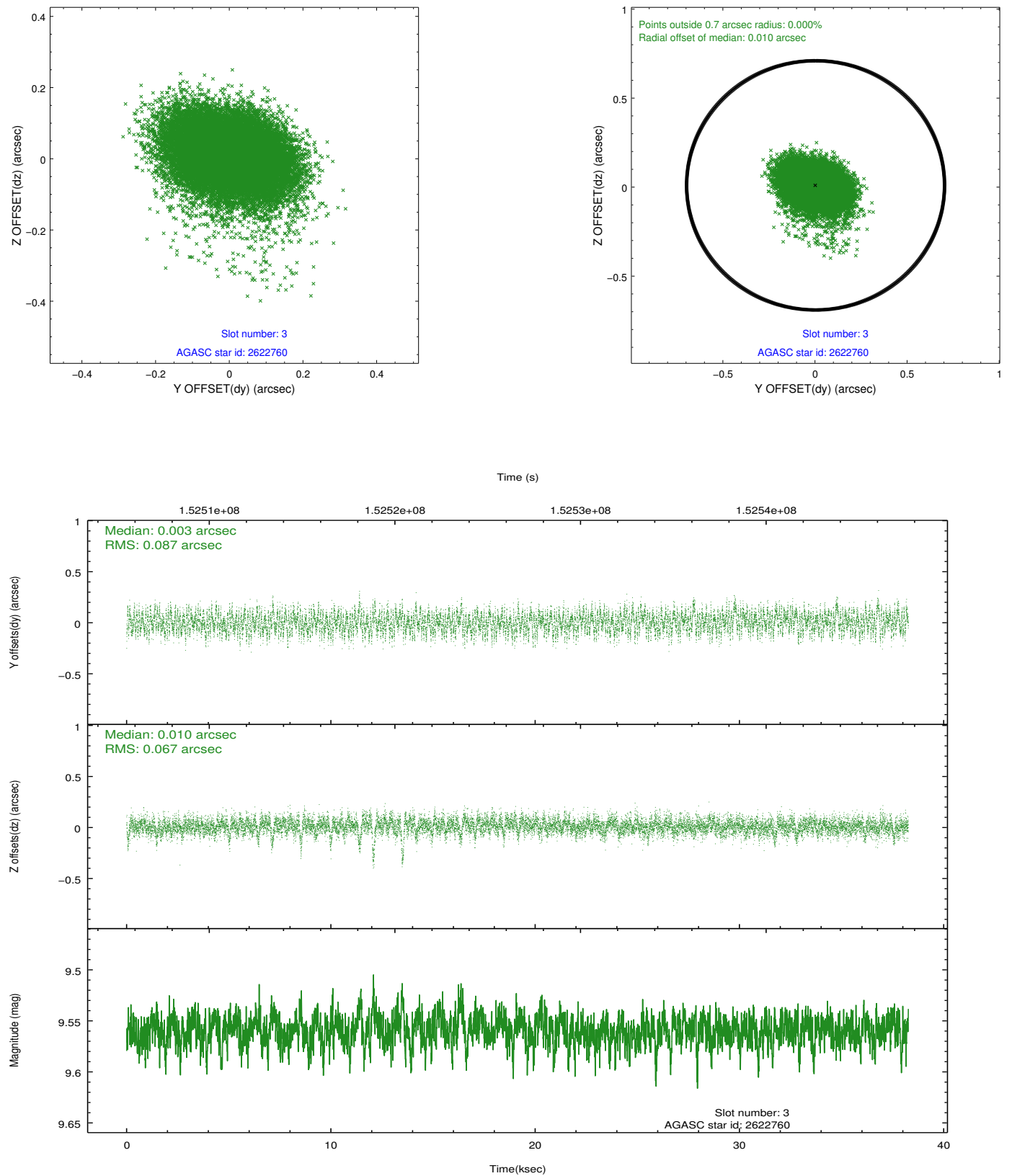


### Slot Statistics

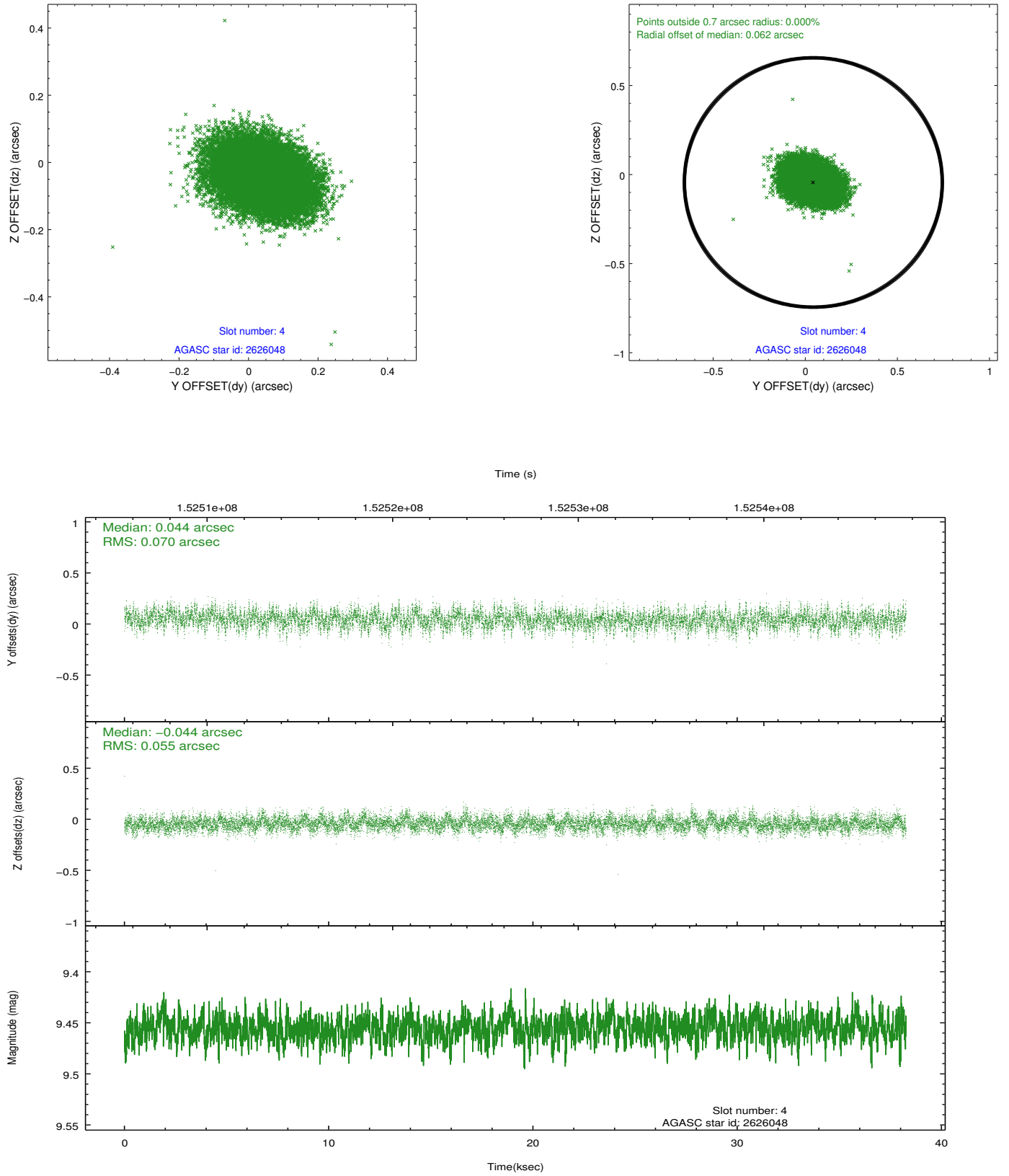
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.25	9332	0.054	-0.063	0.010	0.023	0.000000	0.000000	937.33	-830.04
