

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4147 - L2 Version 3  
Chandra X-Ray Center

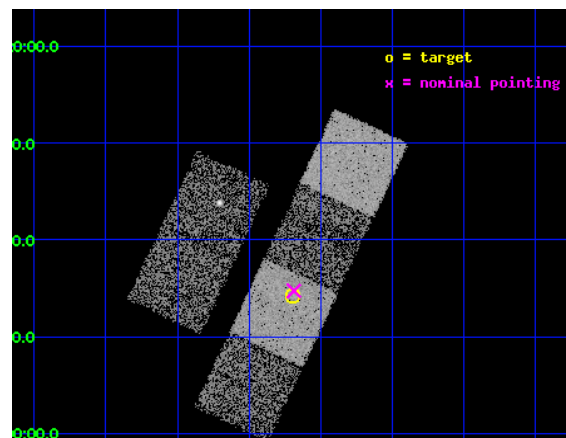
L2 Processing Date : Oct 29 2012

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# 1 Front

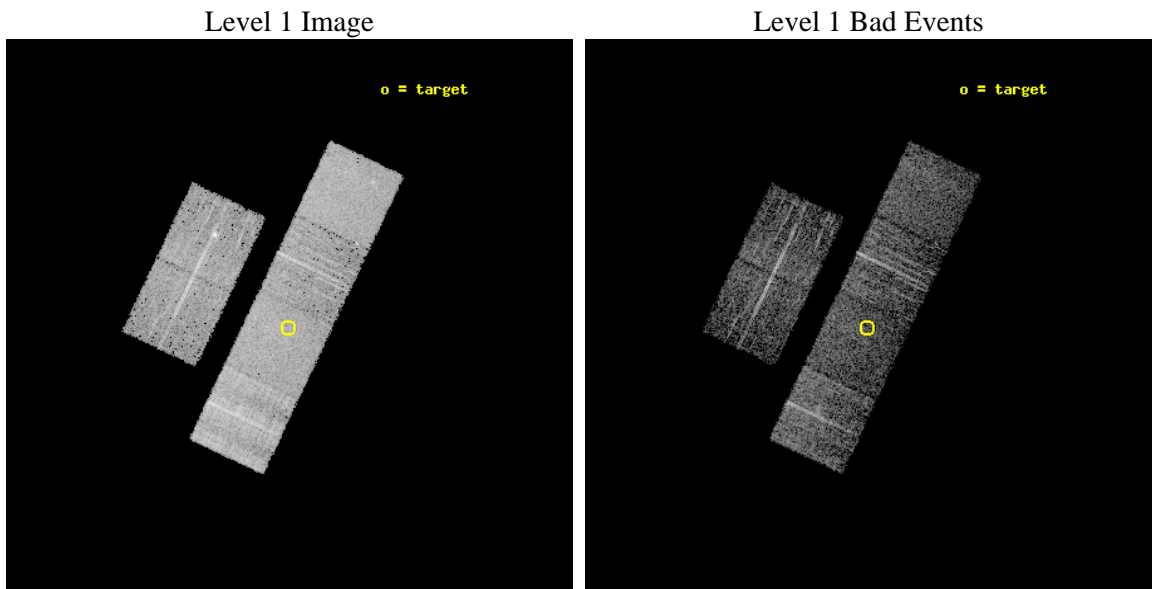
seq_num	700826	Sequence number
obs_id	4147	Observation id
title	X-RAYS FROM BROAD ABSORPTION LINE QUASARS WITH EXTREME PROPERTIES	&#160
observer	Dr. Patrick Hall	Principal investigator
object	SDSS J2215-0045	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	333.799583	Observer's specified target RA [deg]
dec_targ	-0.763861	Observer's specified target Dec [deg]
ra_nom	333.79698393662	Nominal RA [deg]
dec_nom	-0.75453788792719	Nominal Dec [deg]
roll_nom	115.45523158535	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4639.9999827147	Sum of GTIs [s]
livetime	4581.245509061	Livetime [s]
ontime2	4633.5181119144	Sum of GTIs [s]
ontime3	4639.9999827147	Sum of GTIs [s]
ontime5	4639.9999827147	Sum of GTIs [s]
ontime6	4636.758992523	Sum of GTIs [s]
ontime7	4639.9999827147	Sum of GTIs [s]
ontime8	4636.7432085574	Sum of GTIs [s]
l2events	46645	Number of level 2 events



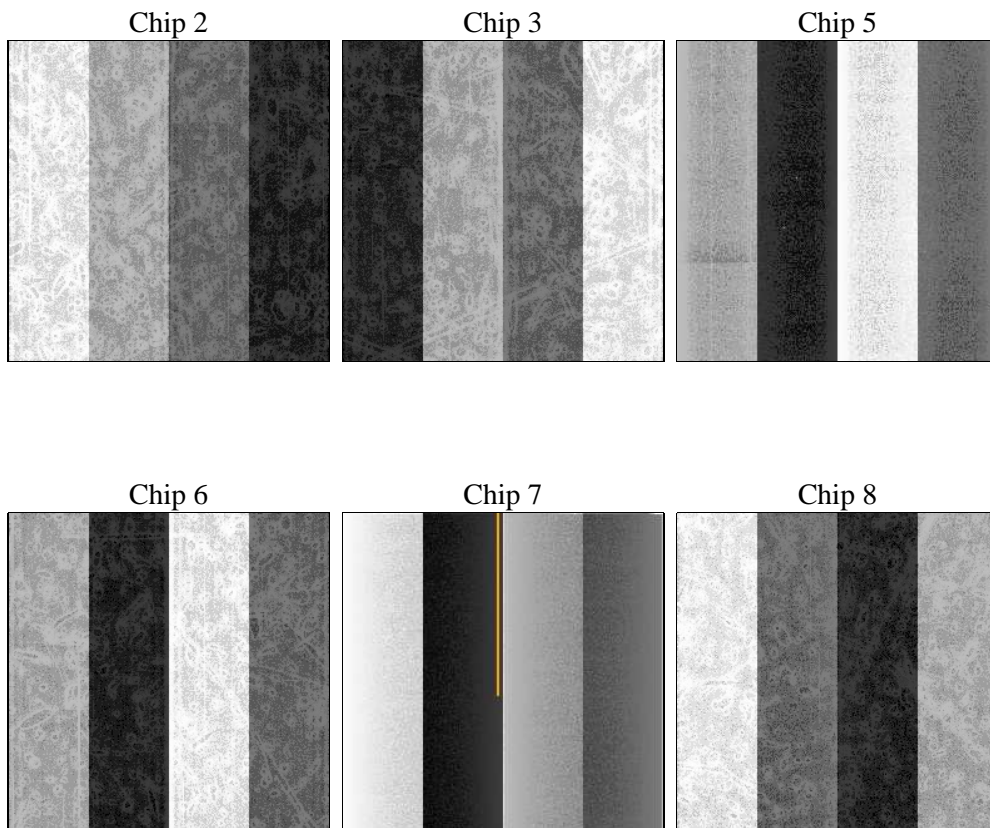
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4886.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	4639.9999827147	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	4633.5181119144	Sum of GTIs [s]
date	2012-10-29T17:44:20	Date and time of file creation	ontime3	4639.9999827147	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	4639.9999827147	Sum of GTIs [s]
			ontime6	4636.758992523	Sum of GTIs [s]
			ontime7	4639.9999827147	Sum of GTIs [s]
			ontime8	4636.7432085574	Sum of GTIs [s]
			l1events	213355	Number of level 1 events

