

# V&V Reference Report

## L2 ASCDS Version : 8.4.3.1

Observation 8448 - L2 Version 2  
Chandra X-Ray Center

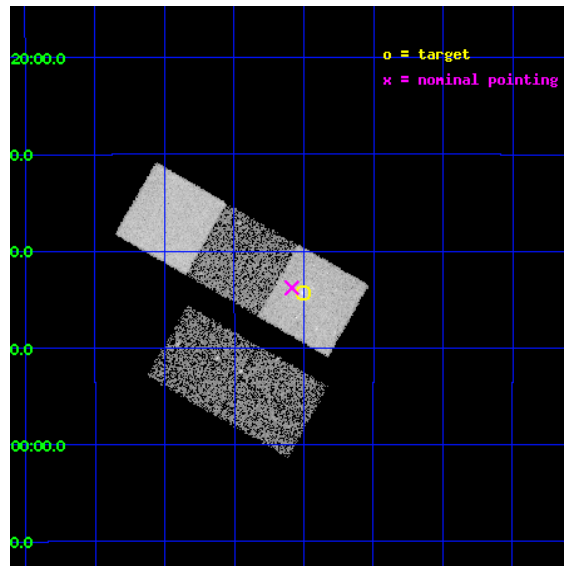
L2 Processing Date : Apr 11 2012

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# 1 Front

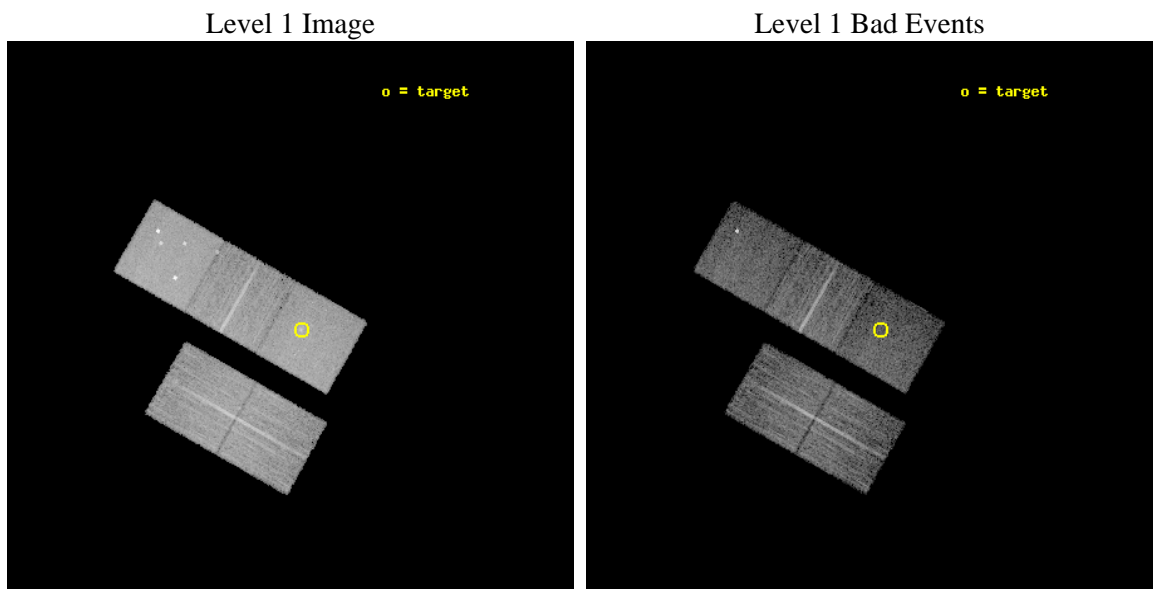
seq_num	600500	Sequence number
obs_id	8448	Observation id
title	Resolving the Dark Matter in a Normal Elliptical Galaxy	Proposal t
observer	Dr Philip Humphrey	Principal investigator
object	NGC 720	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	28.252083	Observer's specified target RA [deg]
dec_targ	-13.738611	Observer's specified target Dec [deg]
ra_nom	28.271493860972	Nominal RA [deg]
dec_nom	-13.729904599582	Nominal Dec [deg]
roll_nom	29.661213122631	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8162.3000627756	Sum of GTIs [s]
livetime	8055.6536034576	Livetime [s]
ontime2	8159.1590625048	Sum of GTIs [s]
ontime3	8162.3000627756	Sum of GTIs [s]
ontime5	8162.3000627756	Sum of GTIs [s]
ontime6	8159.1590625048	Sum of GTIs [s]
ontime7	8162.3000627756	Sum of GTIs [s]
l2events	89180	Number of level 2 events



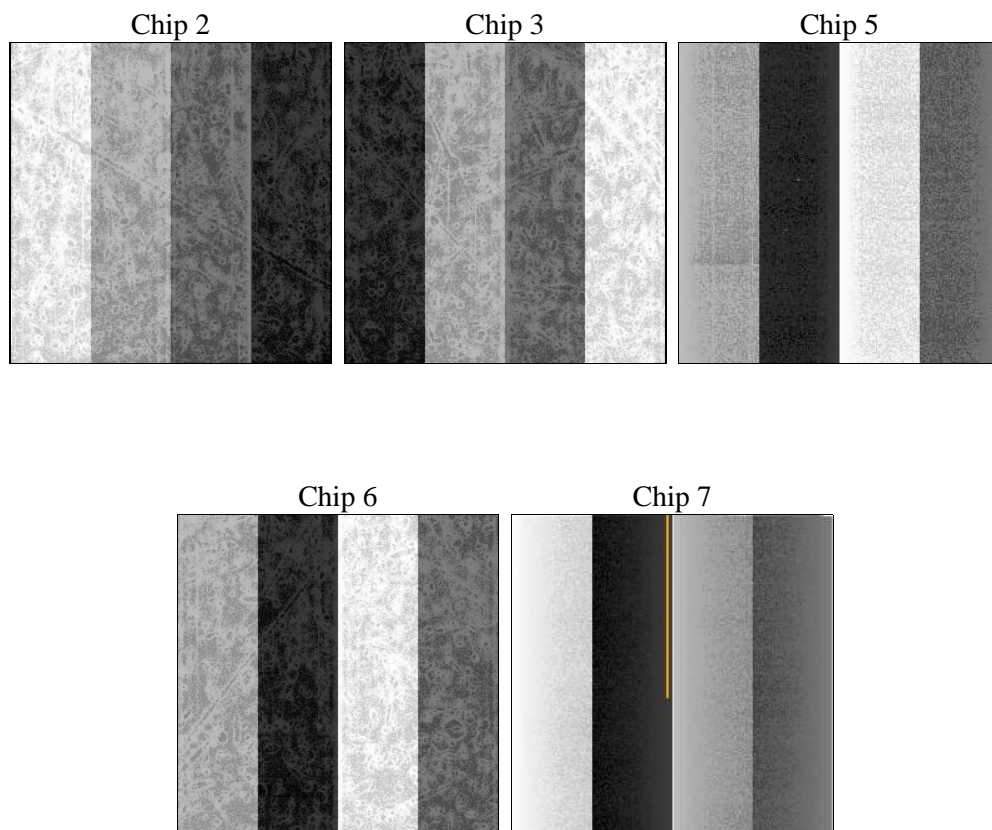
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3.1	Processing system revision	ontime	8162.3000627756	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime2	8159.1590625048	Sum of GTIs [s]
date	2012-04-11T14:48:59	Date and time of file creation	ontime3	8162.3000627756	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	8162.3000627756	Sum of GTIs [s]
			ontime6	8159.1590625048	Sum of GTIs [s]
			ontime7	8162.3000627756	Sum of GTIs [s]
			l1events	397107	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	73736	68774	102055	71102	81440
rejected events	67508	63023	56117	64336	47359
rejected %	91%	91%	54%	90%	58%