1	FID	ACIS-I-5	7.24	9330	0.100	0.138	0.010	0.017	0.000000	0.000000	-1810.79	1067.53
2	FID	ACIS-I-6	7.25	9331	-0.245	-0.003	0.016	0.035	0.000000	0.000000	402.46	1712.00
3	GUIDE	2622760	9.56	18627	0.003	0.010	0.116	0.190	18.942327	0.938727	-1440.79	1941.37
4	GUIDE	2626048	9.46	18650	0.044	-0.044	0.094	0.156	19.277853	0.298245	1099.65	1374.26
5	GUIDE	2626464	7.14	18664	-0.091	0.056	0.075	0.121	18.898535	0.912454	-1470.43	1760.05
6	GUIDE	2628352	9.77	18620	0.003	0.036	0.140	0.231	18.930347	0.017661	1062.76	-233.26
7	GUIDE	613548600	9.87	18644	0.046	-0.059	0.119	0.195	18.710460	-0.218466	1200.50	-1386.94

## 2.4 Star Slots

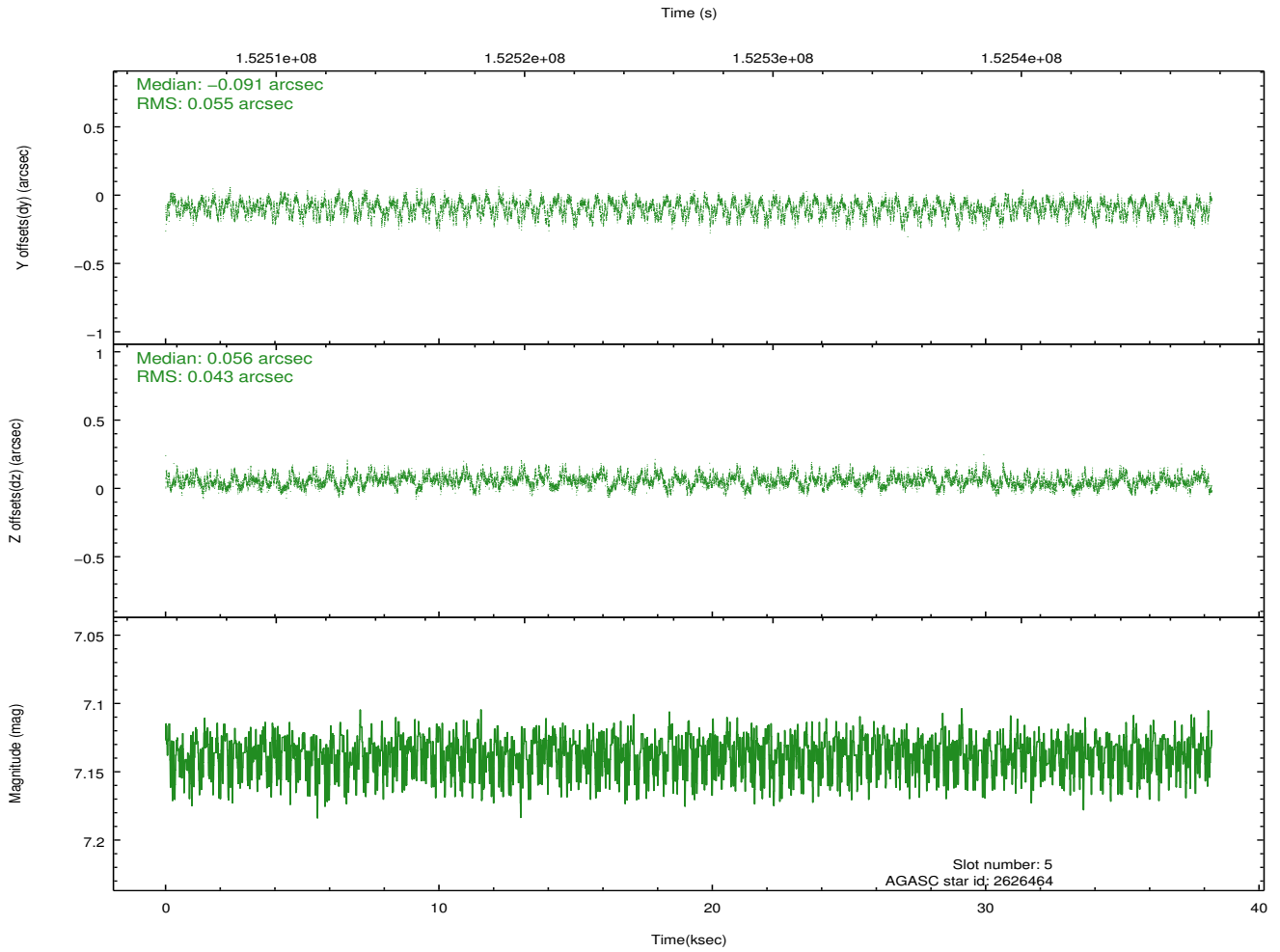
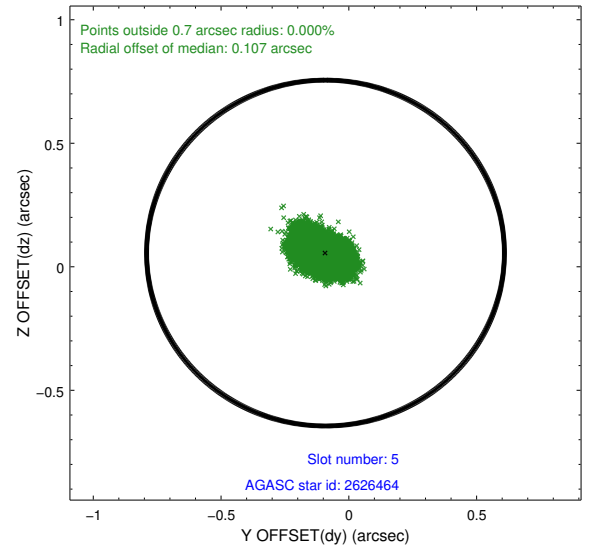
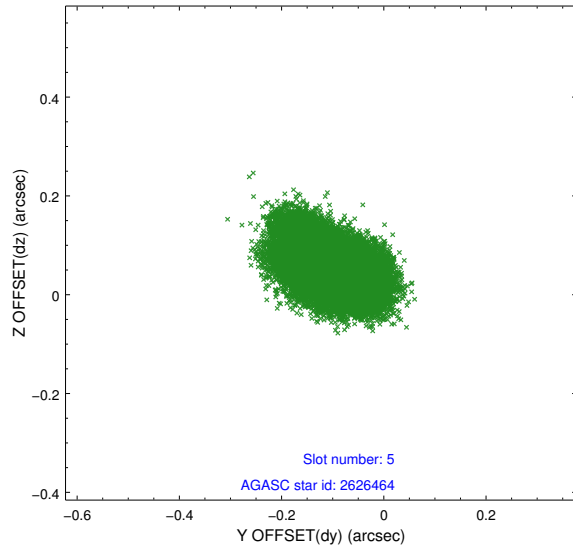
### 2.4.1 Slot 3



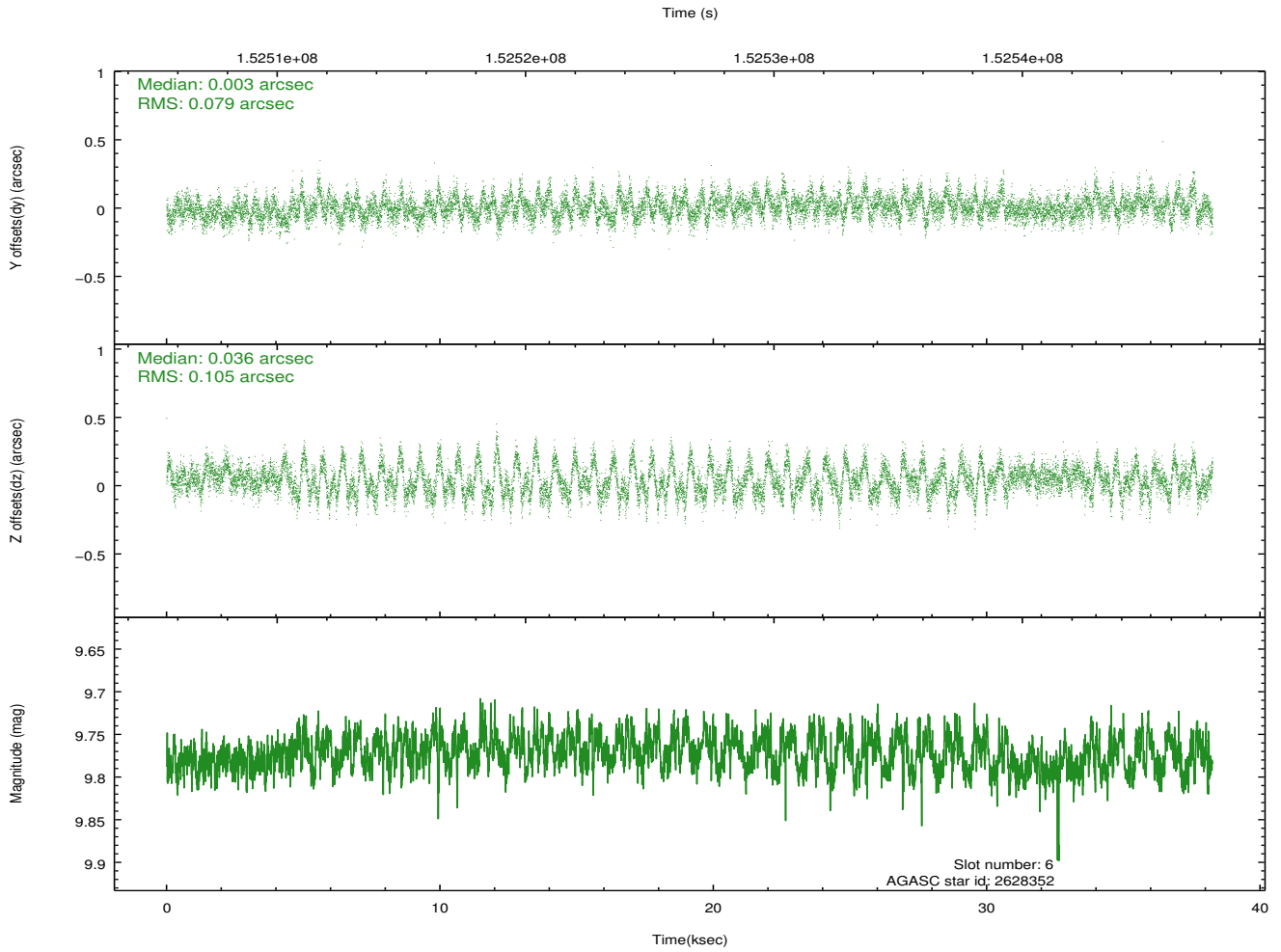
