

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 13002 - L2 Version 2  
Chandra X-Ray Center

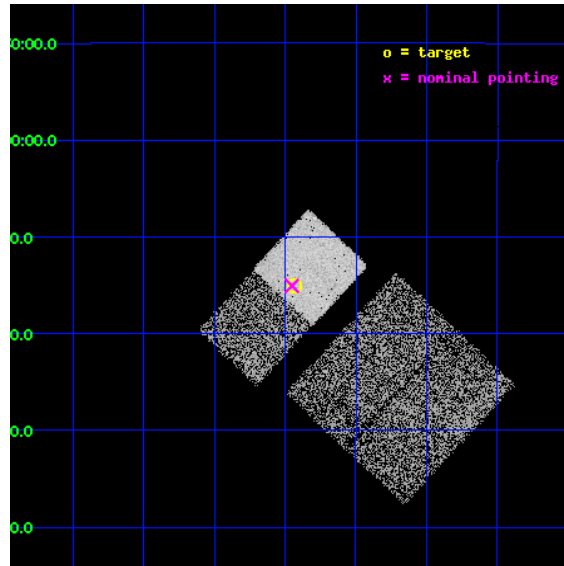
L2 Processing Date : Jul 5 2012

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# 1 Front

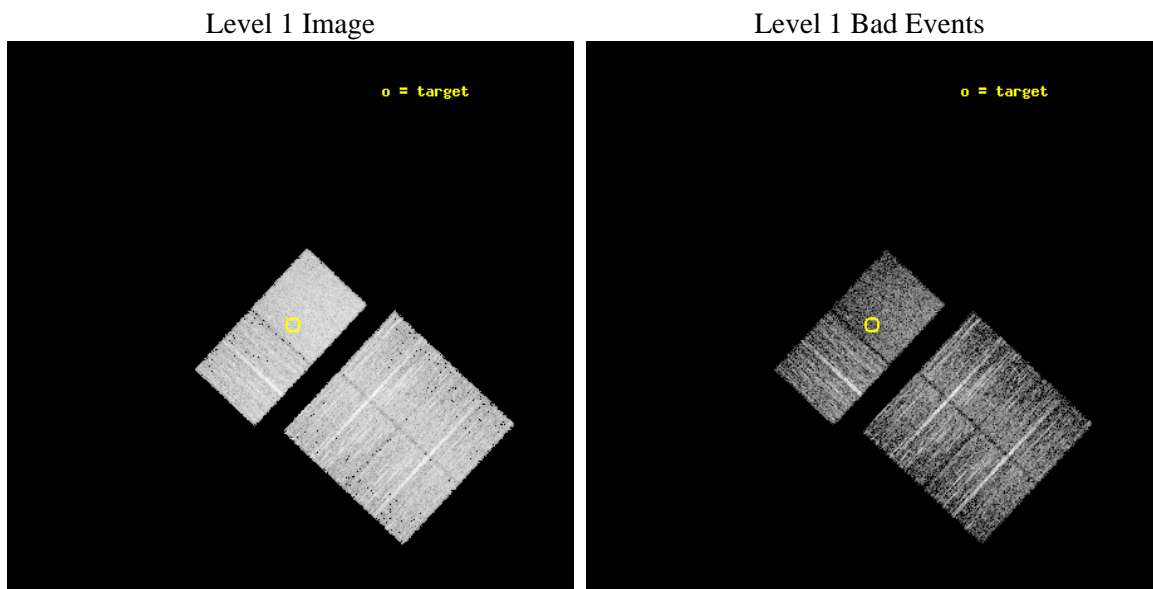
seq_num	600966	Sequence number
obs_id	13002	Observation id
title	The brightest ultraluminous X-ray sources across the sky	Proposal
observer	Dr Jifeng Liu	Principal investigator
object	J003756.0-091500	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	9.483333	Observer's specified target RA [deg]
dec_targ	-9.25	Observer's specified target Dec [deg]
ra_nom	9.4881561905376	Nominal RA [deg]
dec_nom	-9.251219986988	Nominal Dec [deg]
roll_nom	313.04442498267	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4965.0020071268	Sum of GTIs [s]
livetime	4902.1321621473	Livetime [s]
ontime0	4965.0430471301	Sum of GTIs [s]
ontime1	4964.8378471136	Sum of GTIs [s]
ontime2	4964.8788871169	Sum of GTIs [s]
ontime3	4964.9199271202	Sum of GTIs [s]
ontime6	4964.9609671235	Sum of GTIs [s]
ontime7	4965.0020071268	Sum of GTIs [s]
l2events	36069	Number of level 2 events



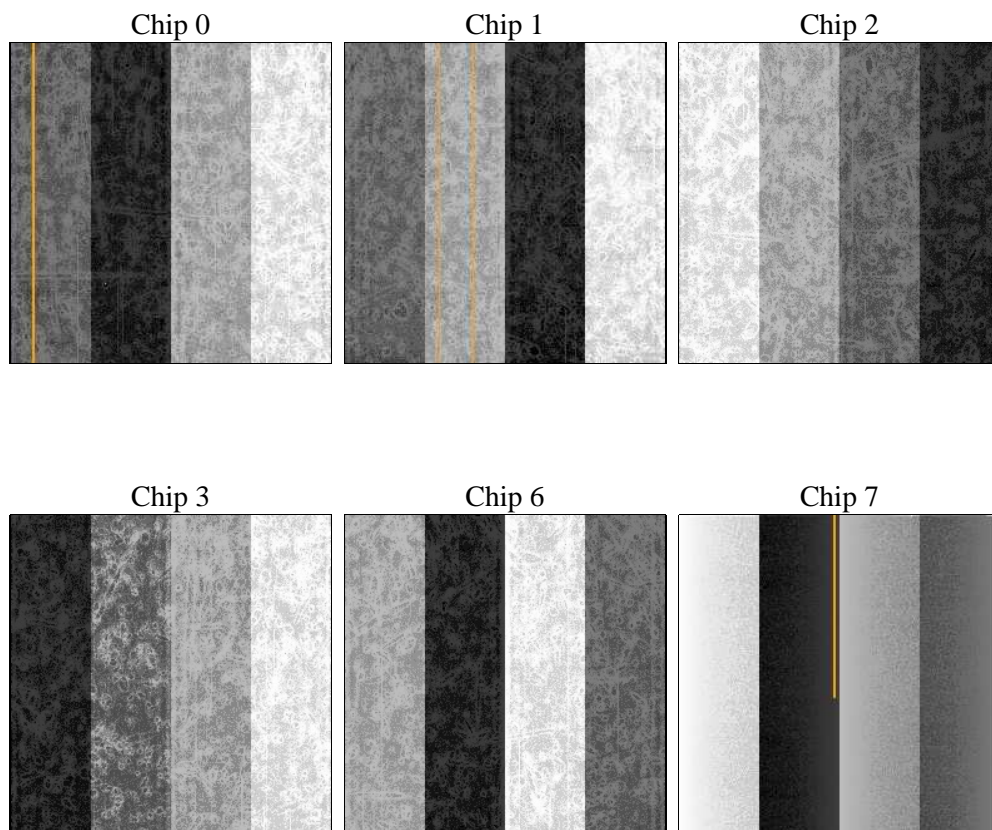
## 2 OBI

### 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	8.4.5	Processing system revision	ontime	4965.0020071268	Sum of GTIs [s]
caldsver	4.5.0	&#160	ontime0	4965.0430471301	Sum of GTIs [s]
date	2012-07-05T20:44:10	Date and time of file creation	ontime1	4964.8378471136	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4964.8788871169	Sum of GTIs [s]
			ontime3	4964.9199271202	Sum of GTIs [s]
			ontime6	4964.9609671235	Sum of GTIs [s]
			ontime7	4965.0020071268	Sum of GTIs [s]
			l1events	218325	Number of level 1 events

