

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 14049 - L2 Version 2  
Chandra X-Ray Center

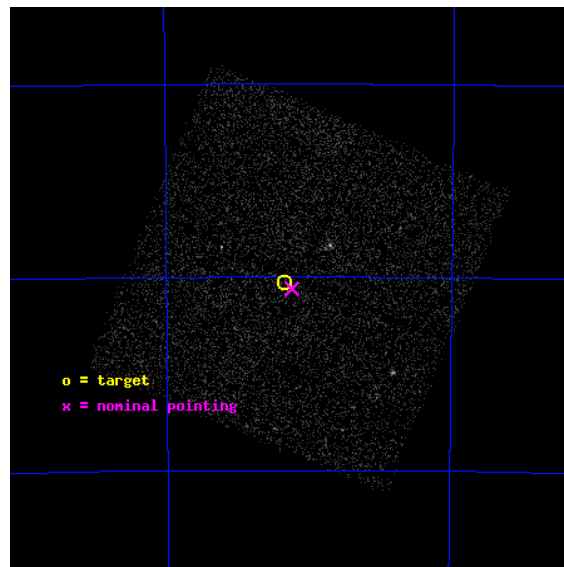
L2 Processing Date : Feb 28 2012

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# 1 Front

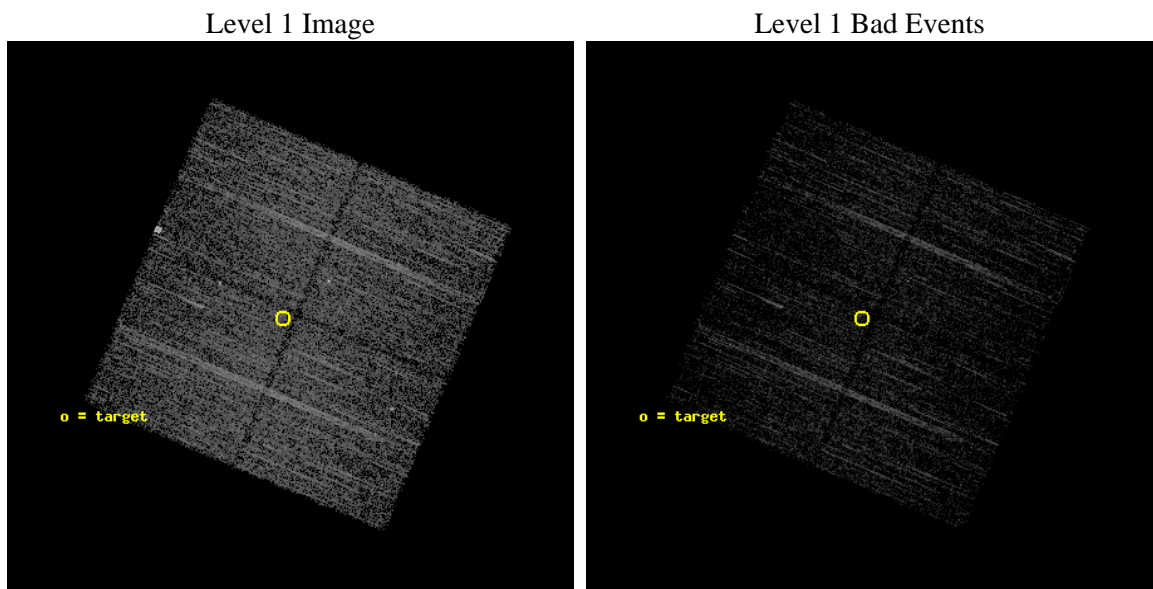
seq_num	901015	Sequence number
obs_id	14049	Observation id
title	BAT, Chandra, NuSTAR and The origin of the Cosmic X-ray Background	&#160
observer	Dr. marco ajello	Principal investigator
object	J1857.9-7830	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	284.480833	Observer's specified target RA [deg]
dec_targ	-78.505111	Observer's specified target Dec [deg]
ra_nom	284.45005601419	Nominal RA [deg]
dec_nom	-78.510257932524	Nominal Dec [deg]
roll_nom	202.98932618814	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5055.1939842701	Sum of GTIs [s]
livetime	4989.1441532859	Livetime [s]
ontime0	5061.3529148698	Sum of GTIs [s]
ontime1	5061.3939548731	Sum of GTIs [s]
ontime2	5061.4349948764	Sum of GTIs [s]
ontime3	5055.1939842701	Sum of GTIs [s]
l2events	14205	Number of level 2 events



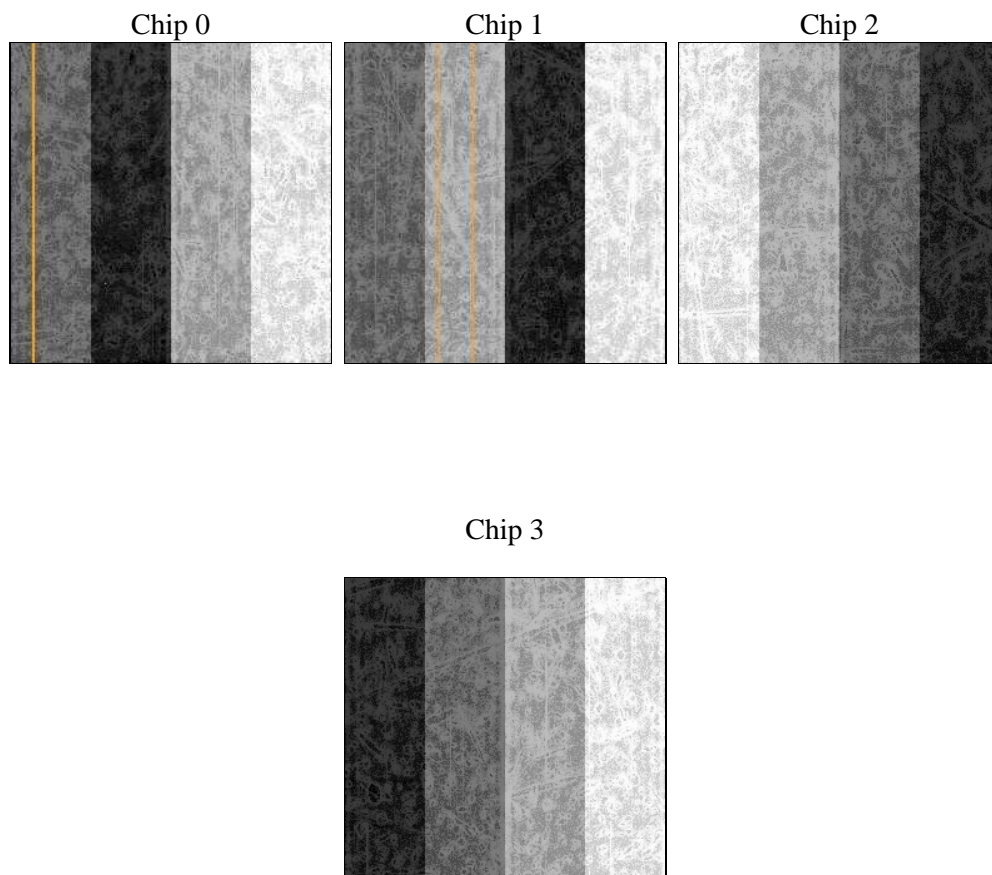
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	5055.1939842701	Sum of GTIs [s]
caldsver	4.4.8	&#160	ontime0	5061.3529148698	Sum of GTIs [s]
date	2012-02-28T16:55:09	Date and time of file creation	ontime1	5061.3939548731	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5061.4349948764	Sum of GTIs [s]
			ontime3	5055.1939842701	Sum of GTIs [s]
			l1events	133607	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	32993	33802	33832	32980
rejected events	28098	28033	30021	29283
rejected %	85%	82%	88%	88%

