

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 12999 - L2 Version 2  
Chandra X-Ray Center

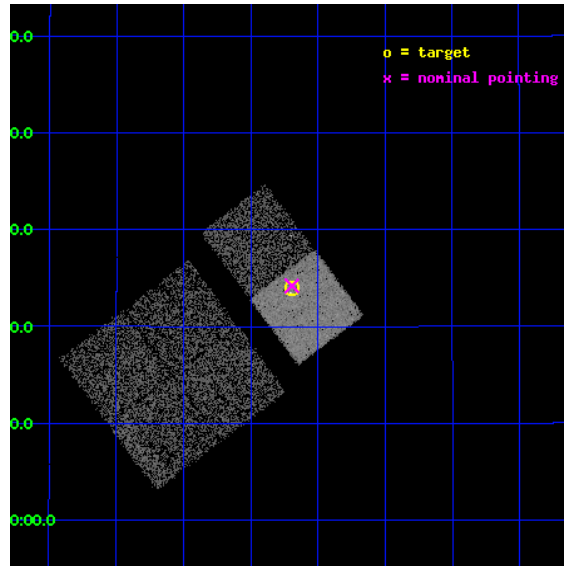
L2 Processing Date : Jul 6 2012

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# 1 Front

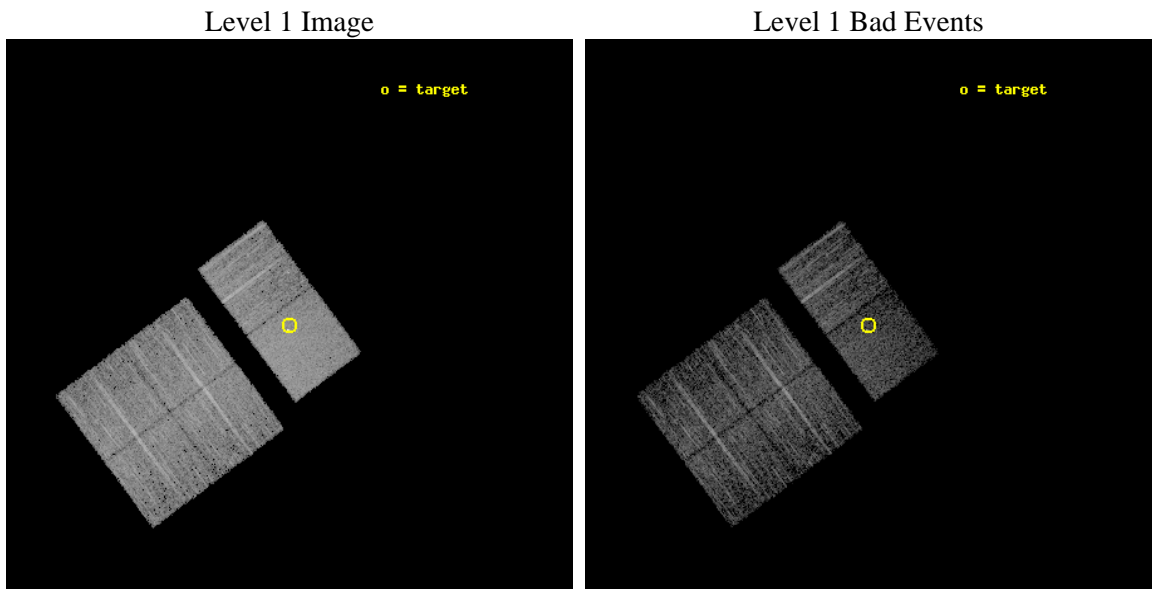
seq_num	600963	Sequence number
obs_id	12999	Observation id
title	The brightest ultraluminous X-ray sources across the sky	Proposal
observer	Dr Jifeng Liu	Principal investigator
object	J114611.5+202355	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	176.547917	Observer's specified target RA [deg]
dec_targ	20.398611	Observer's specified target Dec [deg]
ra_nom	176.54841736365	Nominal RA [deg]
dec_nom	20.403355388072	Nominal Dec [deg]
roll_nom	53.216624400482	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4959.9999815822	Sum of GTIs [s]
livetime	4897.1934752619	Livetime [s]
ontime0	4959.9999815822	Sum of GTIs [s]
ontime1	4959.9999815822	Sum of GTIs [s]
ontime2	4959.9999815822	Sum of GTIs [s]
ontime3	4959.9999815822	Sum of GTIs [s]
ontime6	4959.9999815822	Sum of GTIs [s]
ontime7	4959.9999815822	Sum of GTIs [s]
l2events	36423	Number of level 2 events



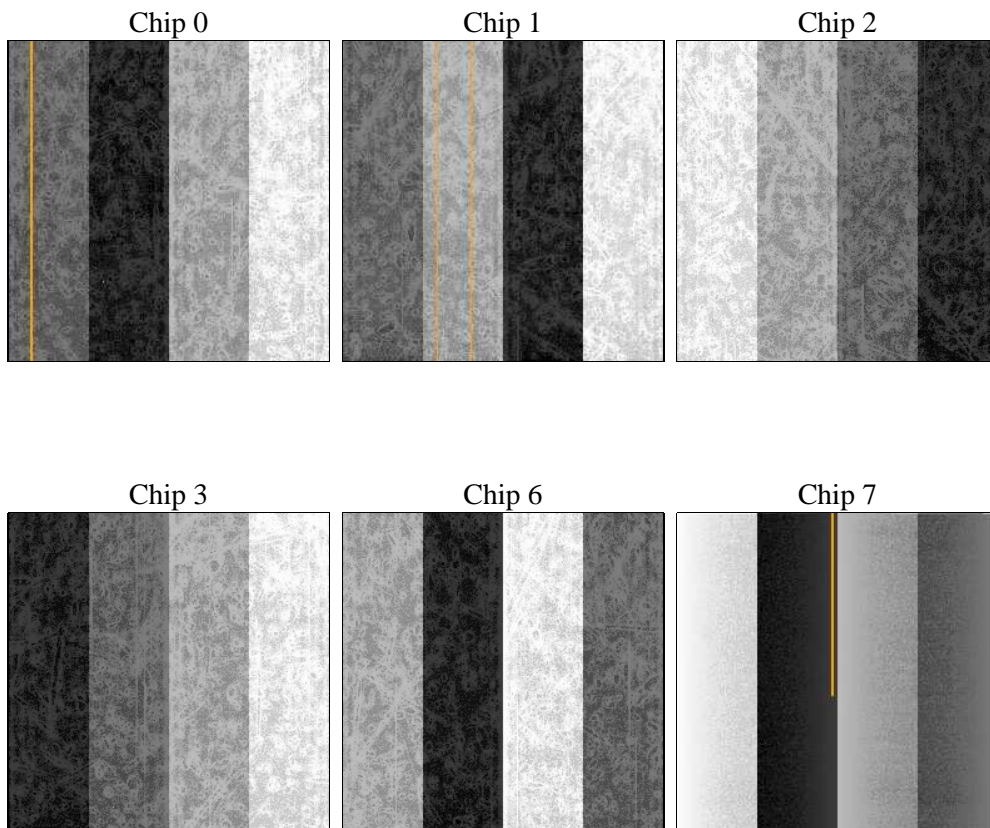
## 2 OBI

### 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	4959.9999815822	Sum of GTIs [s]
caldsver	4.5.0	&#160	ontime0	4959.9999815822	Sum of GTIs [s]
date	2012-07-06T12:20:20	Date and time of file creation	ontime1	4959.9999815822	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4959.9999815822	Sum of GTIs [s]
			ontime3	4959.9999815822	Sum of GTIs [s]
			ontime6	4959.9999815822	Sum of GTIs [s]
			ontime7	4959.9999815822	Sum of GTIs [s]
			l1events	213042	Number of level 1 events