### 2.1.4 Events

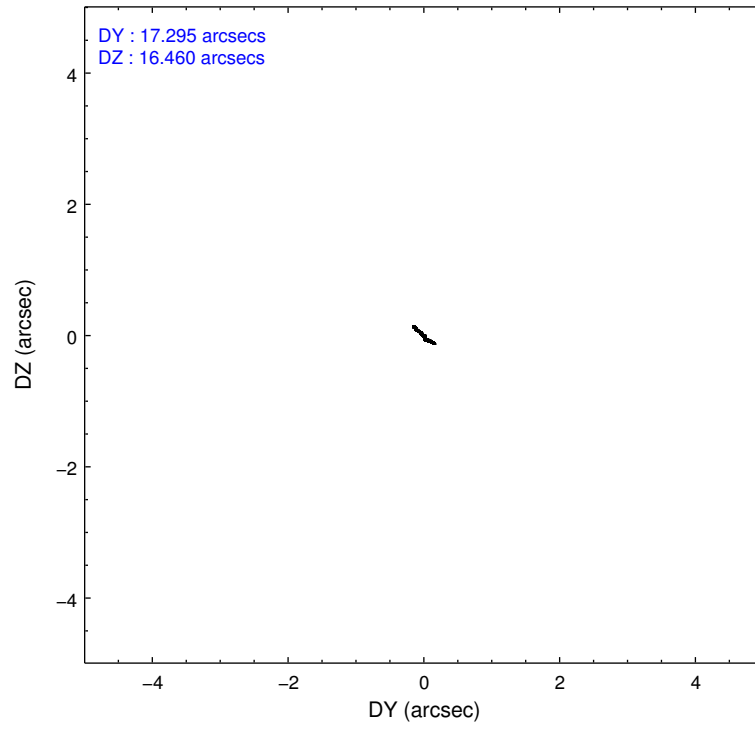
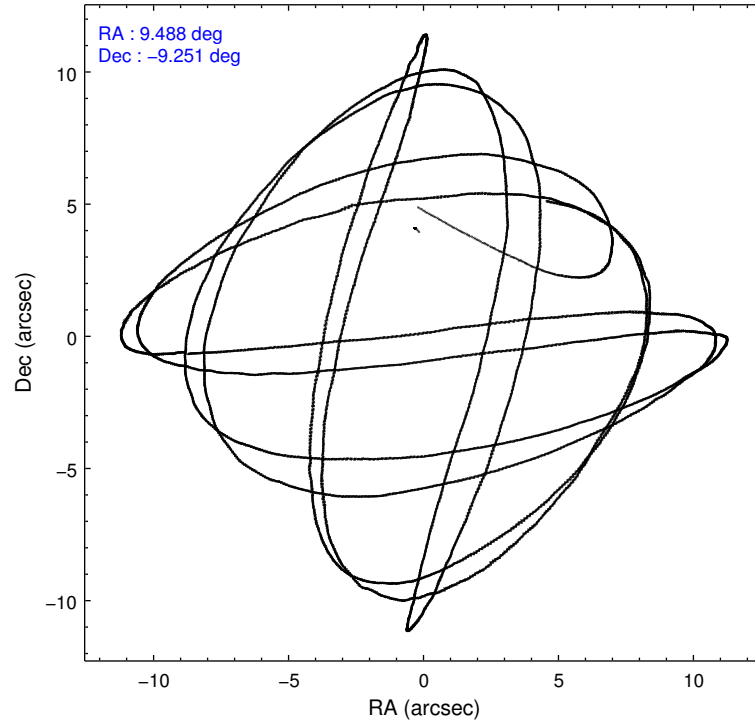
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	32876	32255	35567	36277	36808	44542	grade 0 events	1312	1459	1368	1291	1432	1820
rejected events	28962	28086	31708	32675	32724	24349		3%	4%	3%	3%	3%	4%
rejected %	88%	87%	89%	90%	88%	54%	grade 1 events	25	23	26	22	20	43
								0%	0%	0%	0%	0%	0%
							grade 2 events	1002	973	907	799	936	4258
								3%	3%	2%	2%	2%	9%
							grade 3 events	424	426	413	430	413	1696
								1%	1%	1%	1%	1%	3%
							grade 4 events	416	474	406	397	424	1778
								1%	1%	1%	1%	1%	3%
							grade 5 events	1509	1508	1325	1644	1667	4700
								4%	4%	3%	4%	4%	10%
							grade 6 events	762	840	766	686	881	10651
								2%	2%	2%	1%	2%	23%
							grade 7 events	27426	26552	30356	31008	31035	19596
								83%	82%	85%	85%	84%	43%