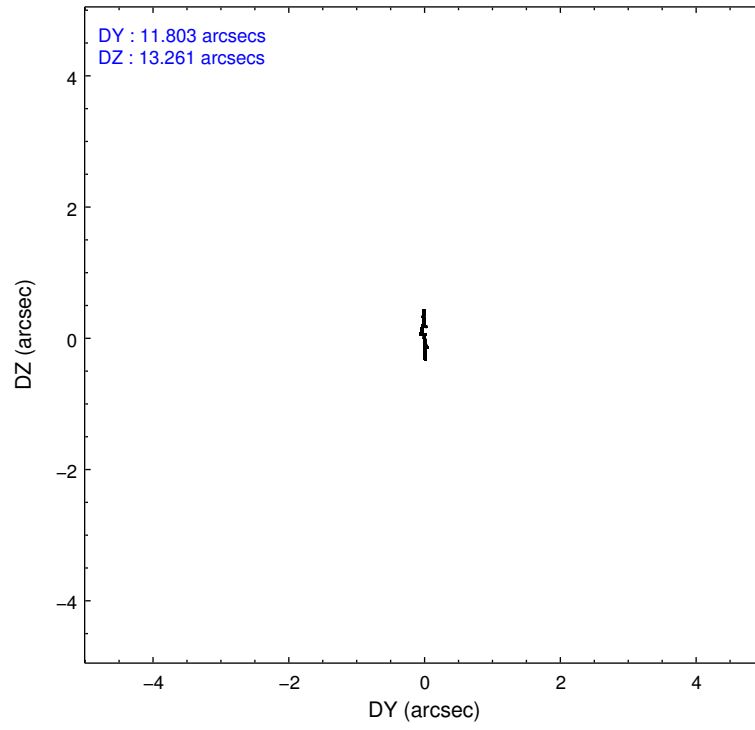
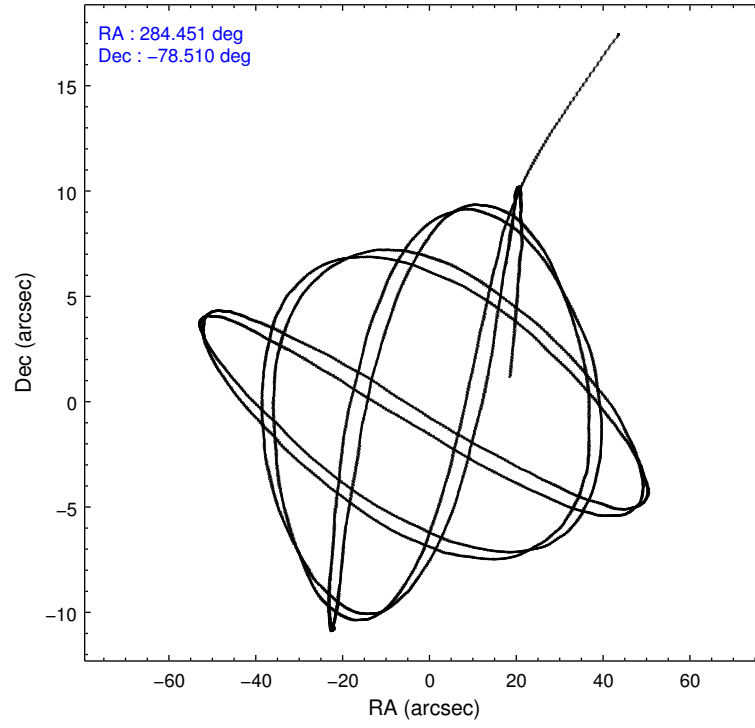
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	2100	3089	1478	1324
	6%	9%	4%	4%
grade 1 events	75	24	17	33
	0%	0%	0%	0%
grade 2 events	1051	1007	886	821
	3%	2%	2%	2%
grade 3 events	474	394	361	426
	1%	1%	1%	1%
grade 4 events	435	413	404	375
	1%	1%	1%	1%
grade 5 events	1487	1469	1327	1694
	4%	4%	3%	5%
grade 6 events	840	870	684	757
	2%	2%	2%	2%
grade 7 events	26531	26536	28675	27550
	80%	78%	84%	83%