### 2.1.4 Events

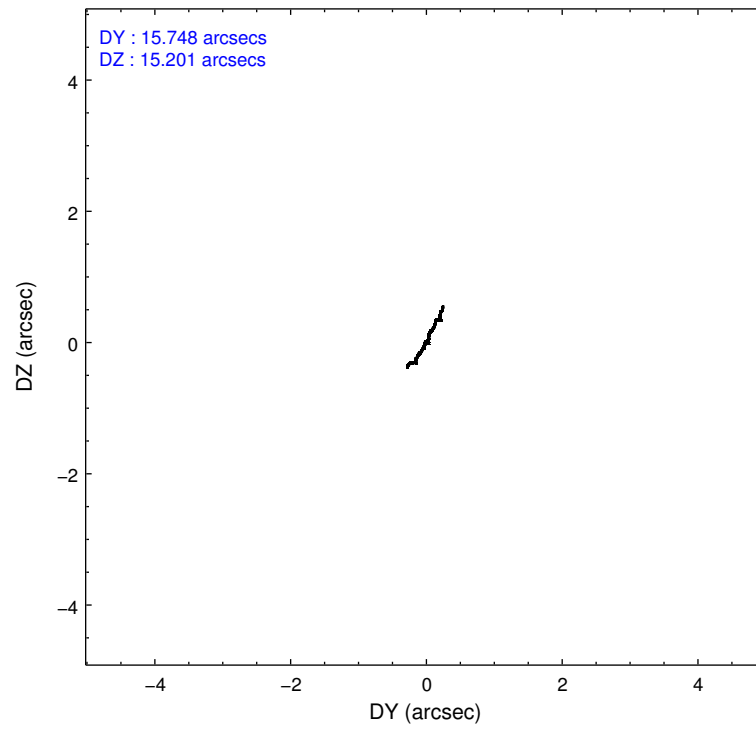
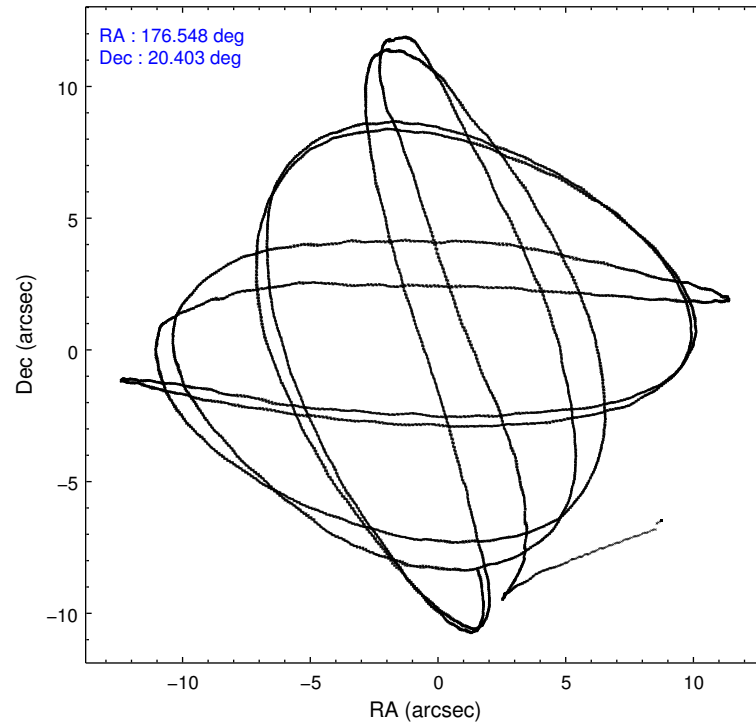
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	32827	31578	34880	33788	35666	44303	grade 0 events	1413	1510	1304	1317	1526	1991
rejected events	28820	27386	31259	30131	31564	23731		4%	4%	3%	3%	4%	4%
rejected %	87%	86%	89%	89%	88%	53%	grade 1 events	28	18	17	22	21	69
								0%	0%	0%	0%	0%	0%
							grade 2 events	914	992	900	762	842	4282
								2%	3%	2%	2%	2%	9%
							grade 3 events	459	460	369	442	395	1822
								1%	1%	1%	1%	1%	4%
							grade 4 events	427	450	375	394	428	1872
								1%	1%	1%	1%	1%	4%
							grade 5 events	1546	1492	1363	1673	1677	4590
								4%	4%	3%	4%	4%	10%
							grade 6 events	797	789	676	749	918	10618
								2%	2%	1%	2%	2%	23%
							grade 7 events	27243	25867	29876	28429	29859	19059
								82%	81%	85%	84%	83%	43%

