

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 505 - L2 Version 4  
Chandra X-Ray Center

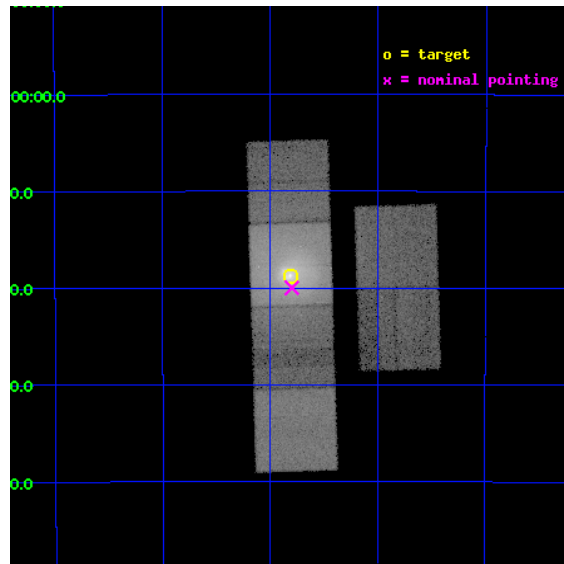
L2 Processing Date : Aug 28 2012

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# 1 Front

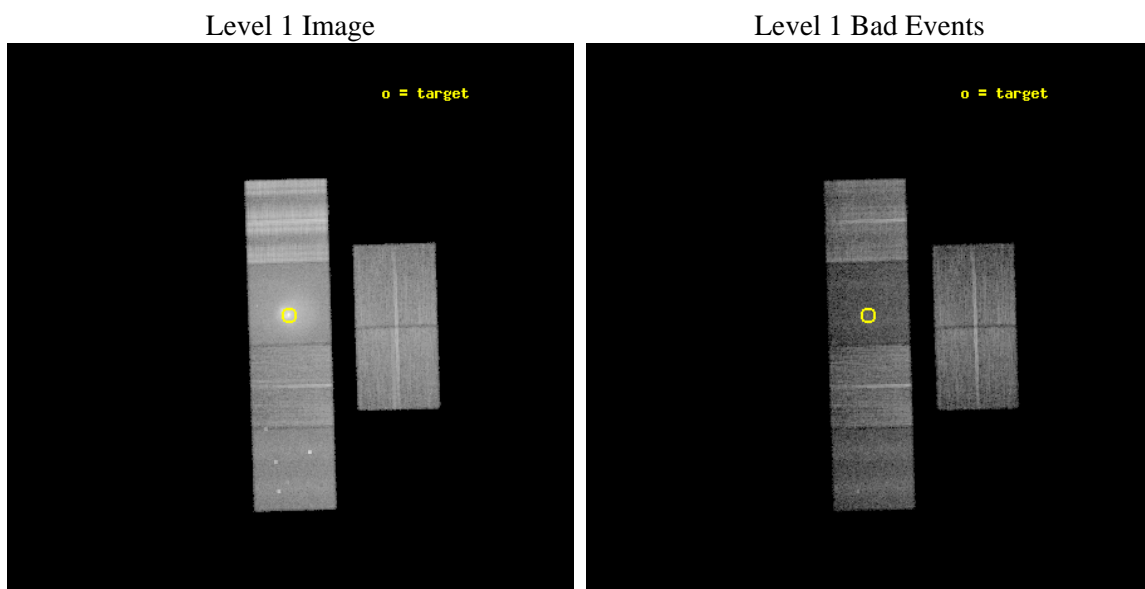
seq_num	800013	Sequence number
obs_id	505	Observation id
title	THE COOLING FLOW IN THE CENTAURUS CLUSTER	Proposal title
observer	Professor Andrew Fabian	Principal investigator
object	CEN CLUSTER	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	192.202917	Observer's specified target RA [deg]
dec_targ	-41.312222	Observer's specified target Dec [deg]
ra_nom	192.19960691043	Nominal RA [deg]
dec_nom	-41.333116953183	Nominal Dec [deg]
roll_nom	268.28679420512	Nominal Roll [deg]
revision	4	Processing version of data
ontime	10083.200009376	Sum of GTIs [s]
livetime	9955.520459483	Livetime [s]
ontime2	10083.200009376	Sum of GTIs [s]
ontime3	10083.200009376	Sum of GTIs [s]
ontime5	10083.200009376	Sum of GTIs [s]
ontime6	10083.200009376	Sum of GTIs [s]
ontime7	10083.200009376	Sum of GTIs [s]
ontime8	10083.200009376	Sum of GTIs [s]
l2events	338478	Number of level 2 events



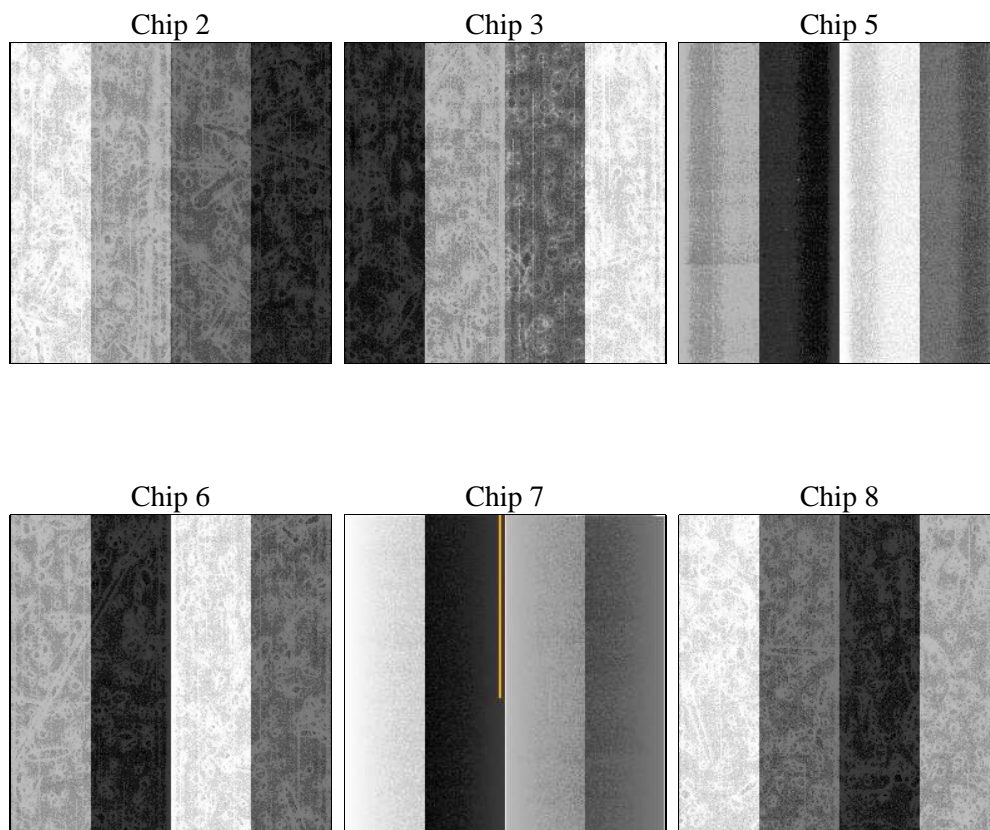
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9925.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10083.200009376	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime2	10083.200009376	Sum of GTIs [s]
date	2012-08-28T22:36:42	Date and time of file creation	ontime3	10083.200009376	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	10083.200009376	Sum of GTIs [s]
			ontime6	10083.200009376	Sum of GTIs [s]
			ontime7	10083.200009376	Sum of GTIs [s]
			ontime8	10083.200009376	Sum of GTIs [s]
			l1events	1097285	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	135475	127539	119831	140973	248279	325188	grade 0 events	14091	14045	10891	21907	51436	68578
rejected events	108999	101723	64221	105921	58819	135594		10%	11%	9%	15%	20%	21%
rejected %	80%	79%	53%	75%	23%	41%	grade 1 events	123	87	338	122	188	506
								0%	0%	0%	0%	0%	0%
							grade 2 events	7482	6699	17152	8085	49831	28719
								5%	5%	14%	5%	20%	8%
							grade 3 events	1033	1134	3814	1431	21975	33948
								0%	0%	3%	1%	8%	10%
							grade 4 events	1582	1239	3686	1466	22335	29998
								1%	0%	3%	1%	8%	9%
							grade 5 events	2357	2435	7951	2829	9419	5734
								1%	1%	6%	2%	3%	1%
							grade 6 events	4027	4205	24420	4086	49648	41332
								2%	3%	20%	2%	19%	12%
							grade 7 events	104780	97695	51579	101047	43447	116373
								77%	76%	43%	71%	17%	35%