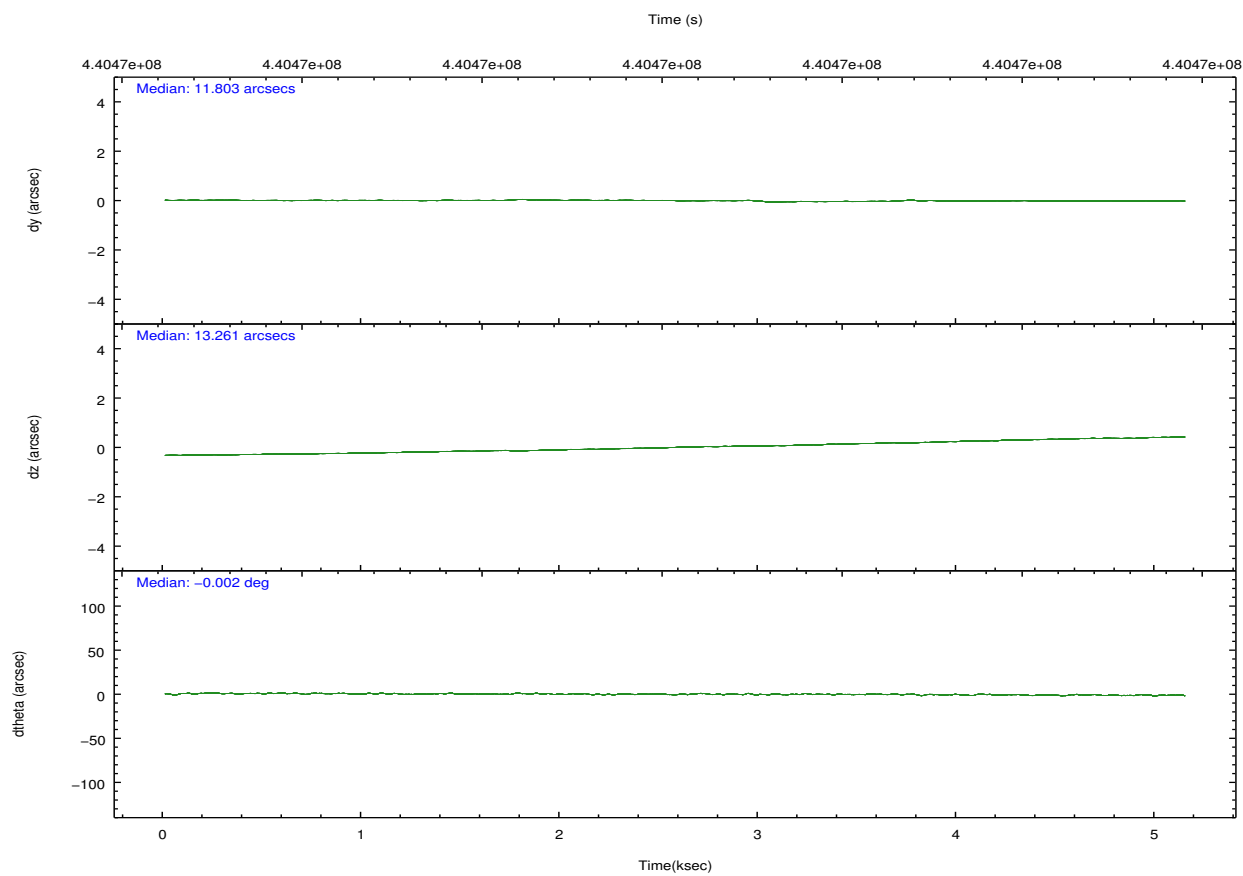
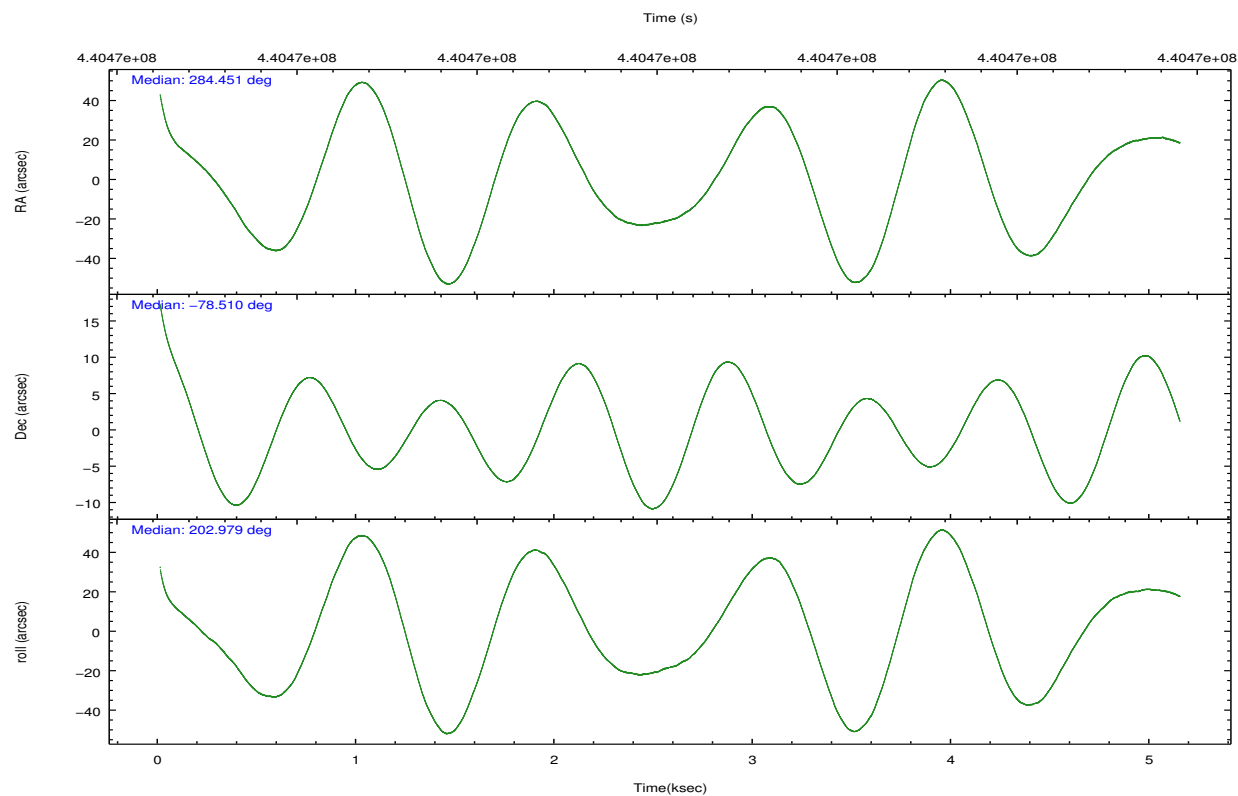


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	284.532383	284.4500560141886	Subarray requested	NONE	NONE
[deg] Pointing Dec	-78.488332	-78.51025793252431	Alternating exposures requested	N	N
[deg] Pointing Roll	202.861328	202.989326188137	[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)	440466654.184000	440465473.35227			
Observation start date	2011-12-16T23:49:48	2011-12-16T23:31:13			
[s] Observation end time (MET)	440471654.184000	440472749.31516			
Observation end date	2011-12-17T01:13:08	2011-12-17T01:32:29			
Read mode	TIMED	TIMED			