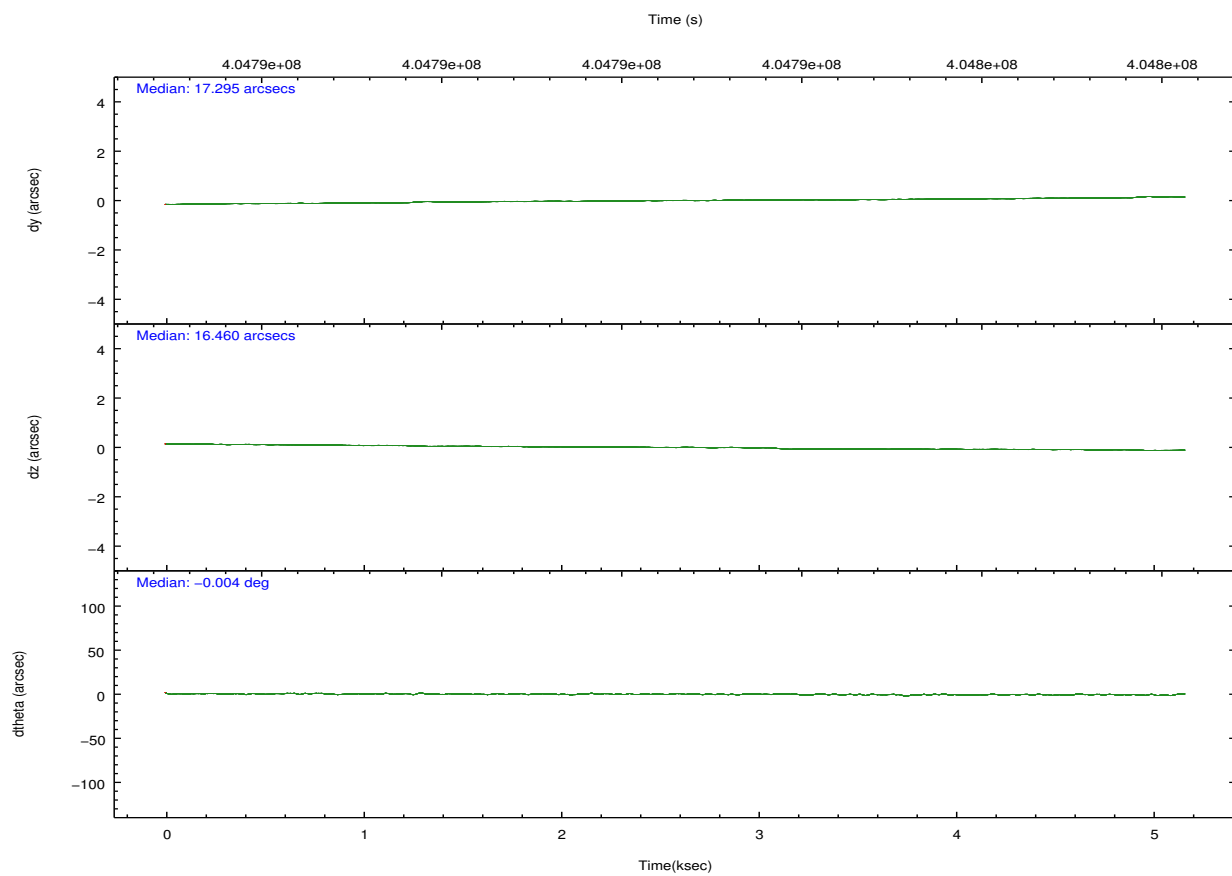
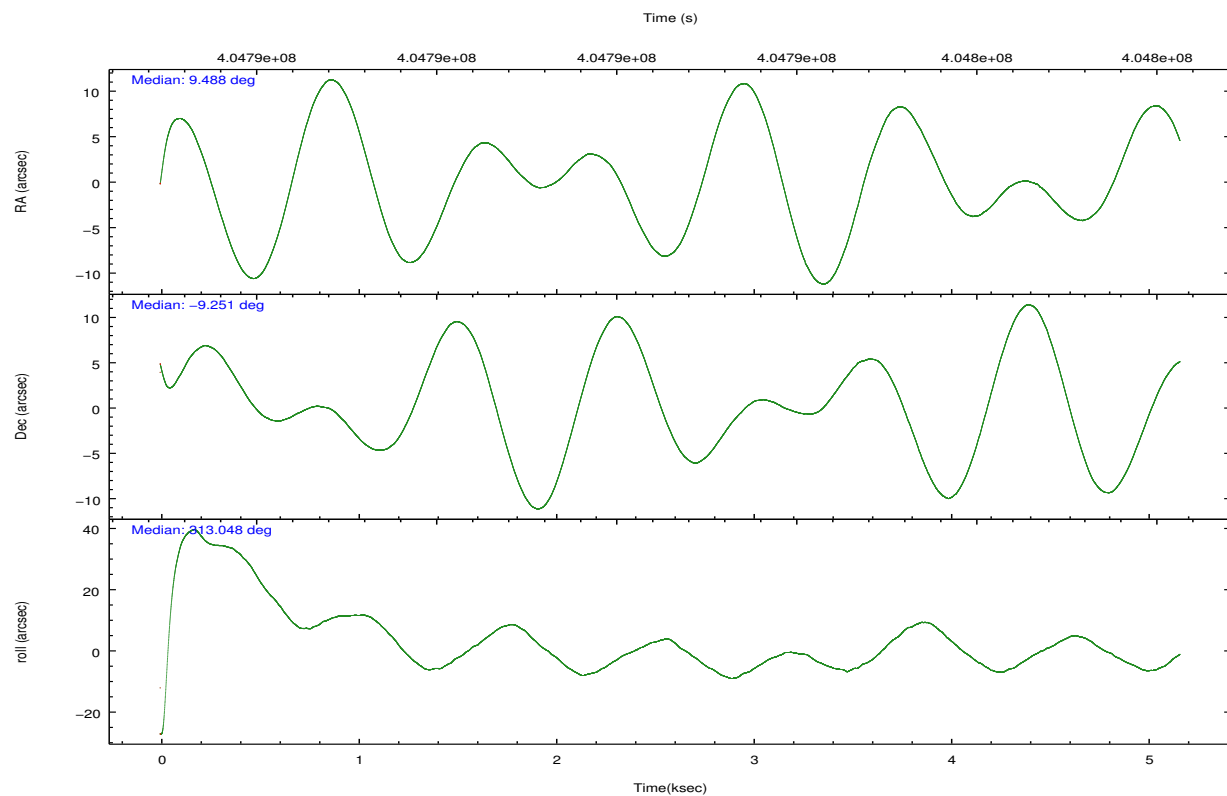


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	9.461468	9.488156190537552	Subarray requested	NONE	NONE
[deg] Pointing Dec	-9.243662	-9.251219986988023	Alternating exposures requested	N	N
[deg] Pointing Roll	312.883684	313.0444249826735	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	404790877.184000	404789599.34224			
Observation start date	2010-10-30T01:53:31	2010-10-30T01:33:19			
[s] Observation end time (MET)	404795877.184000	404796781.00511			
Observation end date	2010-10-30T03:16:51	2010-10-30T03:33:01			
Read mode	TIMED	TIMED			

