

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3959 - L2 Version 3  
Chandra X-Ray Center

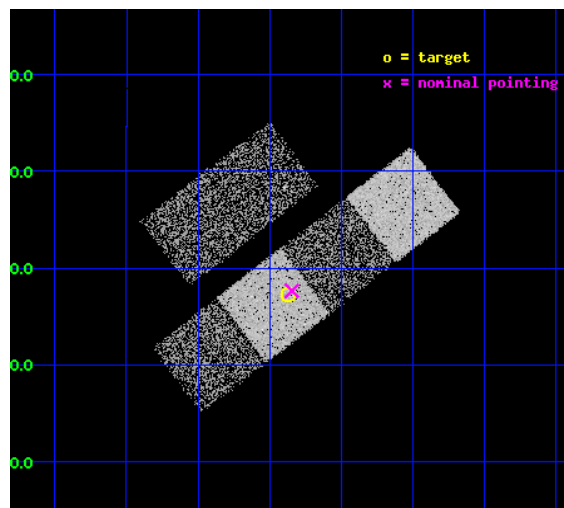
L2 Processing Date : Oct 26 2012

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# 1 Front

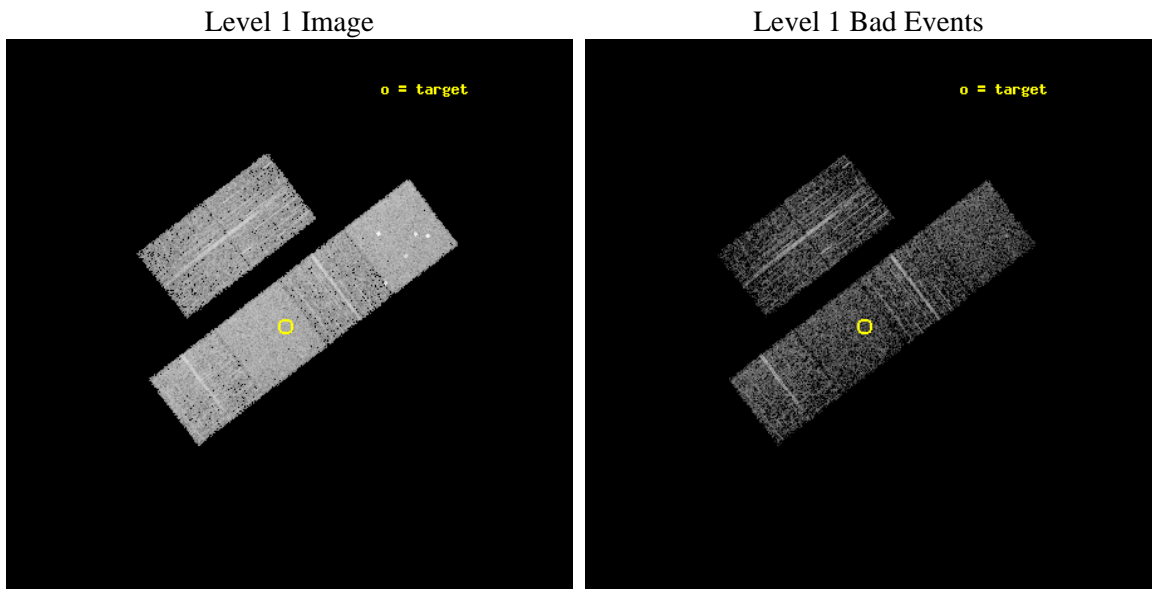
seq_num	700638	Sequence number
obs_id	3959	Observation id
title	A CHANDRA AND XMM-NEWTON STUDY OF THE MOST DISTANT QUASARS: X-RAYING THE FIRST MASSIVE BLACK HOLES	Proposal title
observer	Prof. William Brandt	Principal investigator
object	SDSS J143352+022714	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	218.4675	Observer's specified target RA [deg]
dec_targ	2.453889	Observer's specified target Dec [deg]
ra_nom	218.46111109267	Nominal RA [deg]
dec_nom	2.4609034574744	Nominal Dec [deg]
roll_nom	142.54862751251	Nominal Roll [deg]
revision	3	Processing version of data
ontime	3542.3999868035	Sum of GTIs [s]
livetime	3497.5439851934	Livetime [s]
ontime2	3539.1589966416	Sum of GTIs [s]
ontime3	3542.3999868035	Sum of GTIs [s]
ontime5	3542.3999868035	Sum of GTIs [s]
ontime6	3542.3999868035	Sum of GTIs [s]
ontime7	3542.3999868035	Sum of GTIs [s]
ontime8	3542.3999868035	Sum of GTIs [s]
l2events	37104	Number of level 2 events



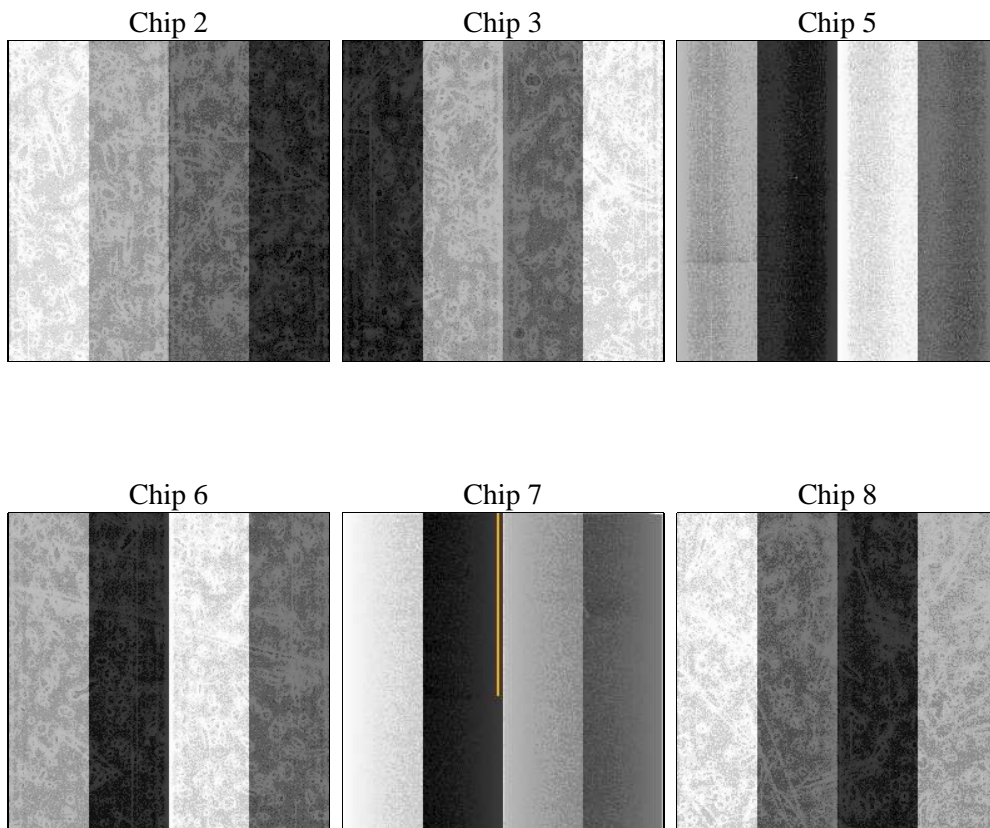
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	3500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	3542.3999868035	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	3539.1589966416	Sum of GTIs [s]
date	2012-10-26T16:52:17	Date and time of file creation	ontime3	3542.3999868035	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	3542.3999868035	Sum of GTIs [s]
			ontime6	3542.3999868035	Sum of GTIs [s]
			ontime7	3542.3999868035	Sum of GTIs [s]
			ontime8	3542.3999868035	Sum of GTIs [s]
			l1events	161024	Number of level 1 events