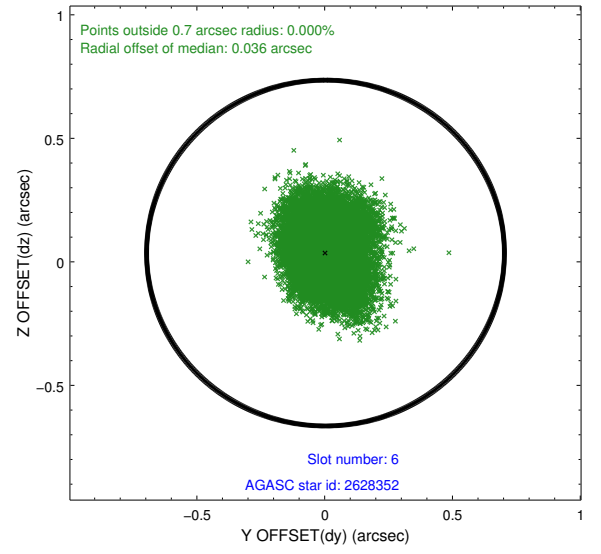
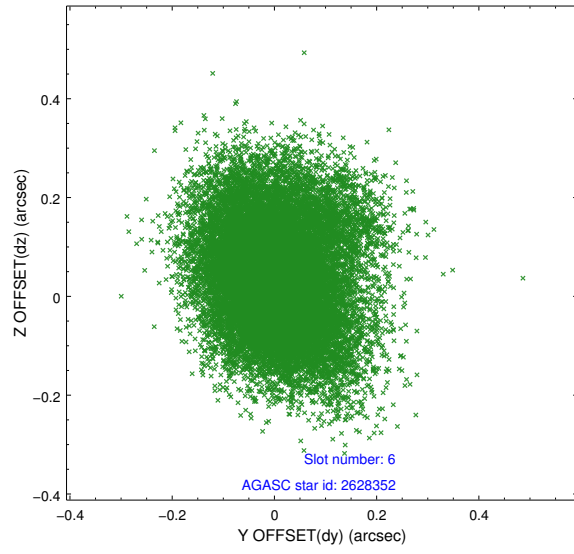
## 2.4.2 Slot 4



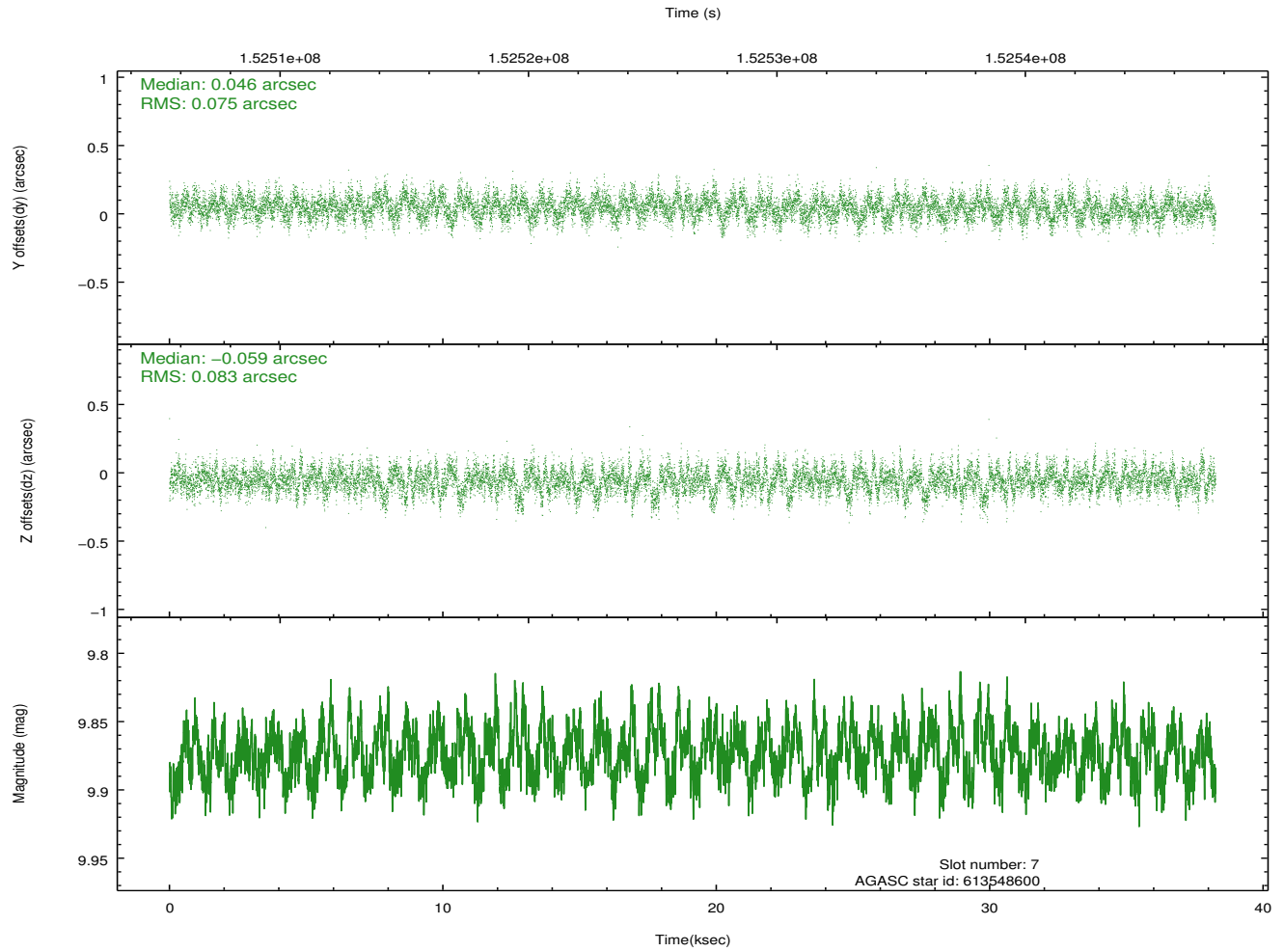
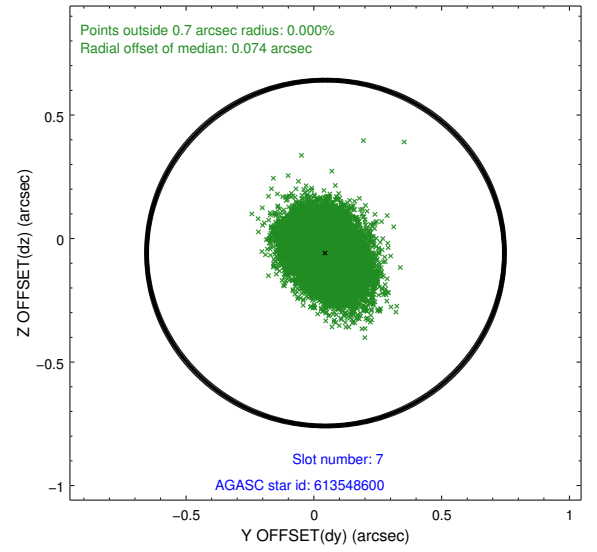