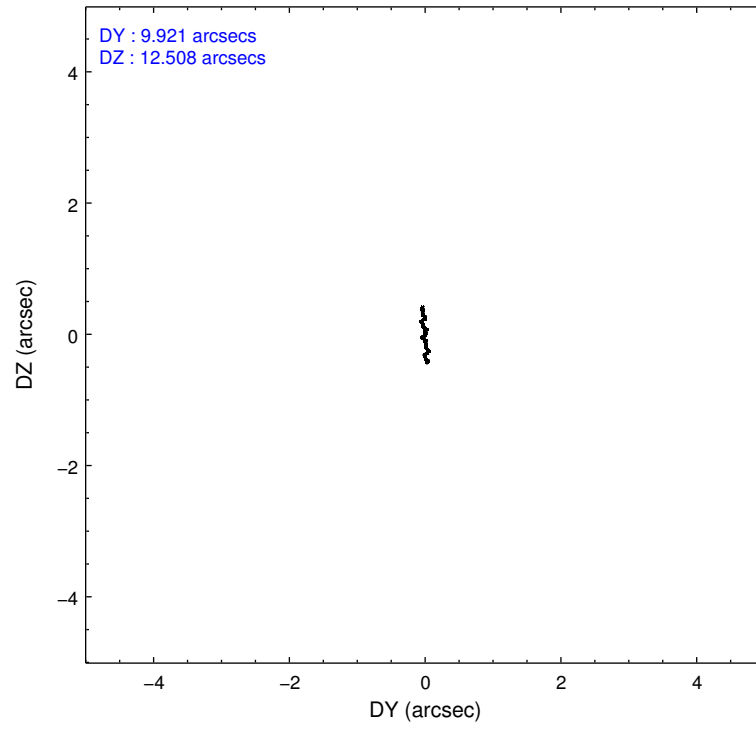
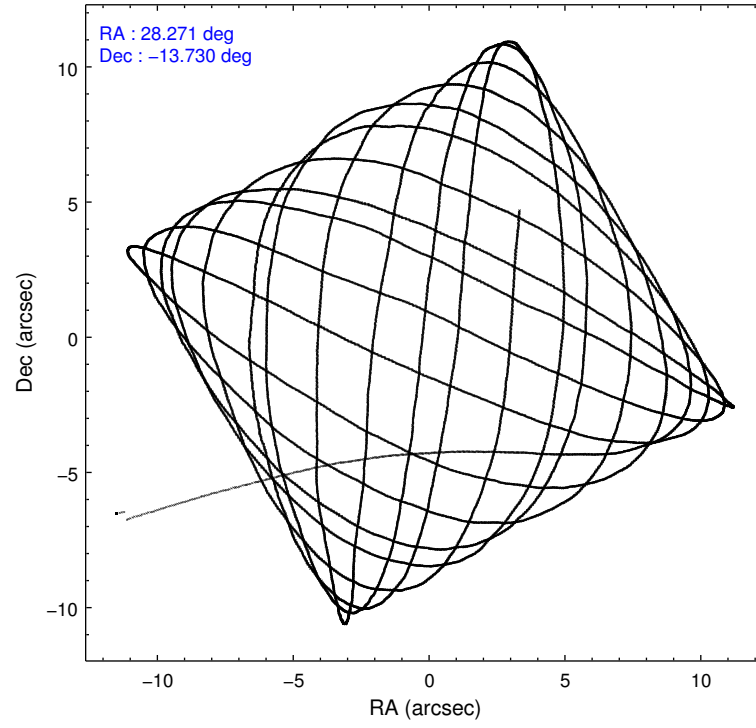
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	2625	2339	7734	2662	4299
	3%	3%	7%	3%	5%
grade 1 events	36	44	254	41	113
	0%	0%	0%	0%	0%
grade 2 events	1626	1430	14850	1613	7726
	2%	2%	14%	2%	9%
grade 3 events	777	748	2228	838	3517
	1%	1%	2%	1%	4%
grade 4 events	747	713	2043	877	3645
	1%	1%	2%	1%	4%
grade 5 events	2285	2702	8003	2782	8179
	3%	3%	7%	3%	10%
grade 6 events	1249	1273	25048	1628	19124
	1%	1%	24%	2%	23%
grade 7 events	64391	59525	41895	60661	34837
	87%	86%	41%	85%	42%