### 2.1.4 Events

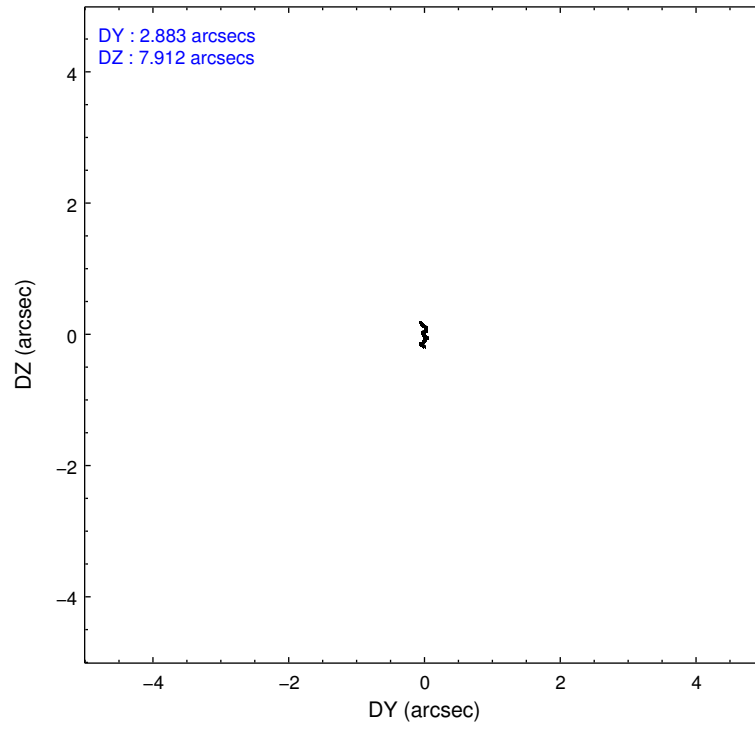
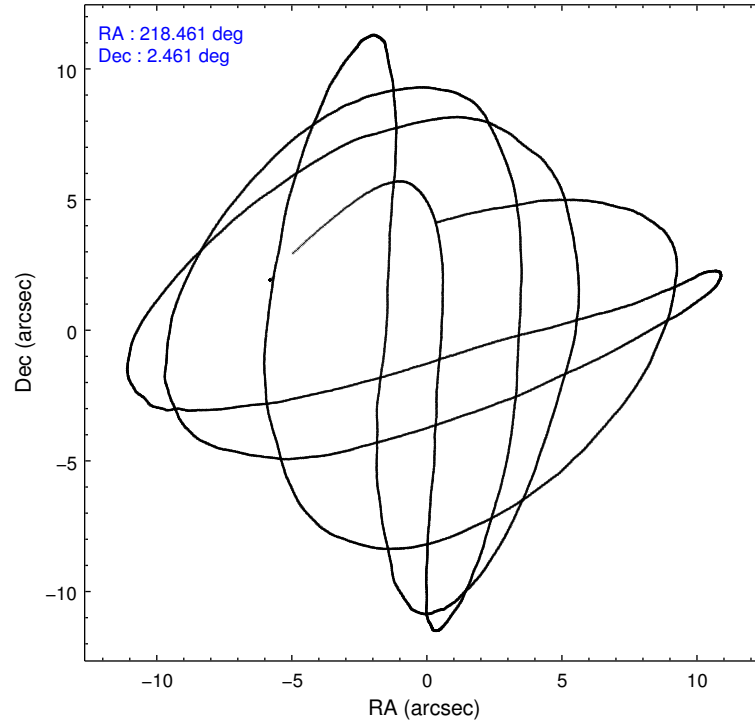
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	23441	20557	35118	23195	30336	28377	grade 0 events	1363	1304	3236	1306	1256	2034
rejected events	20633	17790	17840	20254	17587	22190		5%	6%	9%	5%	4%	7%
rejected %	88%	86%	50%	87%	57%	78%	grade 1 events	19	19	78	11	19	14
								0%	0%	0%	0%	0%	0%
							grade 2 events	549	501	4753	549	2535	1278
								2%	2%	13%	2%	8%	4%
							grade 3 events	271	235	727	264	1146	632
								1%	1%	2%	1%	3%	2%
							grade 4 events	223	288	683	268	1105	584
								0%	1%	1%	1%	3%	2%
							grade 5 events	814	932	2468	1070	2901	1283
								3%	4%	7%	4%	9%	4%
							grade 6 events	409	450	7906	565	6727	1672
								1%	2%	22%	2%	22%	5%
							grade 7 events	19793	16828	15267	19162	14647	20880
								84%	81%	43%	82%	48%	73%