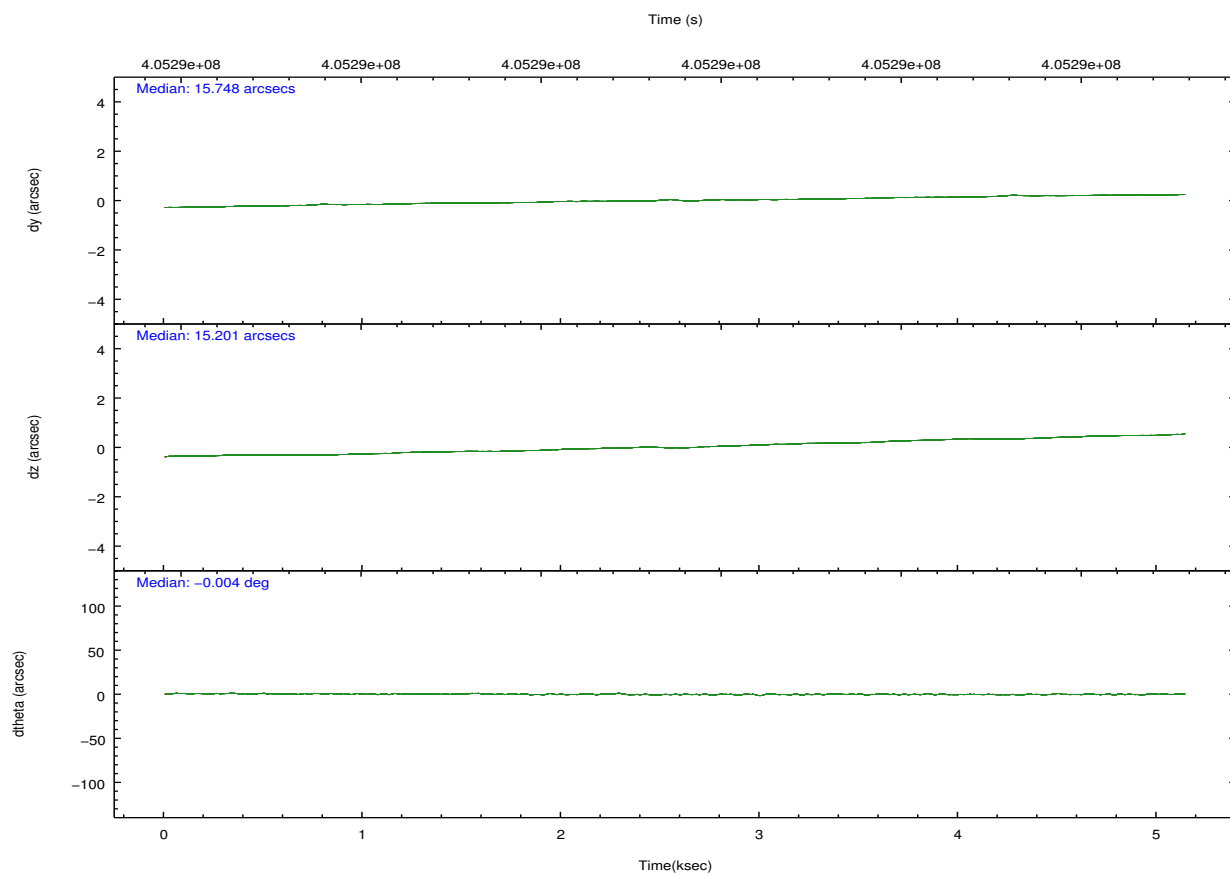
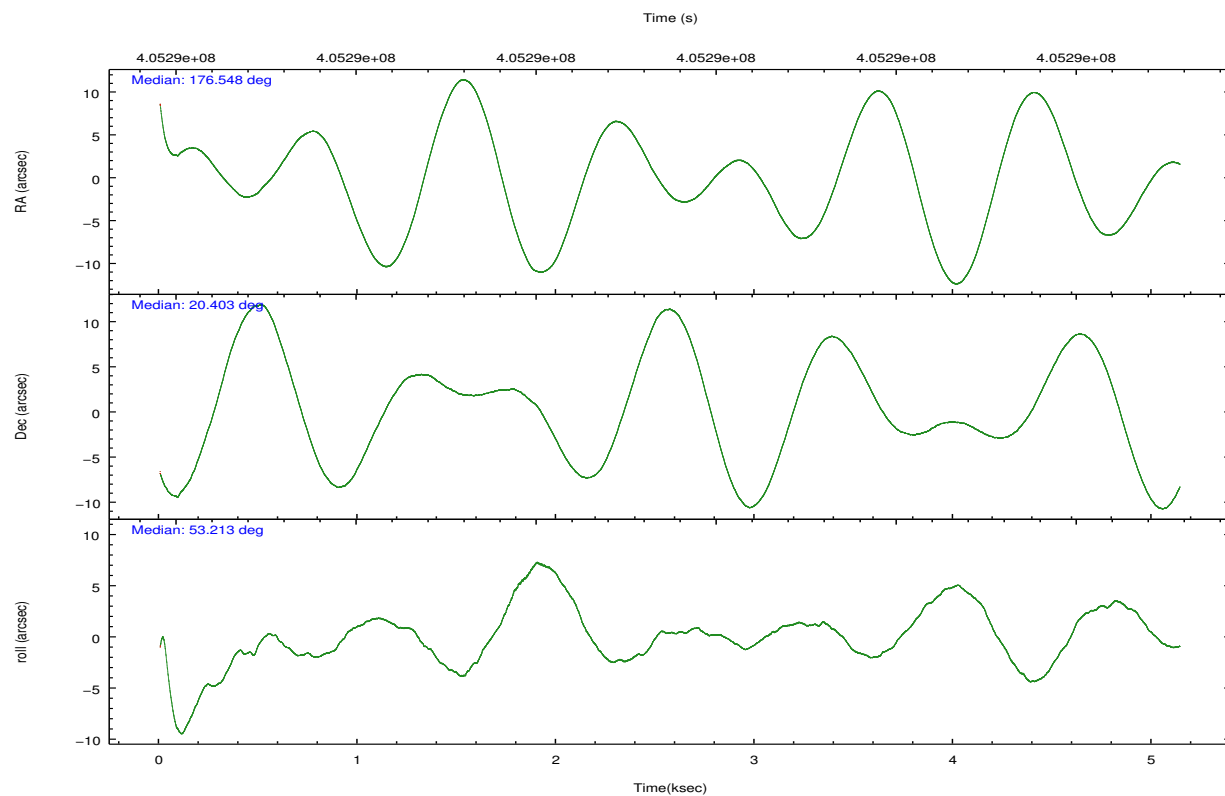


## 2.2 Compared Parameters

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	176.545331	176.5484173636496	Subarray requested	NONE	NONE
[deg] Pointing Dec	20.376243	20.40335538807182	Alternating exposures requested	N	N
[deg] Pointing Roll	53.061046	53.21662440048203	[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)	405287314.184000	405286269.26782			
Observation start date	2010-11-04T19:47:28	2010-11-04T19:31:09			
[s] Observation end time (MET)	405292314.184000	405293347.40568			
Observation end date	2010-11-04T21:10:48	2010-11-04T21:29:07			
Read mode	TIMED	TIMED			

