

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7831 - L2 Version 3  
Chandra X-Ray Center

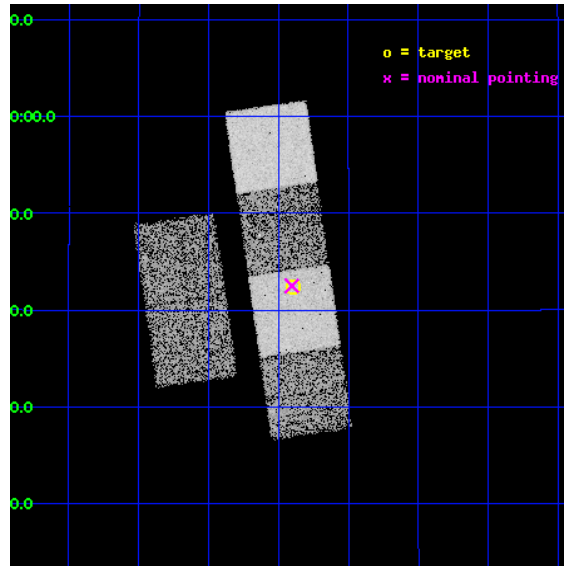
L2 Processing Date : Apr 19 2012

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# 1 Front

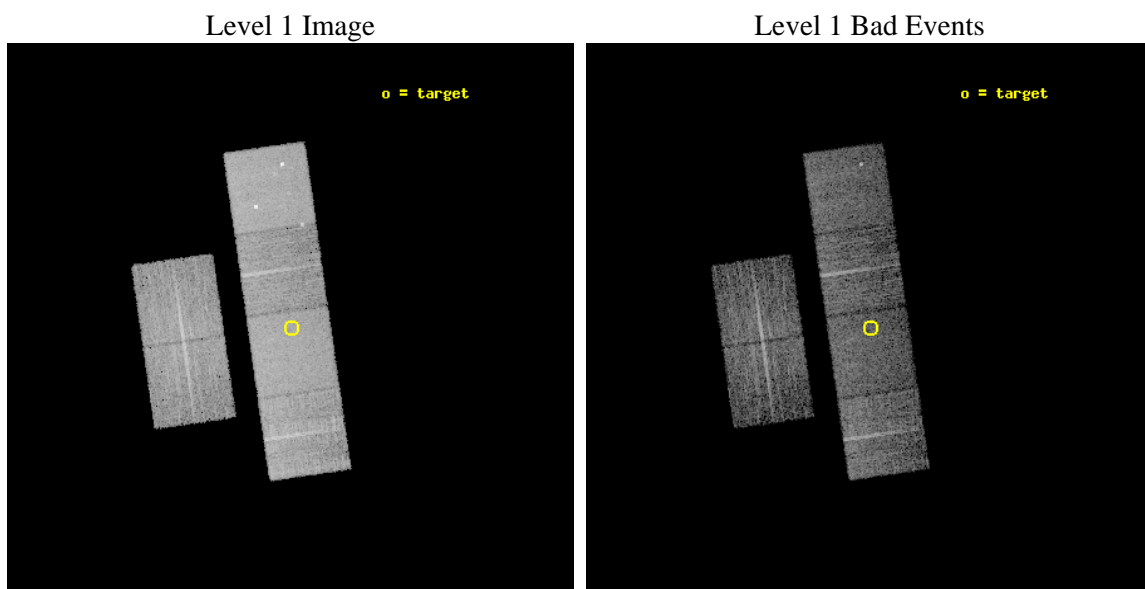
seq_num	701495	Sequence number
obs_id	7831	Observation id
title	Demographics of black holes in the local Universe.	Proposal title
observer	Prof. Smita Mathur	Principal investigator
object	NGC 3299	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	159.099167	Observer's specified target RA [deg]
dec_targ	12.707389	Observer's specified target Dec [deg]
ra_nom	159.10103462822	Nominal RA [deg]
dec_nom	12.70854458364	Nominal Dec [deg]
roll_nom	81.821977797482	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5126.3999809623	Sum of GTIs [s]
livetime	5061.4864176559	Livetime [s]
ontime2	5126.3999809623	Sum of GTIs [s]
ontime3	5126.3999809623	Sum of GTIs [s]
ontime5	5126.3999809623	Sum of GTIs [s]
ontime6	5126.3999809623	Sum of GTIs [s]
ontime7	5126.3999809623	Sum of GTIs [s]
ontime8	5126.3999809623	Sum of GTIs [s]
l2events	77935	Number of level 2 events