### 2.1.4 Events

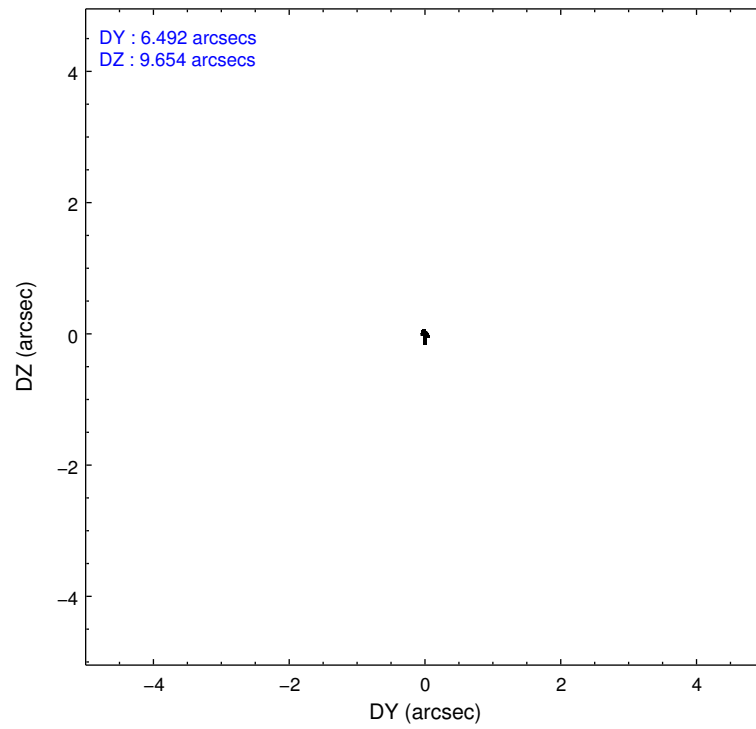
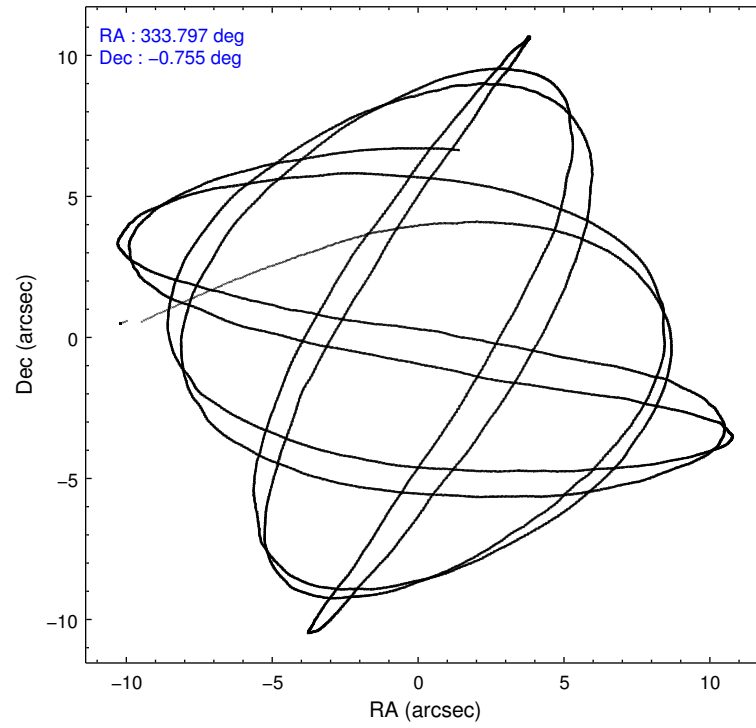
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	30496	26823	40184	30692	36600	48560	grade 0 events	2407	1619	1427	1673	1377	5717
rejected events	25656	22911	22409	26612	21427	31546		7%	6%	3%	5%	3%	11%
rejected %	84%	85%	55%	86%	58%	64%	grade 1 events	24	18	76	17	34	67
								0%	0%	0%	0%	0%	0%
							grade 2 events	1005	903	5281	992	3105	2632
								3%	3%	13%	3%	8%	5%
							grade 3 events	337	321	784	325	1343	2704
								1%	1%	1%	1%	3%	5%
							grade 4 events	383	316	790	321	1353	2595
								1%	1%	1%	1%	3%	5%
							grade 5 events	1049	1159	2962	1224	3367	1719
								3%	4%	7%	3%	9%	3%
							grade 6 events	710	756	9505	772	8009	3375
								2%	2%	23%	2%	21%	6%
							grade 7 events	24581	21731	19359	25368	18012	29751
								80%	81%	48%	82%	49%	61%