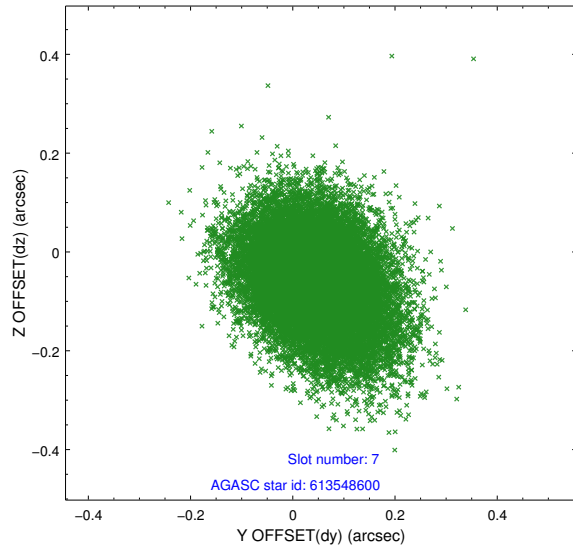
### 2.4.3 Slot 5



## 2.4.4 Slot 6

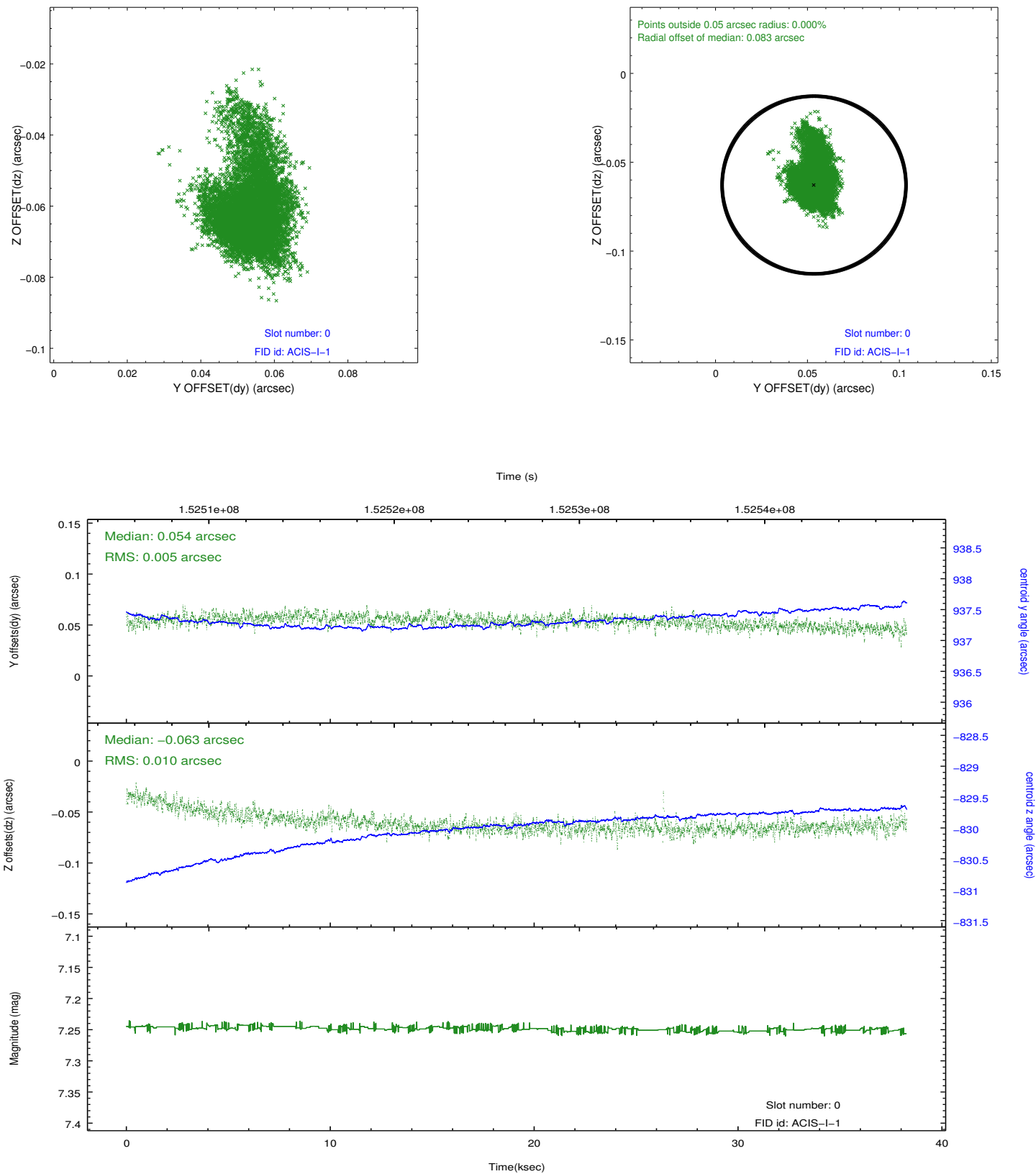


## 2.4.5 Slot 7

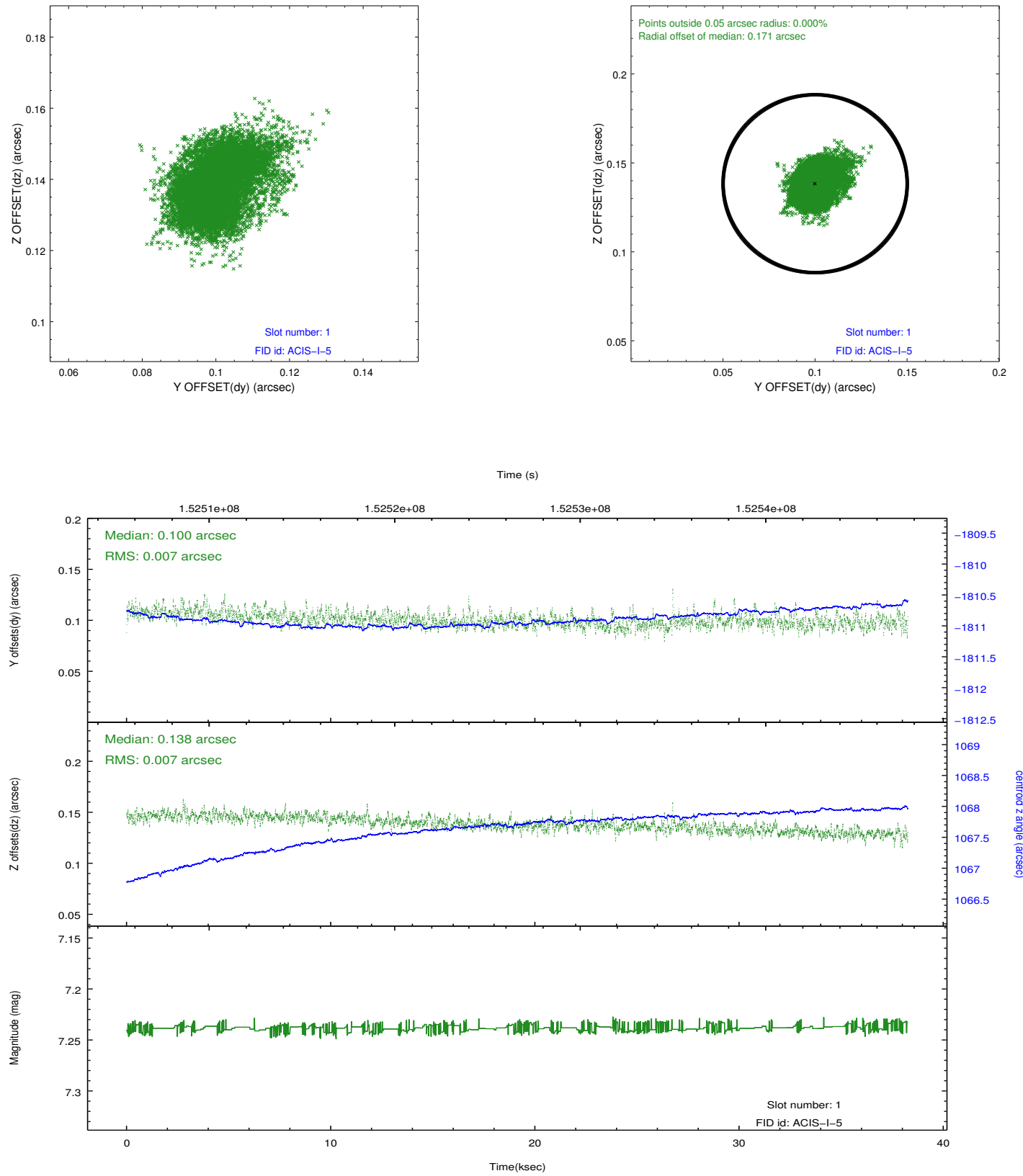