## 2.3 Aspect



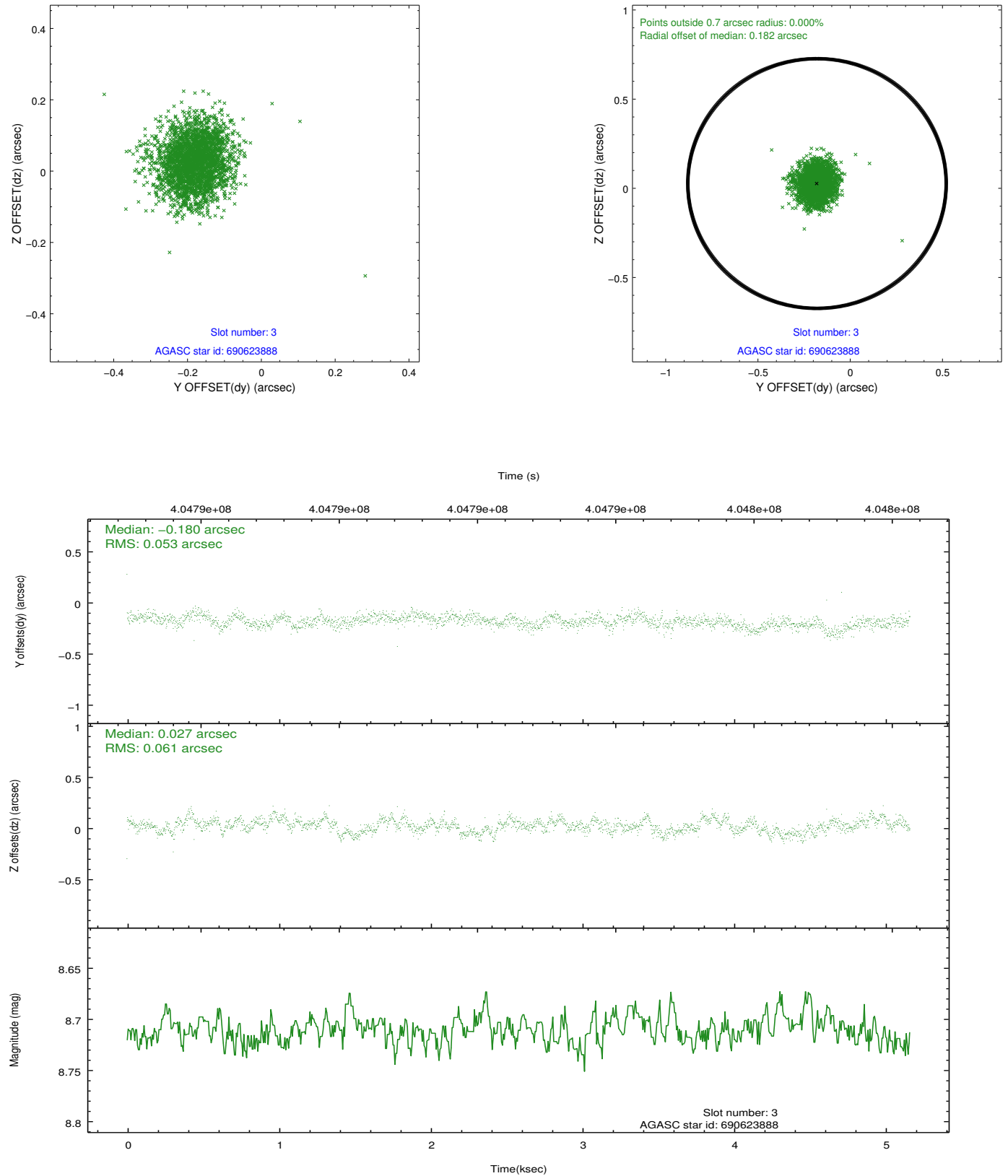


### Slot Statistics

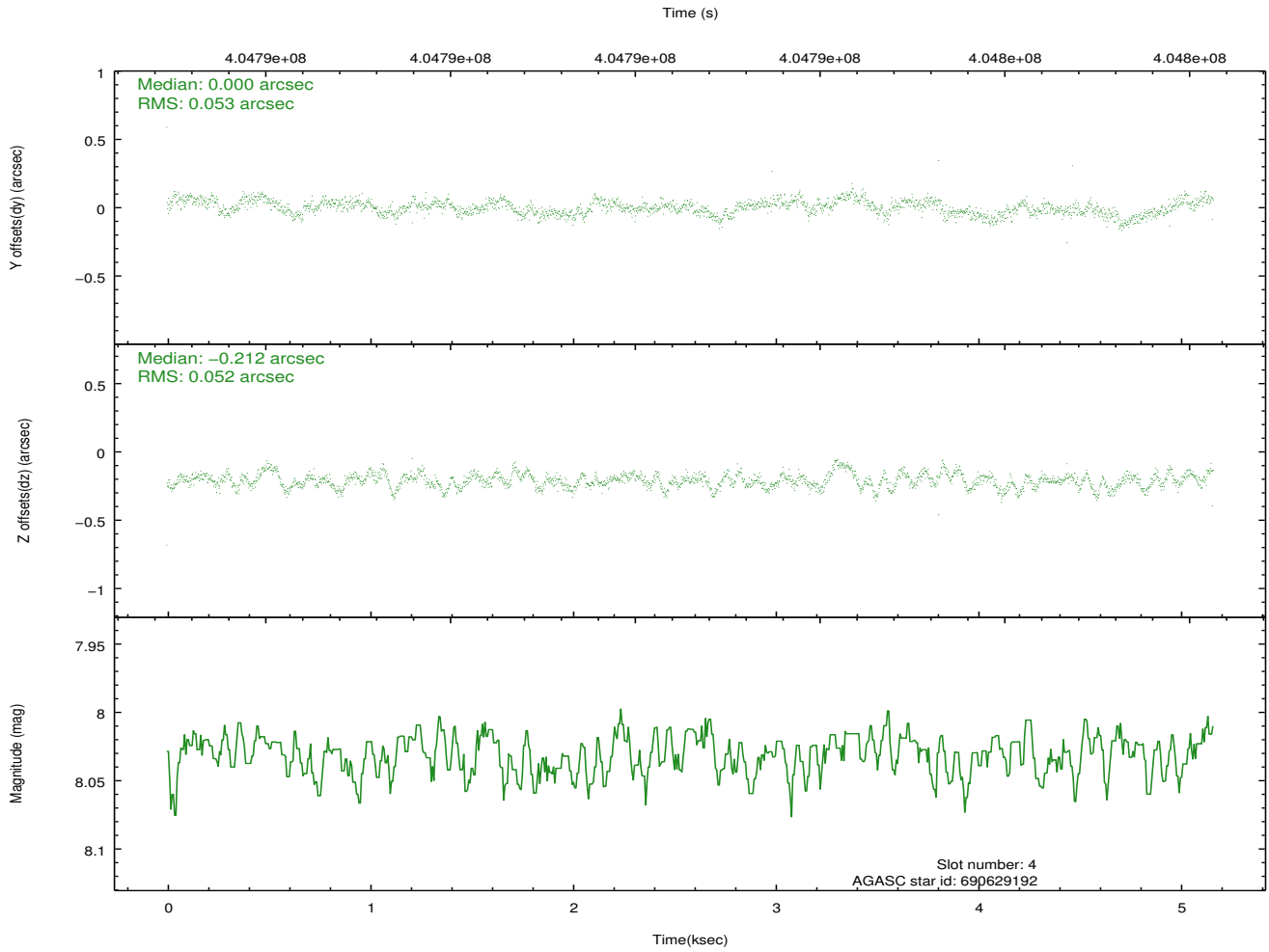
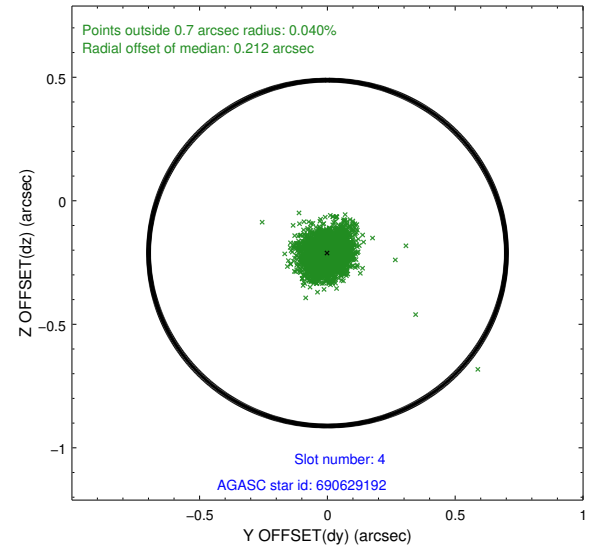
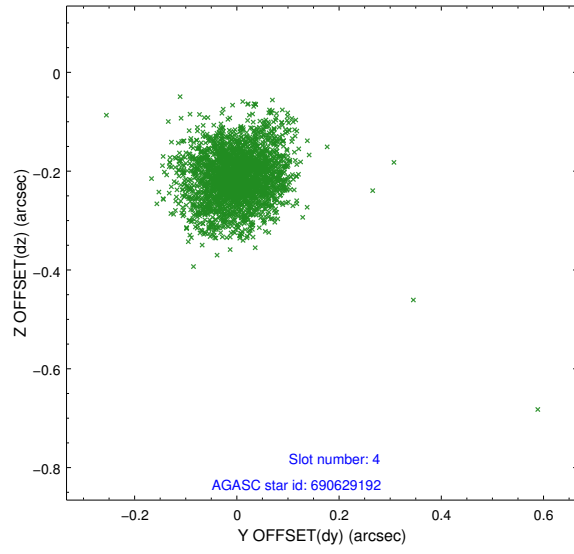
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.92	1260	-0.064	-0.005	0.008	0.014	0.000000	0.000000	-770.39	-1737.83
1	FID	ACIS-S-4	7.00	1260	0.163	0.033	0.007	0.013	0.000000	0.000000	2142.58	169.47
2	FID	ACIS-S-5	7.04	1260	-0.130	-0.018	0.011	0.018	0.000000	0.000000	-1821.79	164.43
3	GUIDE	690623888	8.71	2513	-0.180	0.027	0.085	0.138	10.089843	-9.212040	1437.64	1712.04
4	GUIDE	690629192	8.03	2520	0.000	-0.212	0.078	0.127	9.406691	-9.073525	-580.66	274.24
5	GUIDE	690622544	10.11	2518	-0.009	0.250	0.177	0.282	8.996261	-8.811115	-2266.73	-153.39
6	GUIDE	690625616	10.21	2514	0.094	-0.088	0.145	0.242	9.252901	-8.669343	-2020.74	862.34
7	GUIDE	690626808	10.12	2516	0.074	0.020	0.214	0.363	9.872412	-9.483514	1625.78	481.09