## 2.3 Aspect



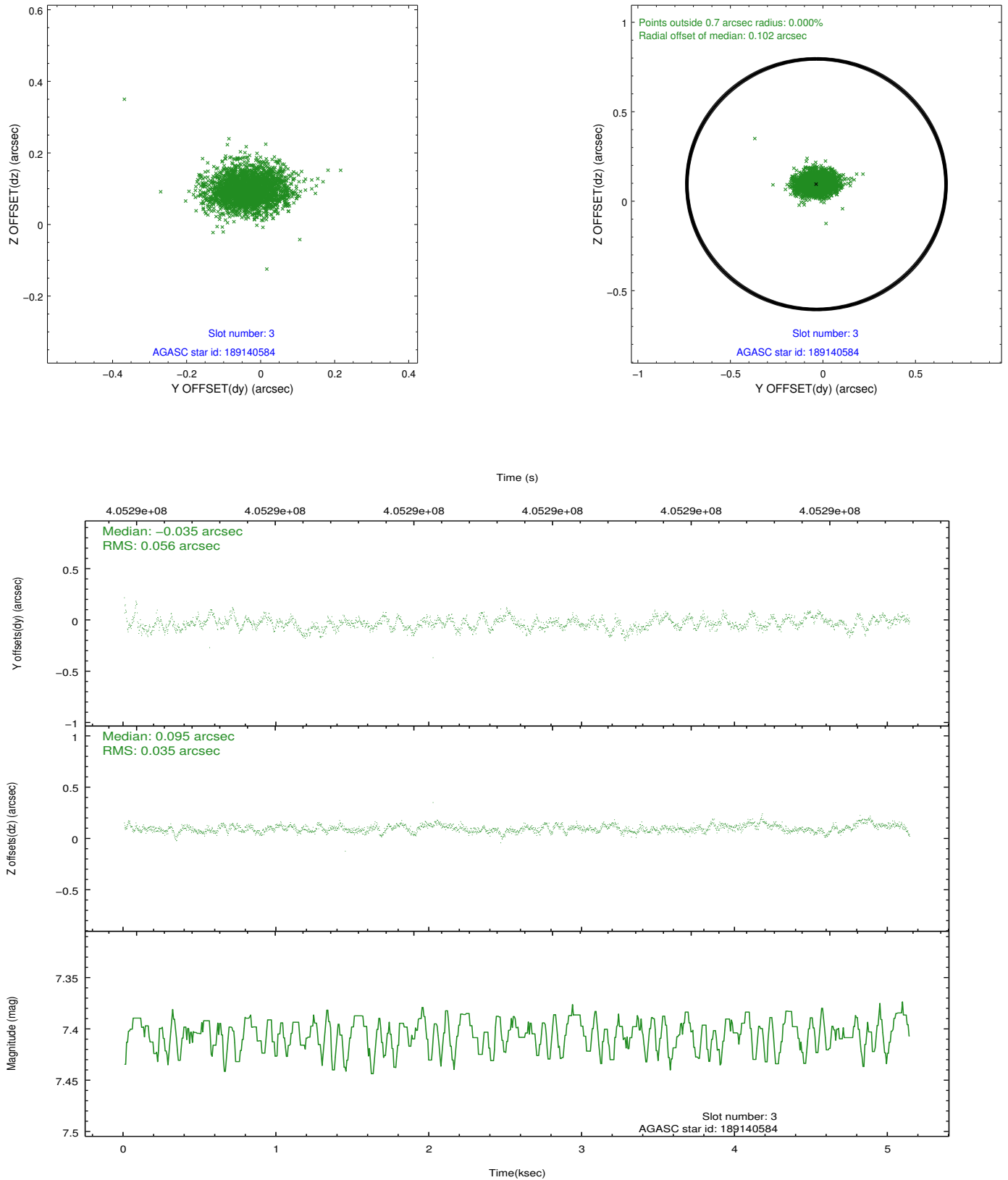


### Slot Statistics

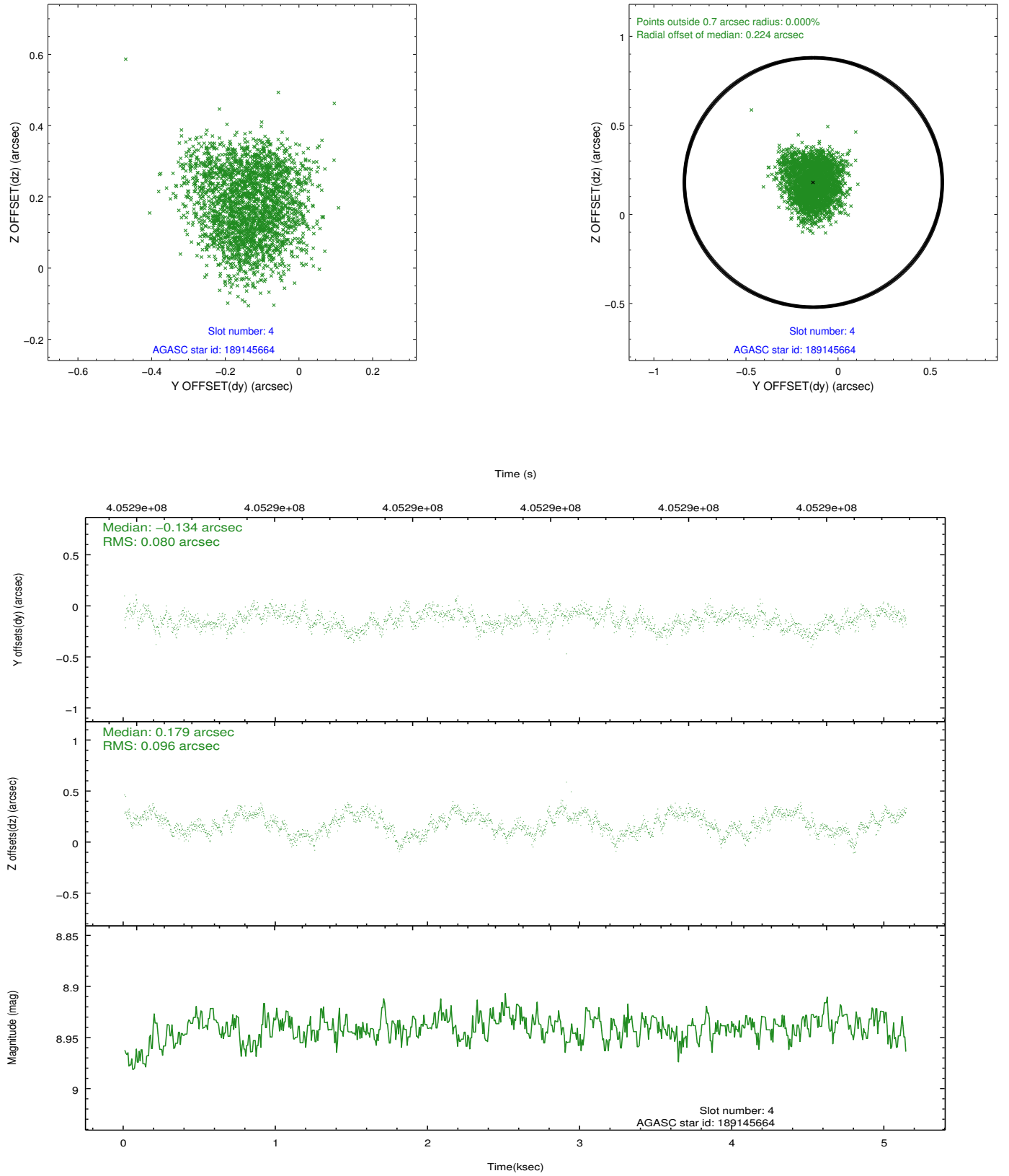
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.97	1254	-0.112	-0.050	0.012	0.025	0.000000	0.000000	-768.84	-1736.63
1	FID	ACIS-S-4	7.05	1254	0.232	0.067	0.011	0.027	0.000000	0.000000	2144.23	170.77
2	FID	ACIS-S-5	7.08	1252	-0.150	-0.010	0.014	0.028	0.000000	0.000000	-1820.22	165.67
3	GUIDE	189140584	7.40	2506	-0.035	0.095	0.068	0.115	176.337611	19.889196	-1823.42	-491.29
4	GUIDE	189145664	8.94	2505	-0.134	0.179	0.137	0.206	177.216150	20.504833	1732.61	-1526.25
5	GUIDE	189147392	9.20	2502	-0.170	-0.261	0.082	0.137	176.661743	20.593528	861.95	156.43
6	GUIDE	189147640	7.61	2507	0.162	-0.150	0.083	0.132	176.540349	20.319236	-173.05	-109.46
7	GUIDE	189138768	9.64	2504	0.174	0.137	0.126	0.211	176.878887	20.051086	-256.02	-1603.96