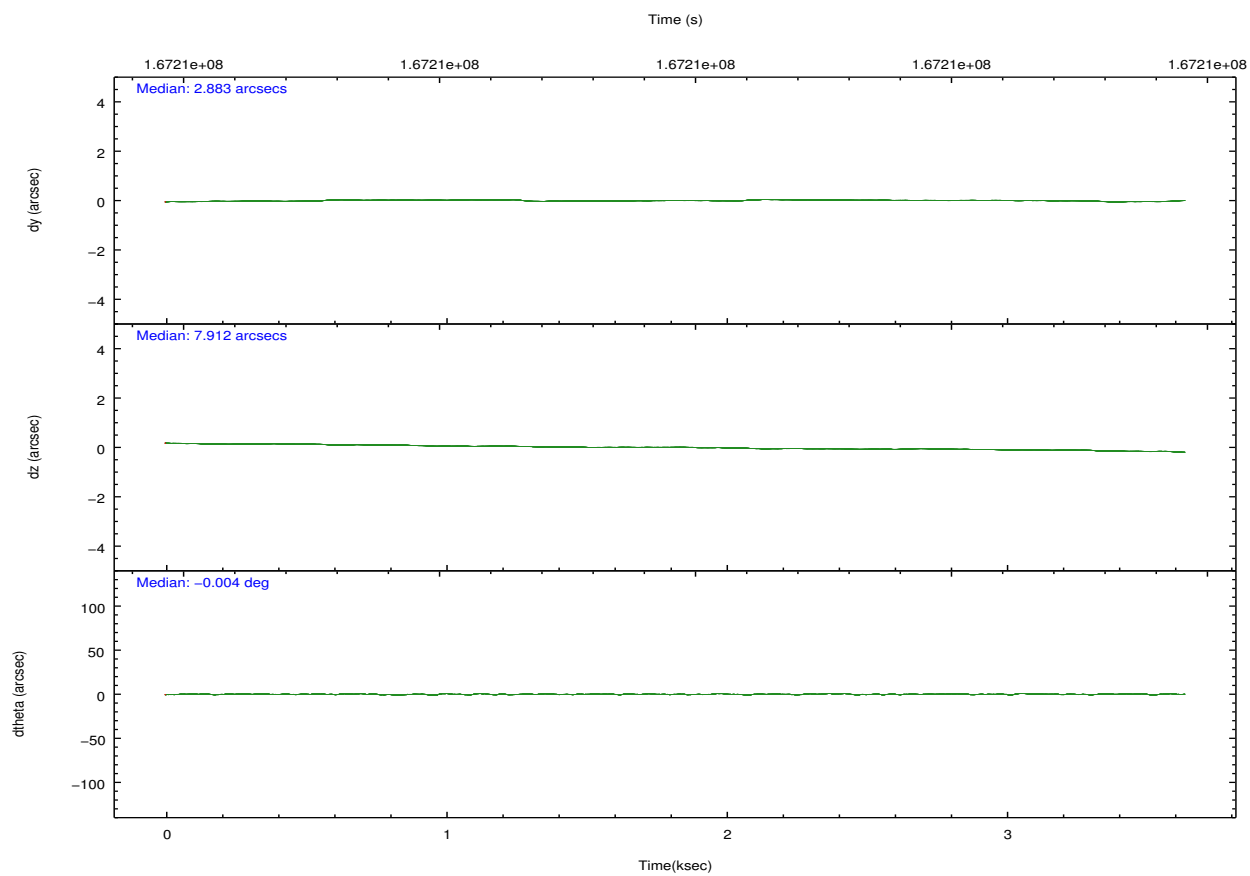
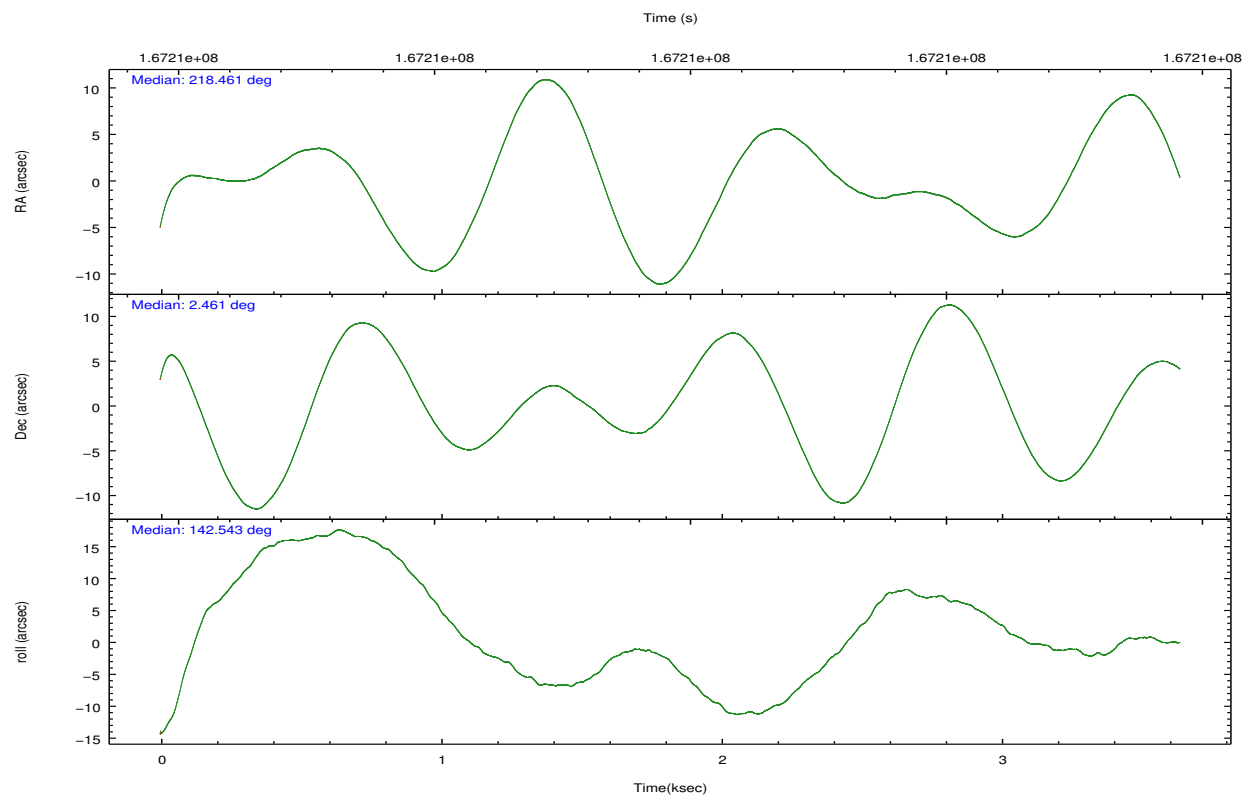


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	218.488034	218.4611110926702	Subarray requested	NONE	NONE
[deg] Pointing Dec	2.457864	2.460903457474415	Alternating exposures requested	N	N
[deg] Pointing Roll	142.390865	142.5486275125107	[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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	167209236.184000	167208102.96418			
Observation start date	2003-04-20T06:59:32	2003-04-20T06:41:42			
[s] Observation end time (MET)	167212736.184000	167213153.1394			
Observation end date	2003-04-20T07:57:52	2003-04-20T08:05:53			
Read mode	TIMED	TIMED			