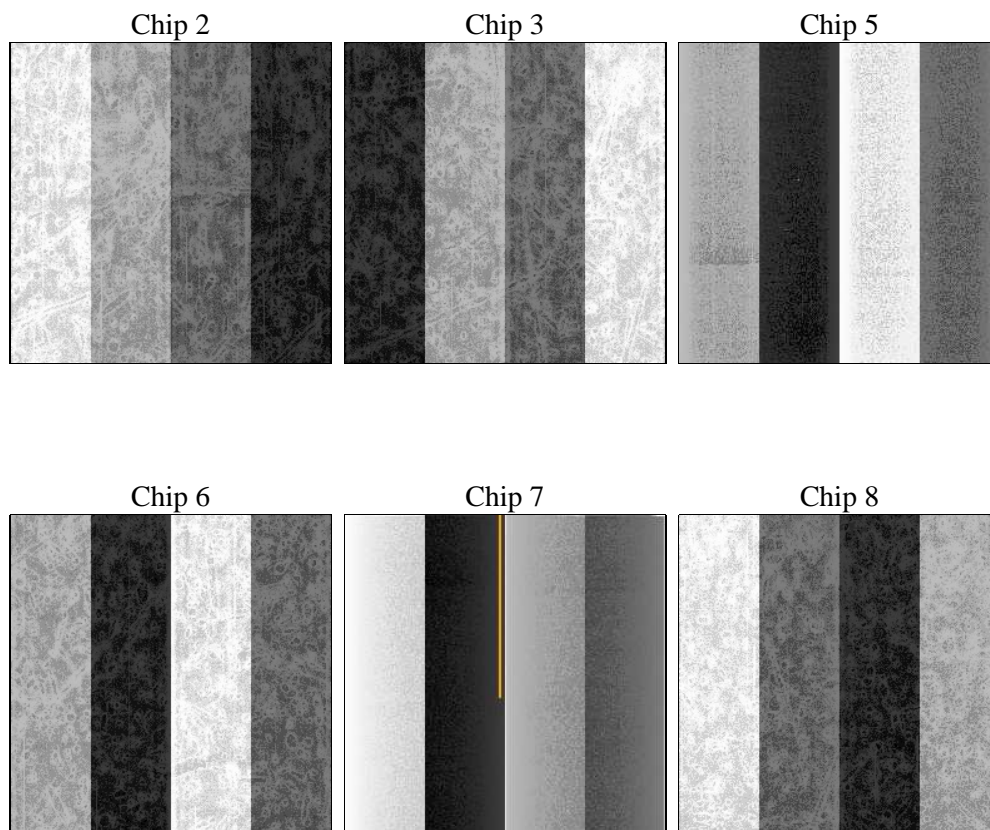
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	5126.3999809623	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime2	5126.3999809623	Sum of GTIs [s]
date	2012-04-19T15:22:12	Date and time of file creation	ontime3	5126.3999809623	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	5126.3999809623	Sum of GTIs [s]
			ontime6	5126.3999809623	Sum of GTIs [s]
			ontime7	5126.3999809623	Sum of GTIs [s]
			ontime8	5126.3999809623	Sum of GTIs [s]
			l1events	379155	Number of level 1 events