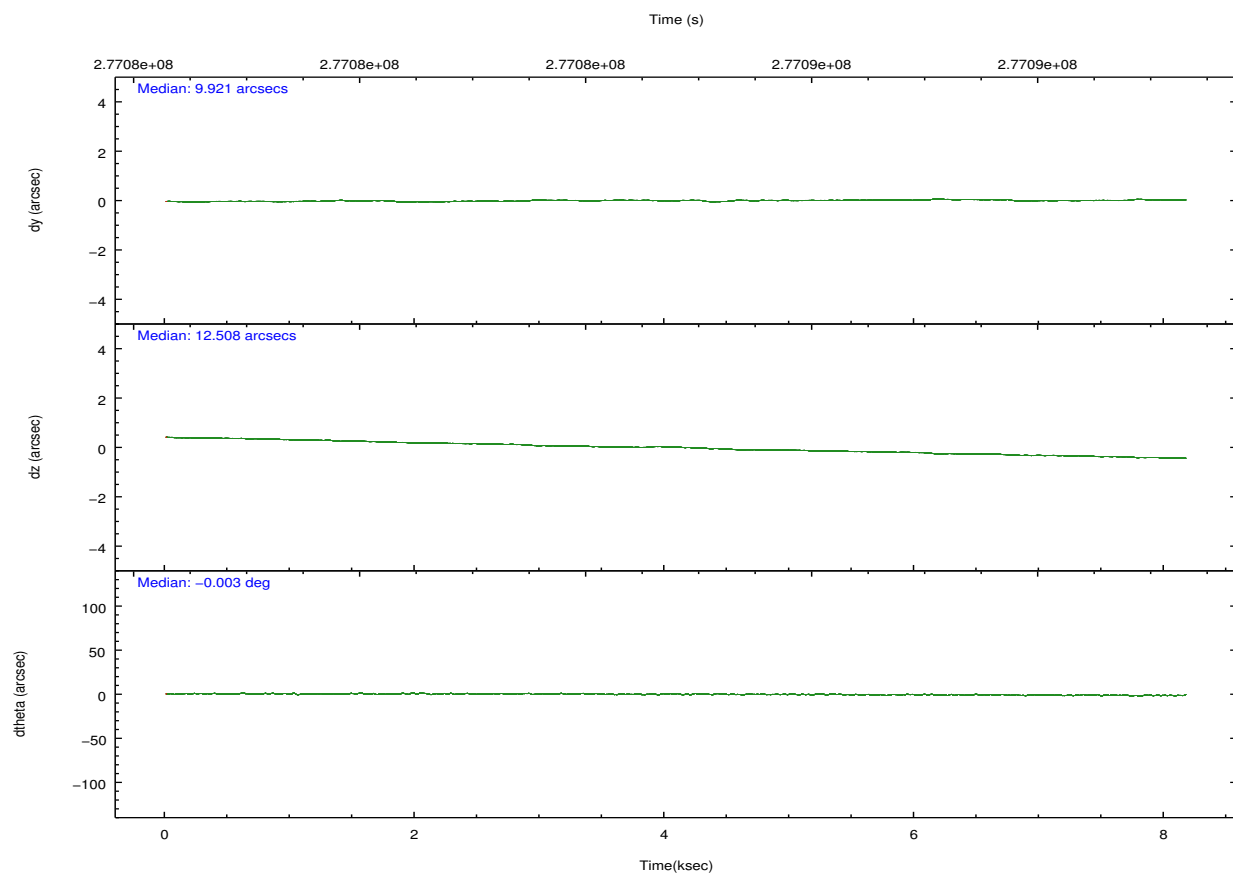
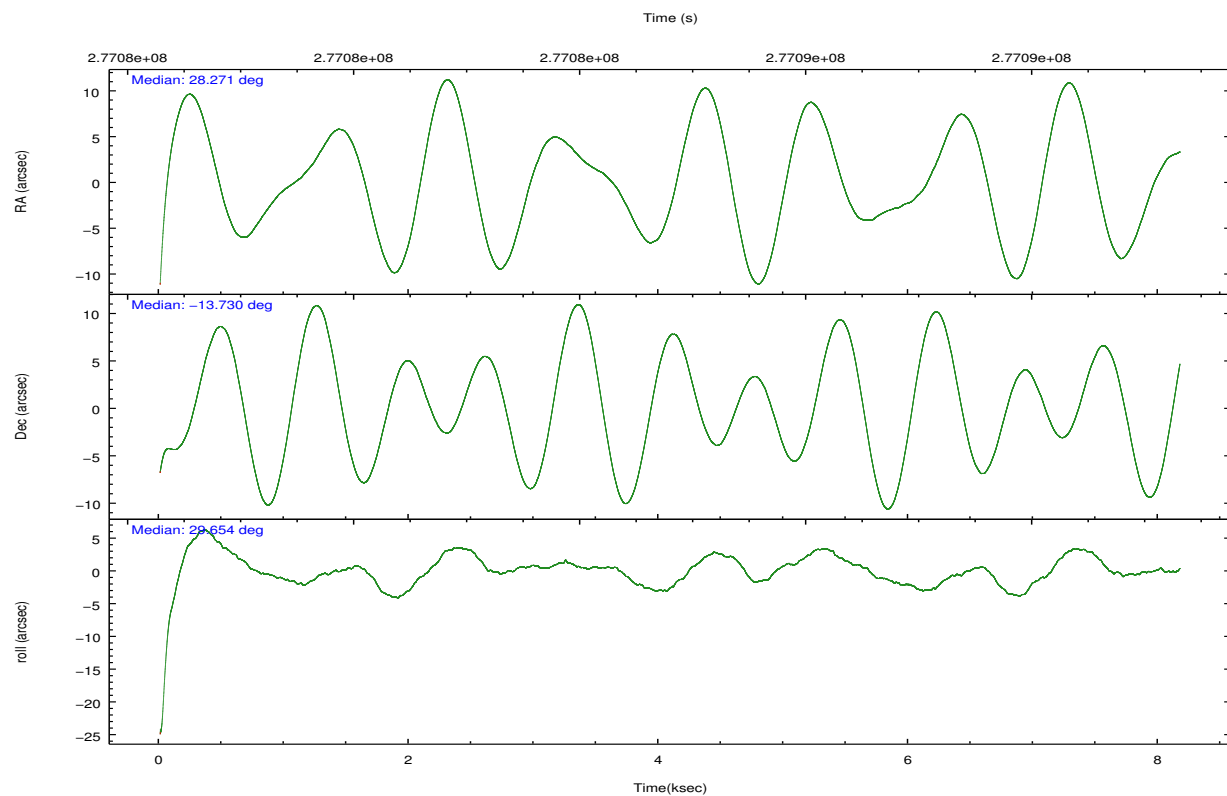


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	28.257641	28.27149386097219	Subarray requested	NONE	NONE
[deg] Pointing Dec	-13.753562	-13.72990459958194	Alternating exposures requested	N	N
[deg] Pointing Roll	29.501318	29.66121312263115	[s] Primary exposure time	0.000000	3.1
[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)	277080885.184000	277079362.60326			
Observation start date	2006-10-12T22:53:40	2006-10-12T22:29:22			
[s] Observation end time (MET)	277088885.184000	277089538.29124			
Observation end date	2006-10-13T01:07:00	2006-10-13T01:18:58			
Read mode	TIMED	TIMED			