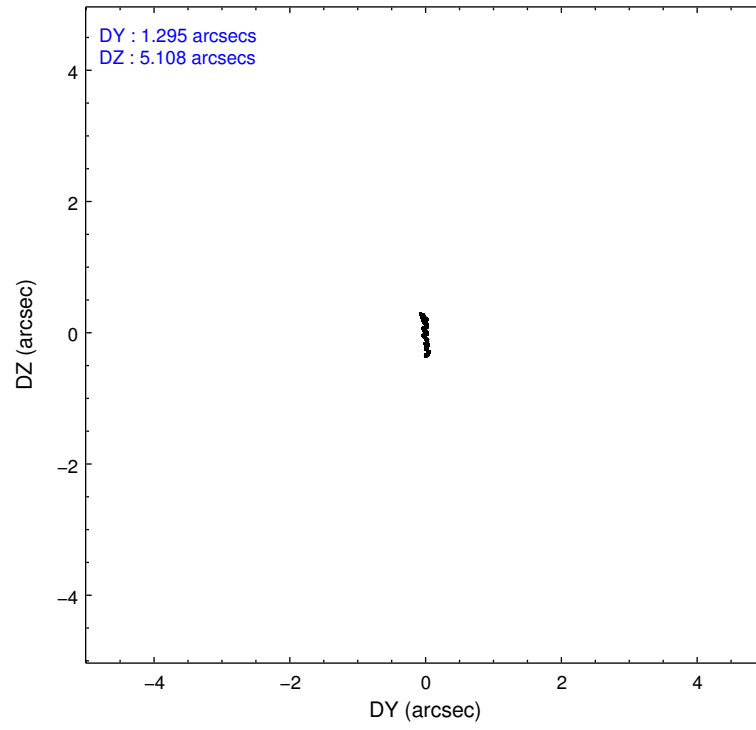
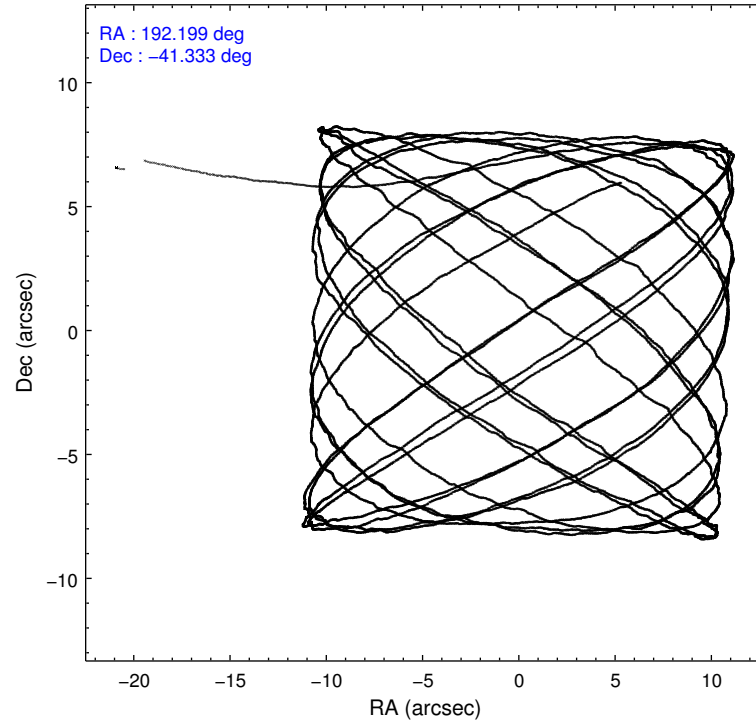