## 2.3 Aspect



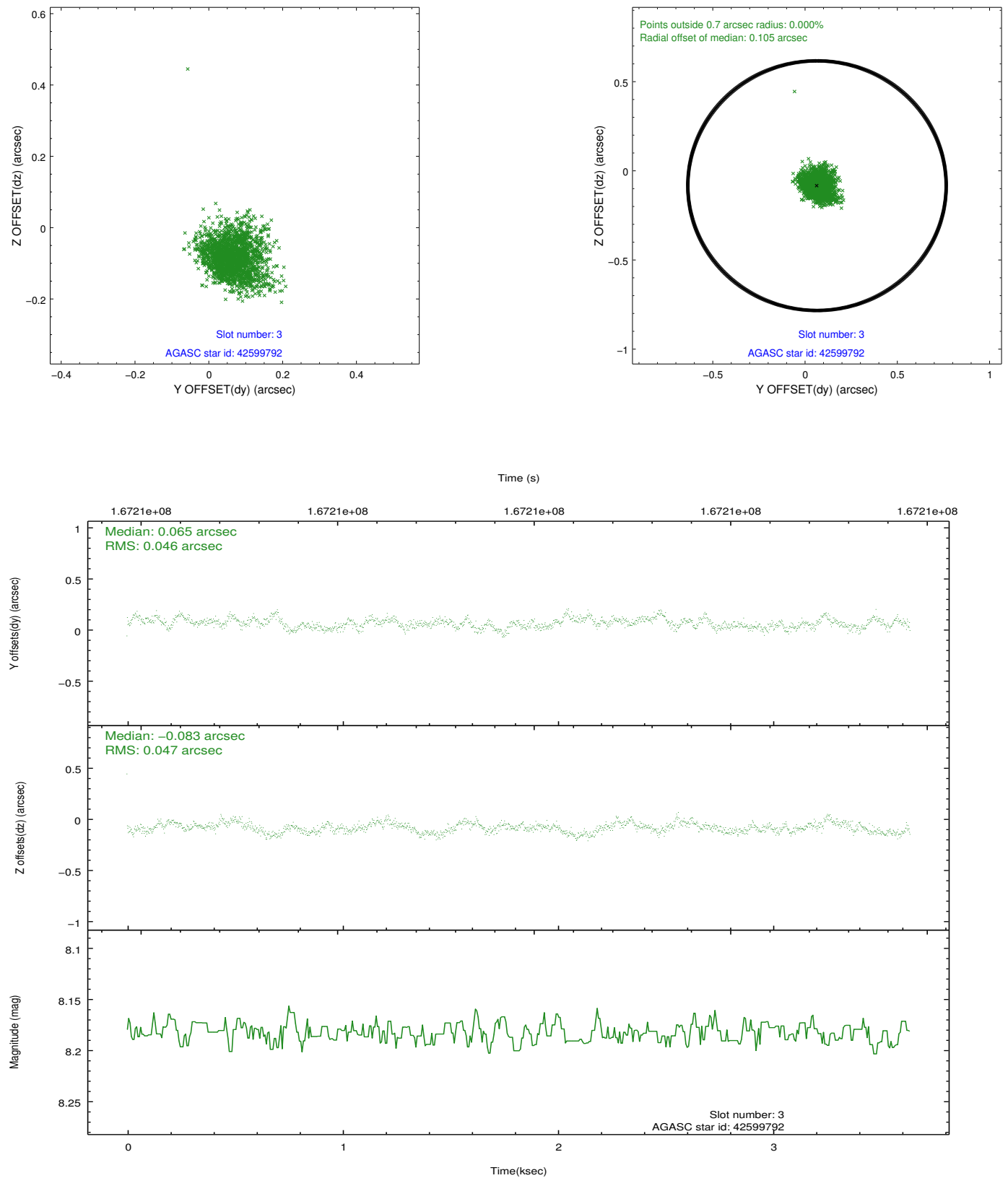


Slot Statistics

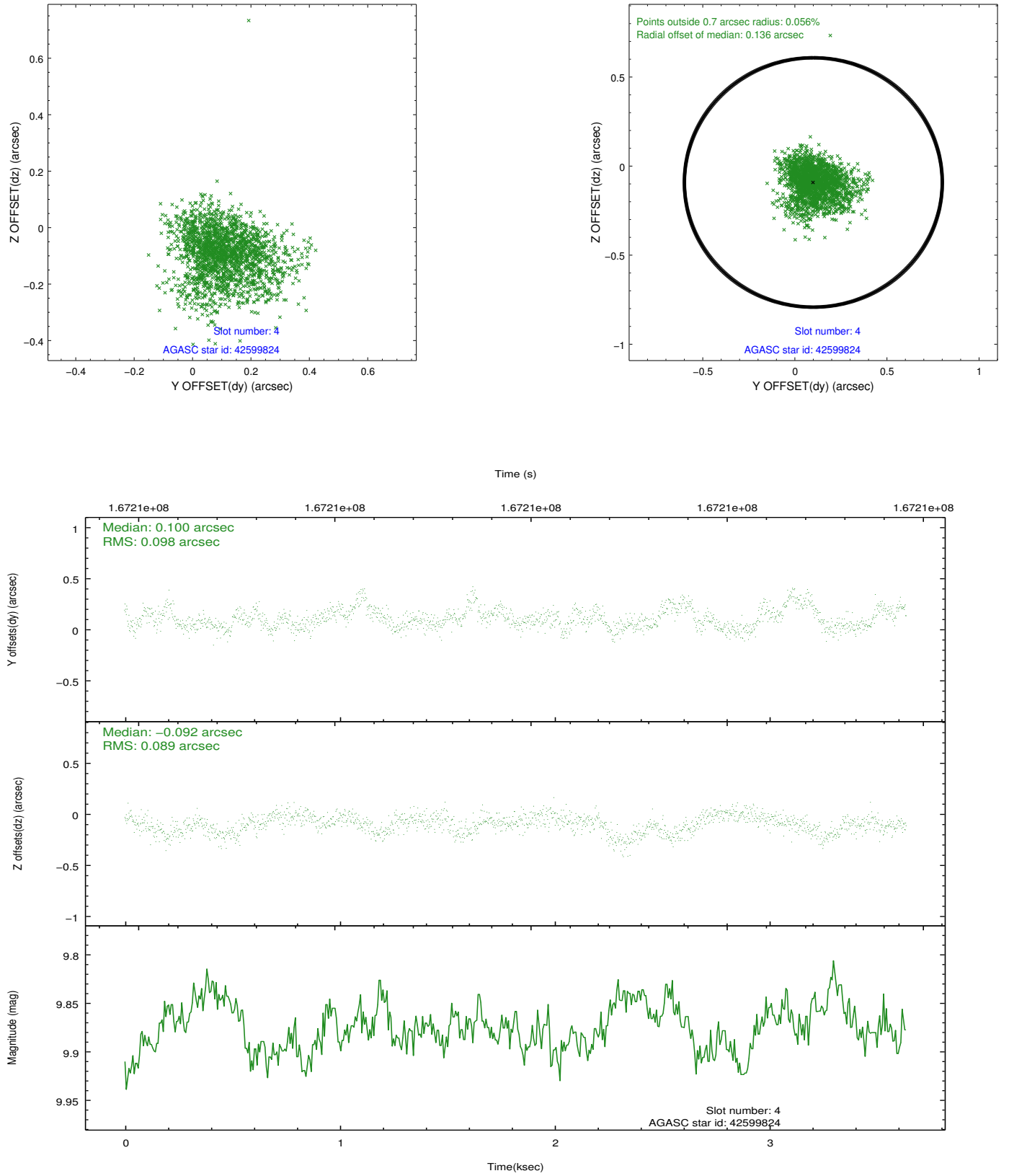
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	888	-0.013	-0.008	0.007	0.011	0.000000	0.000000	-755.54	-1729.10
1	FID	ACIS-S-4	7.20	888	-0.005	0.009	0.006	0.010	0.000000	0.000000	2156.97	177.60
2	FID	ACIS-S-5	7.24	888	-0.013	0.008	0.006	0.010	0.000000	0.000000	-1806.14	173.25
3	GUIDE	42599792	8.18	1776	0.065	-0.083	0.068	0.114	218.578228	1.678118	-1969.60	2025.83
4	GUIDE	42599824	9.88	1775	0.100	-0.092	0.138	0.227	218.576000	2.073509	-1095.51	904.24
5	GUIDE	42993352	9.97	1775	-0.096	0.044	0.140	0.222	218.429374	3.080970	1536.14	-1647.44
6	GUIDE	43004440	10.17	1776	-0.077	0.030	0.133	0.220	218.423689	2.982526	1337.69	-1355.41
7	GUIDE	42992520	10.00	1768	-0.005	0.099	0.137	0.225	218.633600	3.181135	1176.41	-2382.38