## 2.3 Aspect



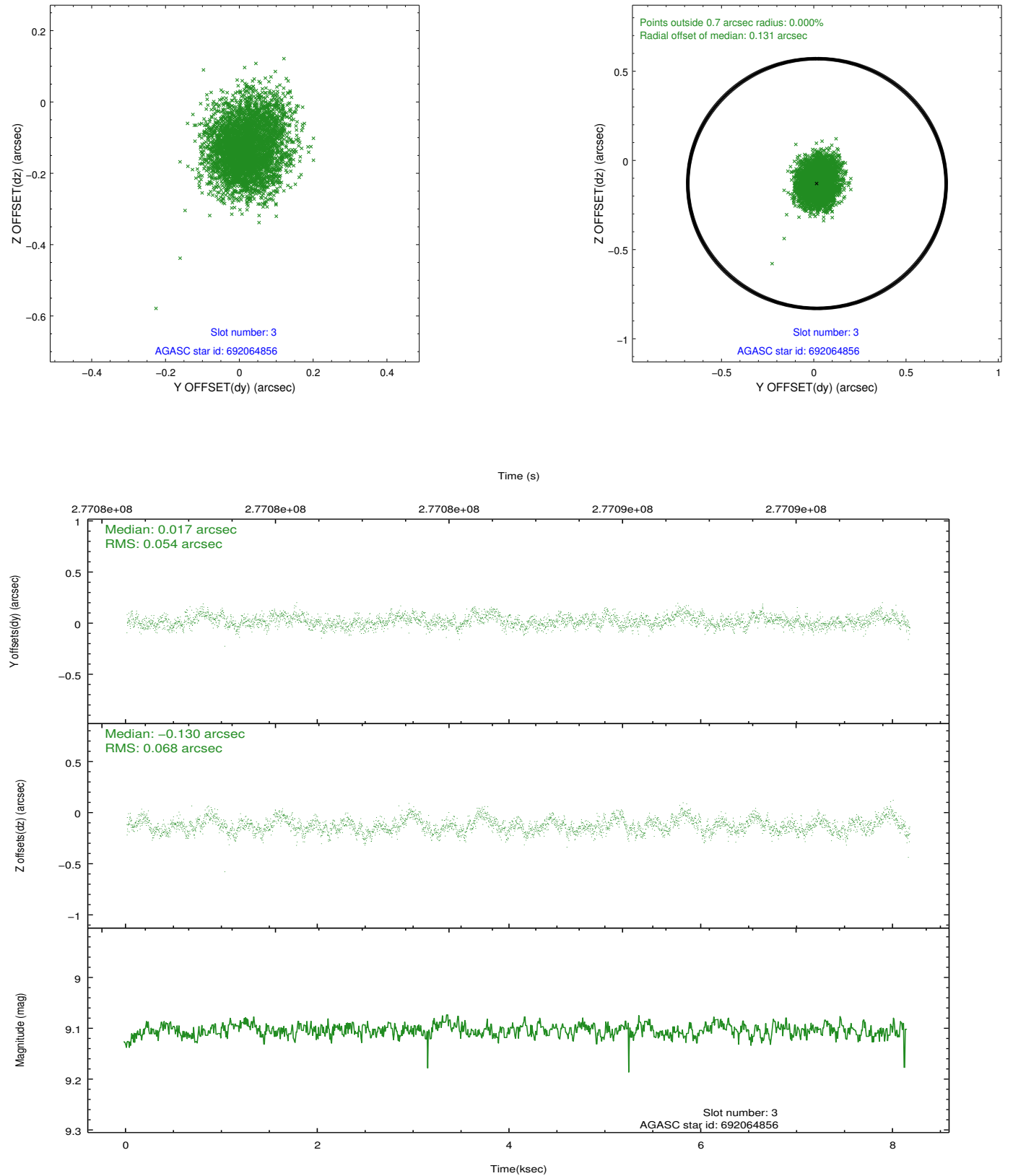


### Slot Statistics

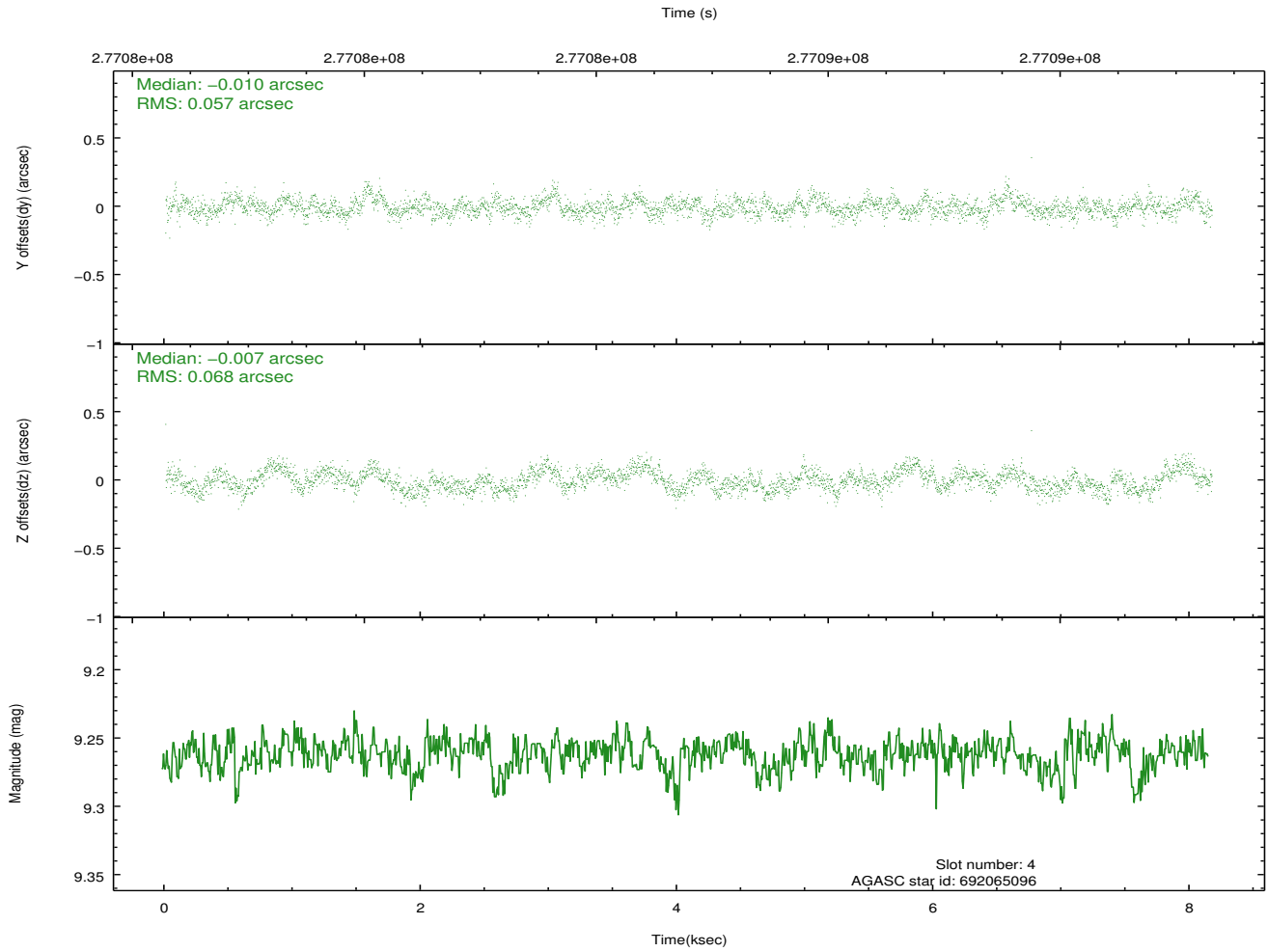
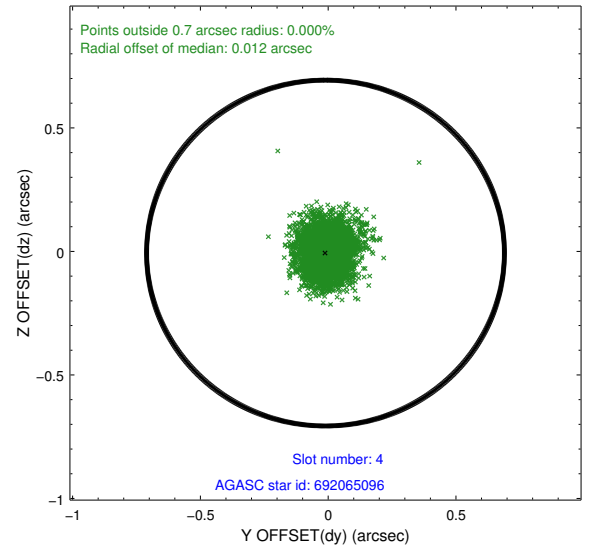
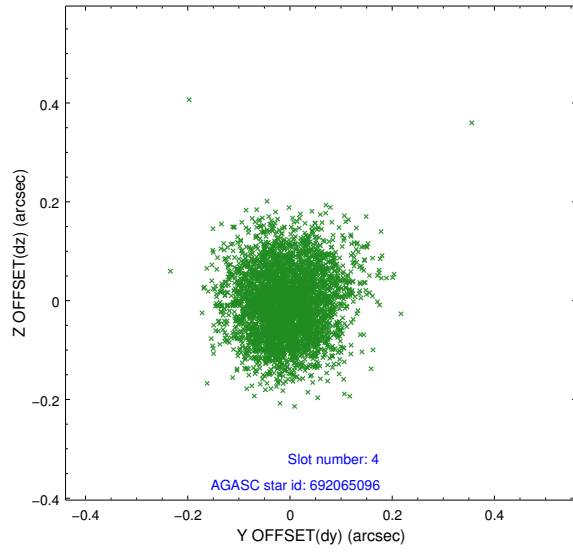
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1993	-0.021	-0.038	0.009	0.014	0.000000	0.000000	-762.79	-1733.78
1	FID	ACIS-S-4	7.20	1993	0.129	0.020	0.006	0.010	0.000000	0.000000	2150.35	174.02
2	FID	ACIS-S-5	7.23	1993	-0.140	0.026	0.009	0.016	0.000000	0.000000	-1814.85	168.52
3	GUIDE	692064856	9.10	3982	0.017	-0.130	0.094	0.150	27.844359	-13.441810	-707.39	1688.48
4	GUIDE	692065096	9.26	3983	-0.010	-0.007	0.095	0.153	28.419979	-13.250038	1387.52	1297.07
5	GUIDE	692065760	8.86	3980	-0.038	0.139	0.093	0.150	28.134676	-14.541960	-1770.21	-2258.87
6	GUIDE	692066072	8.19	3983	0.051	-0.123	0.077	0.122	27.518624	-13.704241	-2164.52	1423.38
7	GUIDE	692067256	8.89	3978	-0.025	0.117	0.093	0.145	28.829272	-14.105112	1113.19	-2085.48