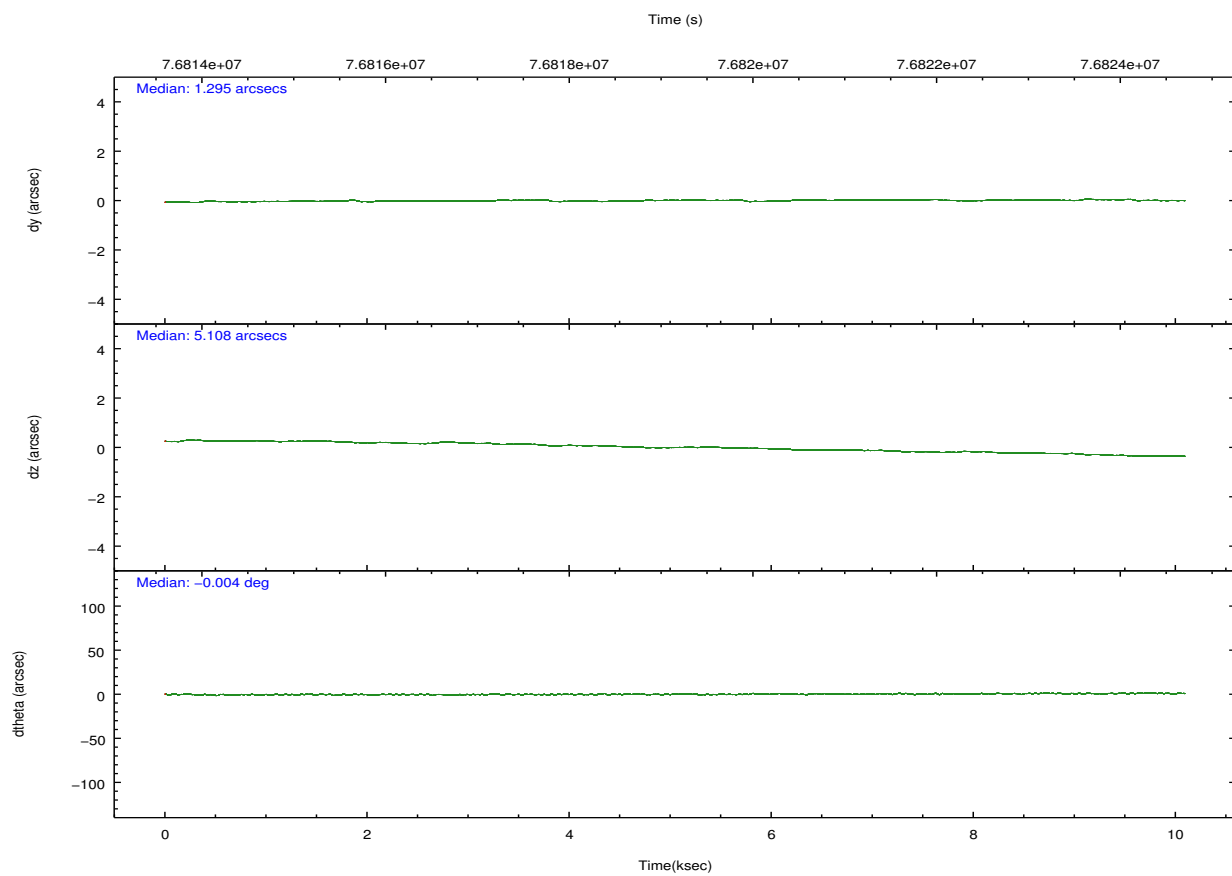
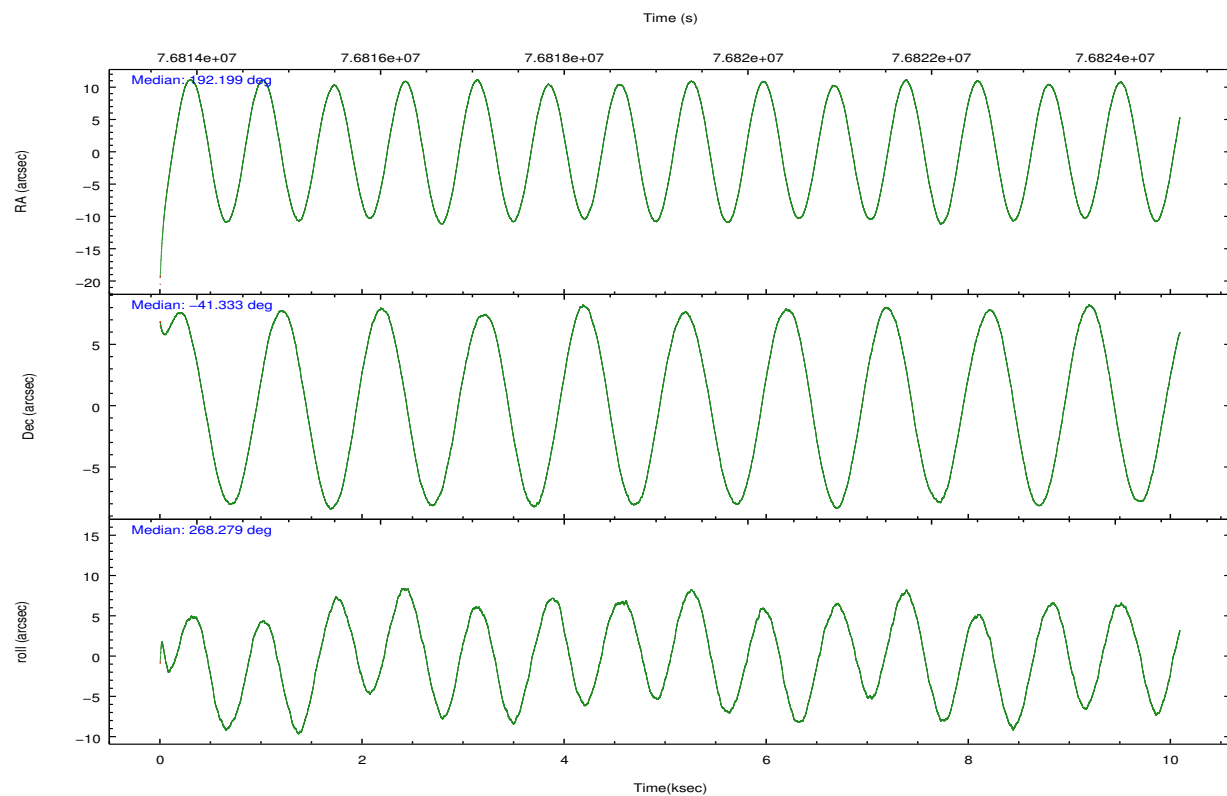
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	192.182193	192.1996069104262
[deg] Pointing Dec	-41.309042	-41.33311695318268
[deg] Pointing Roll	268.118650	268.2867942051247
[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)	76814274.184000	76812710.79163501
Observation start date	2000-06-08T01:16:50	2000-06-08T00:51:50
[s] Observation end time (MET)	76824199.184000	76824781.704579
Observation end date	2000-06-08T04:02:15	2000-06-08T04:13:01
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