### 2.1.4 Events

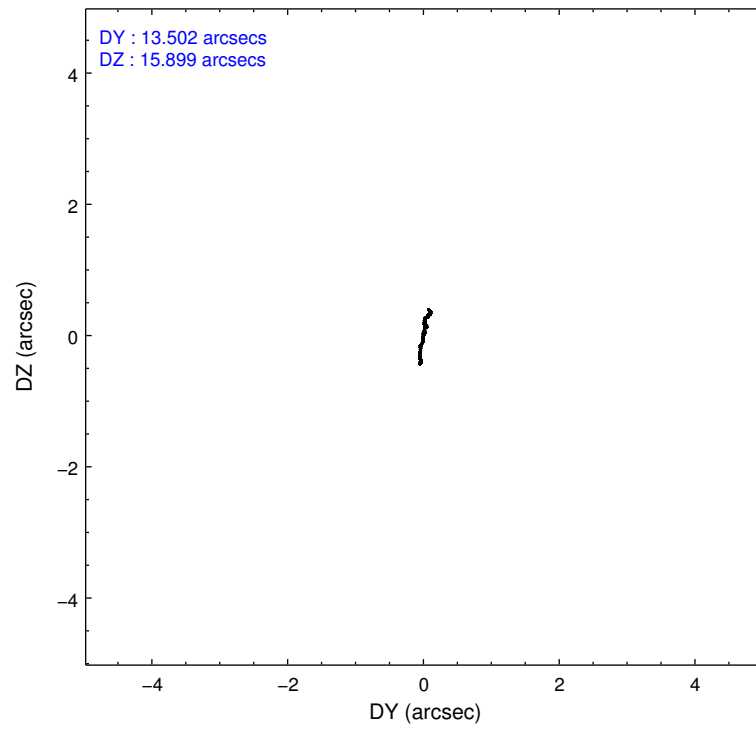
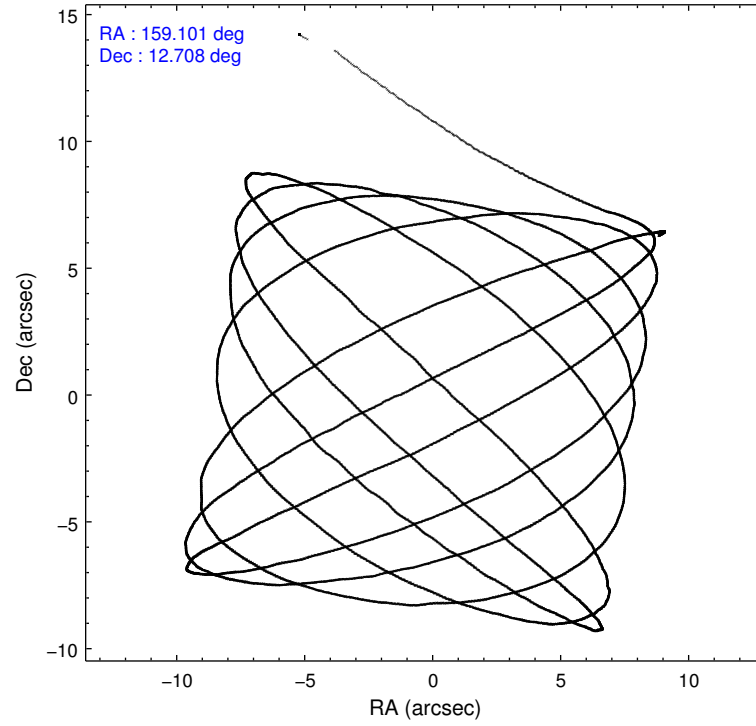
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	53707	50106	82496	52264	72072	68510	grade 0 events	2799	2663	4212	2450	2495	4534
rejected events	47994	44622	47775	46527	45209	54806		5%	5%	5%	4%	3%	6%
rejected %	89%	89%	57%	89%	62%	79%	grade 1 events	32	37	135	37	95	45
								0%	0%	0%	0%	0%	0%
							grade 2 events	1348	1150	12153	1386	6043	3545
								2%	2%	14%	2%	8%	5%
							grade 3 events	602	628	1280	608	2622	1566
								1%	1%	1%	1%	3%	2%
							grade 4 events	603	618	1259	561	2557	1440
								1%	1%	1%	1%	3%	2%
							grade 5 events	2193	2347	5633	2440	6779	3445
								4%	4%	6%	4%	9%	5%
							grade 6 events	1050	1080	19632	1388	16215	4162
								1%	2%	23%	2%	22%	6%
							grade 7 events	45080	41583	38192	43394	35266	49773
								83%	82%	46%	83%	48%	72%