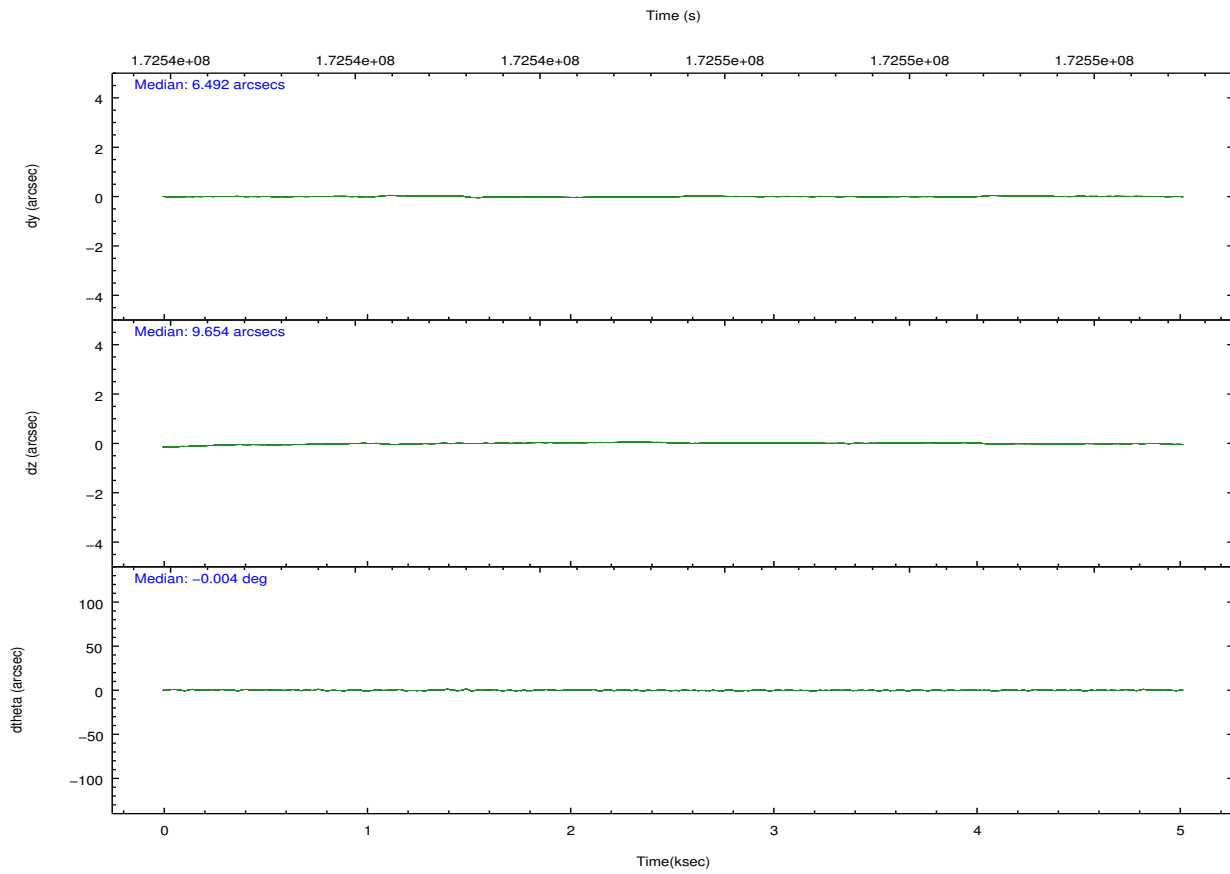
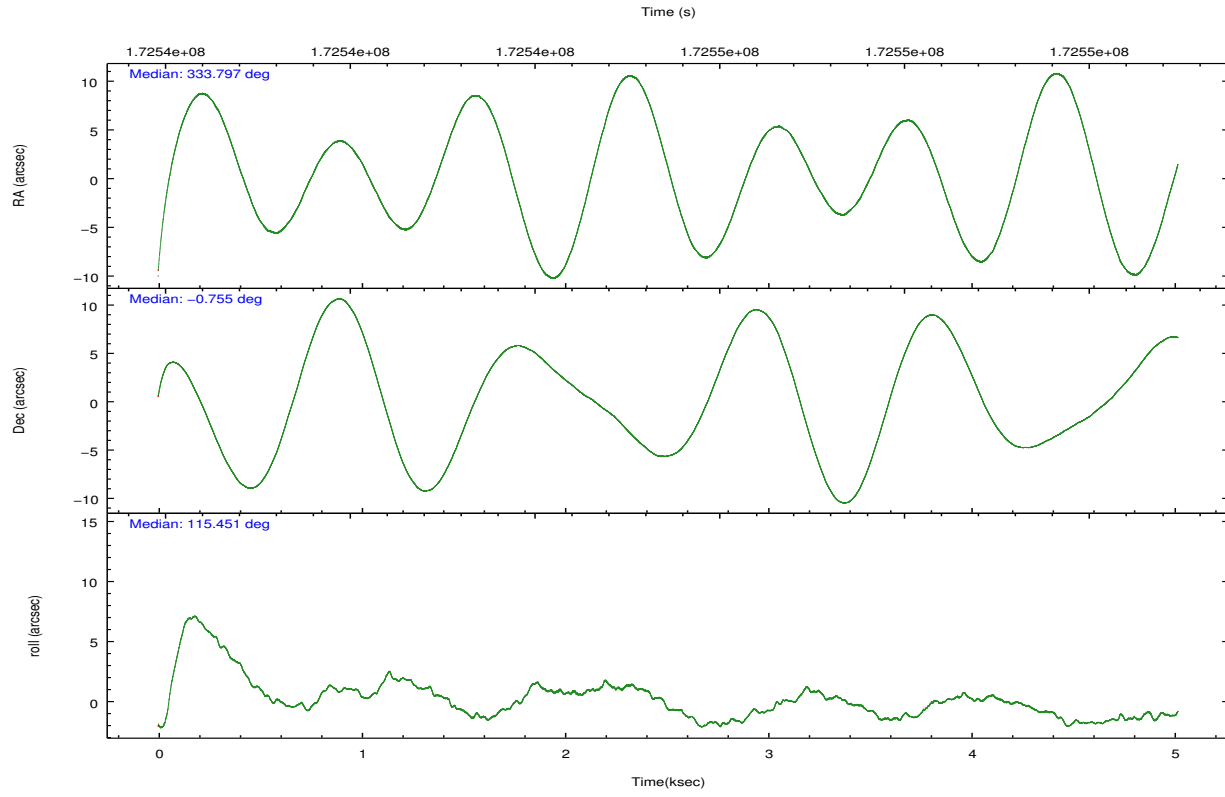


## 2.2 Compared Parameters

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	333.819659	333.7969839366166	Subarray requested	NONE	NONE
[deg] Pointing Dec	-0.769667	-0.7545378879271905	Alternating exposures requested	N	N
[deg] Pointing Roll	115.298921	115.4552315853457	[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)	172543343.184000	172542333.87771			
Observation start date	2003-06-21T00:41:19	2003-06-21T00:25:33			
[s] Observation end time (MET)	172548229.184000	172548949.74049			
Observation end date	2003-06-21T02:02:45	2003-06-21T02:15:49			
Read mode	TIMED	TIMED			