## 2.3 Aspect



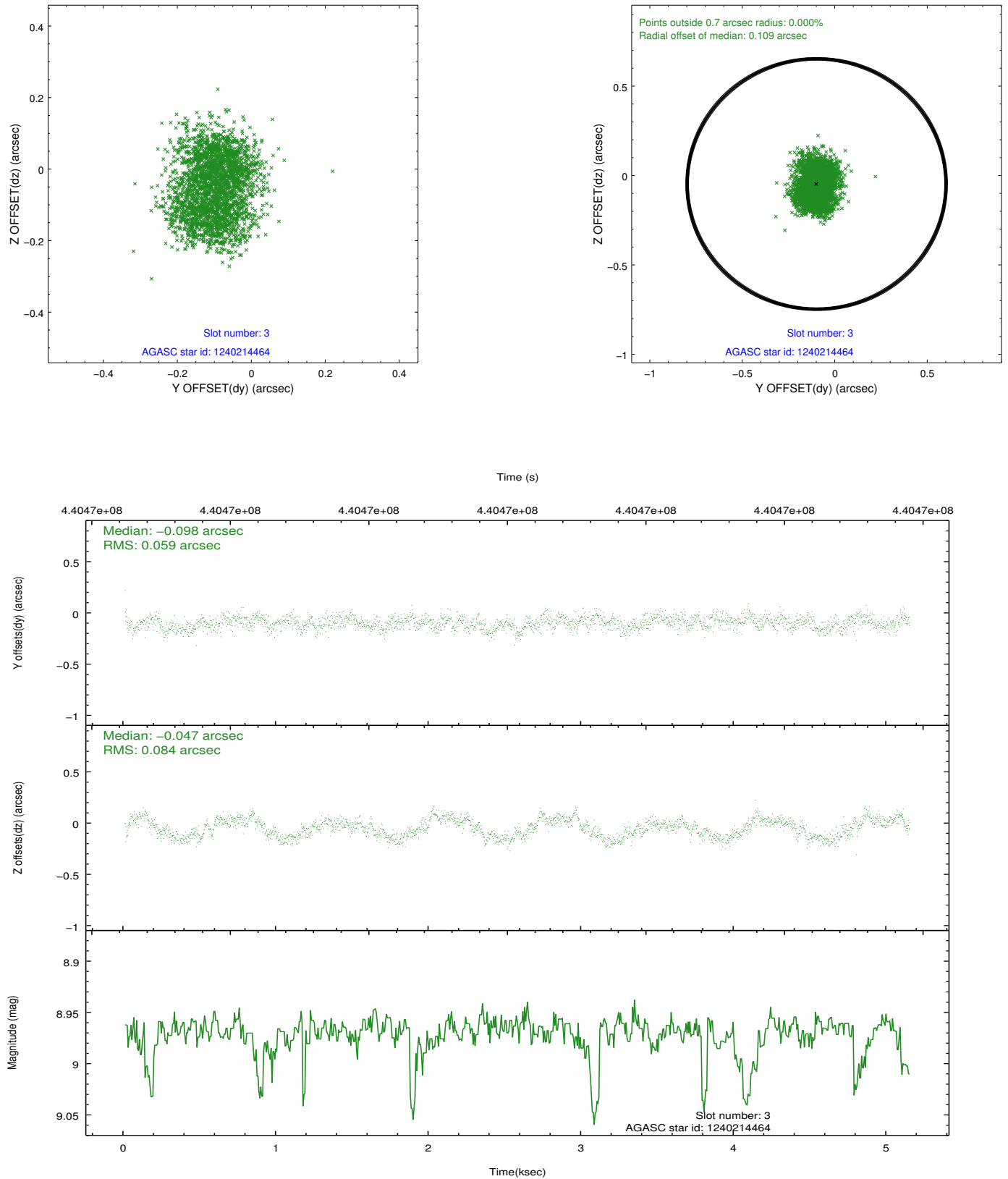


### Slot Statistics

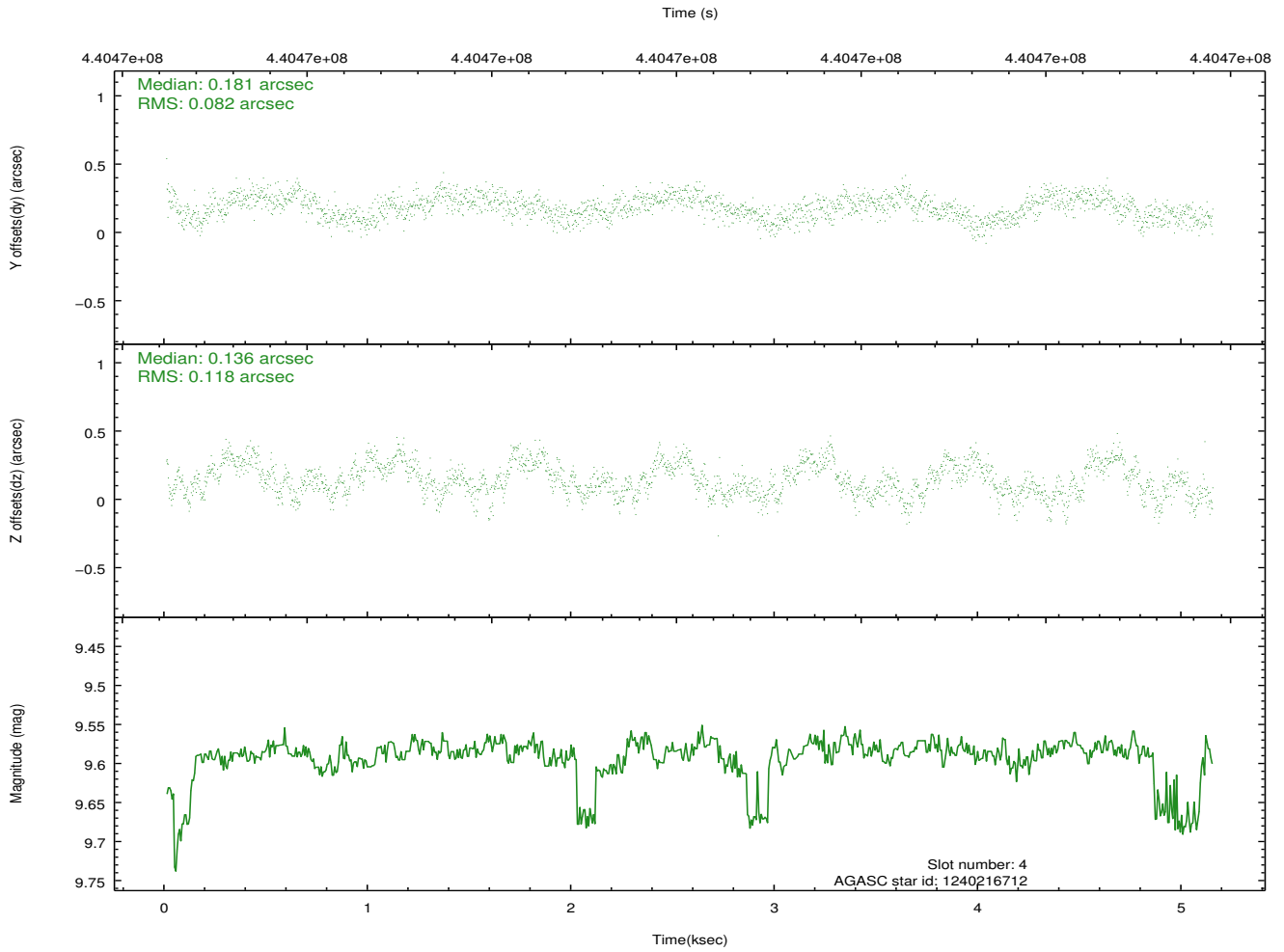
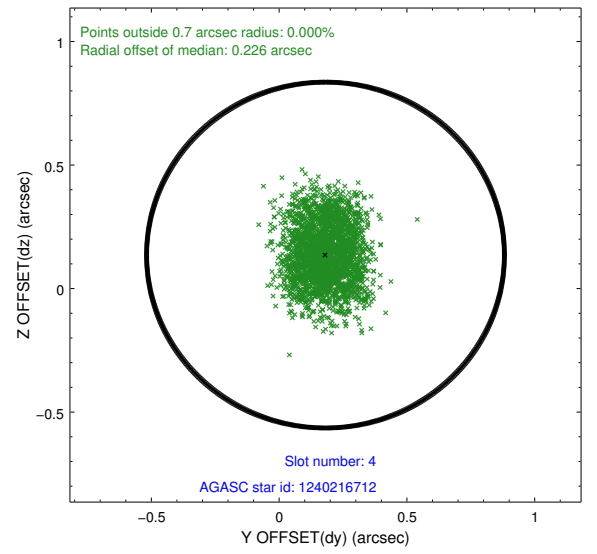
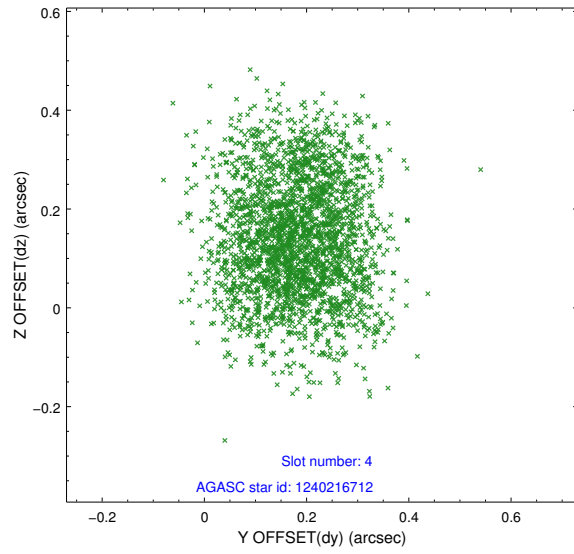
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.18	1255	0.061	-0.006	0.007	0.012	0.000000	0.000000	927.81	-836.84
1	FID	ACIS-I-5	7.17	1255	-0.205	0.072	0.008	0.012	0.000000	0.000000	-1819.91	1060.14
2	FID	ACIS-I-6	7.18	1255	0.053	0.005	0.009	0.013	0.000000	0.000000	392.06	1705.91
3	GUIDE	1240214464	8.97	2496	-0.098	-0.047	0.112	0.166	282.142147	-78.453831	1552.72	-750.40
4	GUIDE	1240216712	9.59	2500	0.181	0.136	0.155	0.245	284.747542	-78.098715	-691.14	-1230.72
5	GUIDE	1240731104	8.70	2508	-0.186	-0.083	0.123	0.188	283.462655	-79.183092	1640.07	2030.07
6	GUIDE	1240731360	9.32	2507	0.107	0.072	0.126	0.198	285.452939	-78.791470	-166.43	1261.65
7	GUIDE	1240731720	9.07	2506	0.012	-0.083	0.125	0.194	284.343288	-79.048970	903.88	1810.72