## 2.4 Star Slots

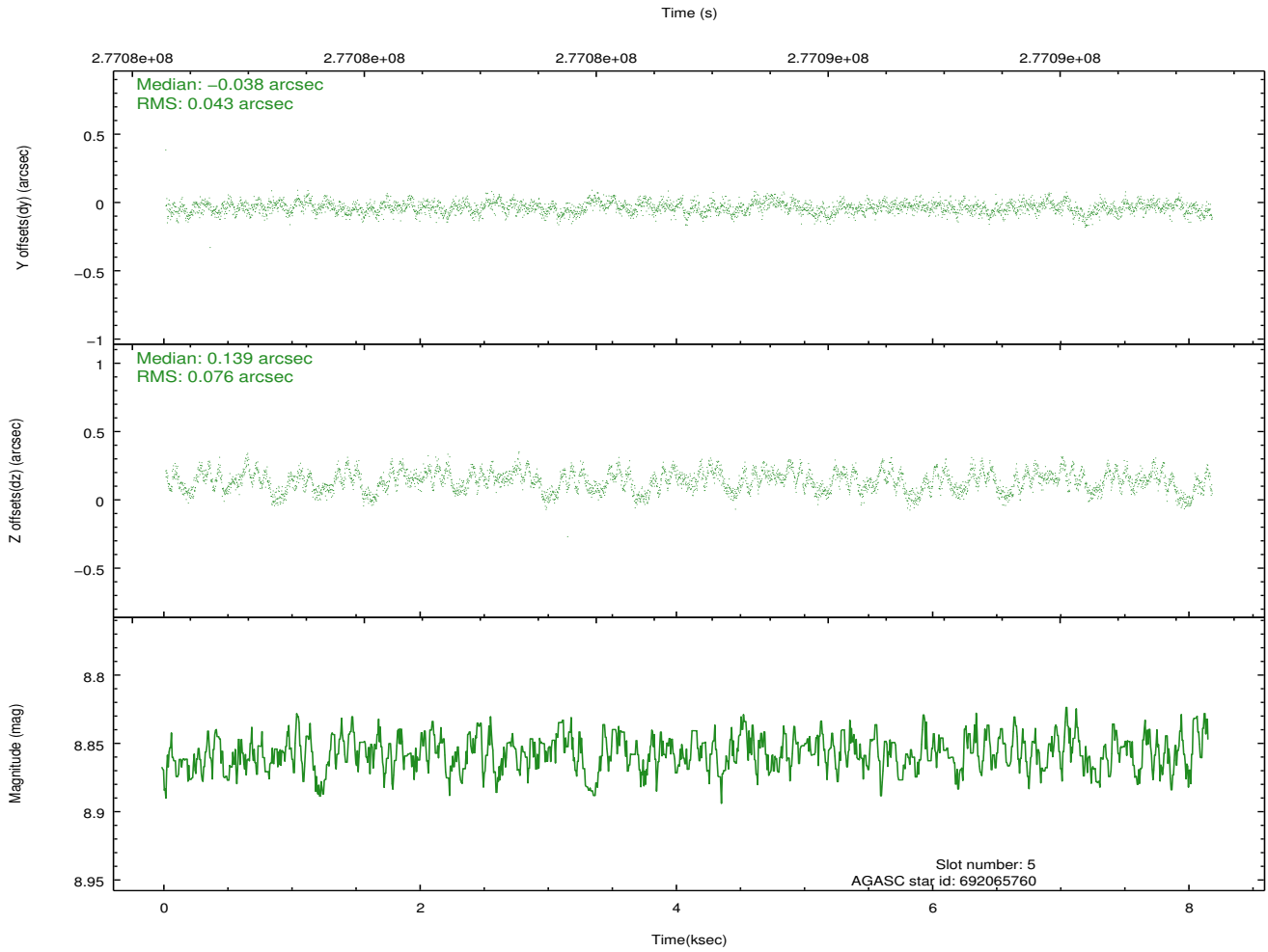
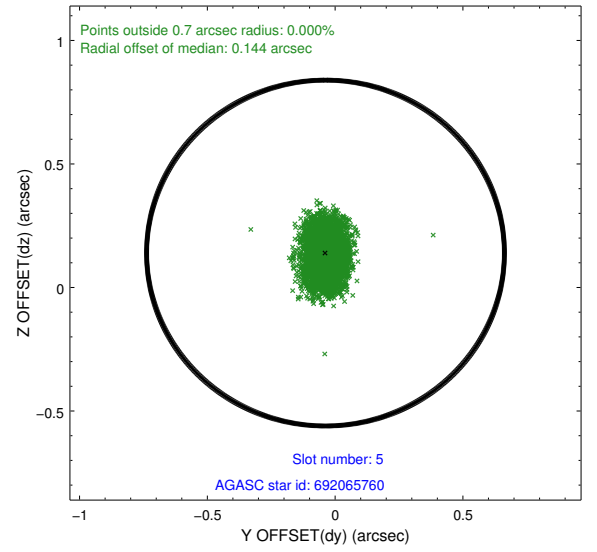
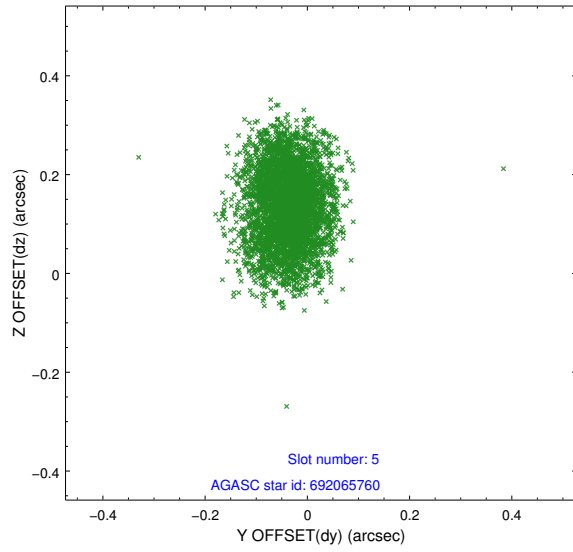
### 2.4.1 Slot 3