## 2.4 Star Slots

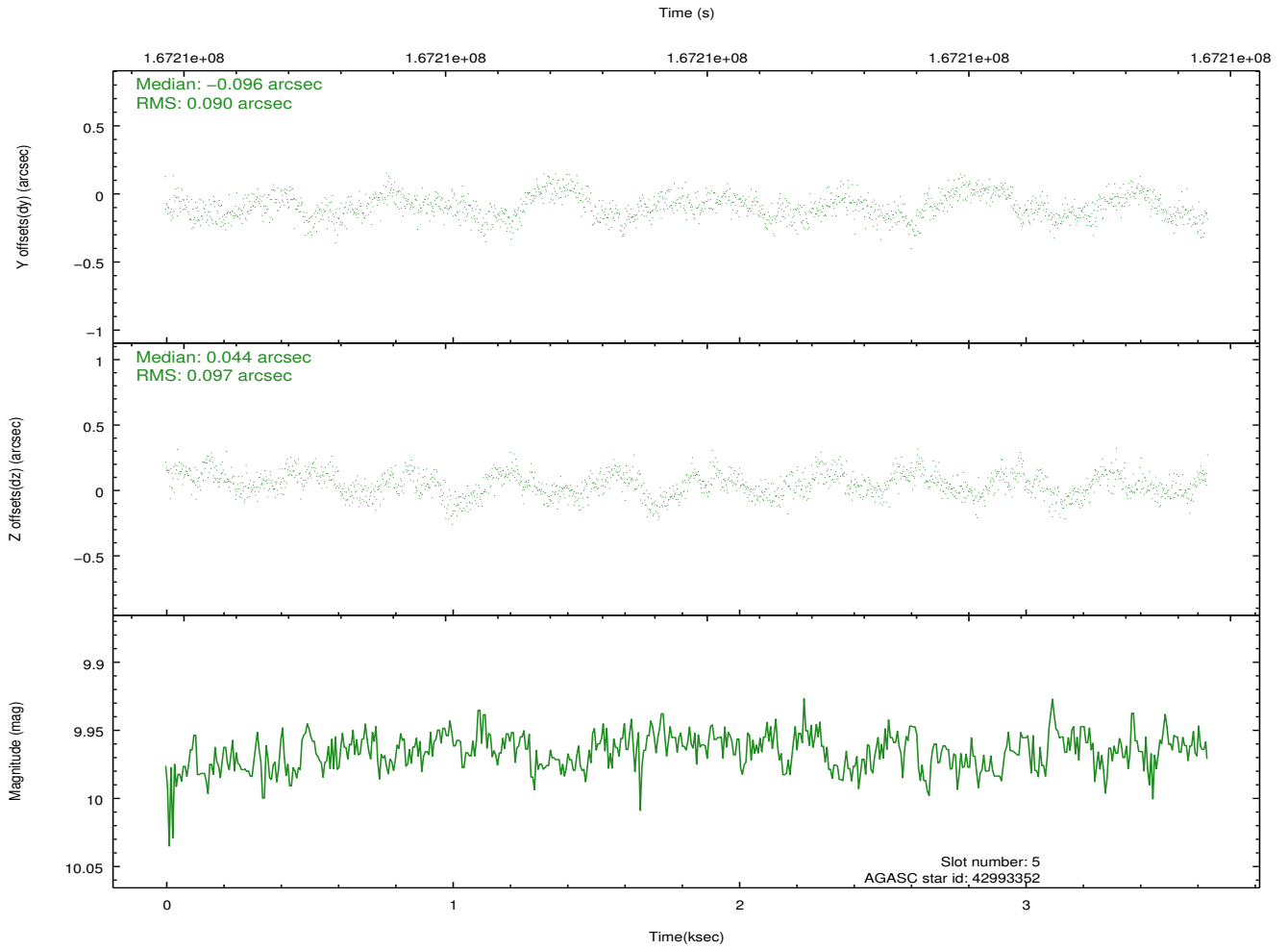
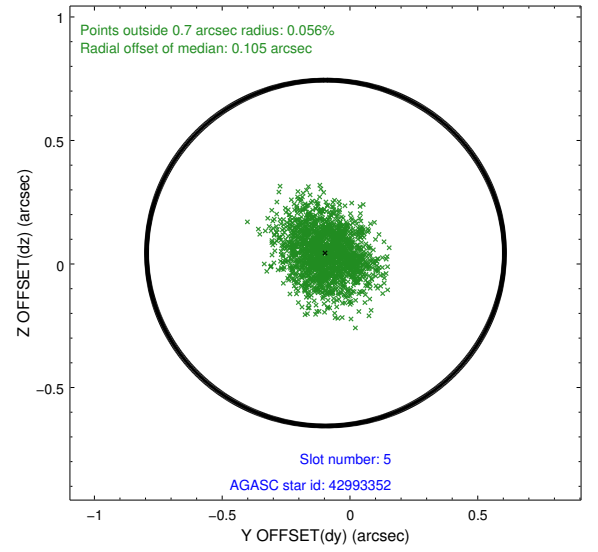
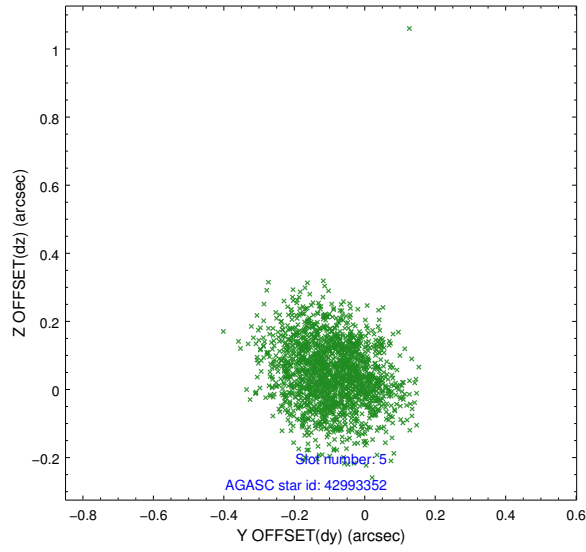
### 2.4.1 Slot 3