## 2.4 Star Slots

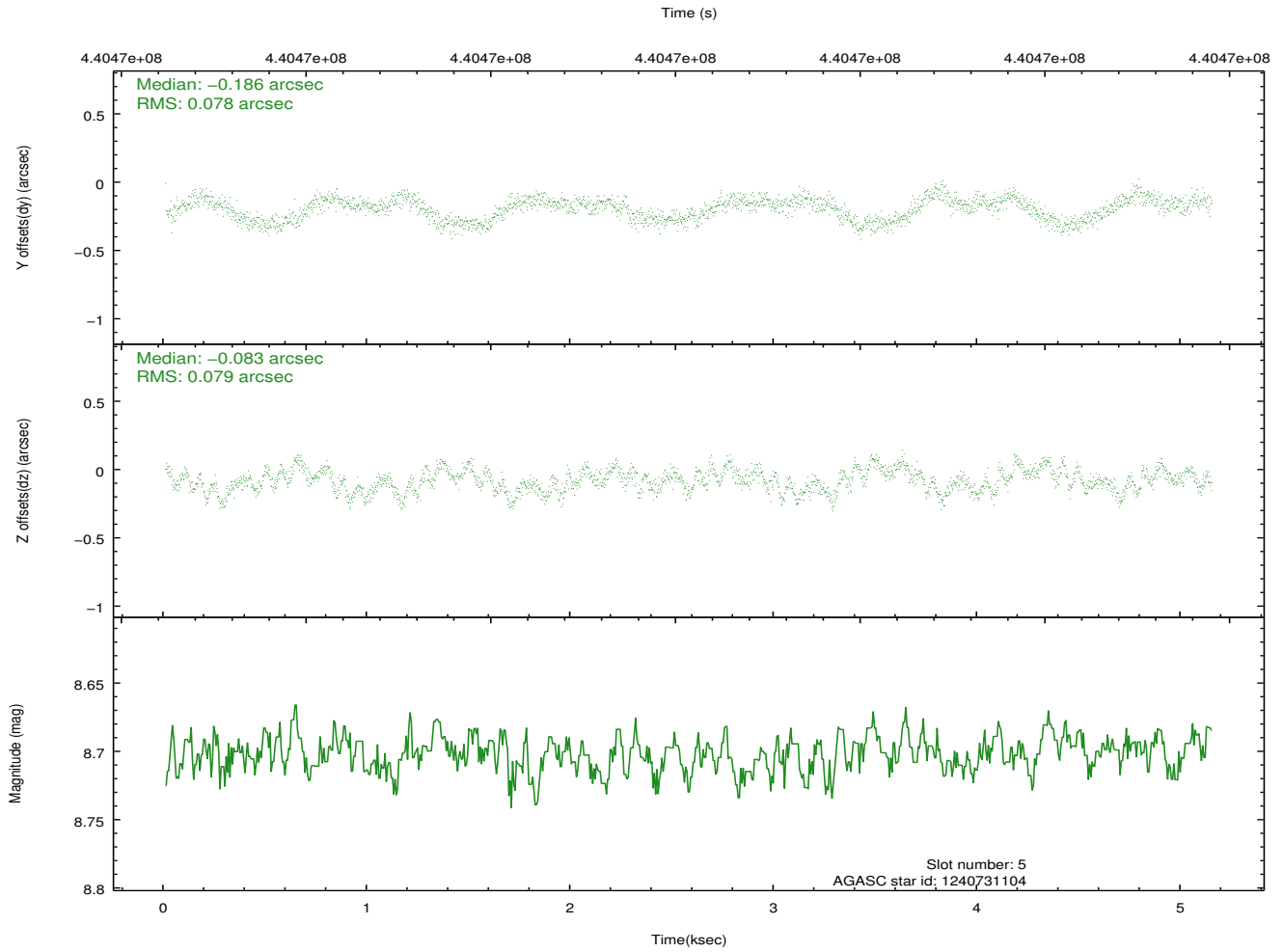
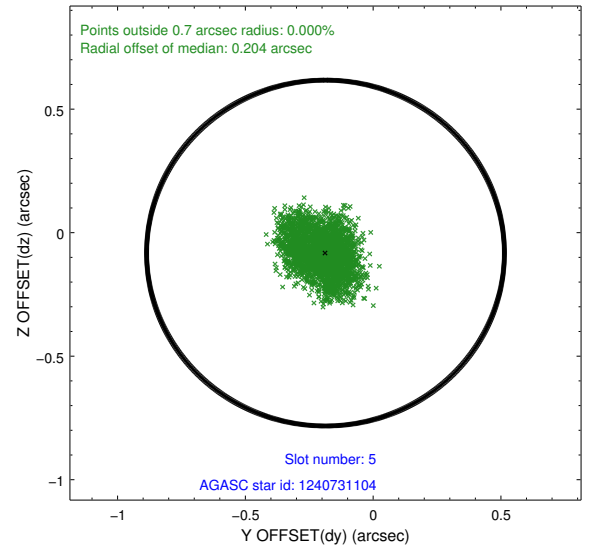
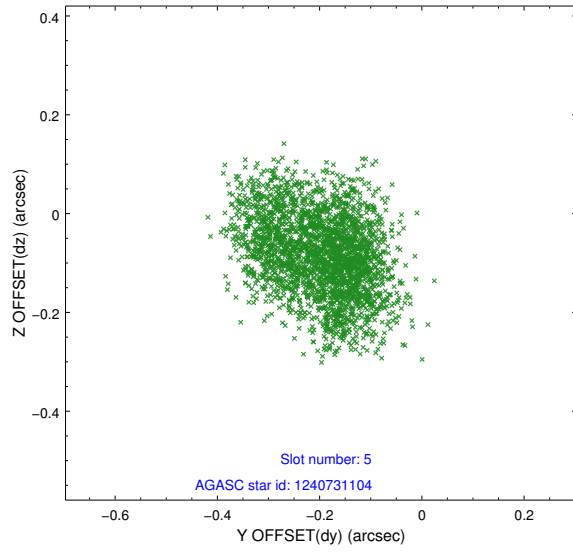
### 2.4.1 Slot 3