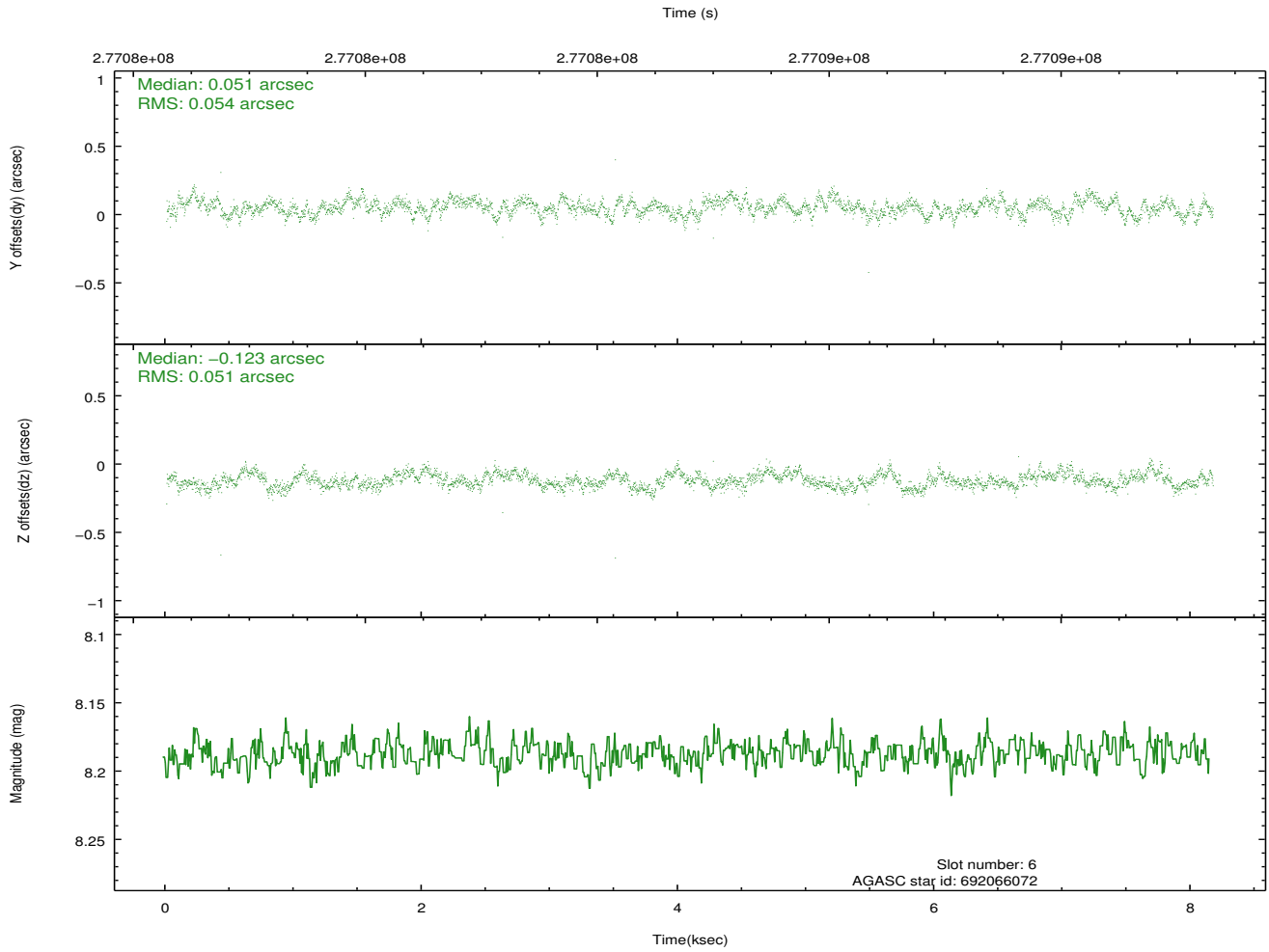
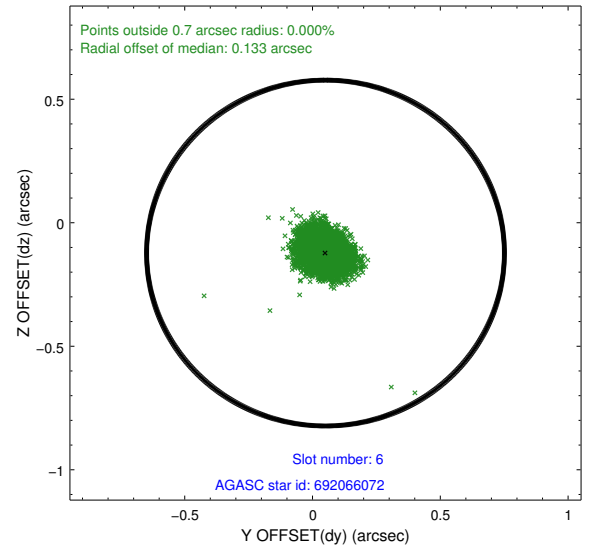
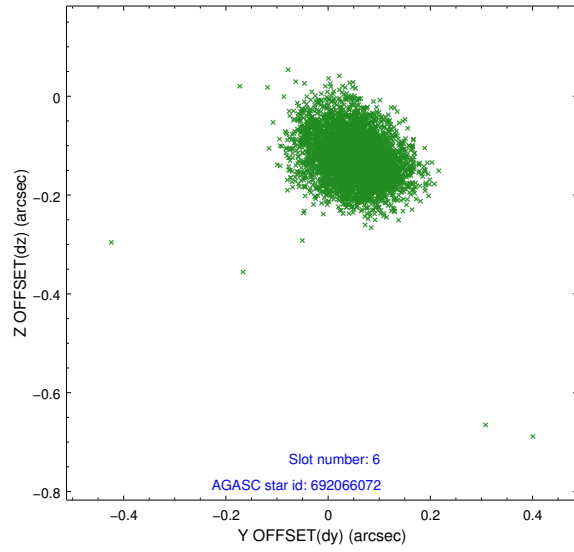
## 2.4.2 Slot 4