## 2.3 Aspect



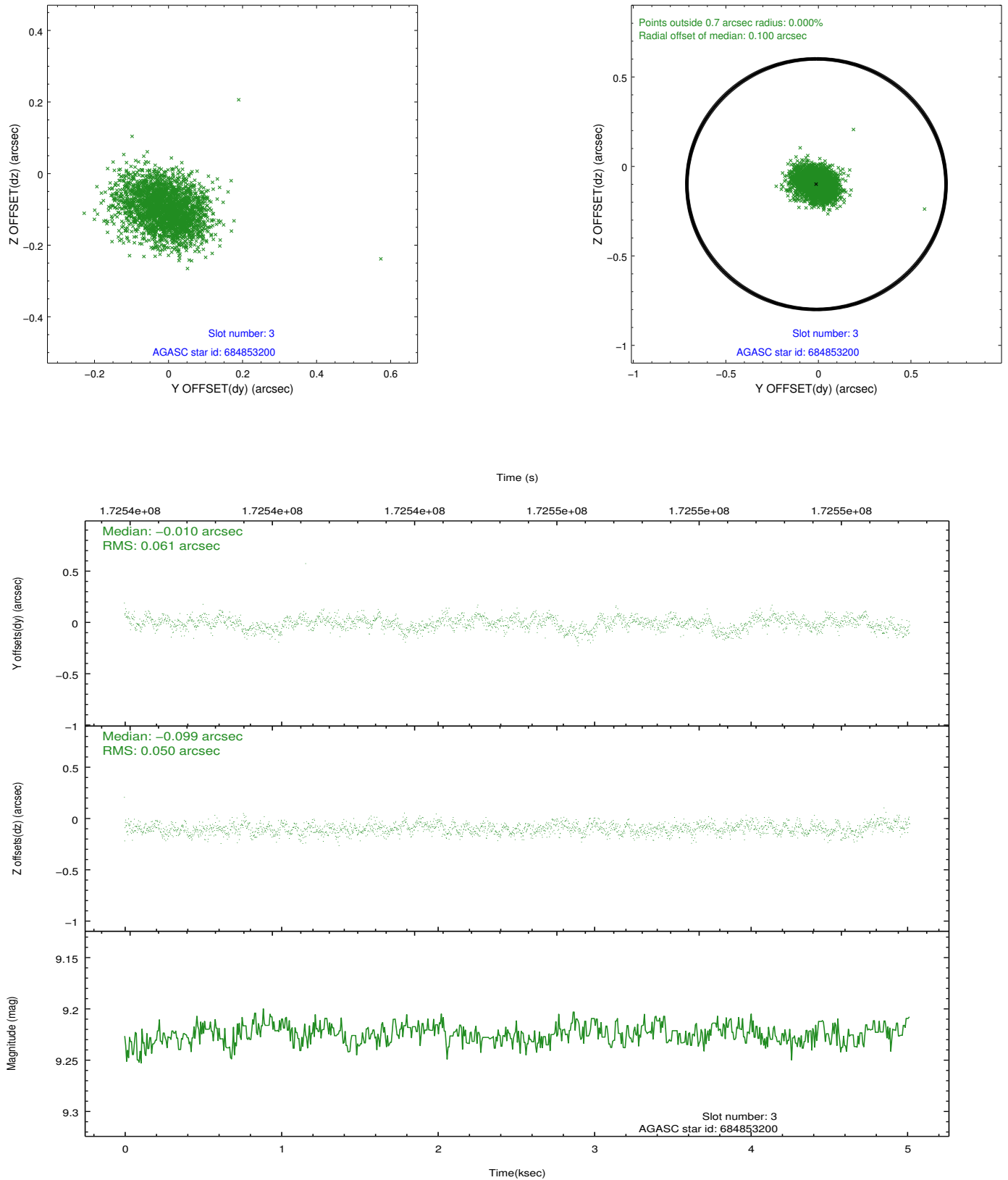


### Slot Statistics

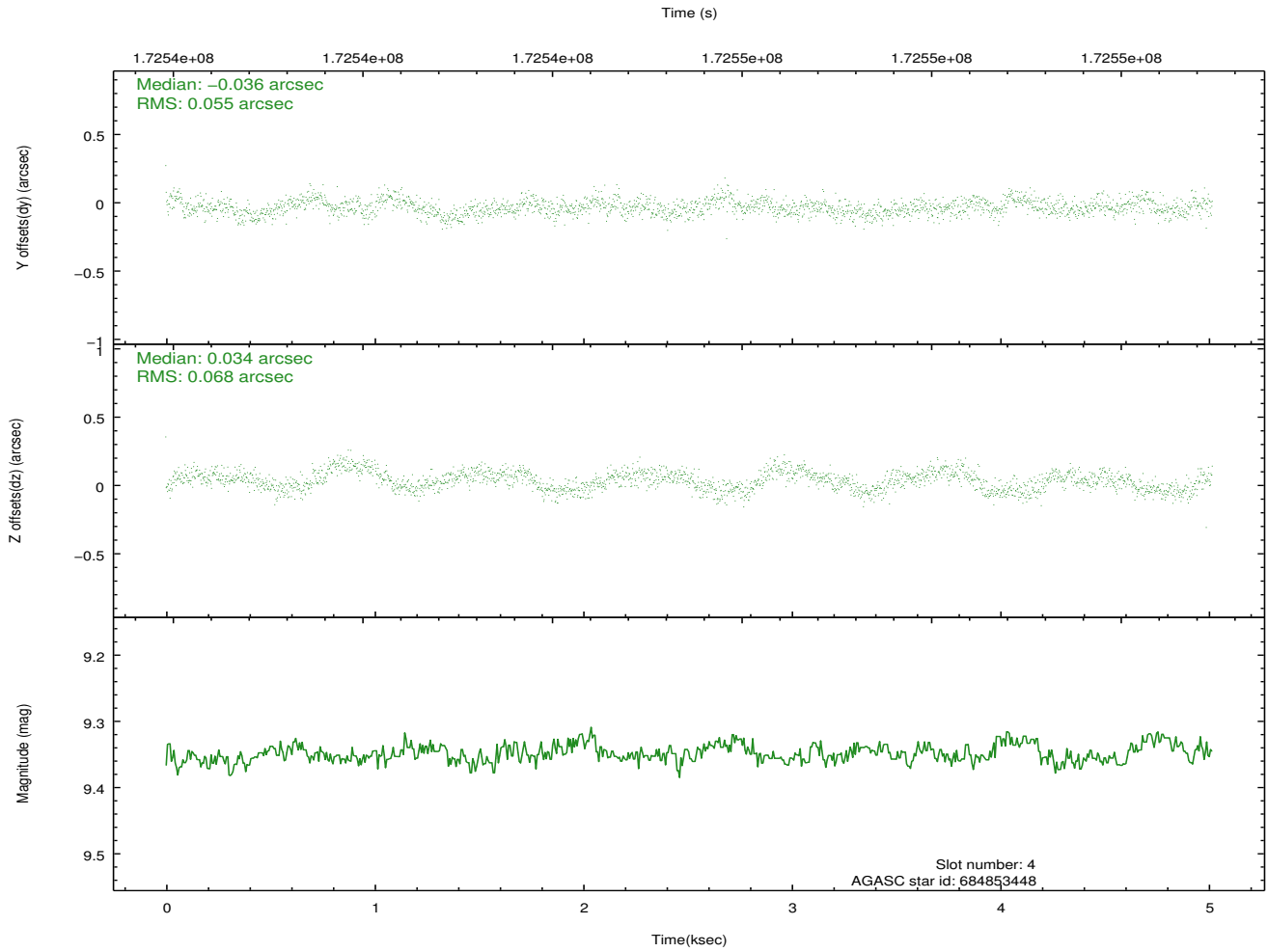
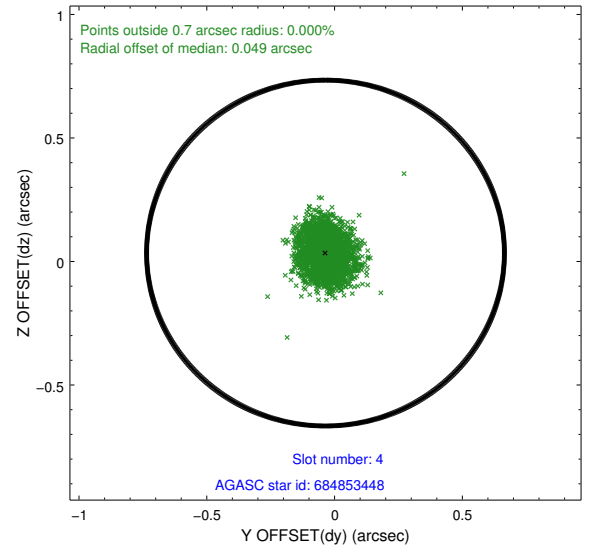
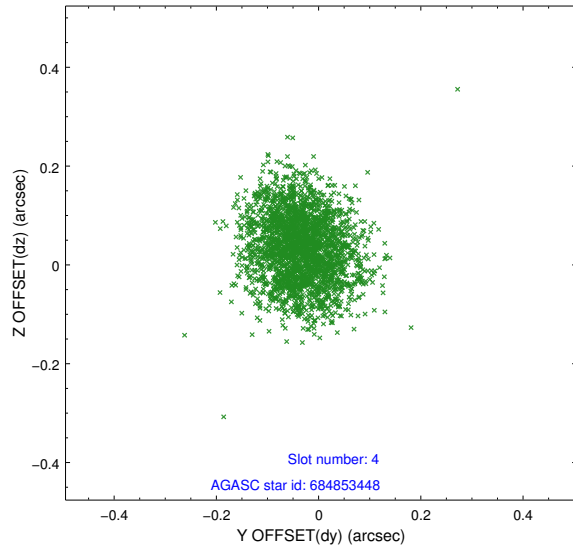
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1224	-0.058	-0.037	0.005	0.009	0.000000	0.000000	-759.27	-1730.93
1	FID	ACIS-S-4	7.21	1225	0.037	0.035	0.005	0.009	0.000000	0.000000	2153.53	176.40
2	FID	ACIS-S-6	7.35	1225	-0.007	0.009	0.006	0.011	0.000000	0.000000	404.30	815.13
3	GUIDE	684853200	9.22	2449	-0.010	-0.099	0.083	0.137	333.536858	-0.658666	796.44	749.64
4	GUIDE	684853448	9.35	2445	-0.036	0.034	0.093	0.147	333.686956	-0.382363	1465.17	-163.58
5	GUIDE	684853480	9.23	2448	-0.074	-0.220	0.075	0.123	333.348189	-0.795562	641.60	1574.06
6	GUIDE	684859784	9.13	2448	0.154	0.182	0.086	0.135	334.538556	-1.122310	-2253.58	-1796.62
7	GUIDE	73279648	9.45	2444	-0.030	0.103	0.129	0.219	333.975275	0.037033	2385.69	-1748.04