## 2.4 Star Slots

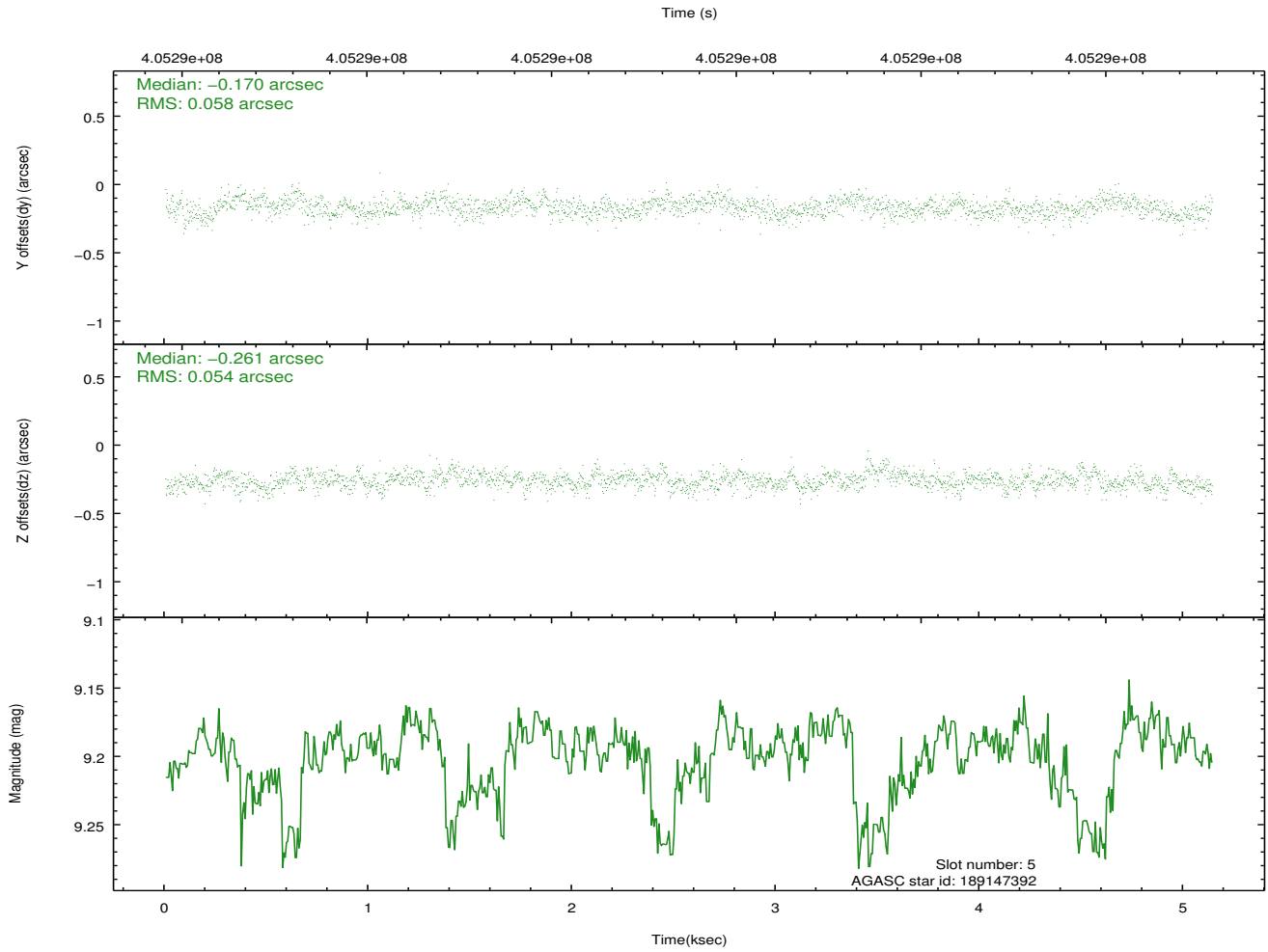
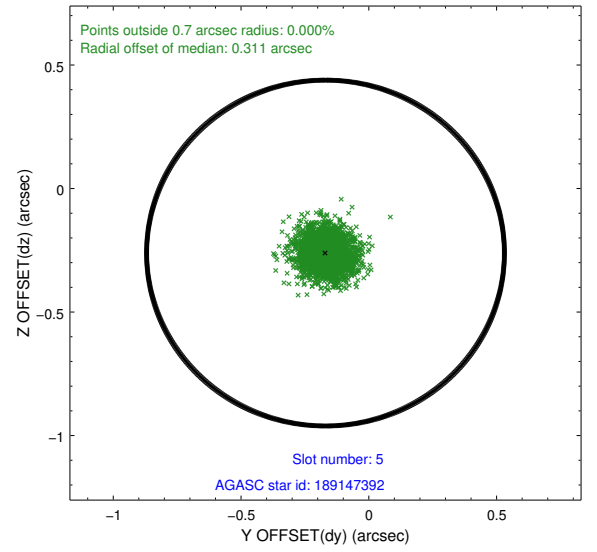
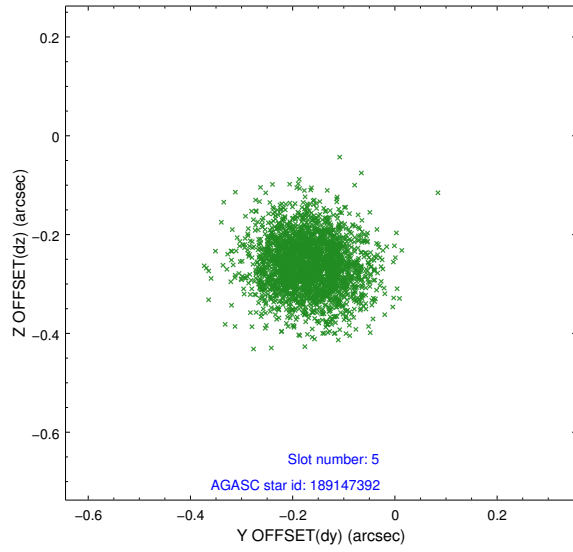
### 2.4.1 Slot 3