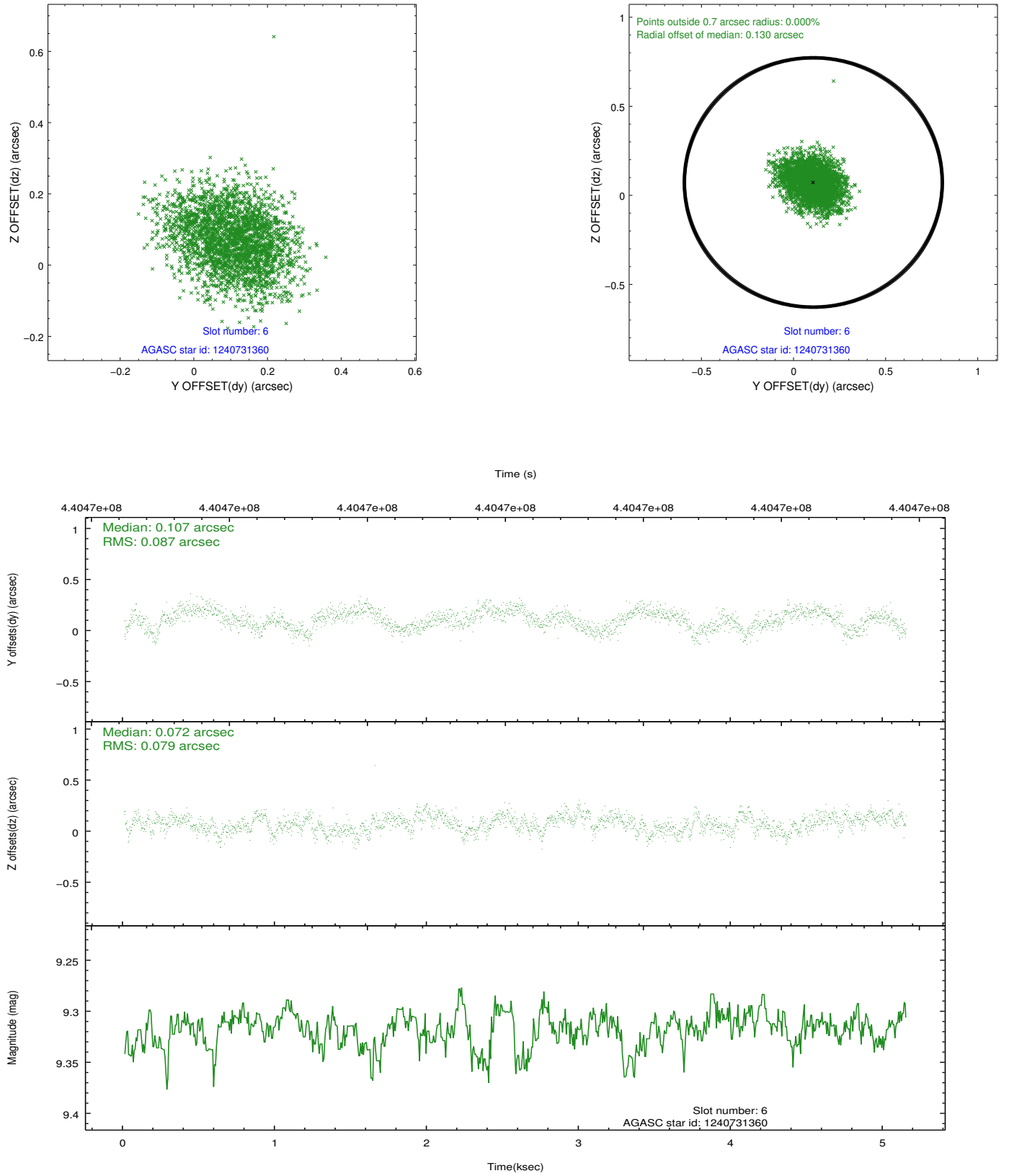
## 2.4.2 Slot 4



### 2.4.3 Slot 5

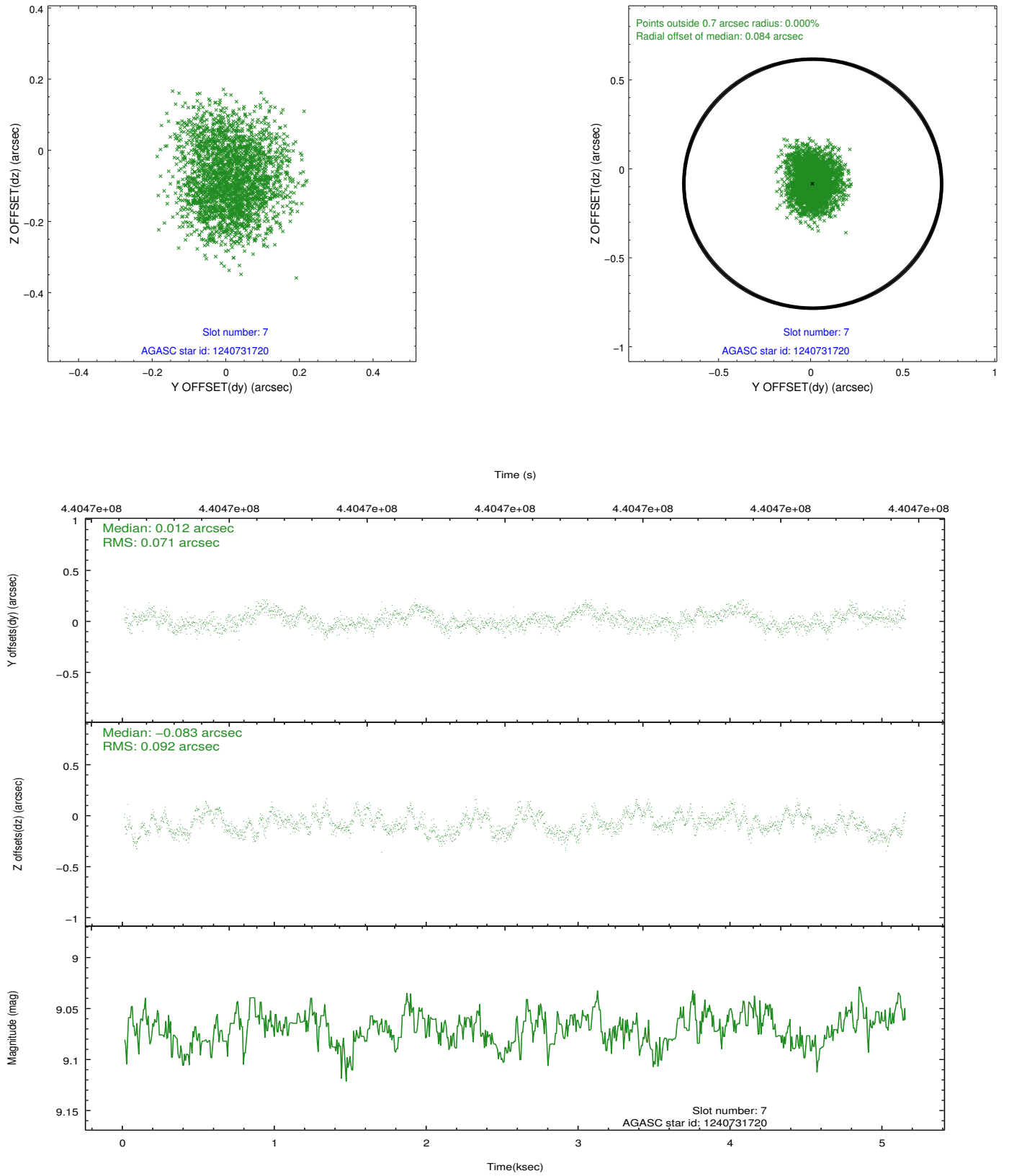


## 2.4.4 Slot 6