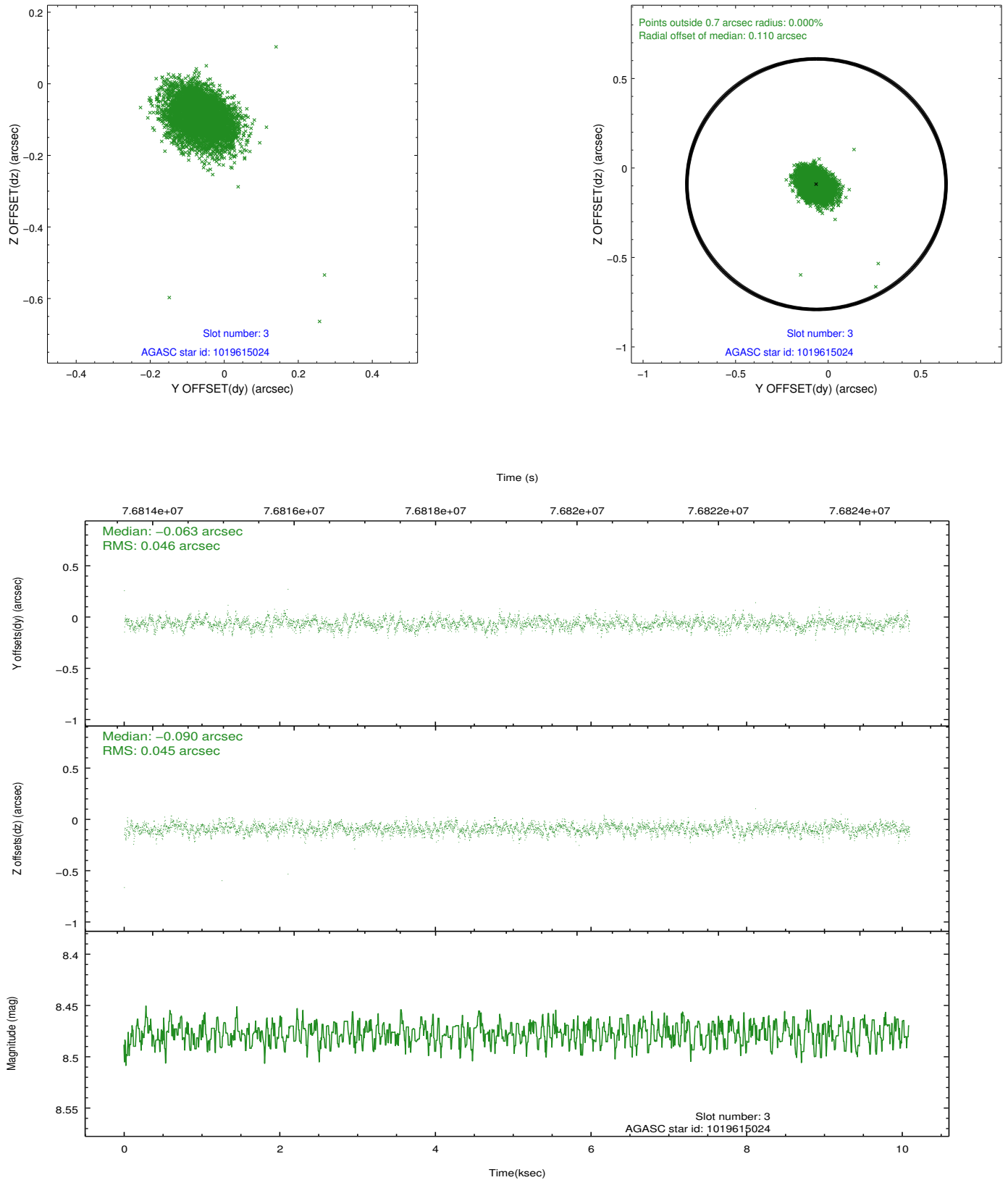


### Slot Statistics

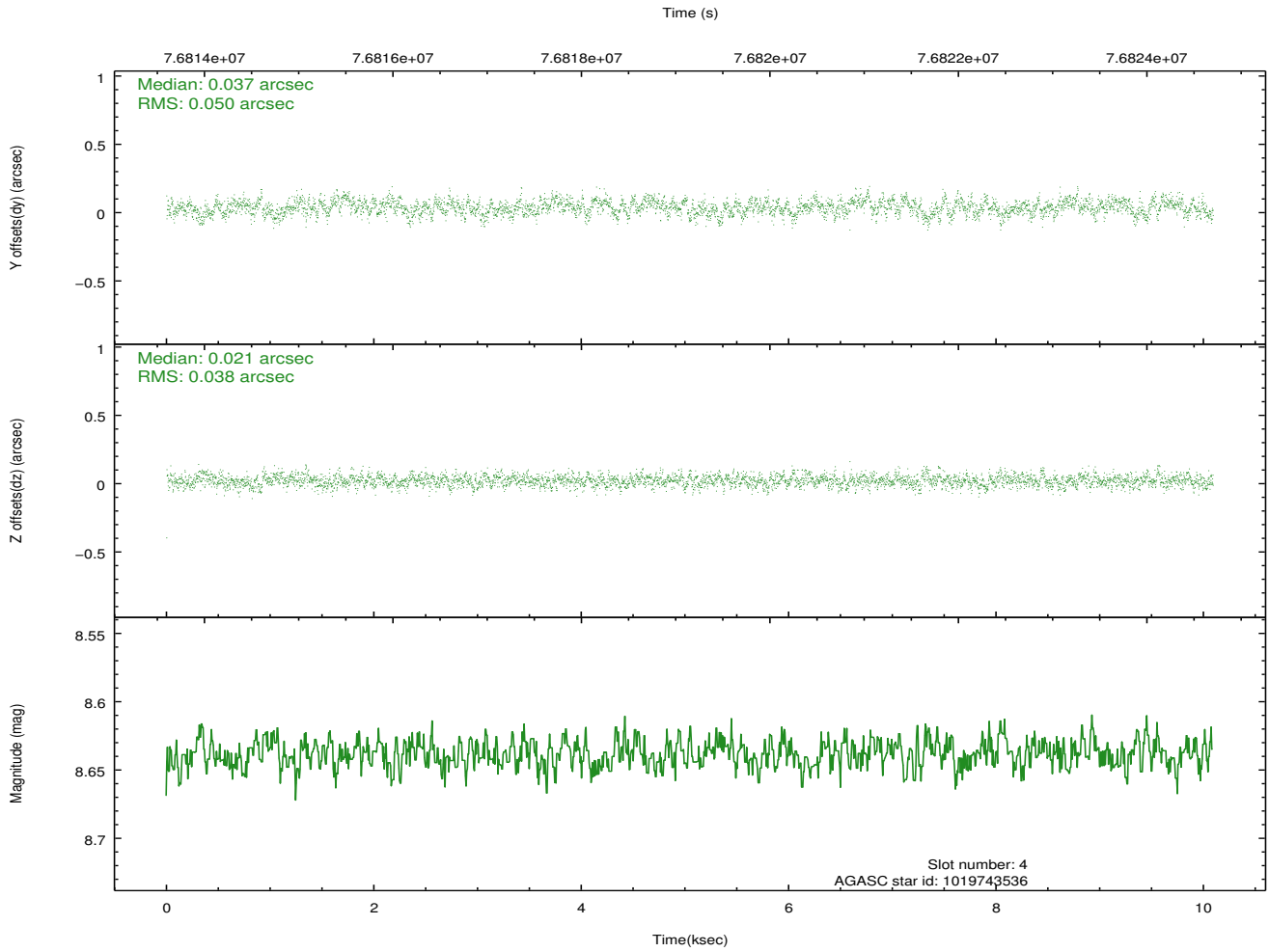
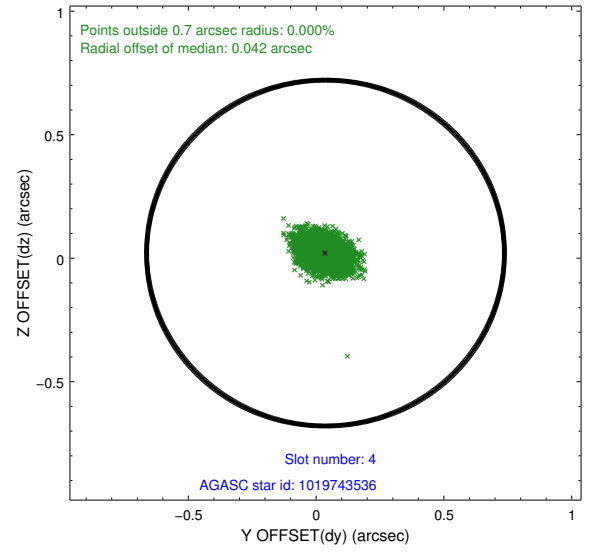
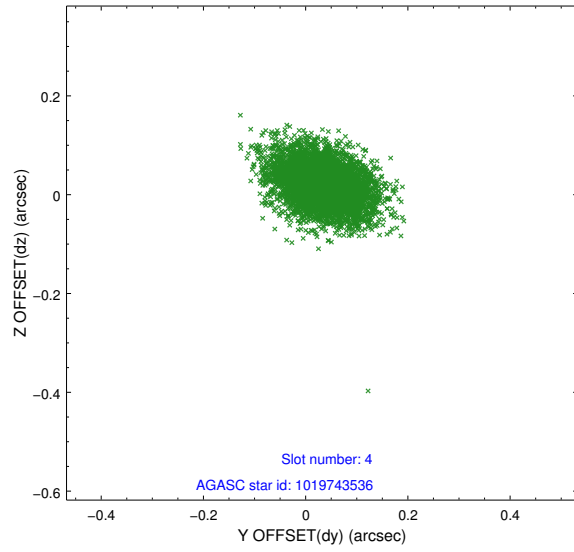
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	2462	-0.034	-0.002	0.009	0.013	0.000000	0.000000	-753.91	-1726.17
1	FID	ACIS-S-4	7.21	2462	-0.004	0.017	0.006	0.011	0.000000	0.000000	2159.15	181.80
2	FID	ACIS-S-5	7.24	2462	0.007	-0.006	0.008	0.013	0.000000	0.000000	-1806.04	176.03
3	GUIDE	1019615024	8.48	4922	-0.063	-0.090	0.066	0.109	191.349086	-41.365736	288.98	-2241.51
4	GUIDE	1019743536	8.64	4922	0.037	0.021	0.066	0.110	192.632057	-41.696442	1357.30	1255.42
5	GUIDE	1019221952	9.61	4921	-0.124	-0.043	0.104	0.173	192.906873	-41.032646	-1051.02	1935.70
6	GUIDE	1019740808	8.80	4924	0.009	0.060	0.079	0.133	192.766173	-41.251253	-254.91	1574.62
7	GUIDE	1019753224	9.20	4922	0.134	0.053	0.078	0.128	192.626894	-41.906362	2113.10	1263.40