### 2.4.3 Slot 5

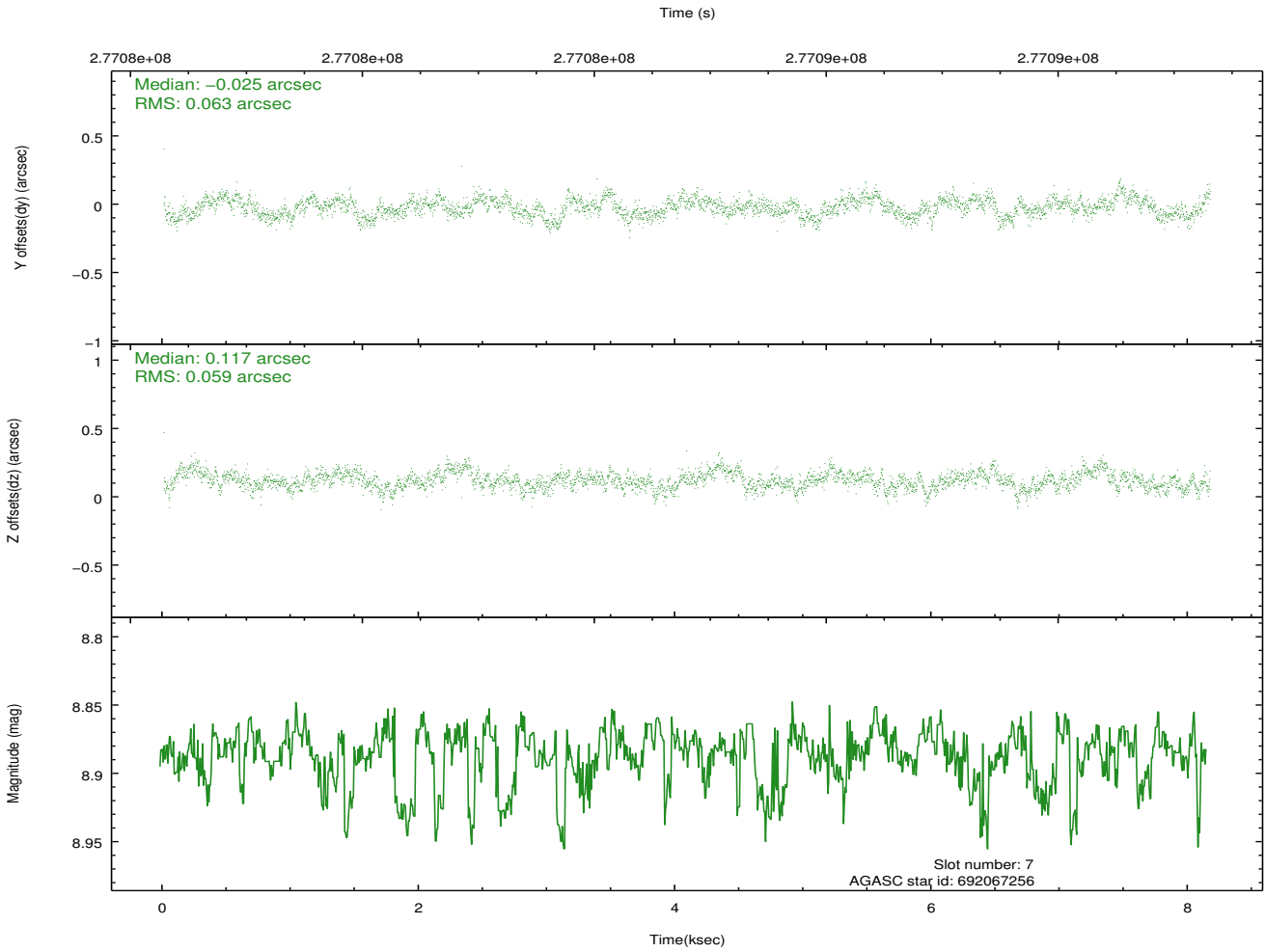
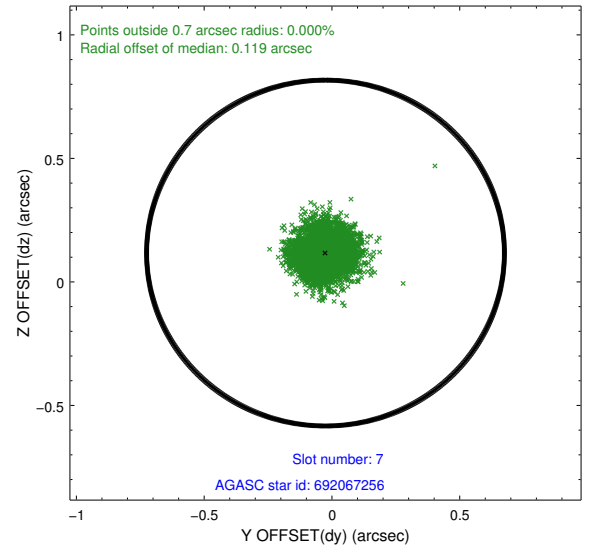
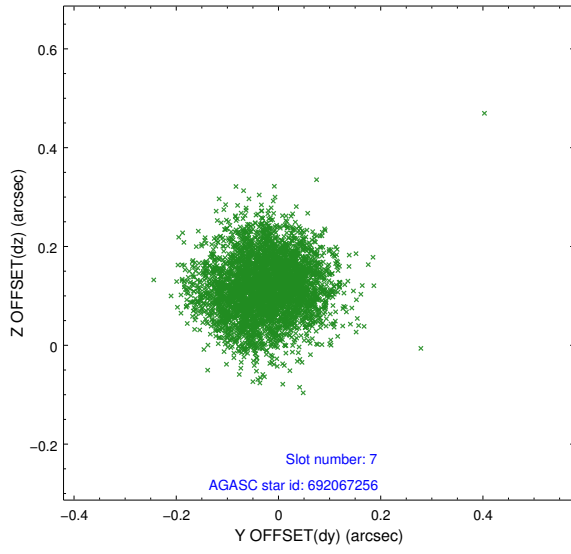