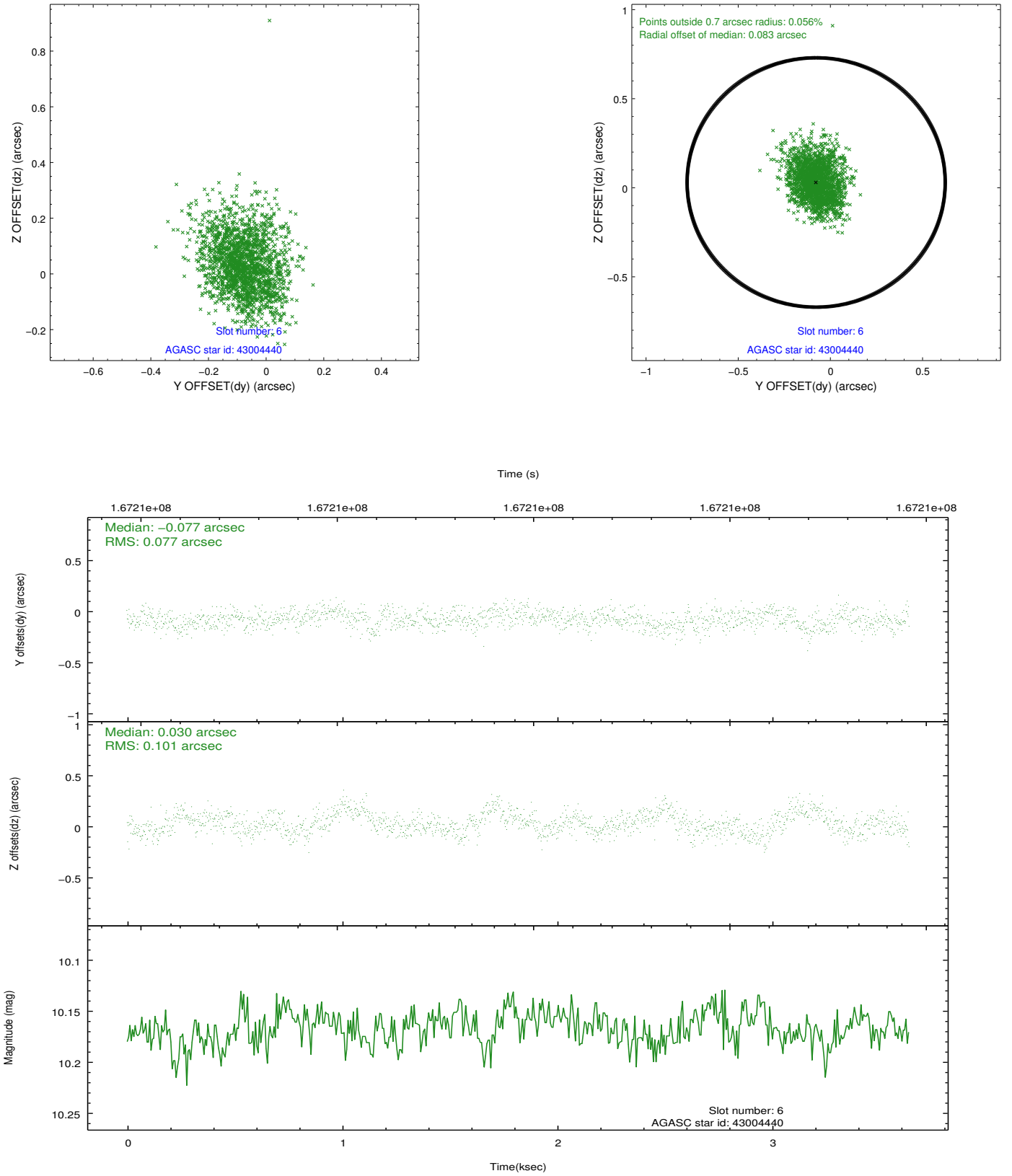
## 2.4.2 Slot 4



### 2.4.3 Slot 5

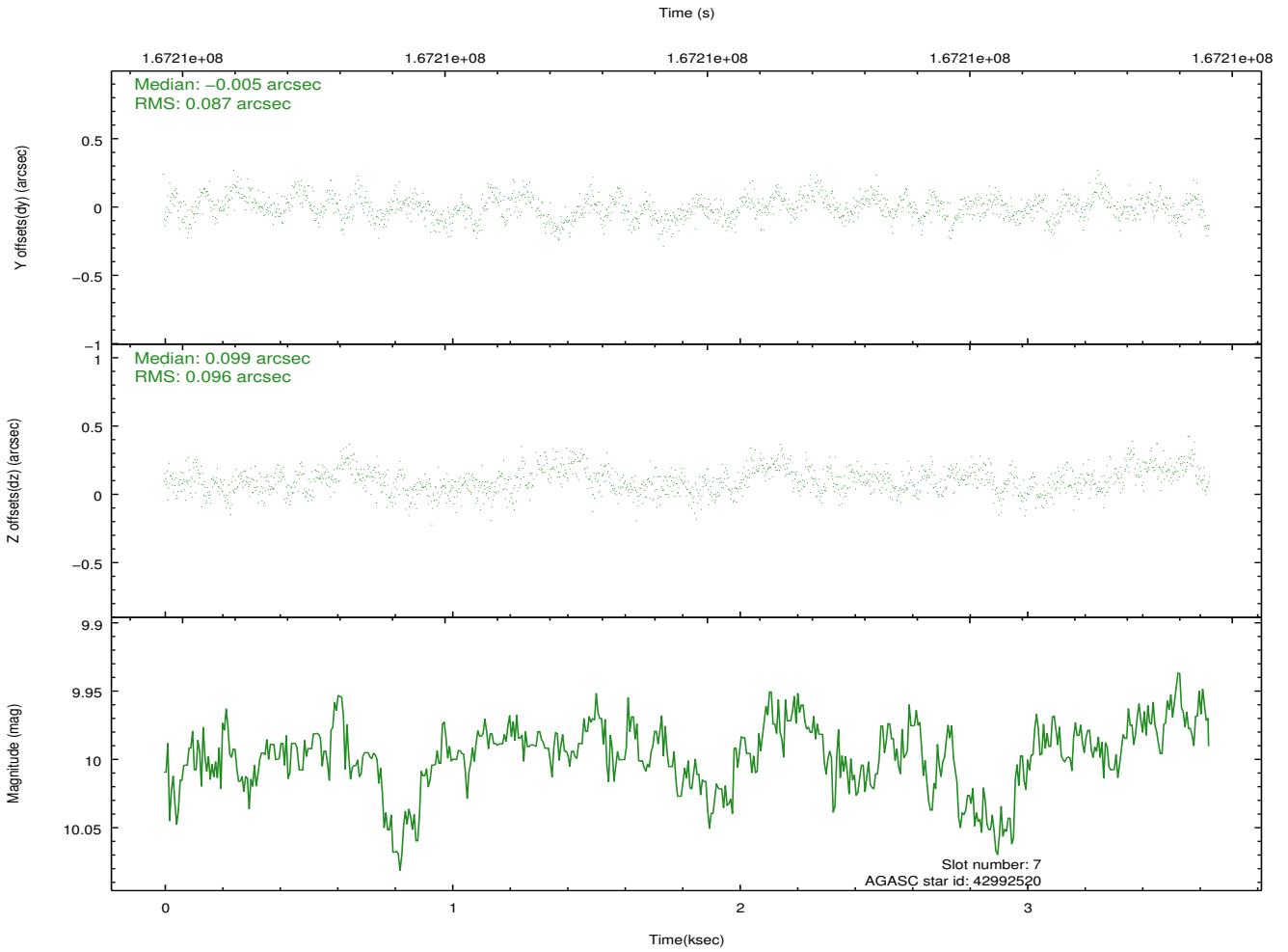
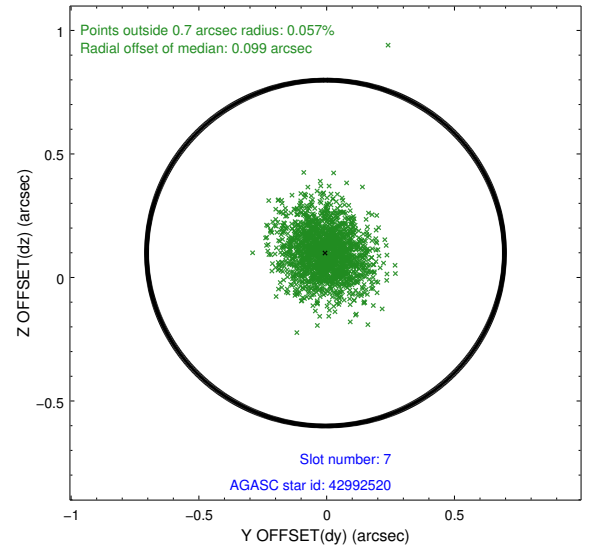
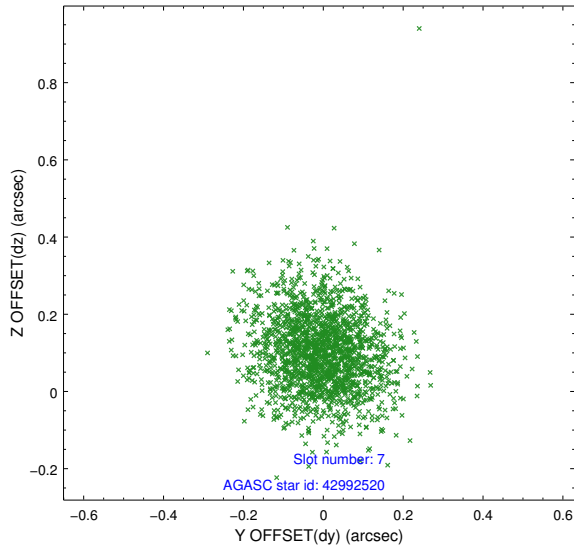