## 2.4 Star Slots

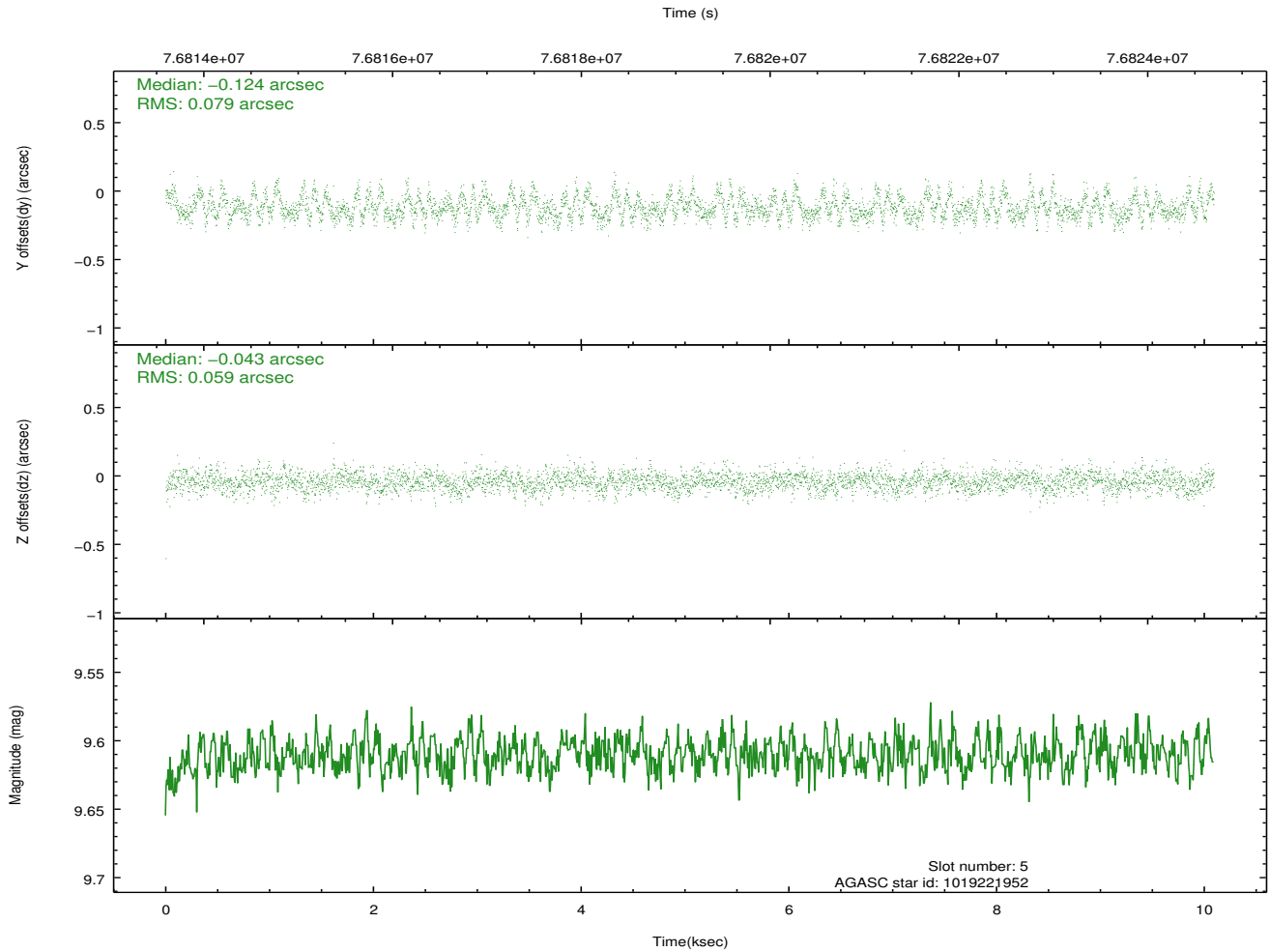
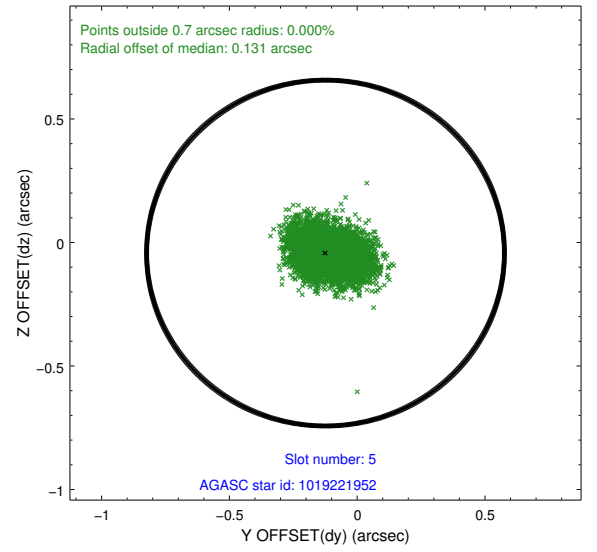
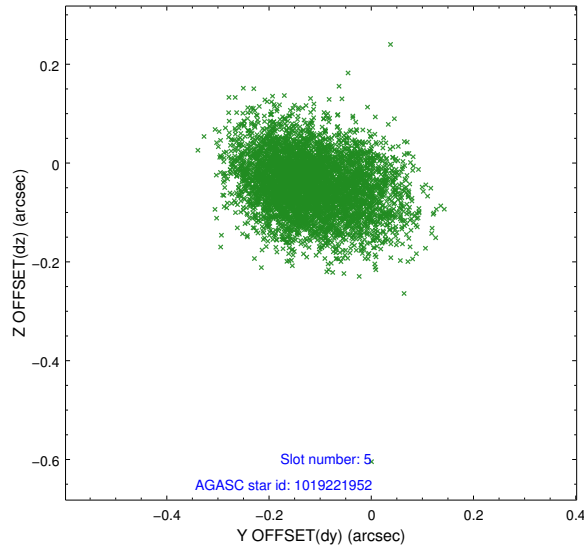
### 2.4.1 Slot 3