## 2.5 FID Slots

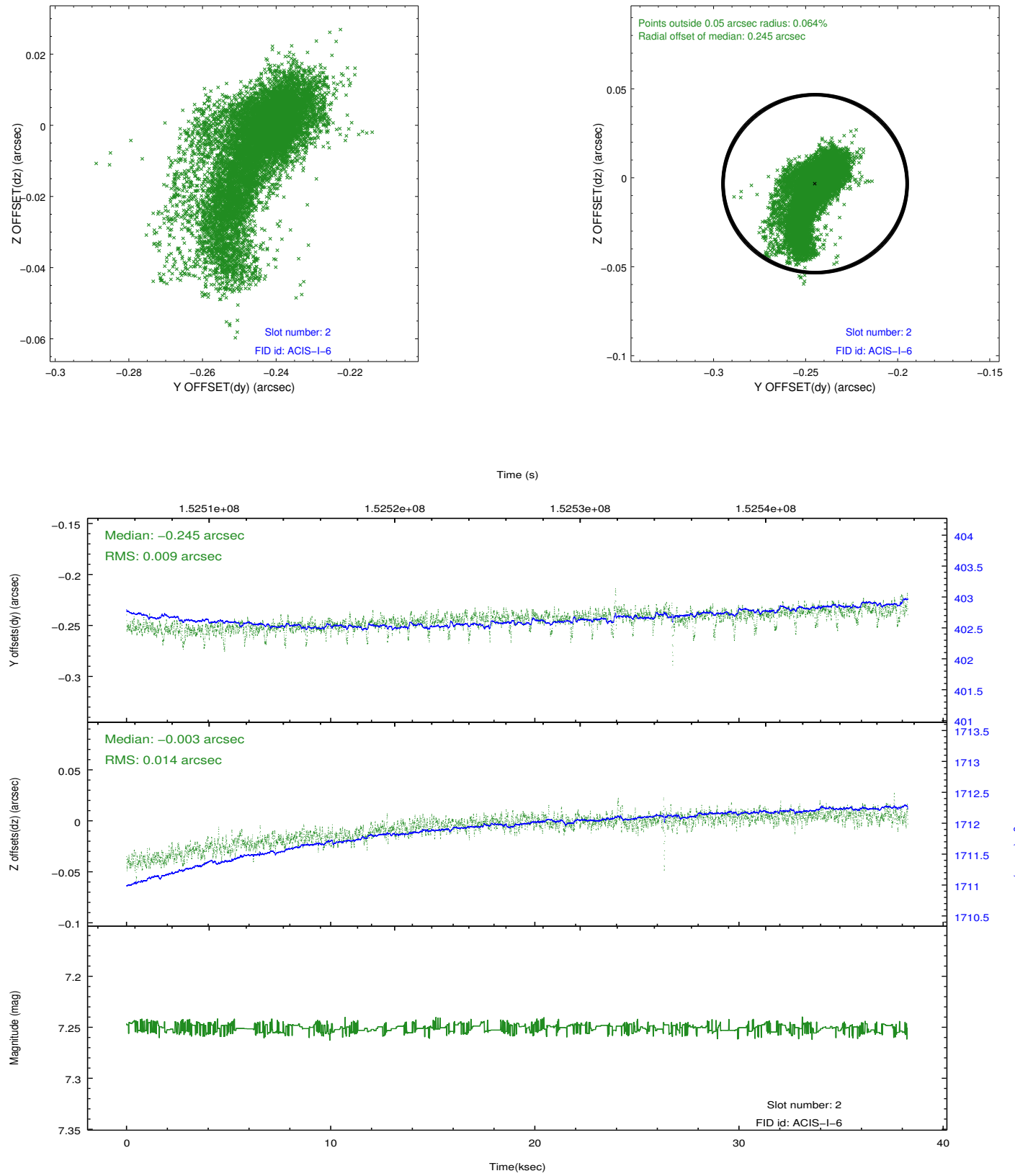
### 2.5.1 Slot 0



## 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)	2012.10.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.111

### A.2 Comments