## 2.4.4 Slot 6



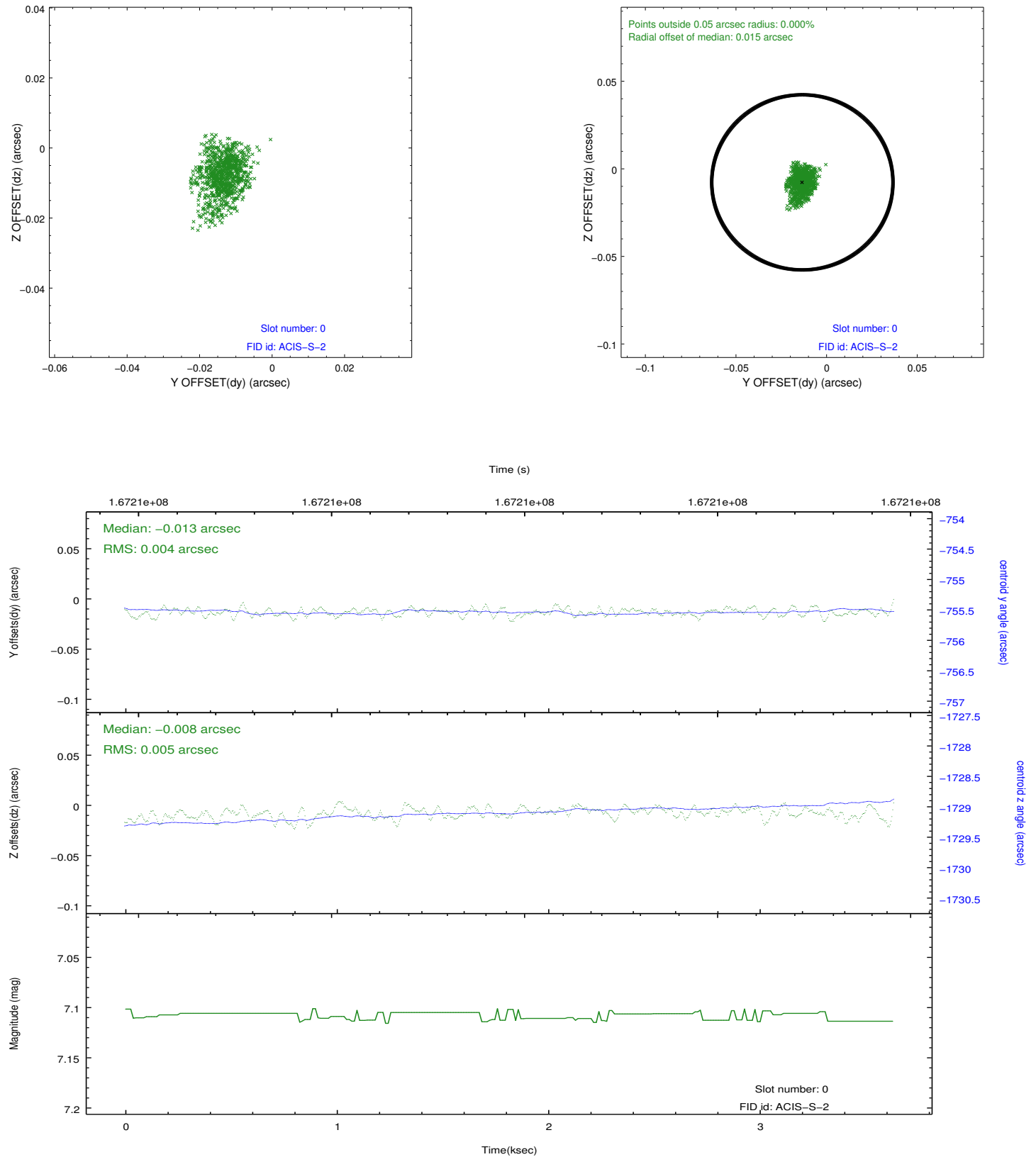


## 2.4.5 Slot 7

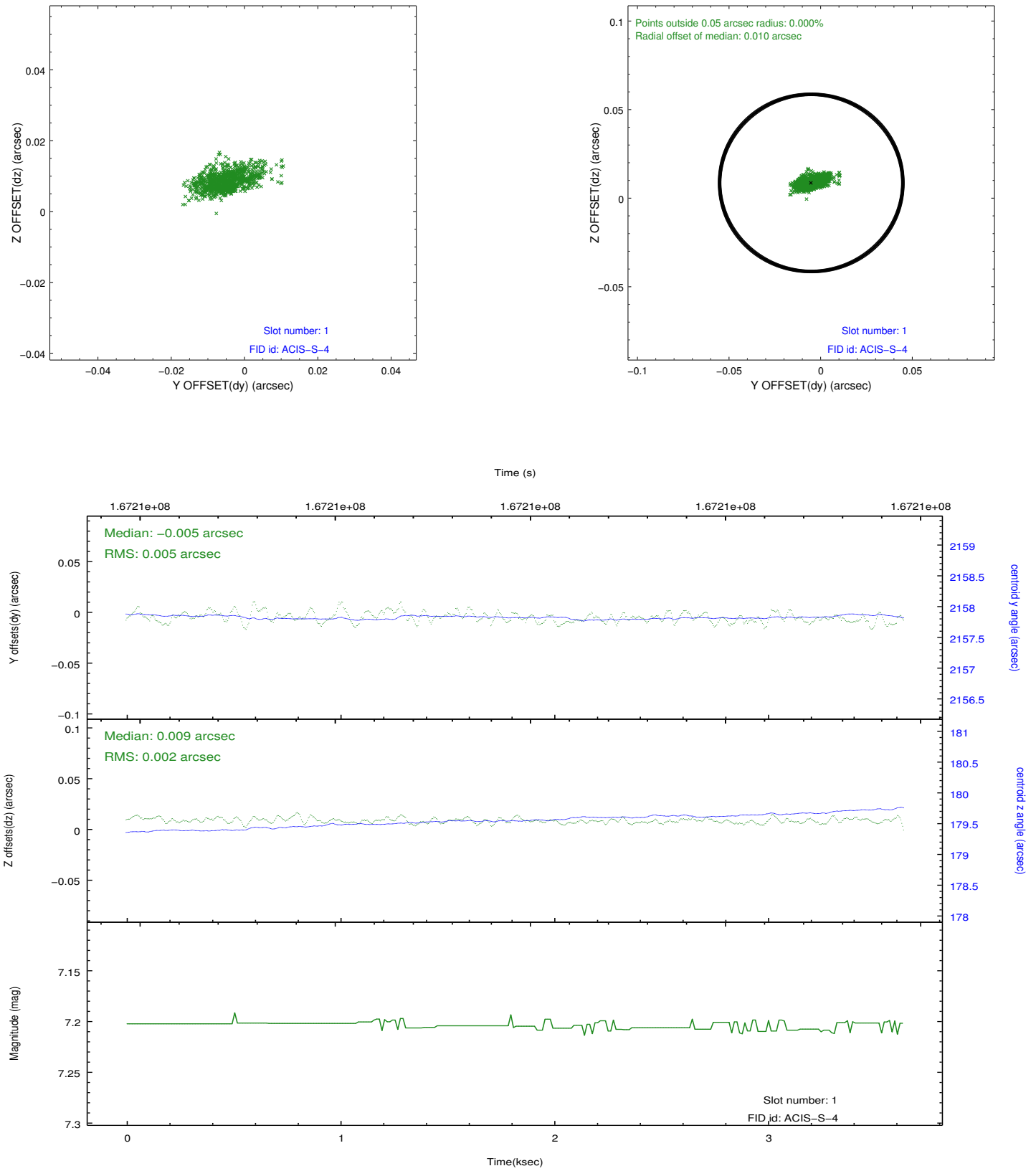


## 2.5 FID Slots