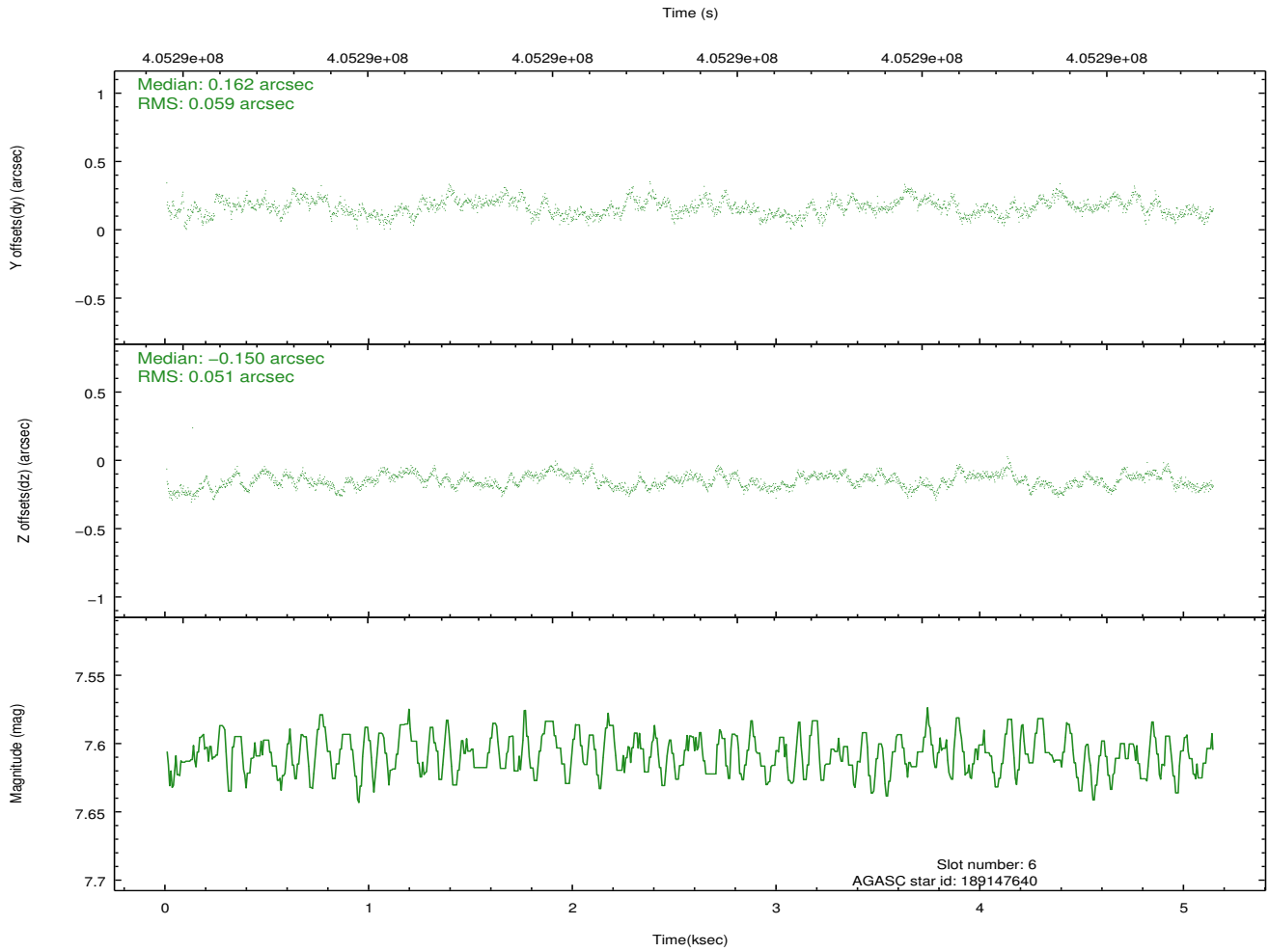
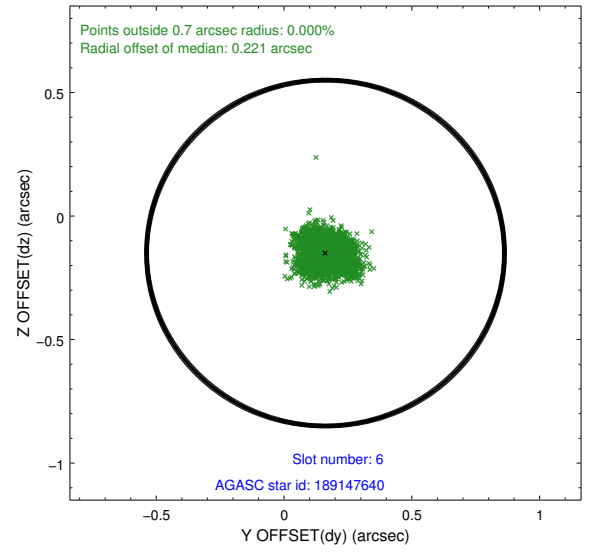
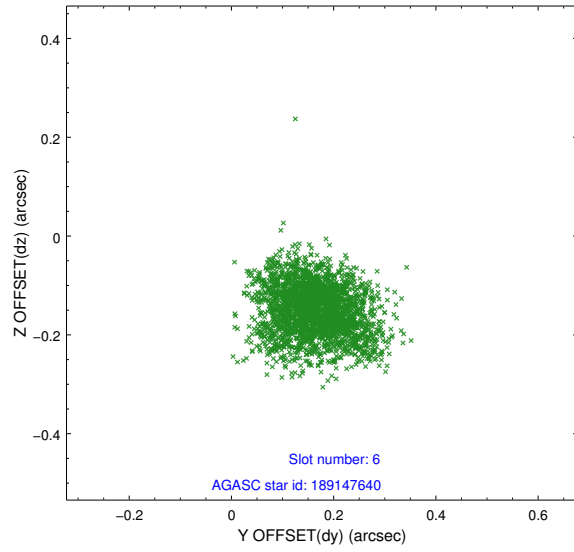