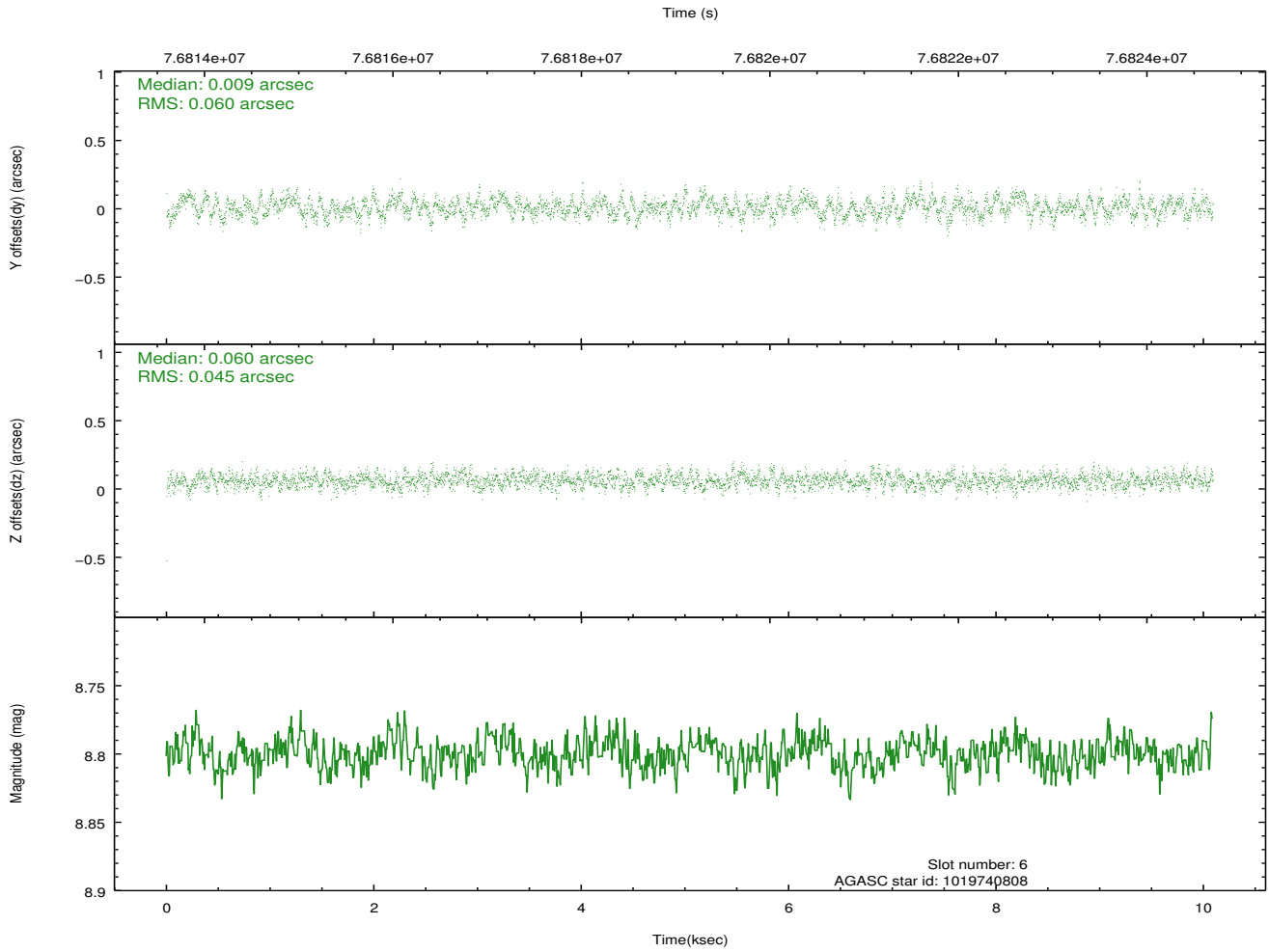
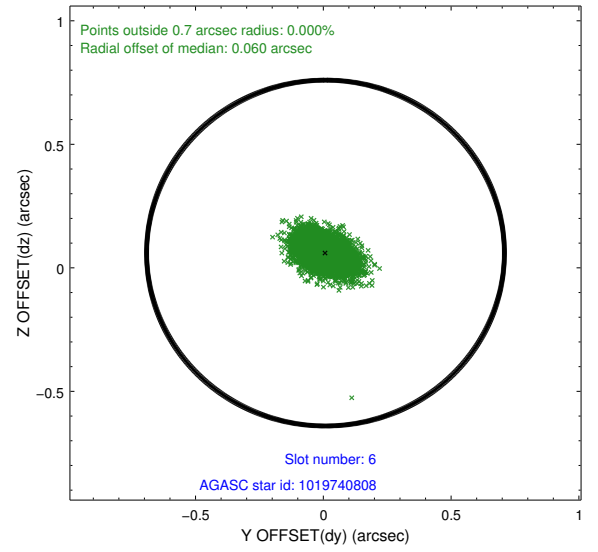
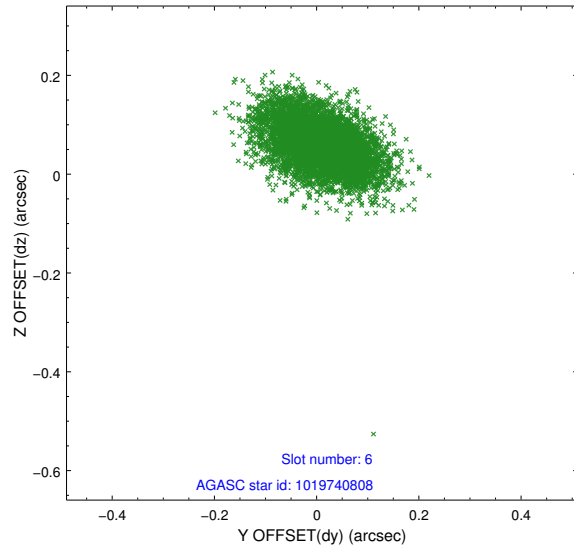
## 2.4.2 Slot 4