## 2.4 Star Slots

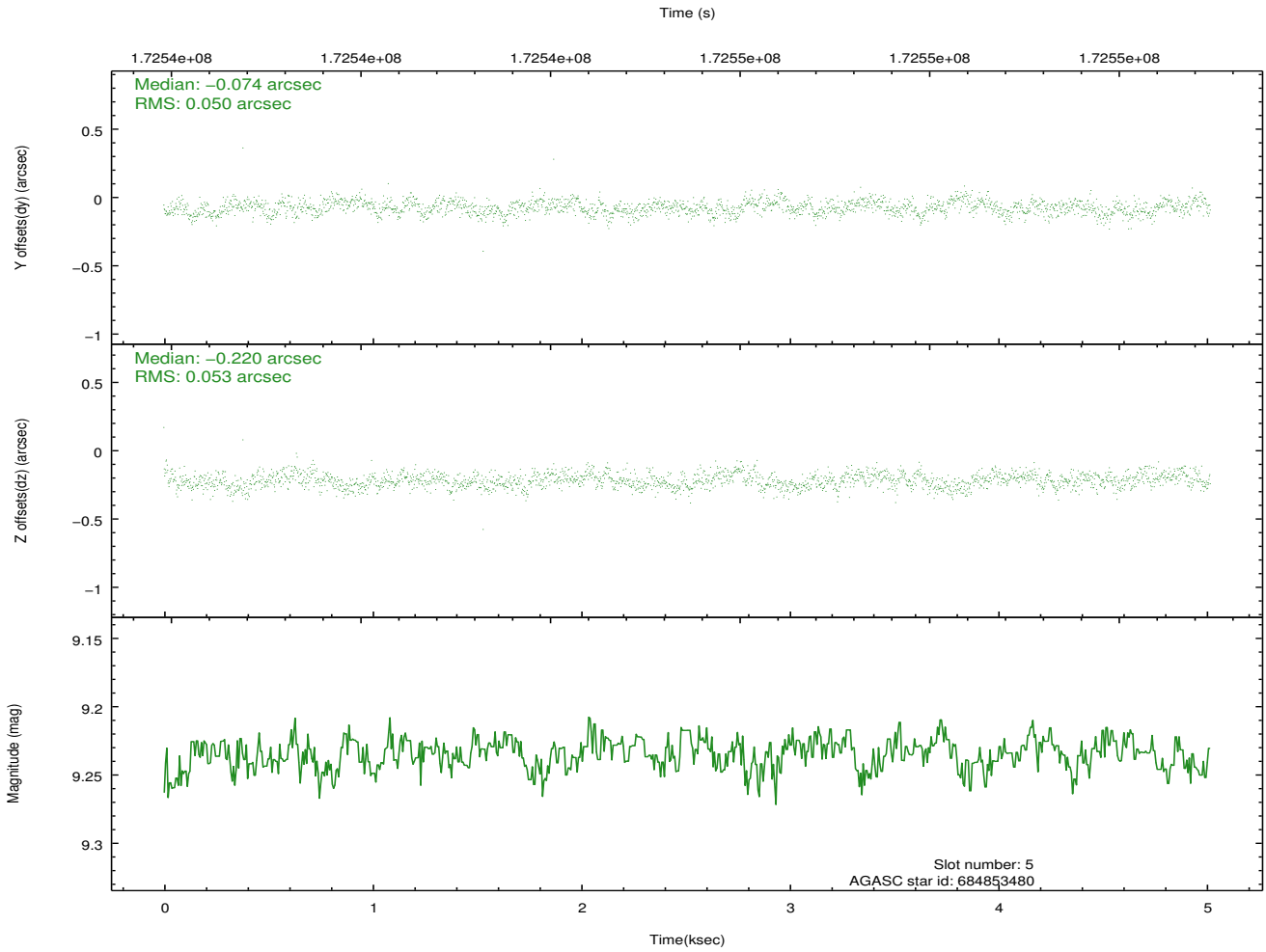
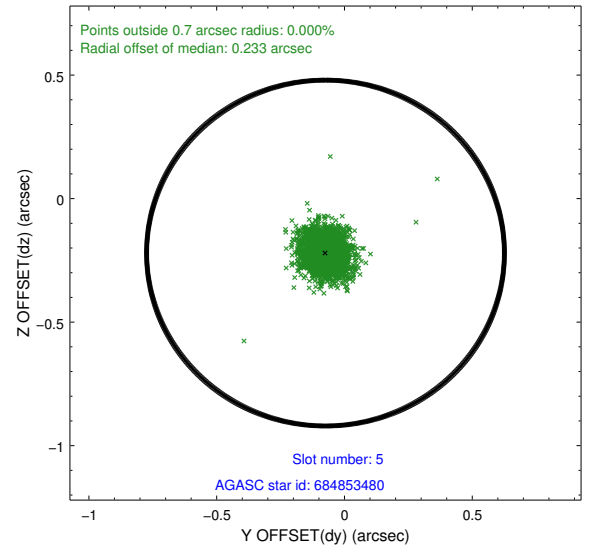
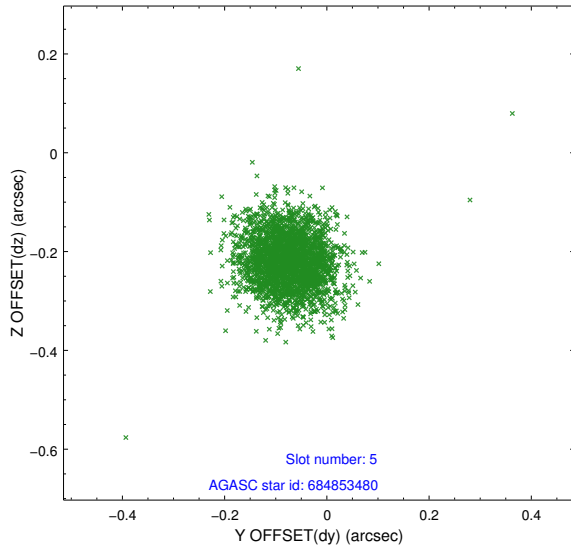
### 2.4.1 Slot 3