## 2.4.2 Slot 4



### 2.4.3 Slot 5

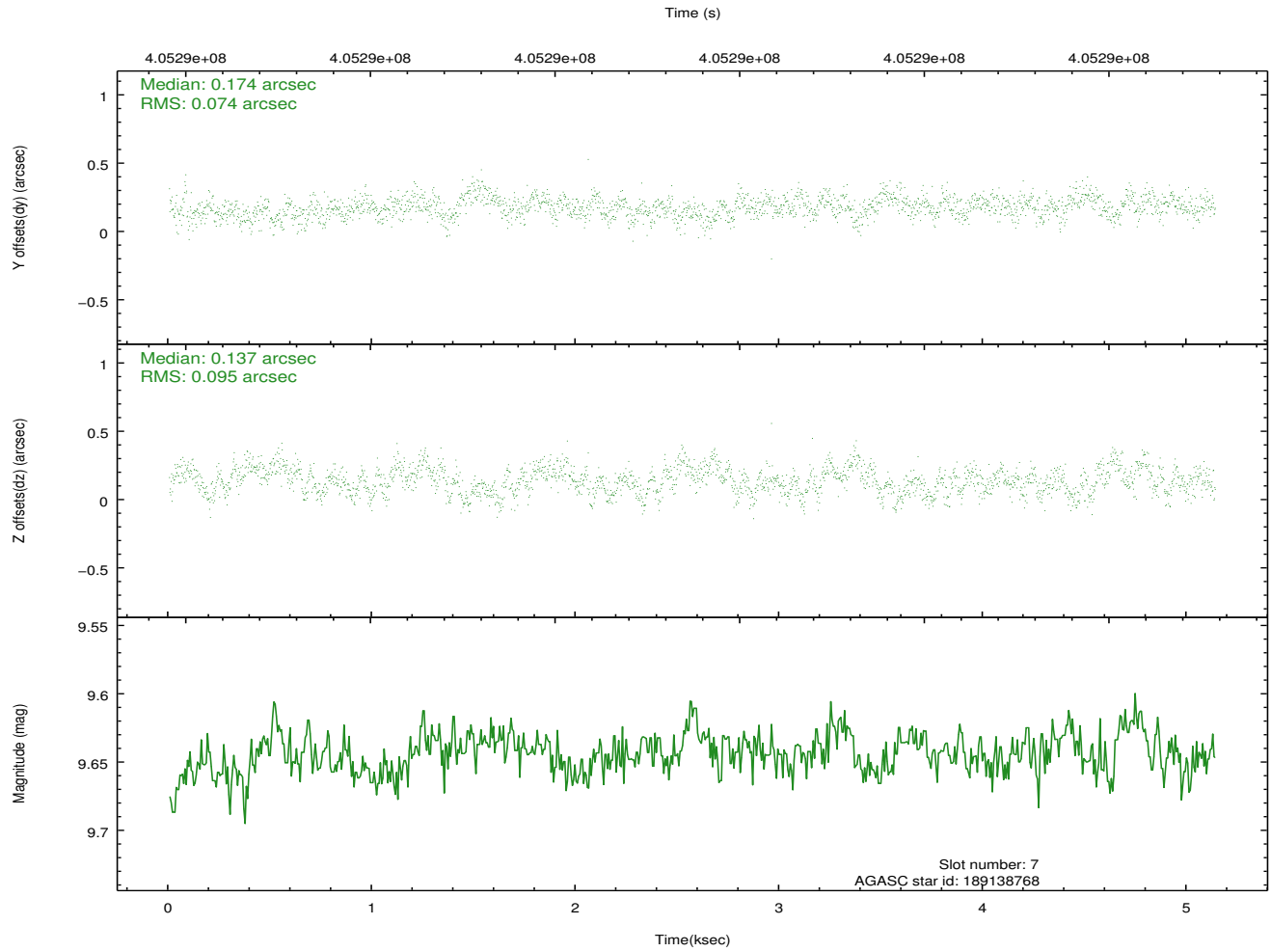
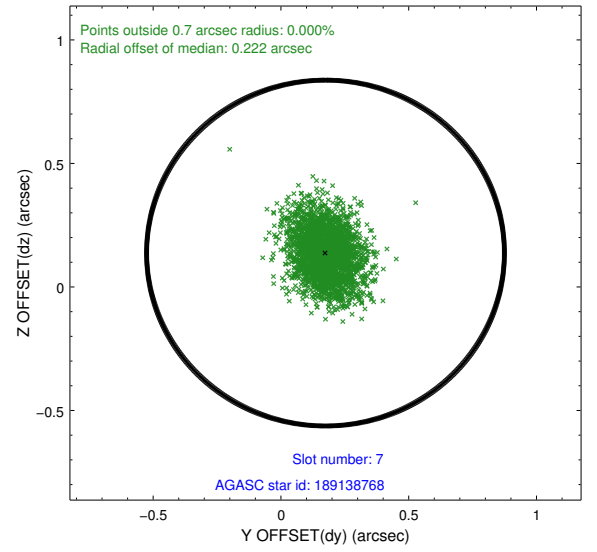
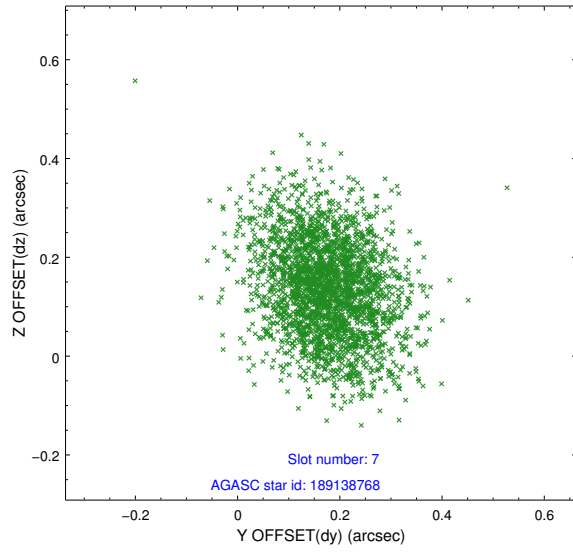