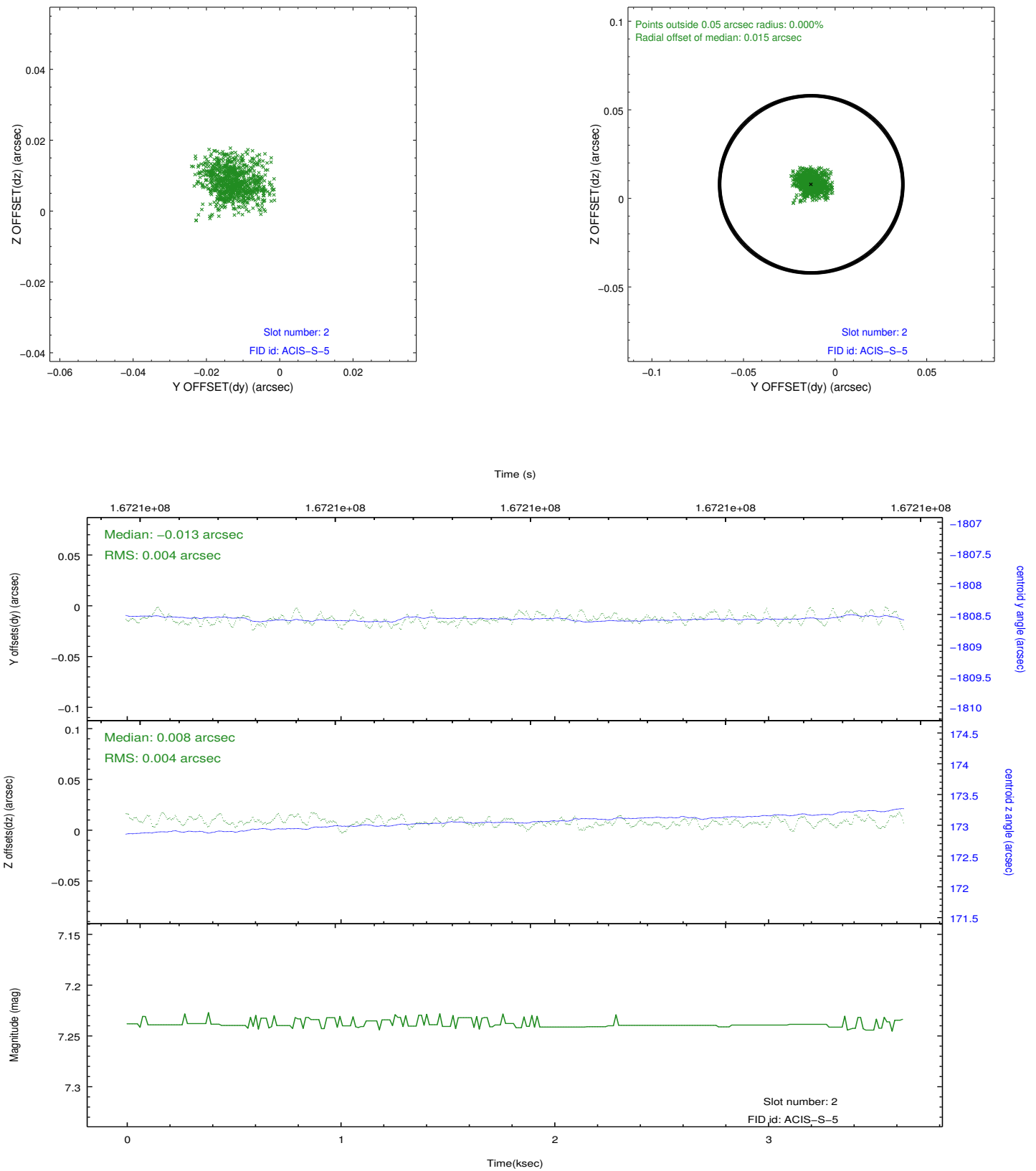
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.11.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.545

### A.2 Comments