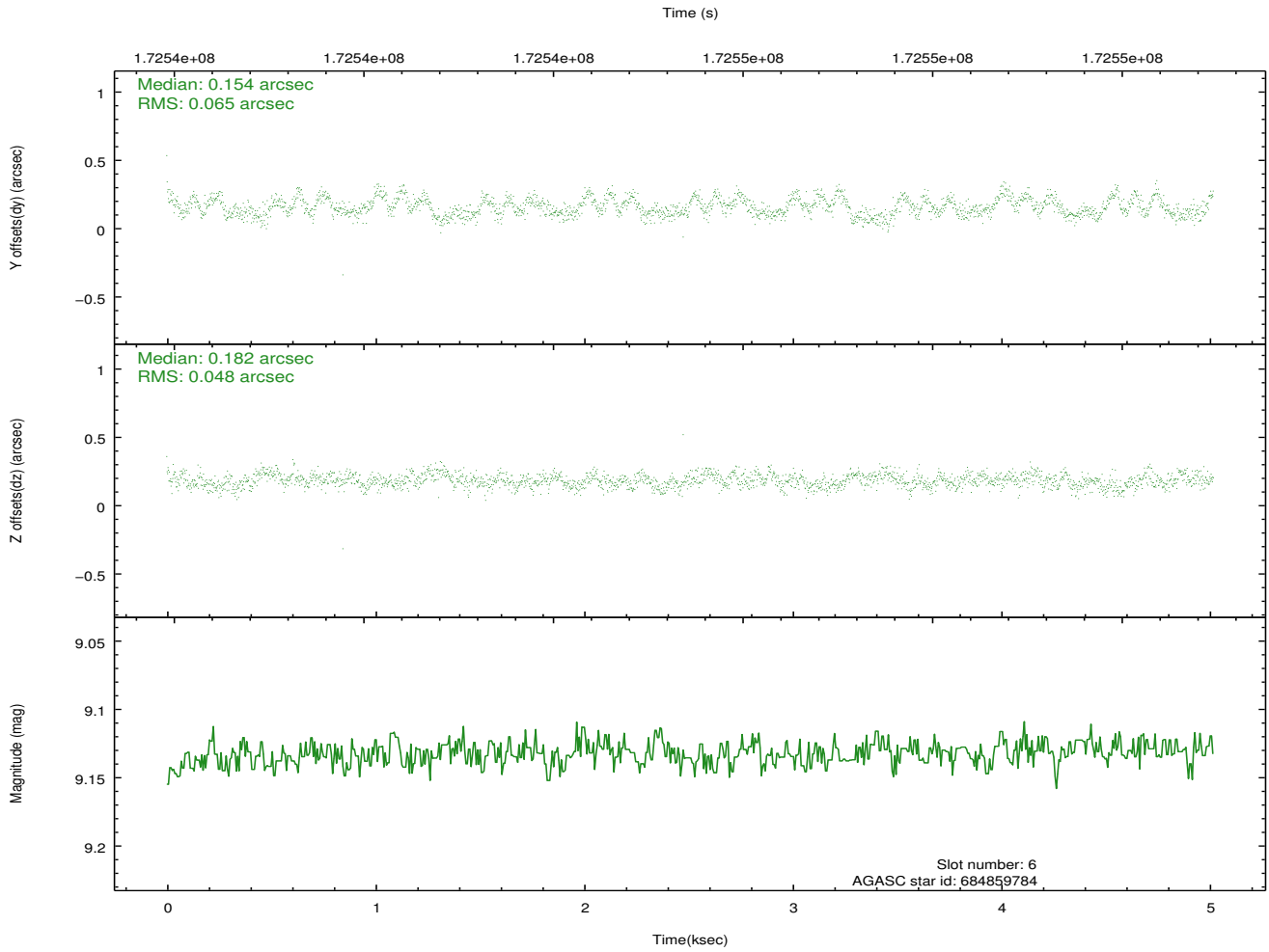
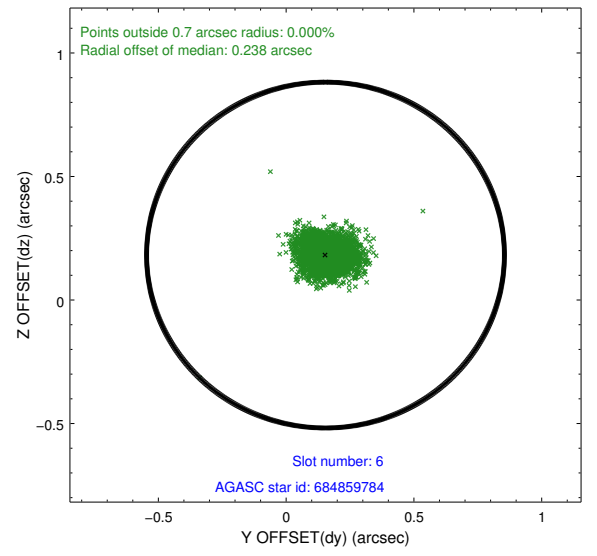
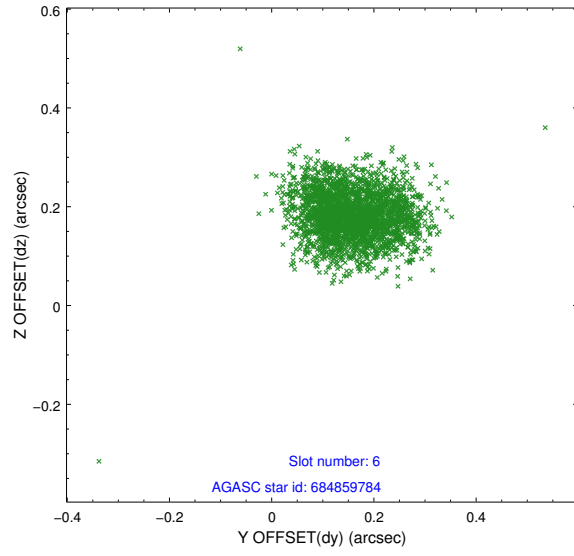
## 2.4.2 Slot 4