### 2.4.3 Slot 5

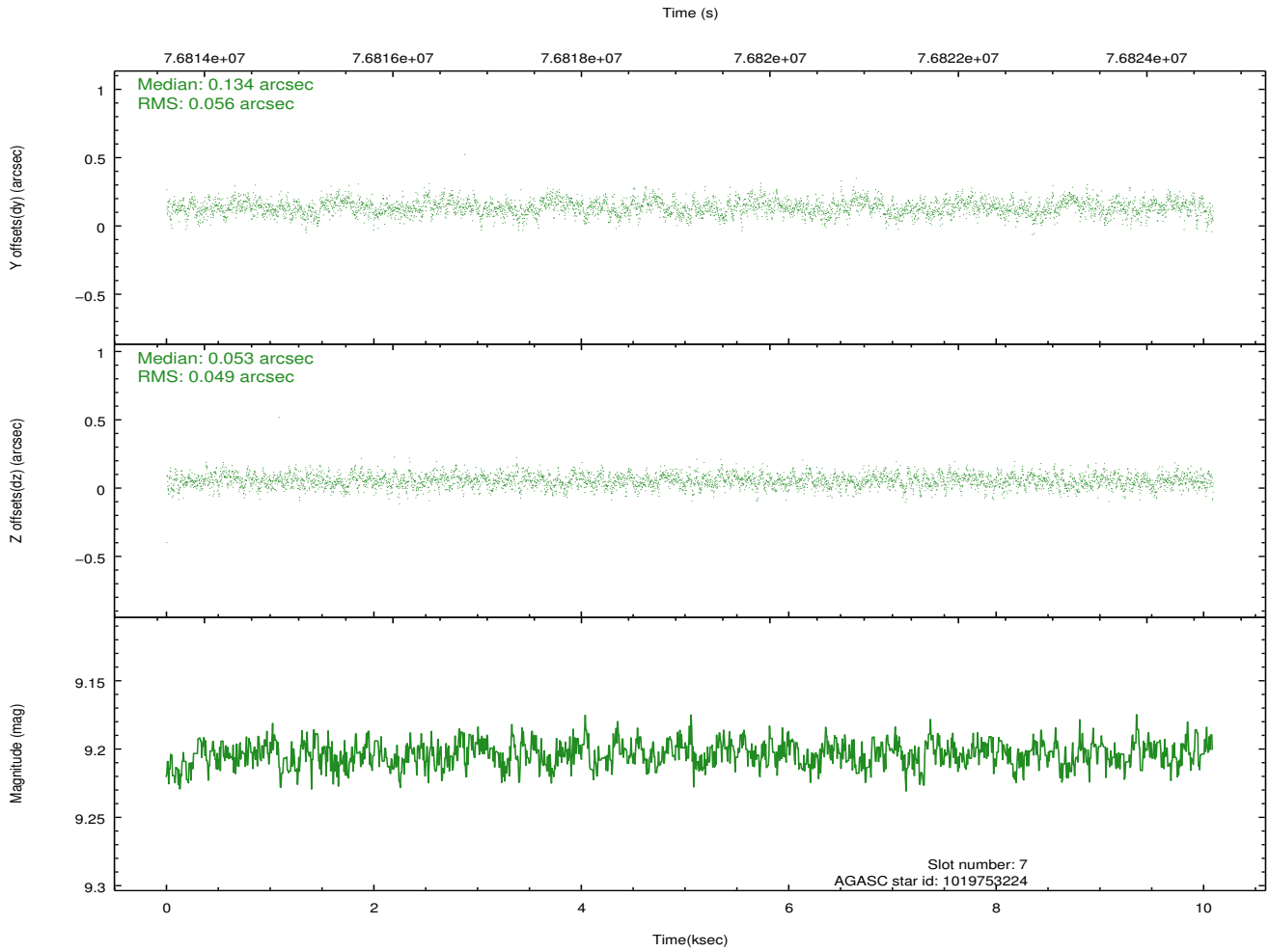
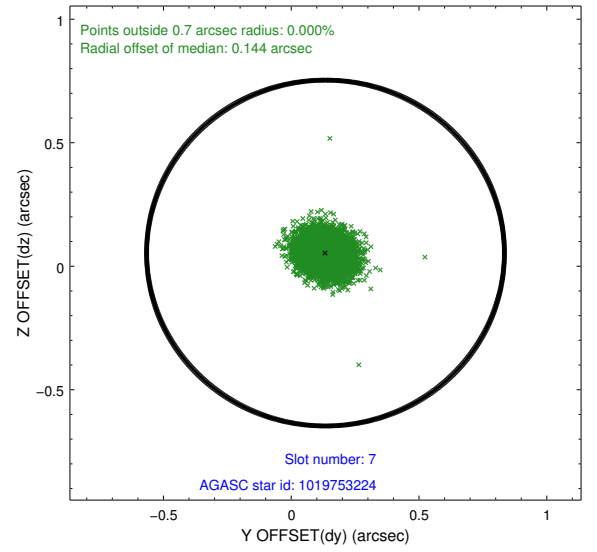
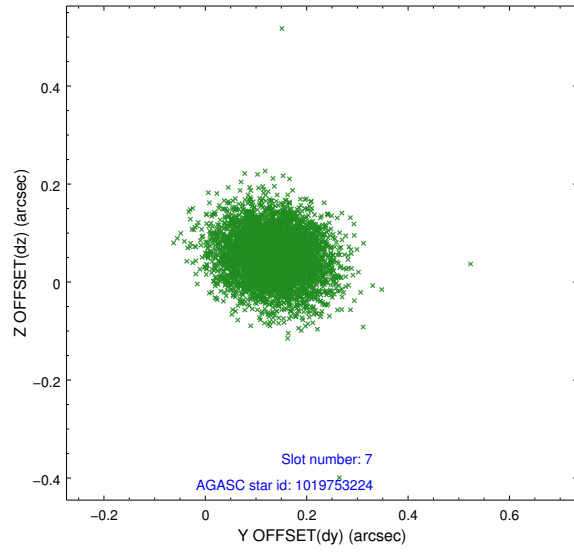