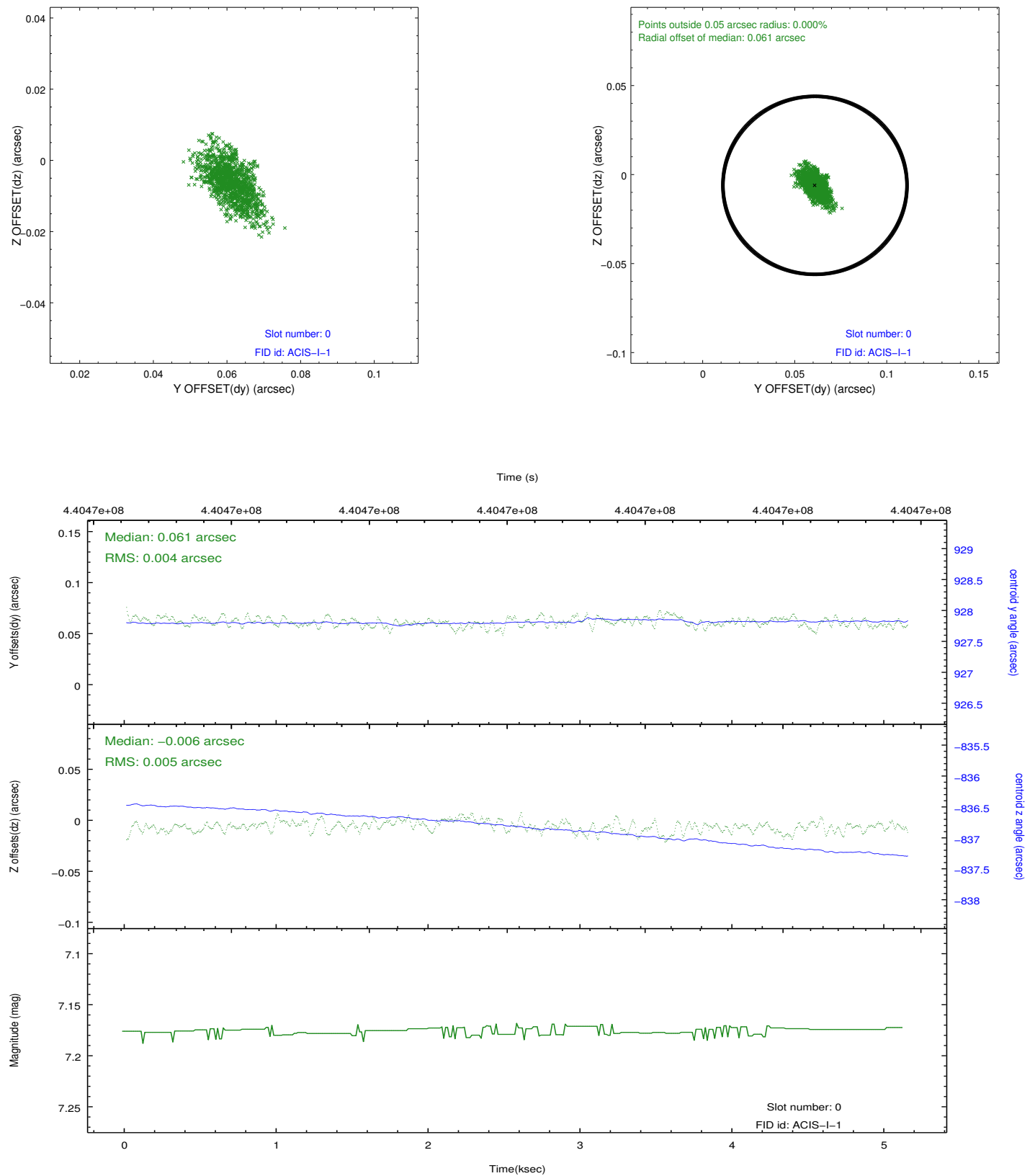


## 2.4.5 Slot 7

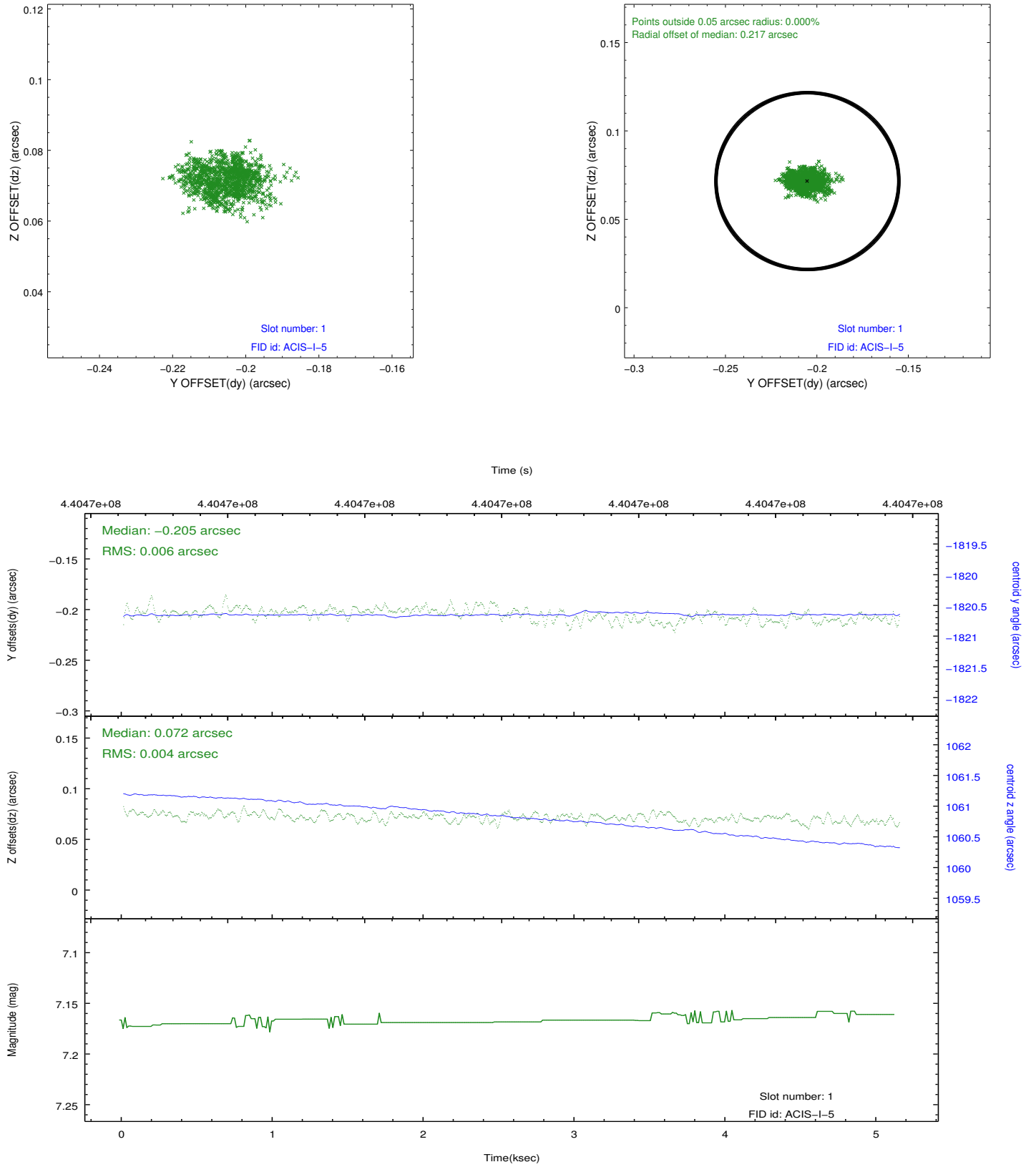


## 2.5 FID Slots

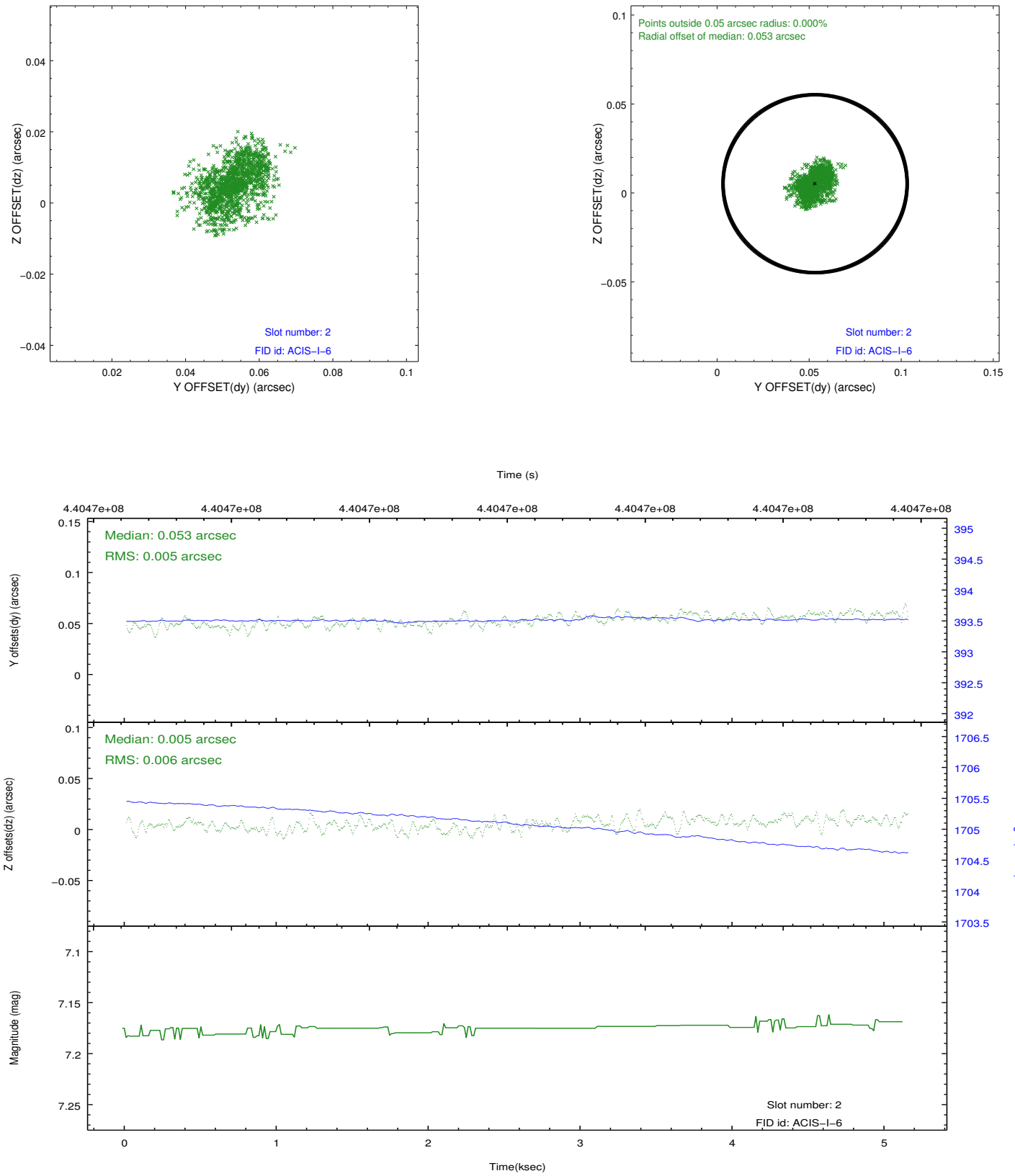
### 2.5.1 Slot 0



## 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)	2012.02.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0551939833164

### A.2 Comments