## 2.4 Star Slots

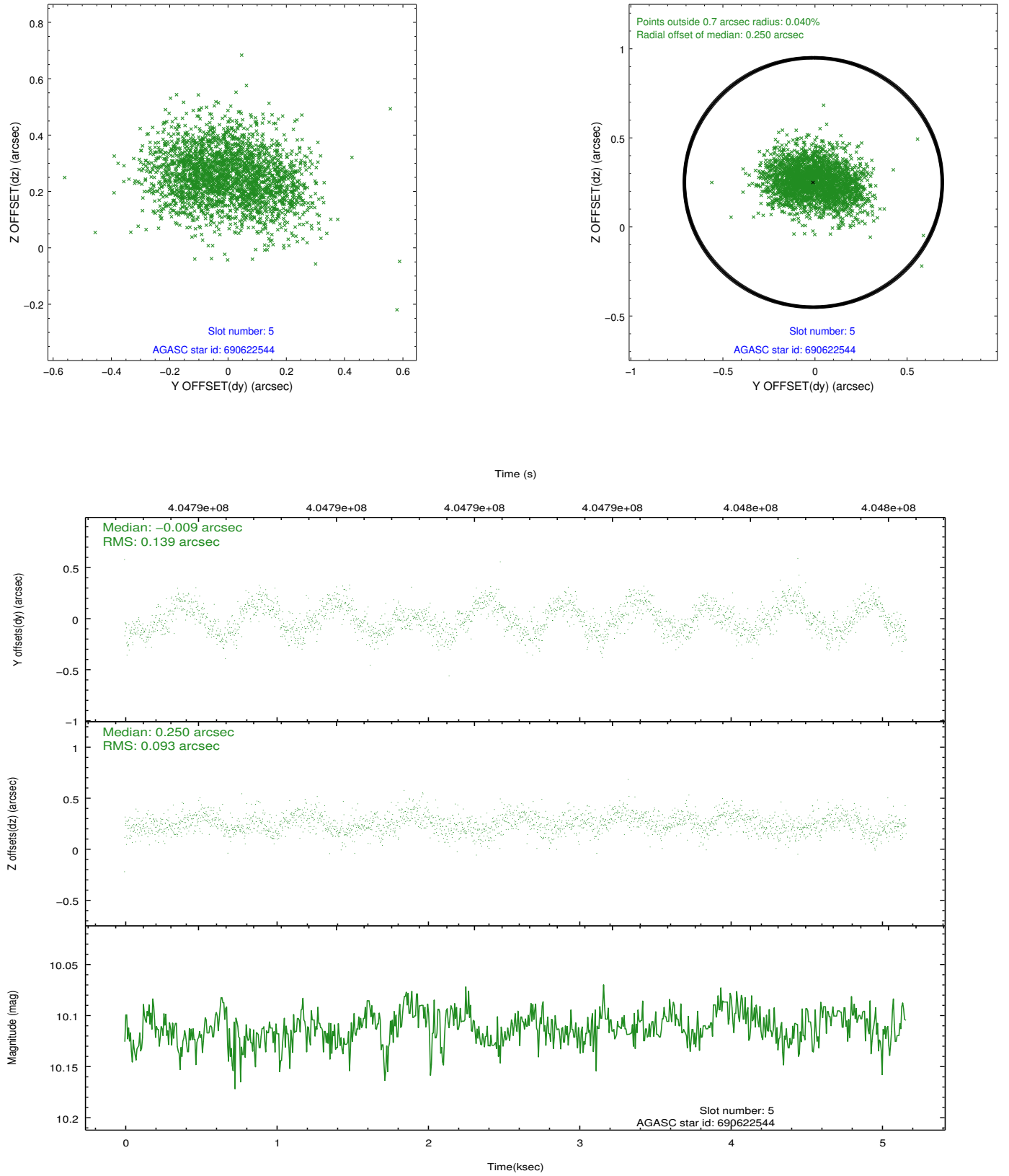
### 2.4.1 Slot 3



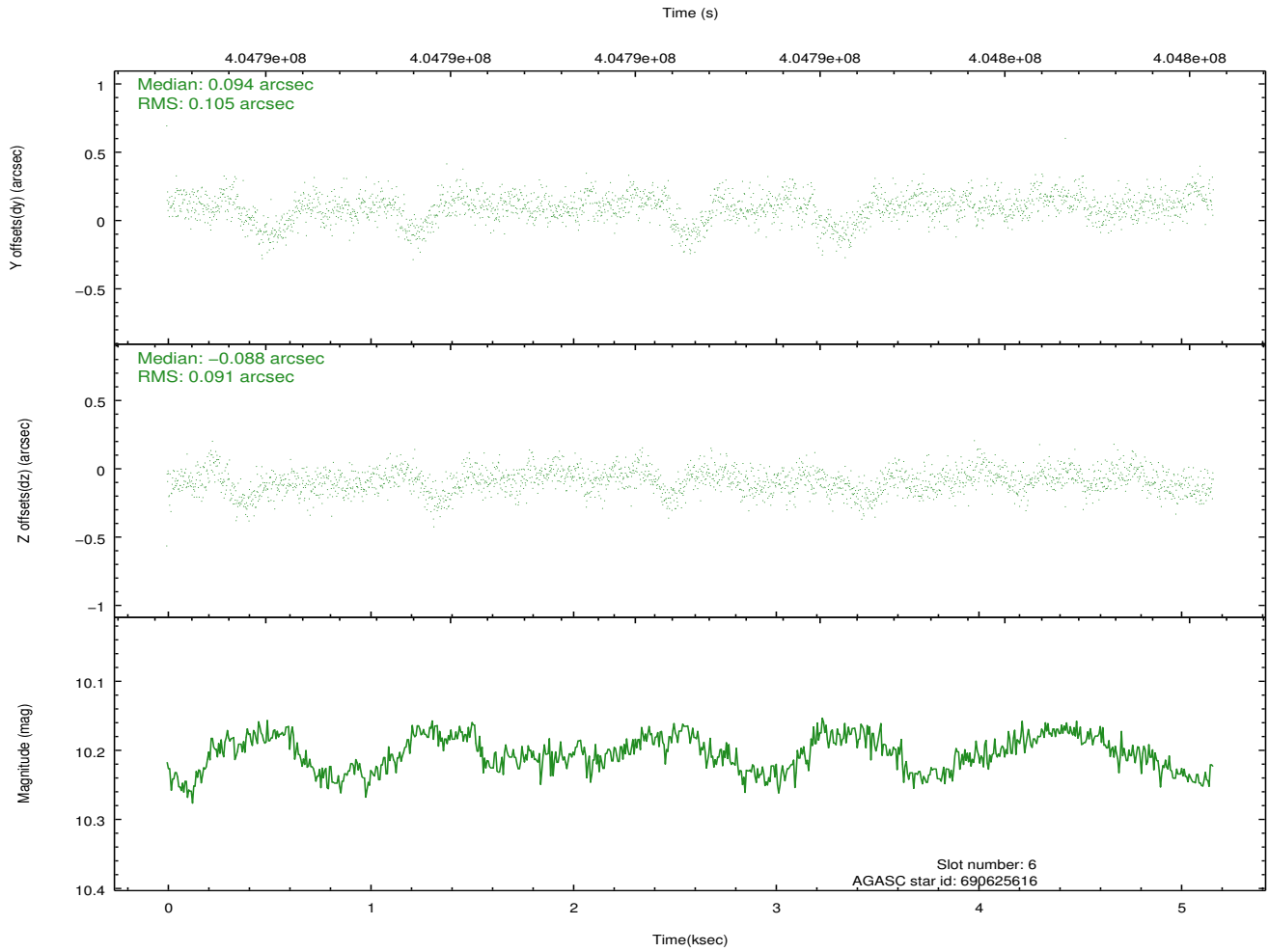
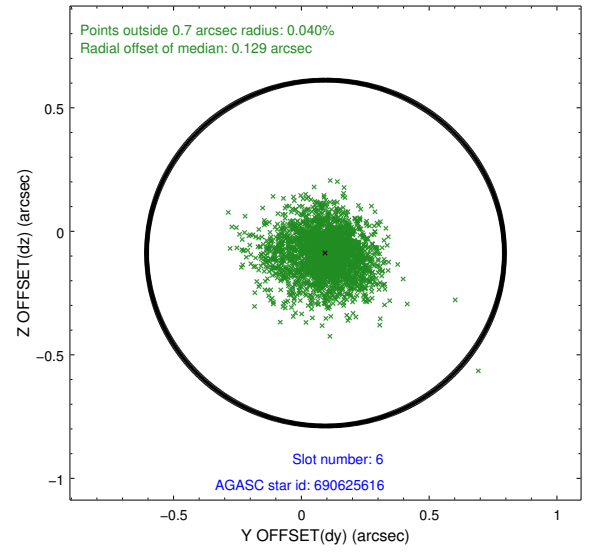