### 2.4.3 Slot 5

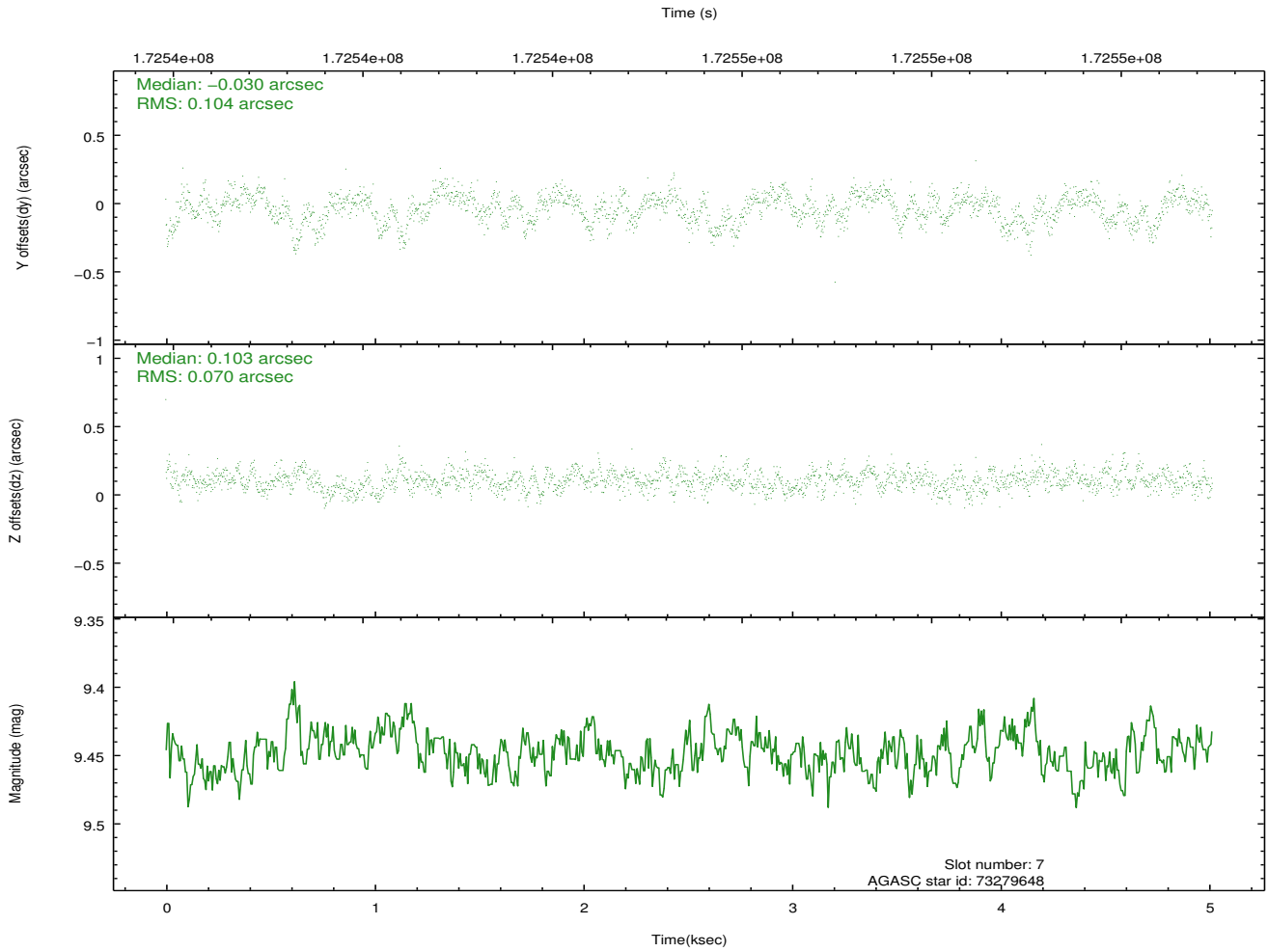
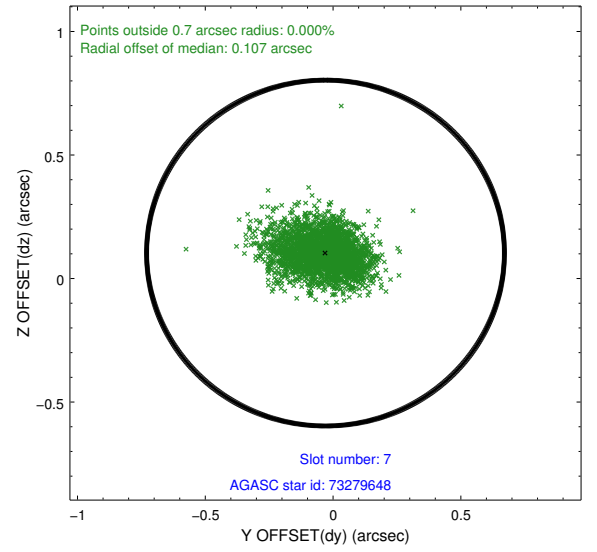
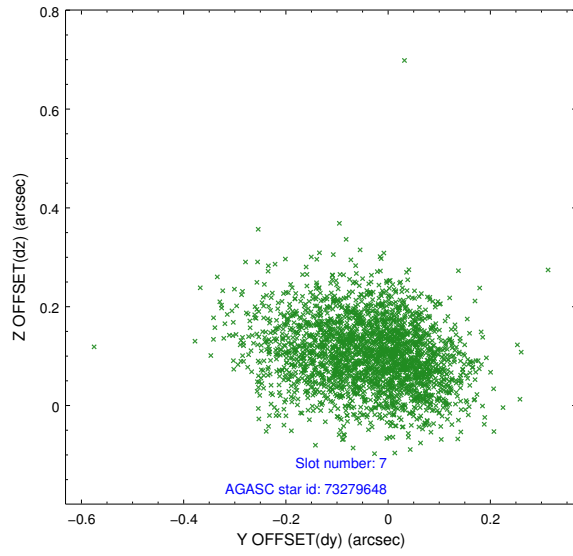