## 2.4.4 Slot 6



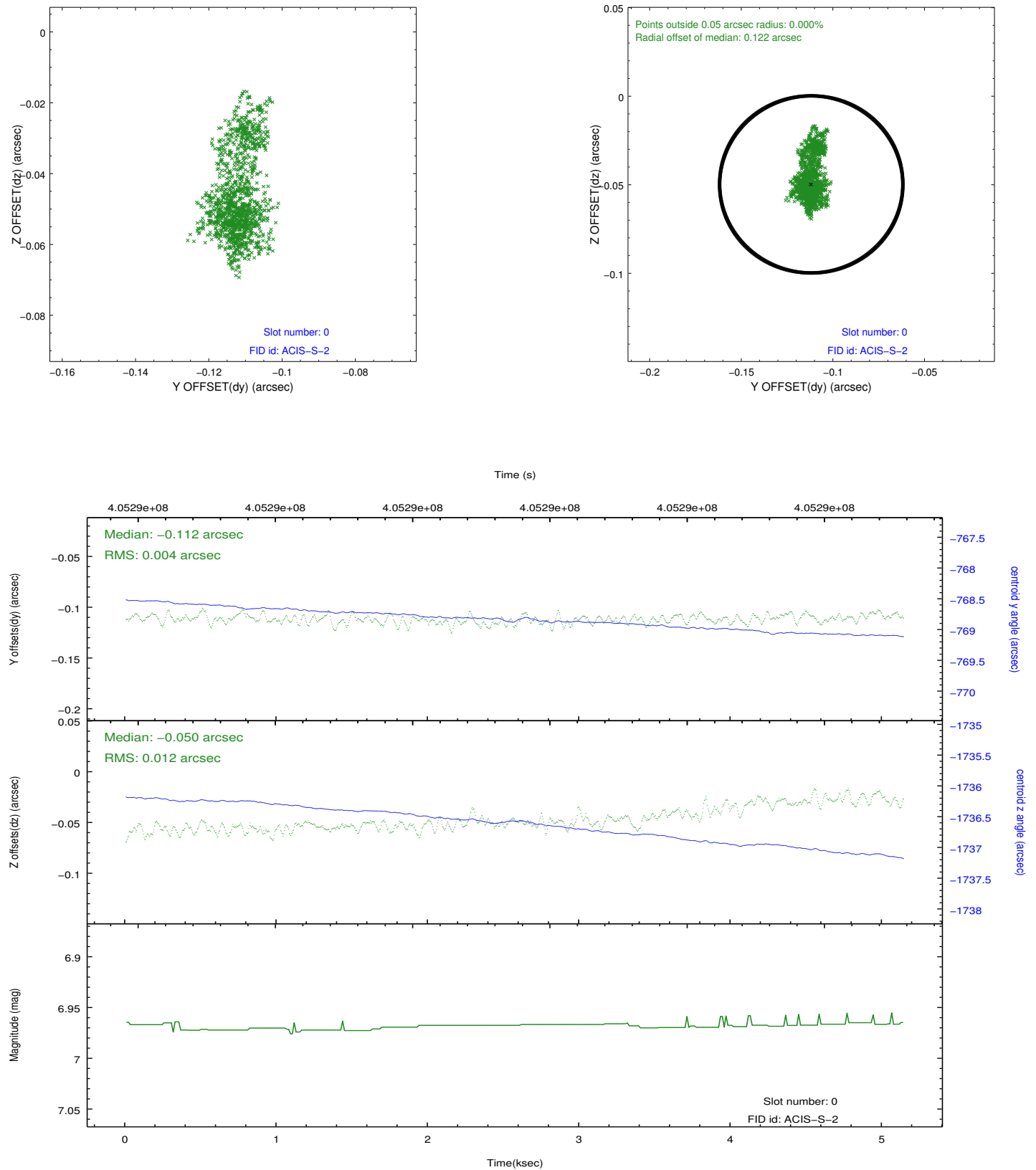


## 2.4.5 Slot 7

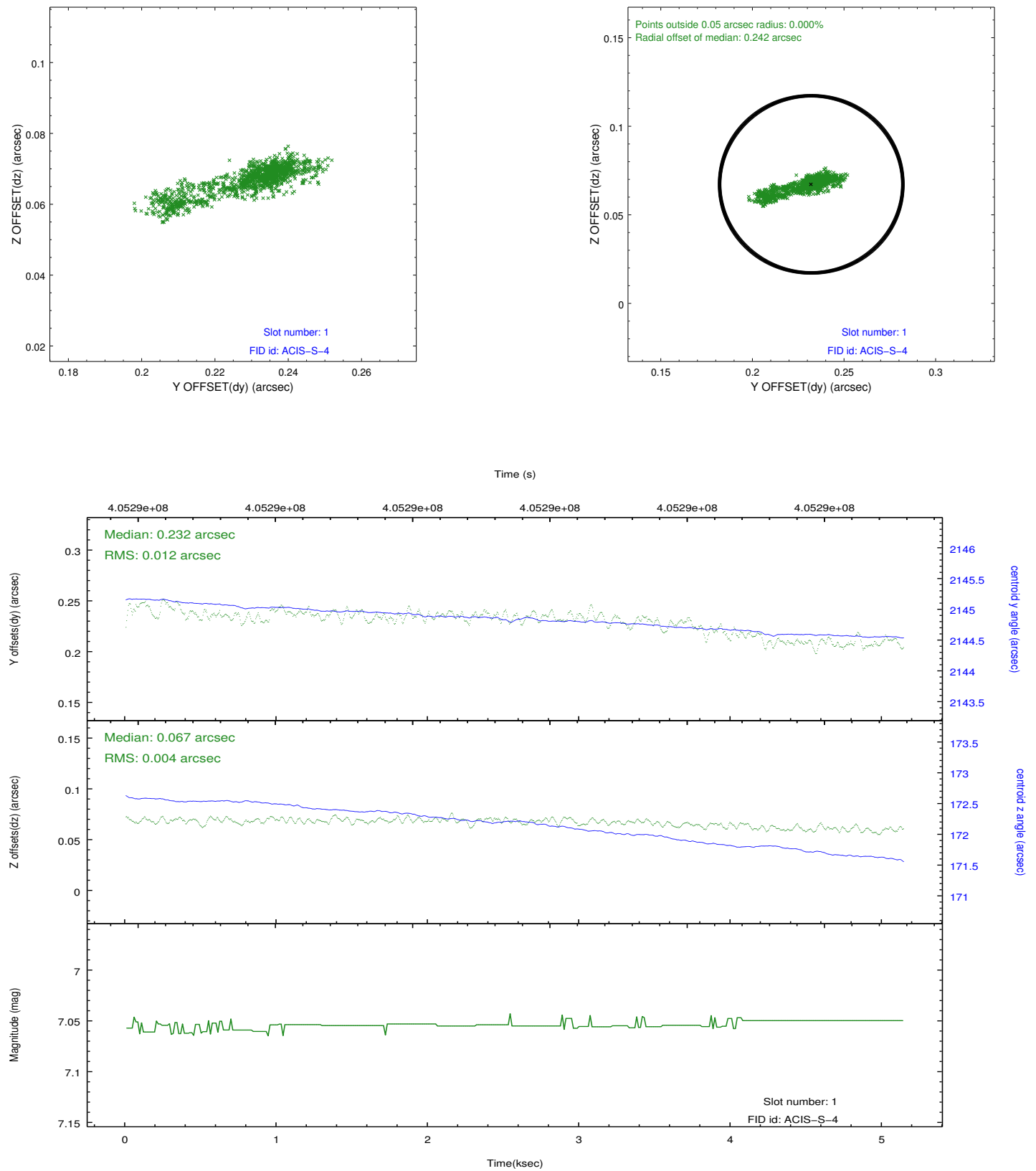


## 2.5 FID Slots

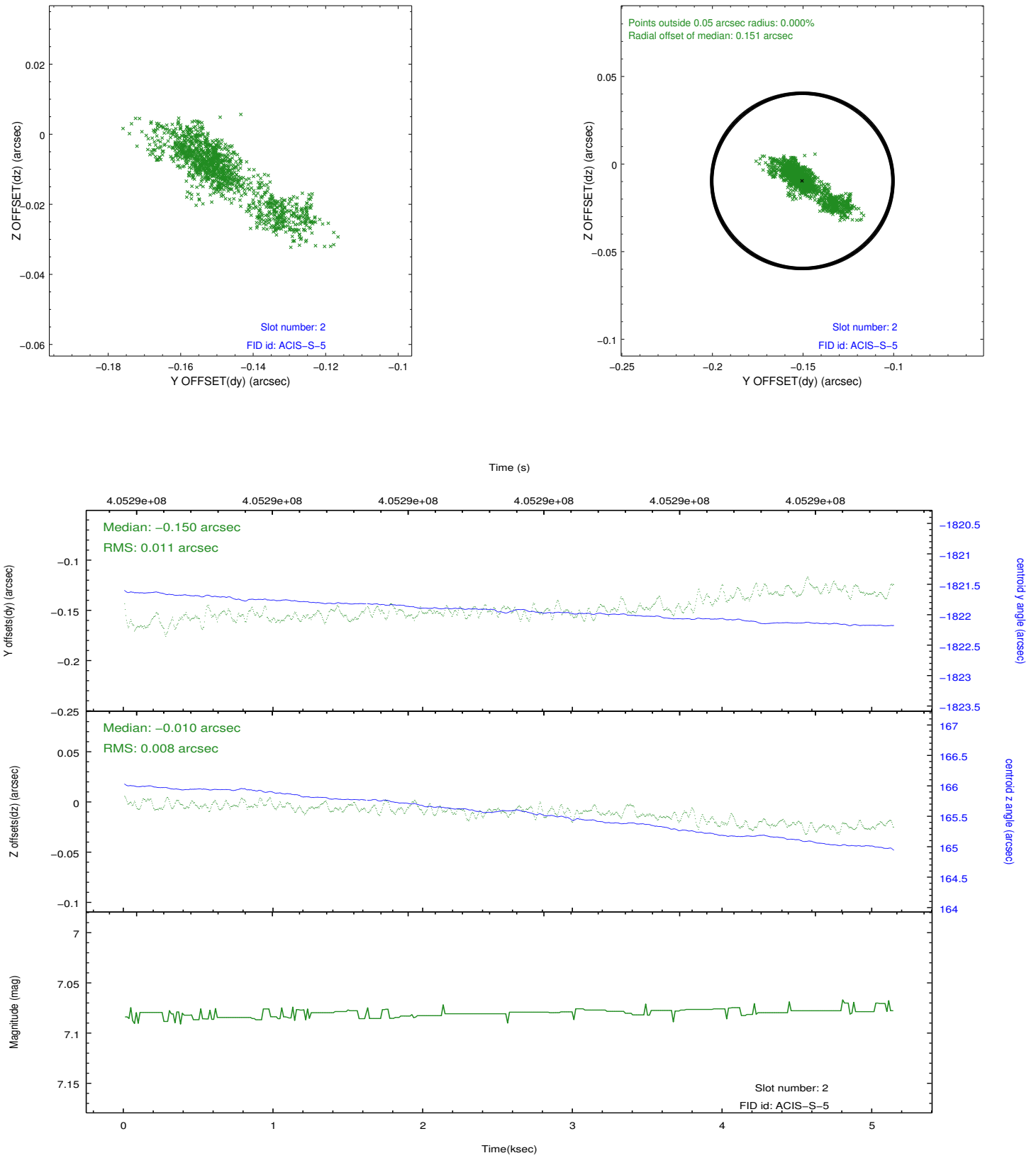
### 2.5.1 Slot 0



## 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)	2012.07.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.9599999815822

### A.2 Comments