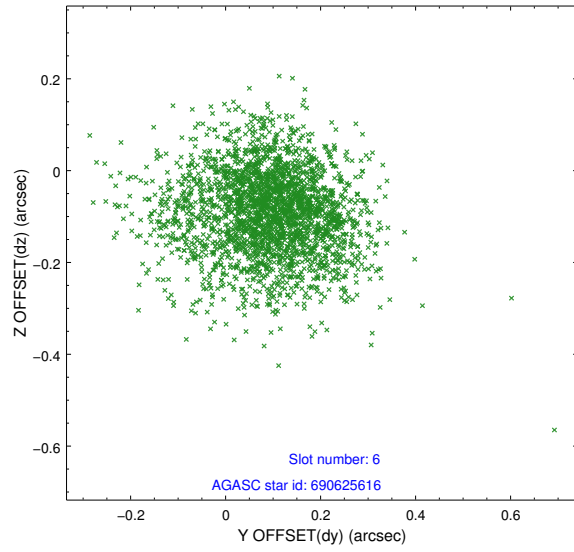
## 2.4.2 Slot 4



### 2.4.3 Slot 5

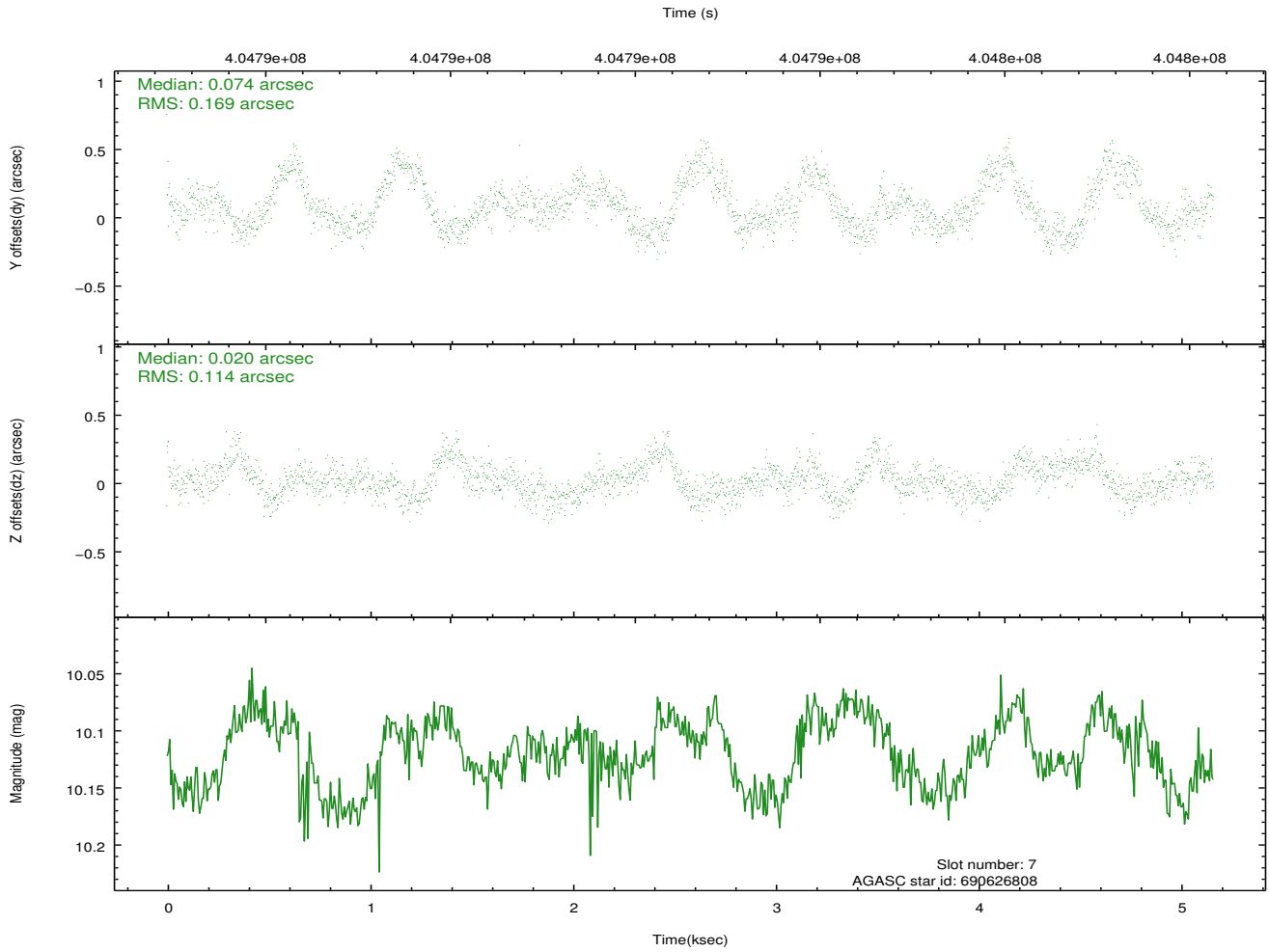
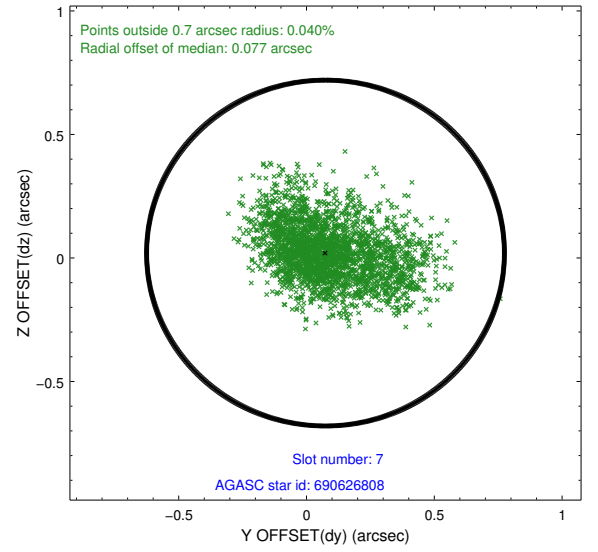
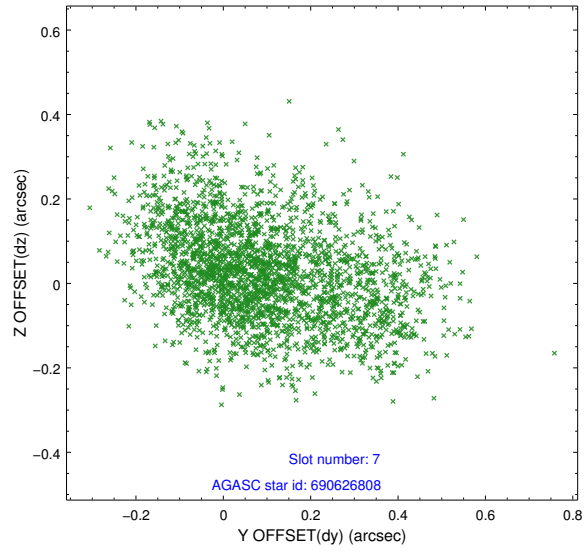