## 2.4.4 Slot 6



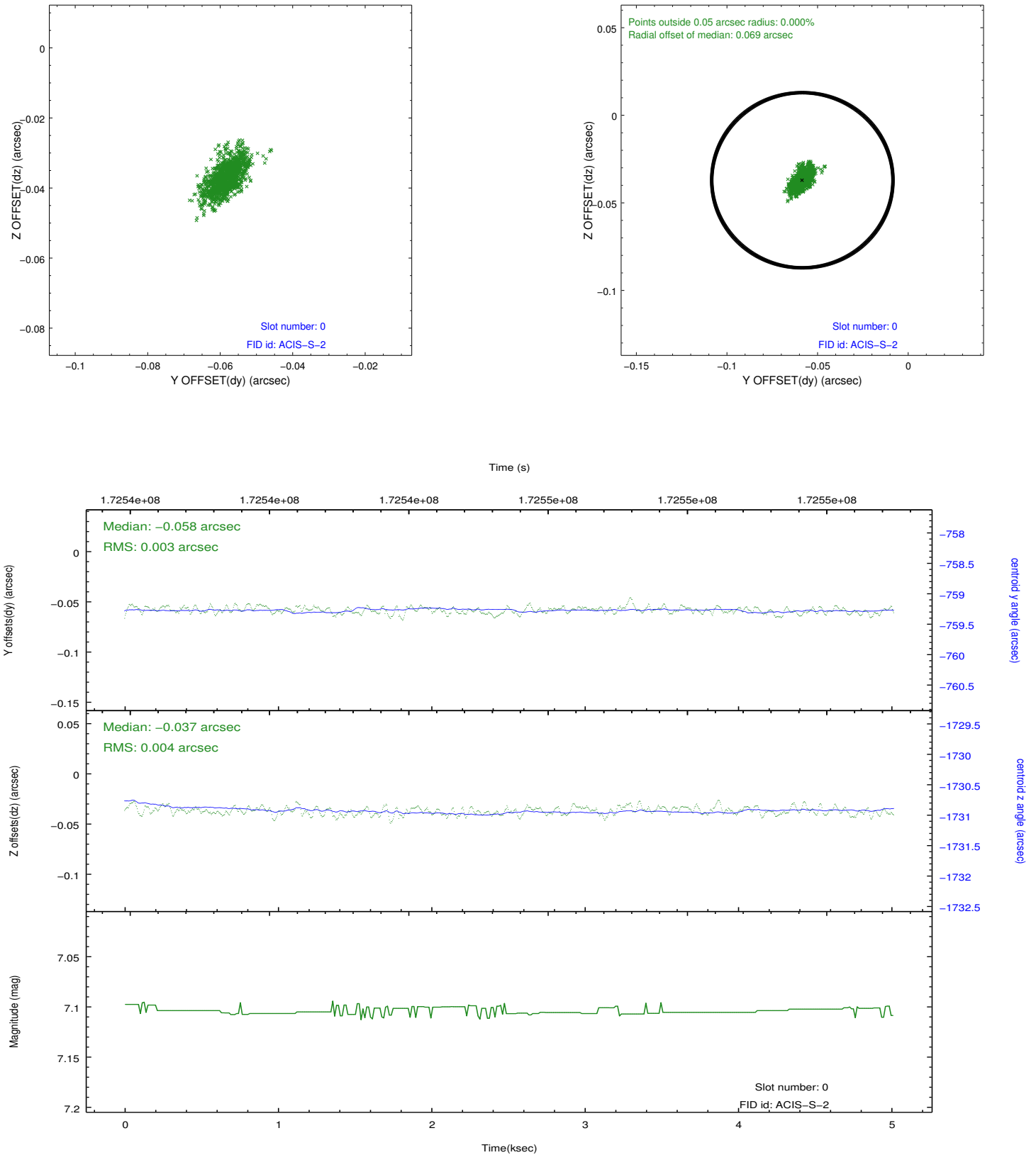


## 2.4.5 Slot 7

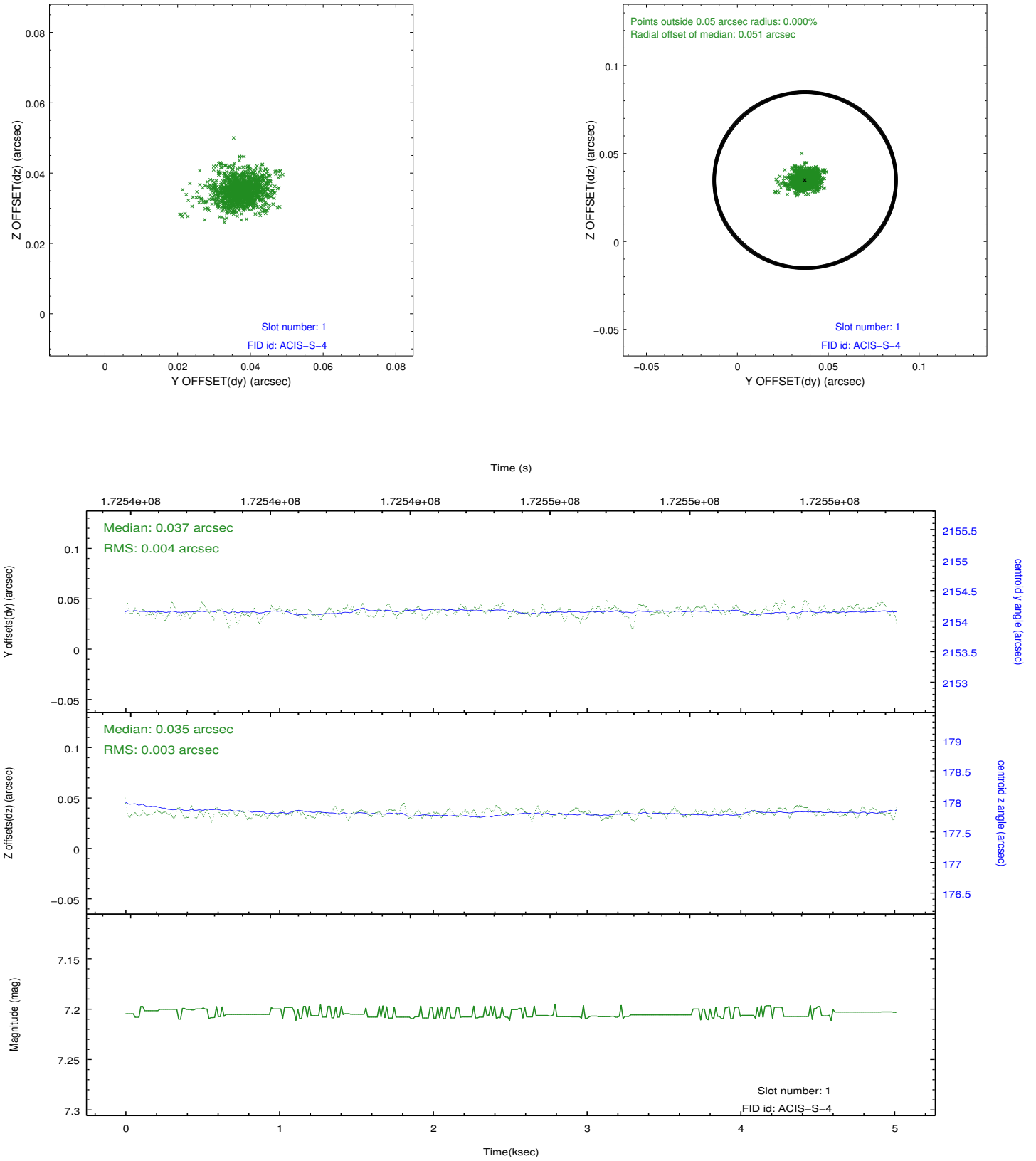


## 2.5 FID Slots

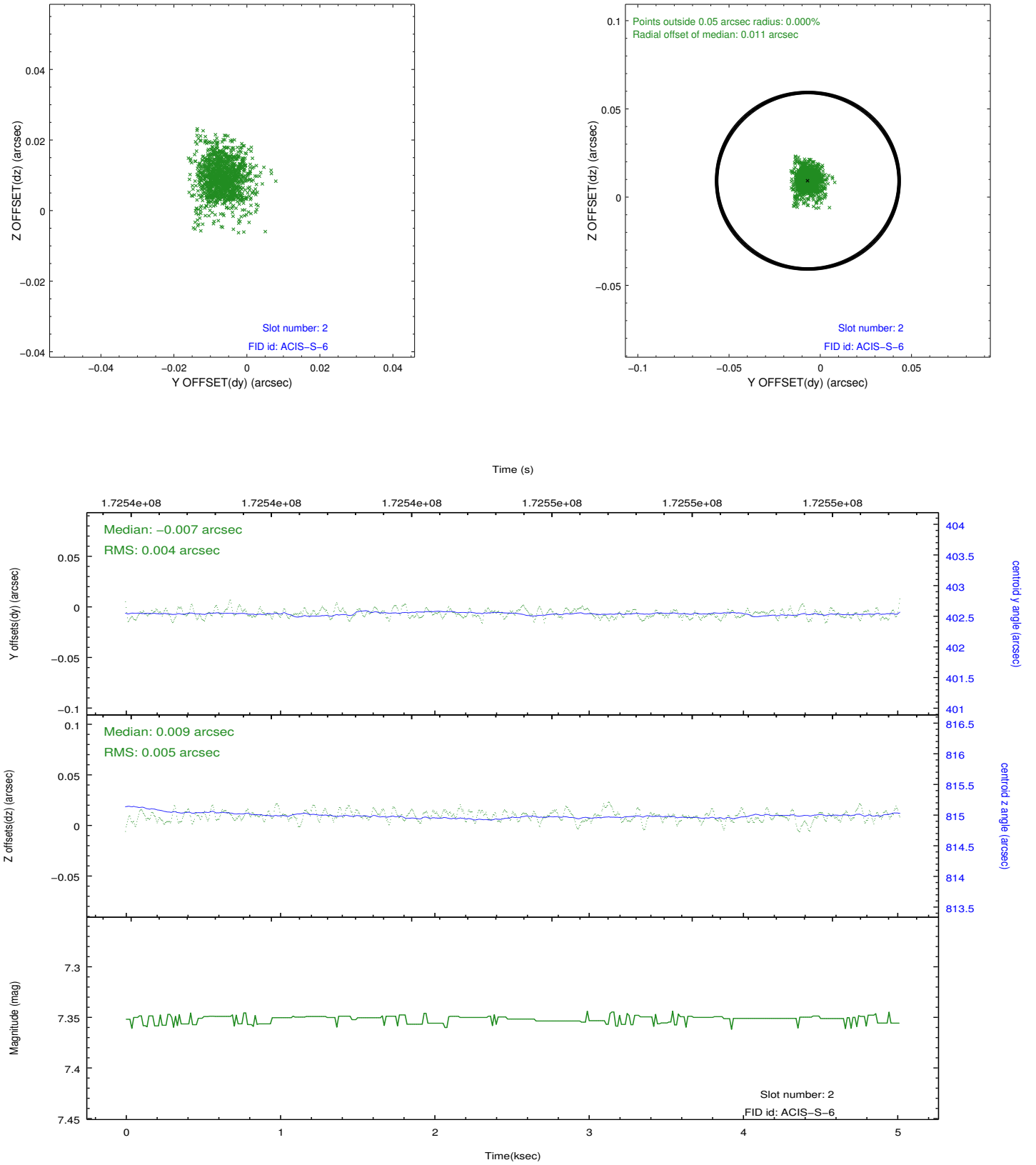
### 2.5.1 Slot 0



## 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)	2012.11.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.643

### A.2 Comments