## 2.4.4 Slot 6



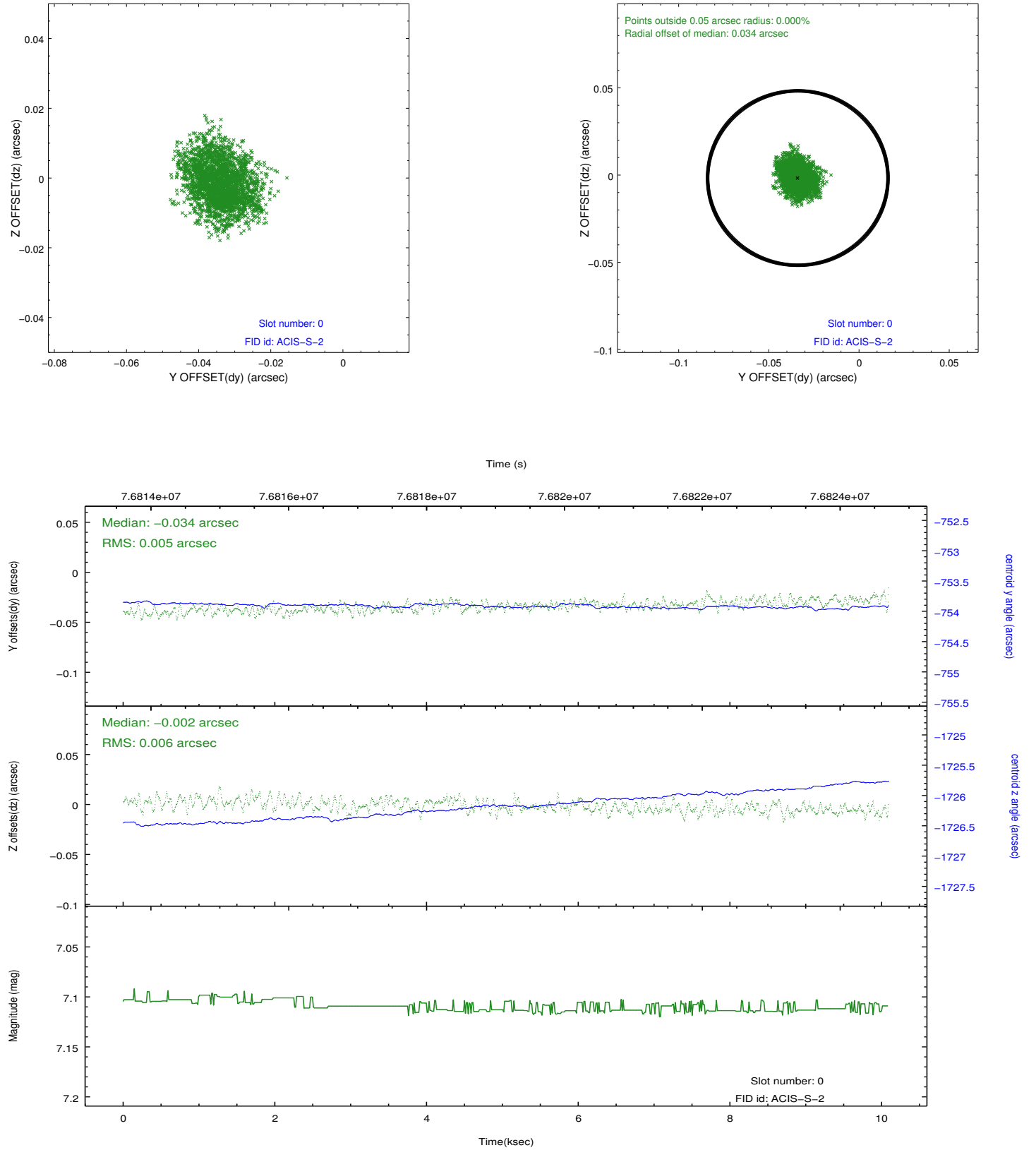


## 2.4.5 Slot 7

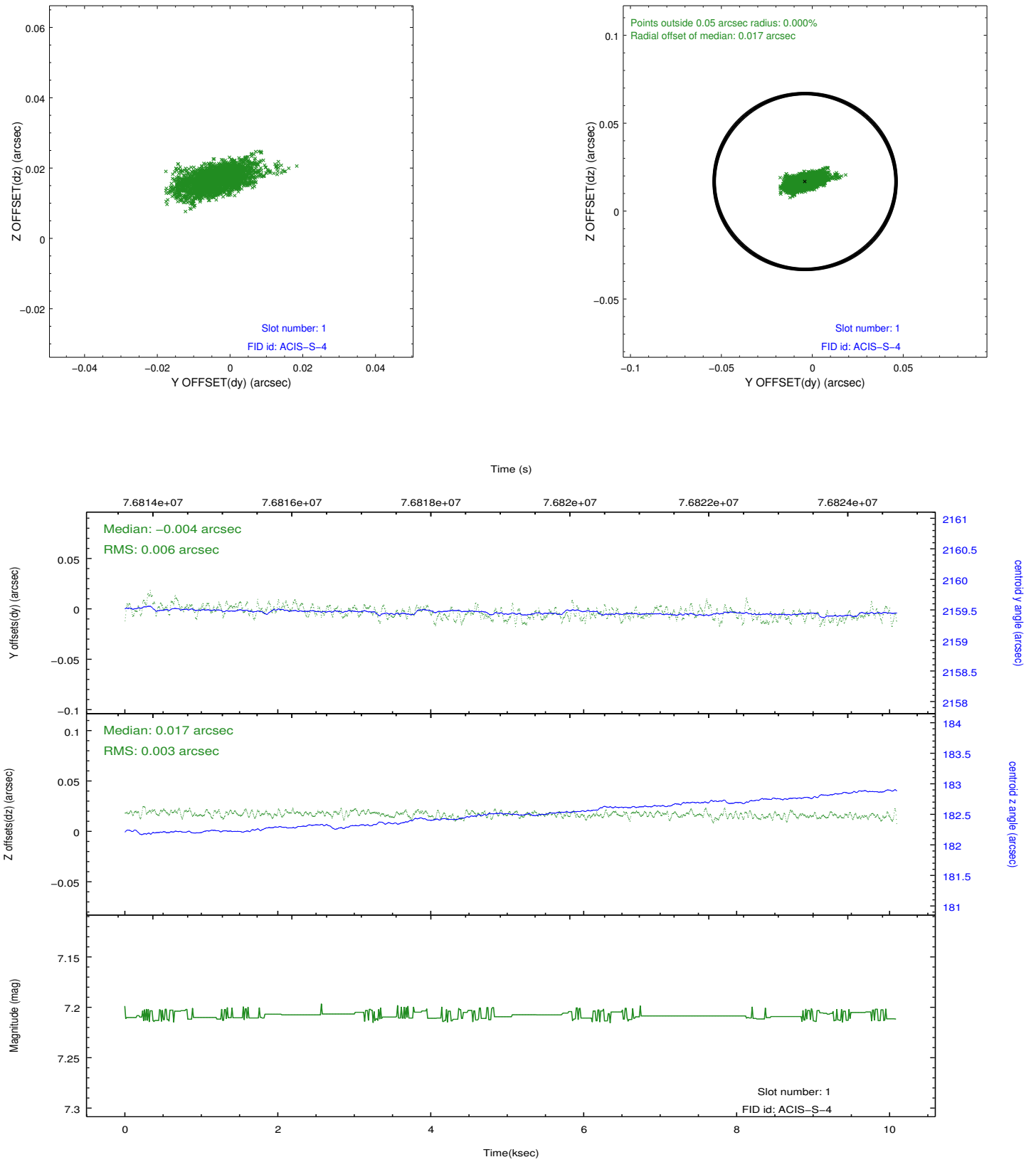


## 2.5 FID Slots

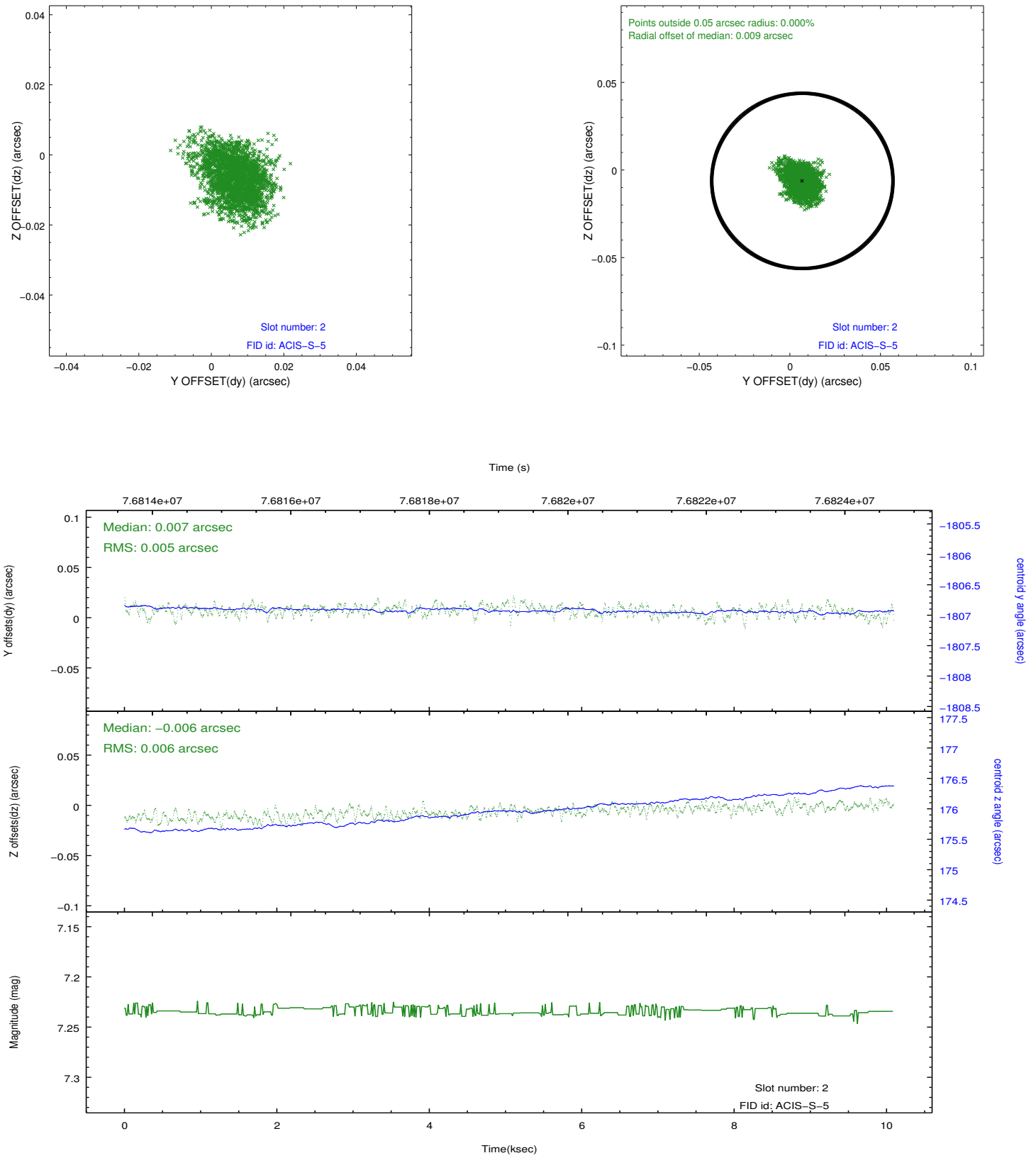
### 2.5.1 Slot 0



## 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)	2012.08.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.083

### A.2 Comments