## 2.4.4 Slot 6



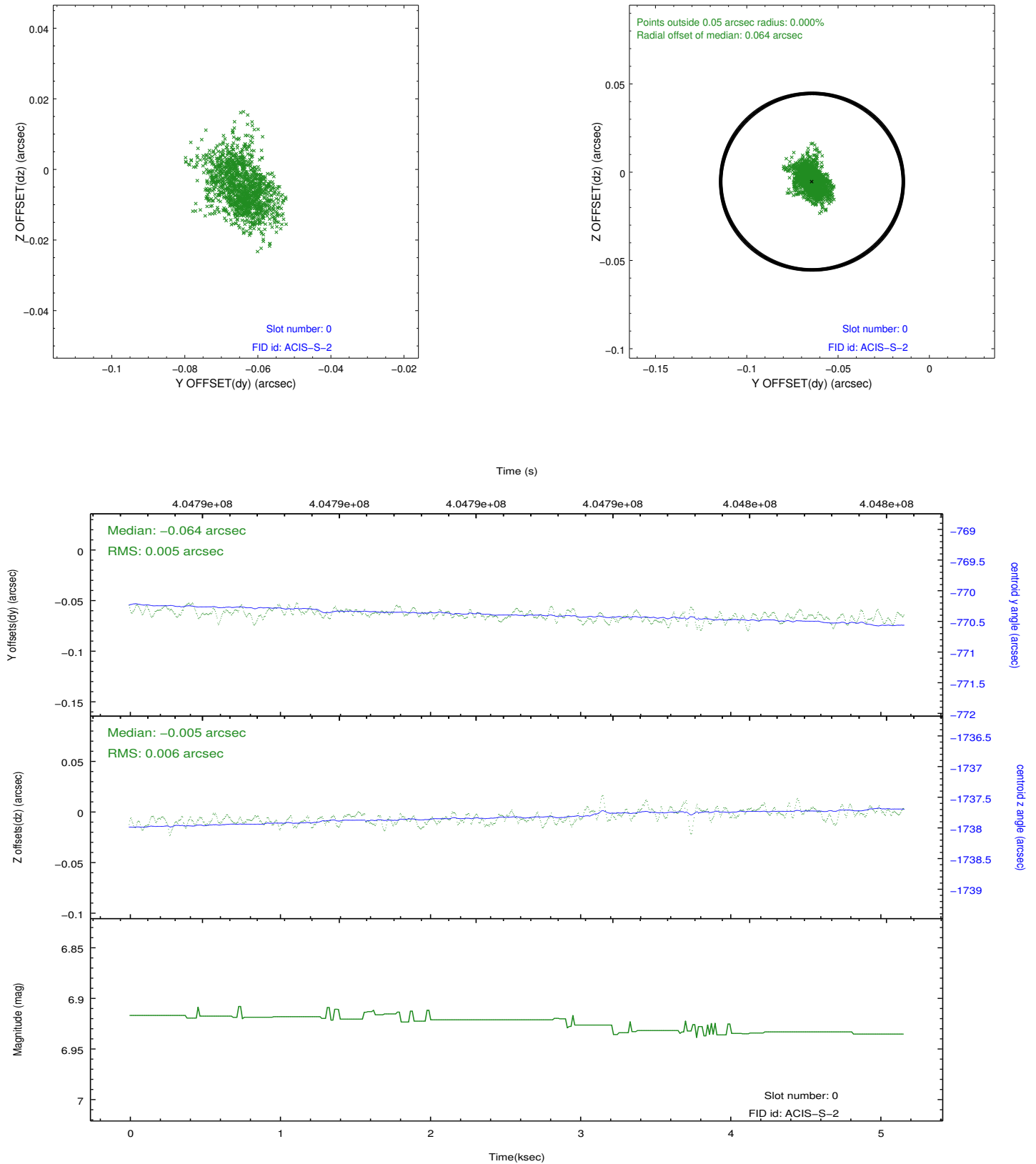


## 2.4.5 Slot 7

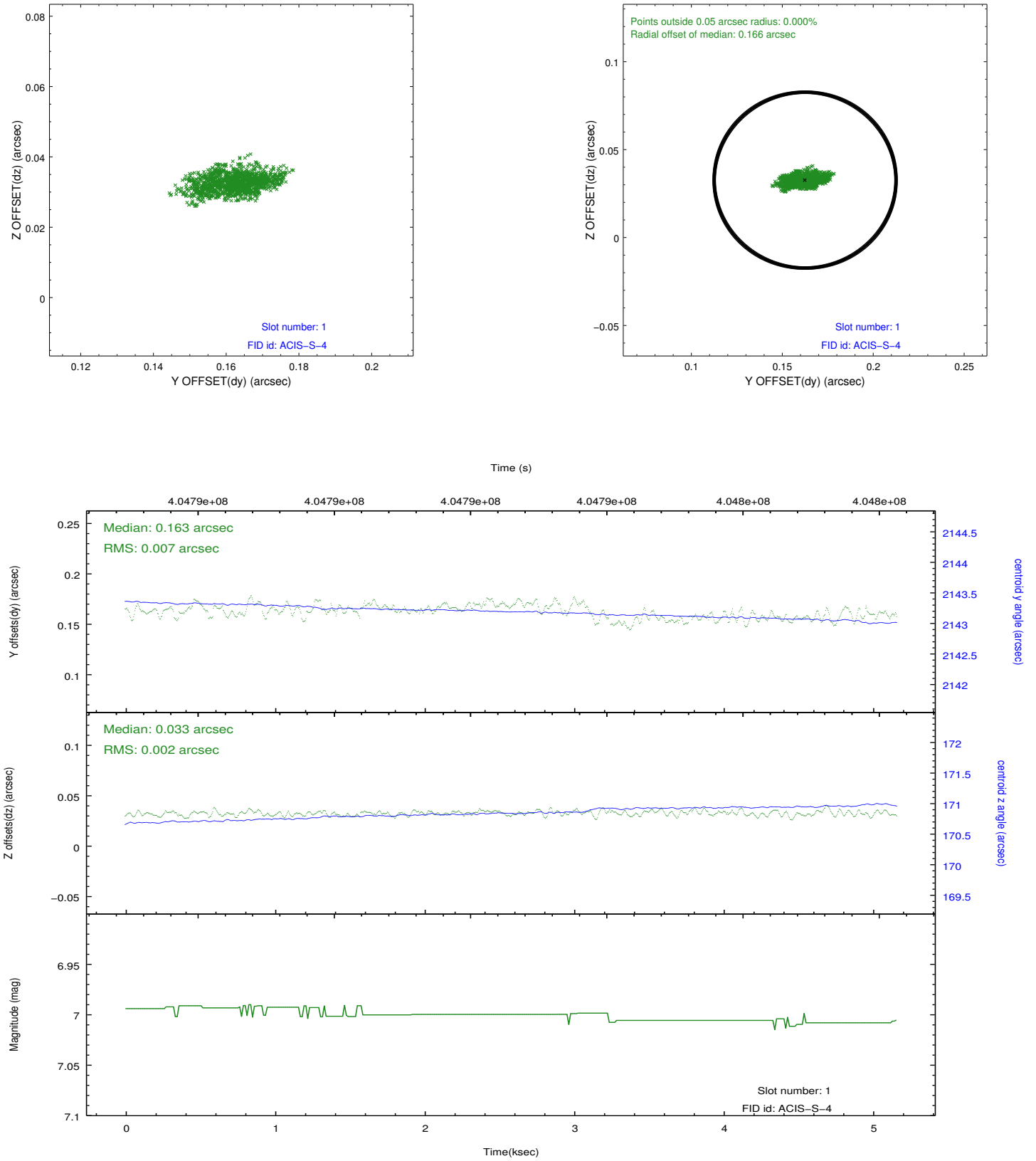


## 2.5 FID Slots

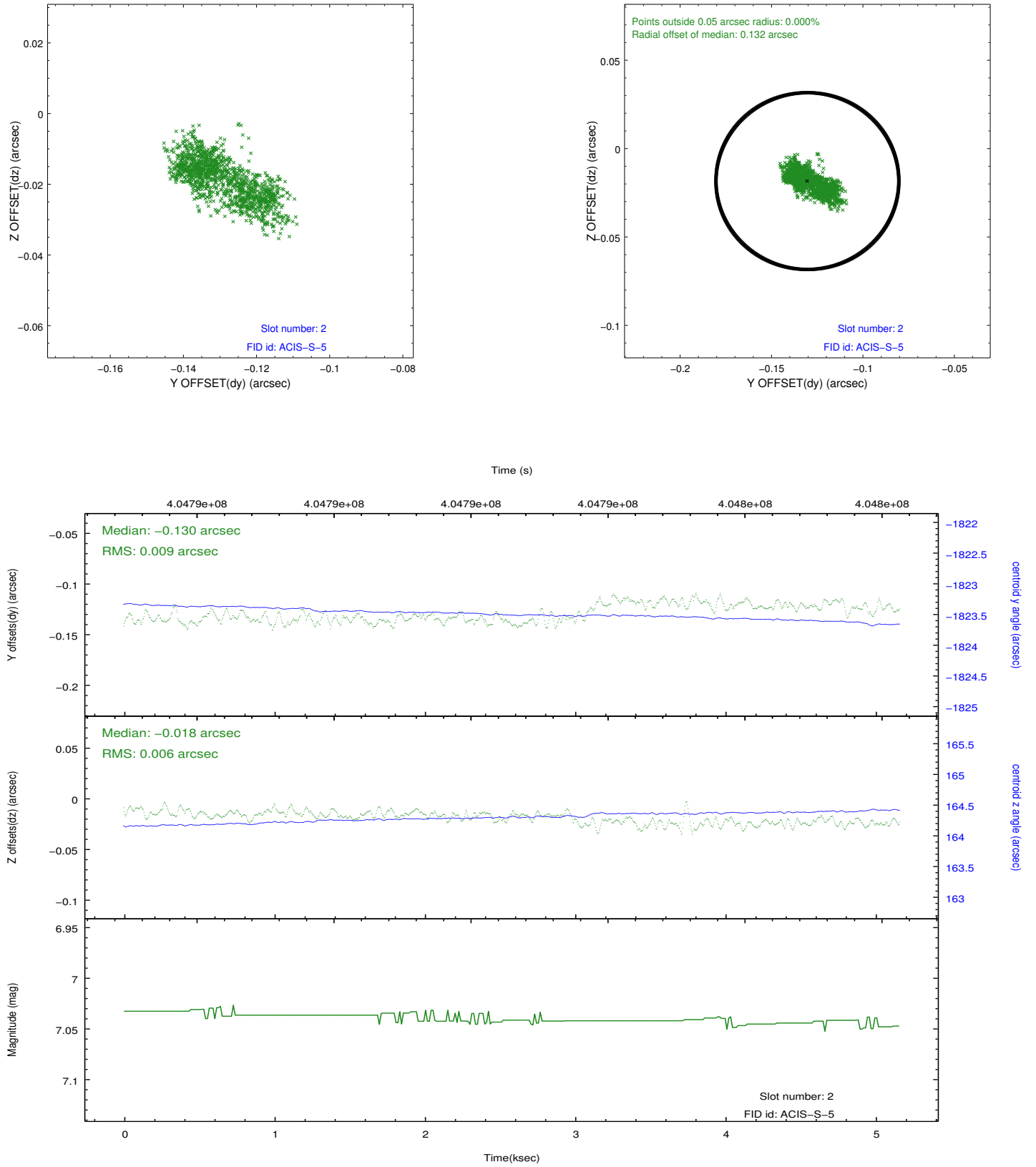
### 2.5.1 Slot 0



## 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)	2012.07.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.9650020087957

### A.2 Comments