## 2.4.4 Slot 6



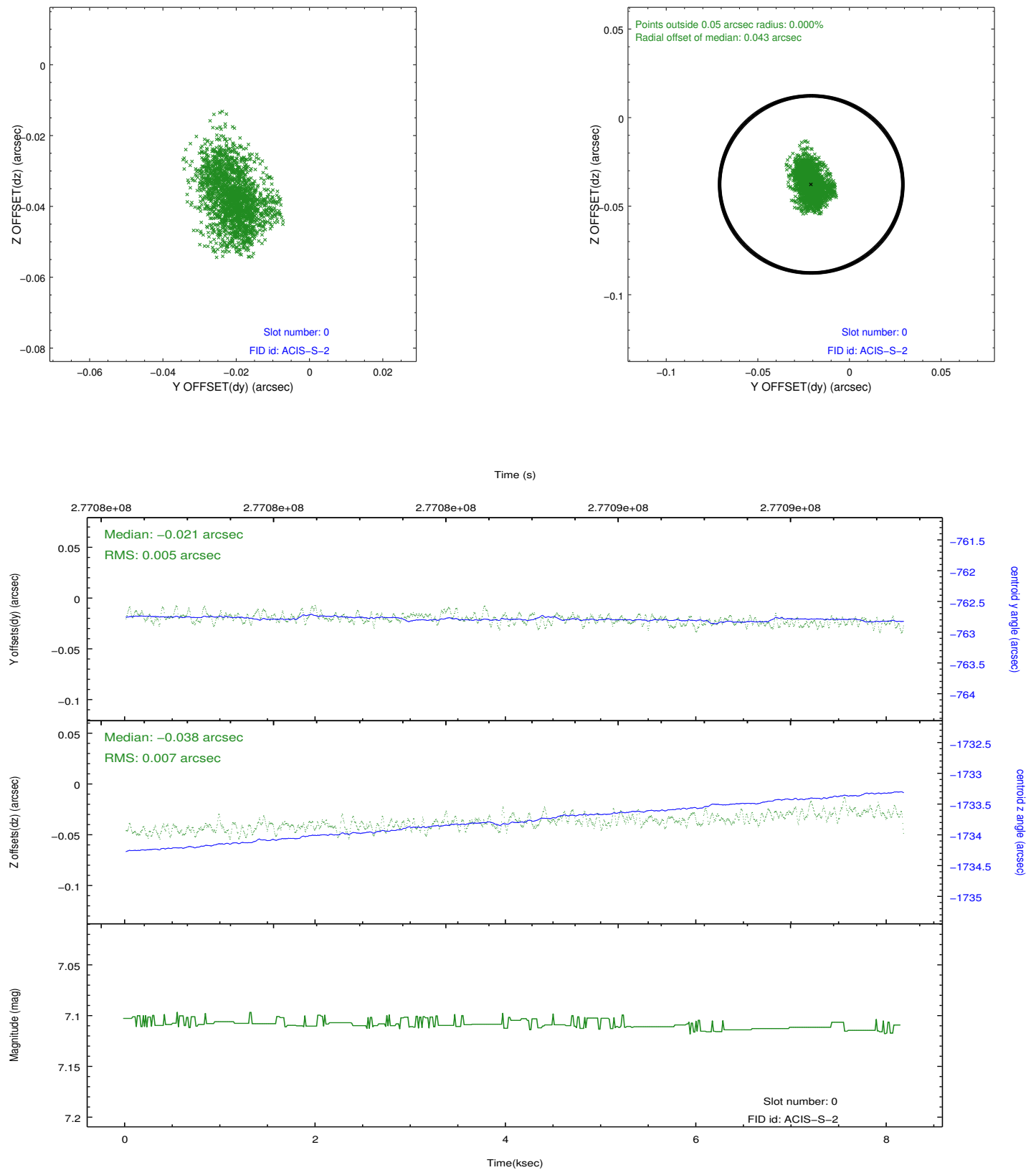


## 2.4.5 Slot 7

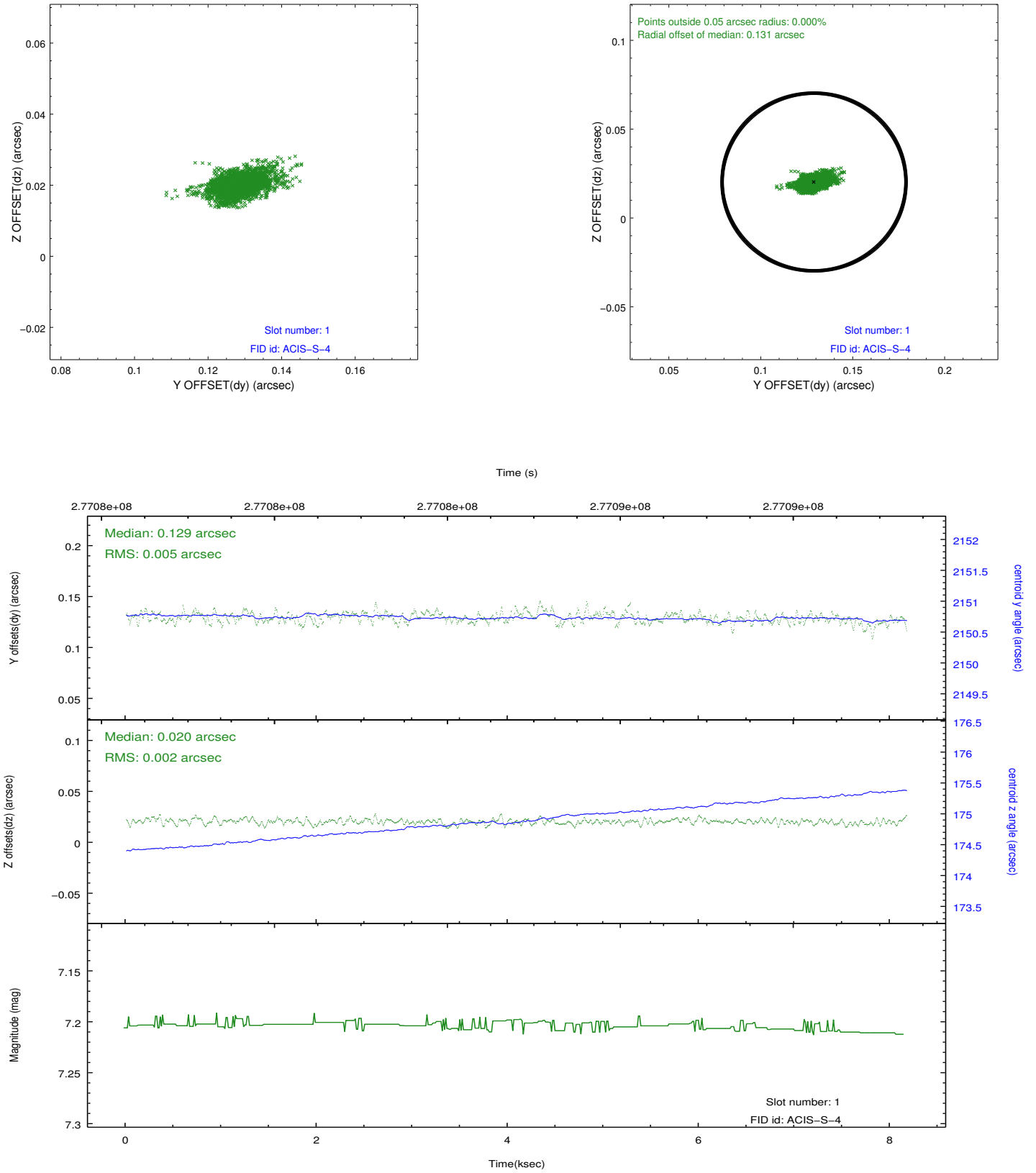


## 2.5 FID Slots

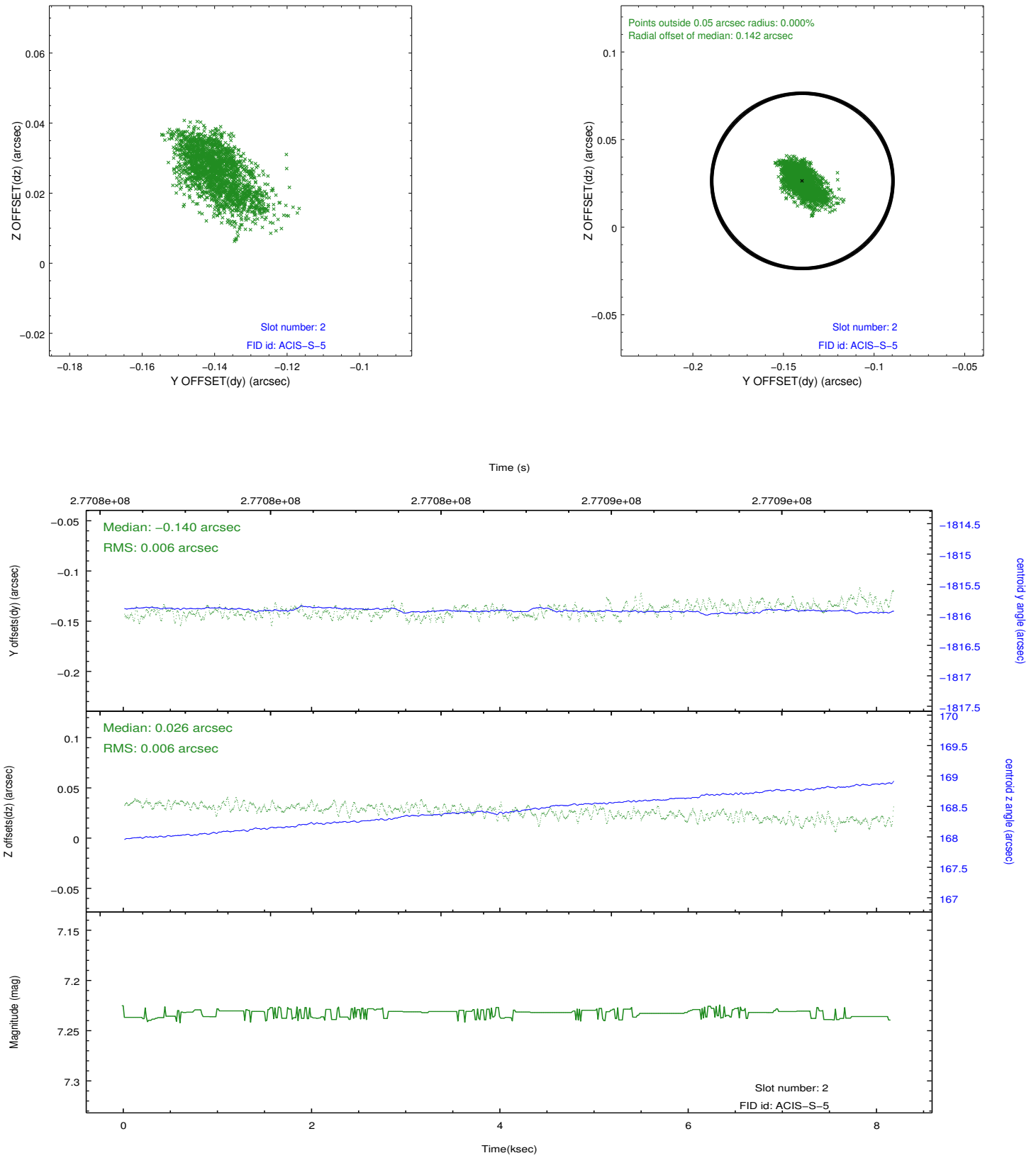
### 2.5.1 Slot 0



## 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)	2012.04.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.16230006

### A.2 Comments