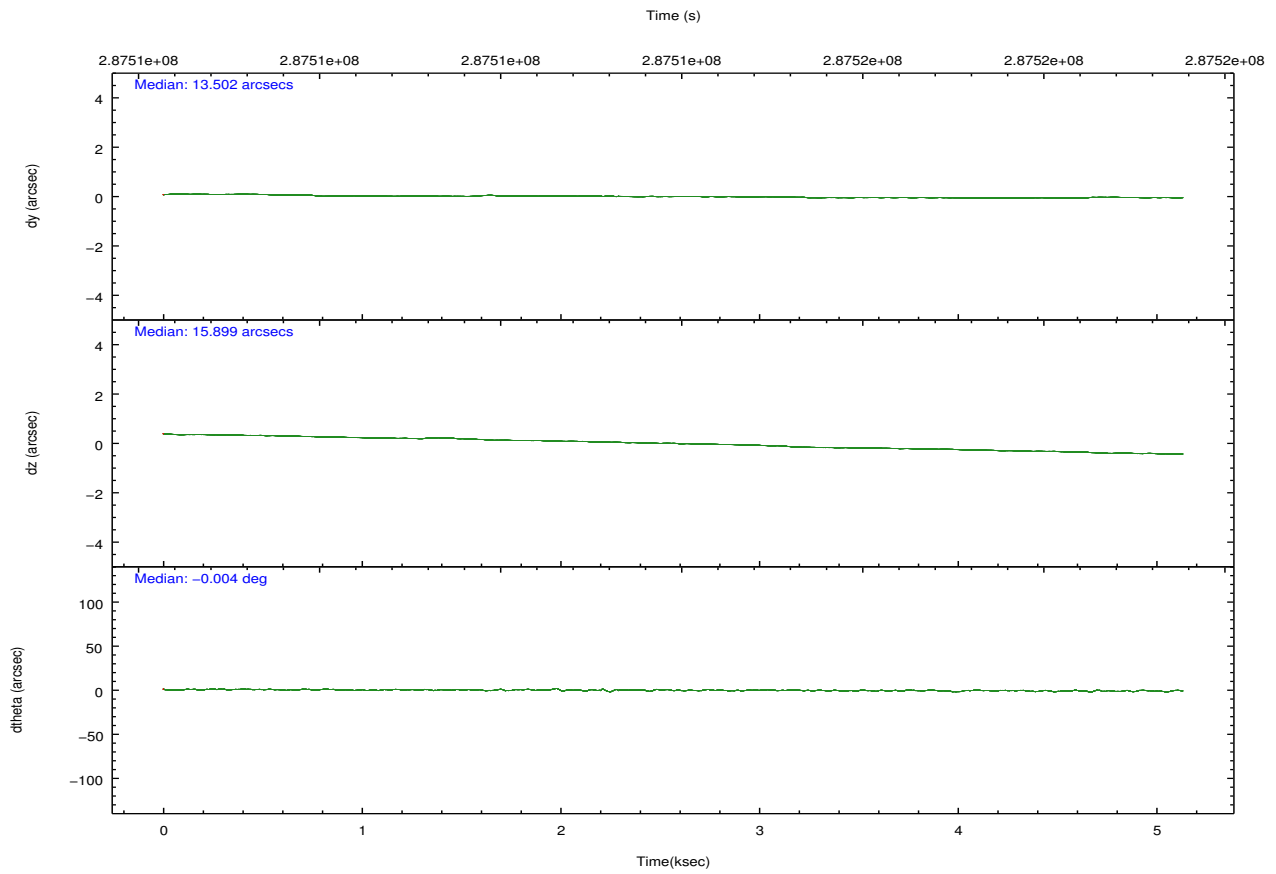
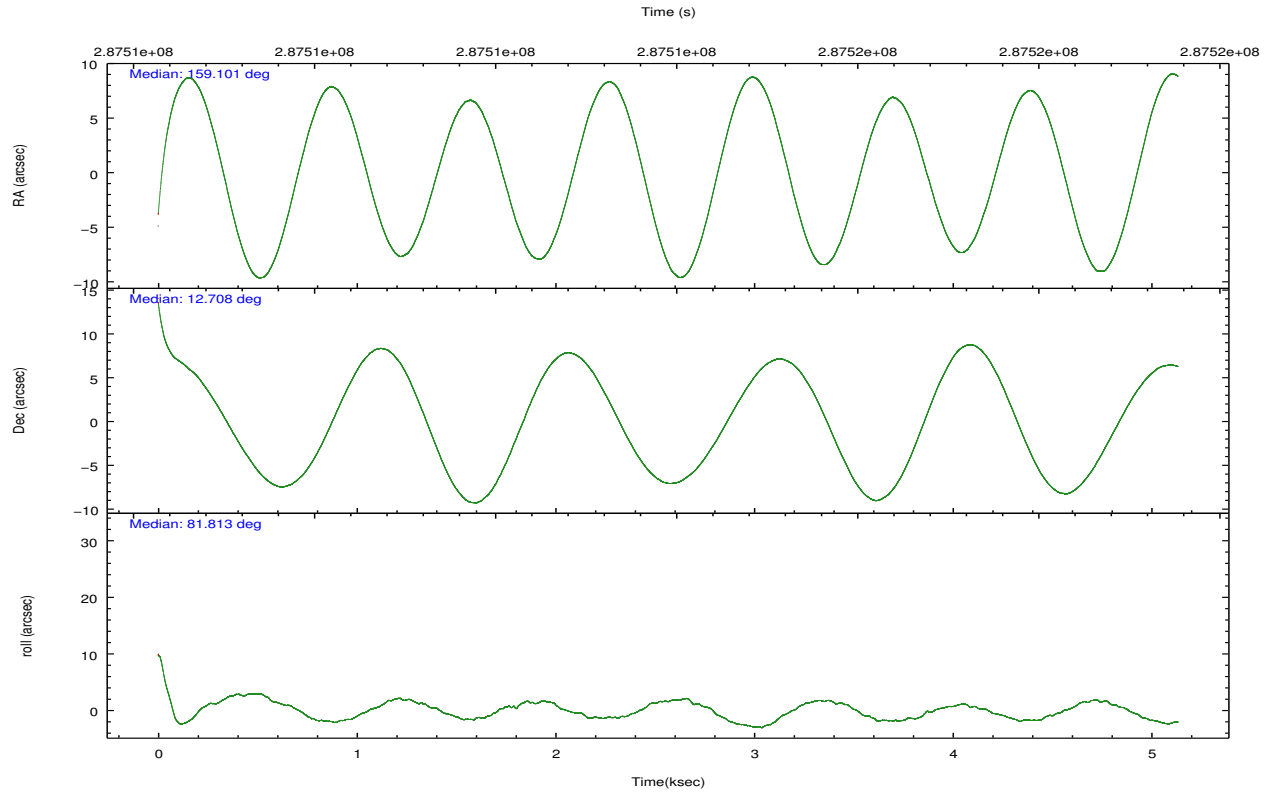


## 2.2 Compared Parameters

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	159.111772	159.1010346282157	Subarray requested	NONE	NONE
[deg] Pointing Dec	12.683242	12.70854458363997	Alternating exposures requested	N	N
[deg] Pointing Roll	81.662960	81.82197779748157	[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)	287511522.184000	287510189.49666			
Observation start date	2007-02-10T16:17:37	2007-02-10T15:56:29			
[s] Observation end time (MET)	287516522.184000	287516995.49698			
Observation end date	2007-02-10T17:40:57	2007-02-10T17:49:55			
Read mode	TIMED	TIMED			

## 2.3 Aspect



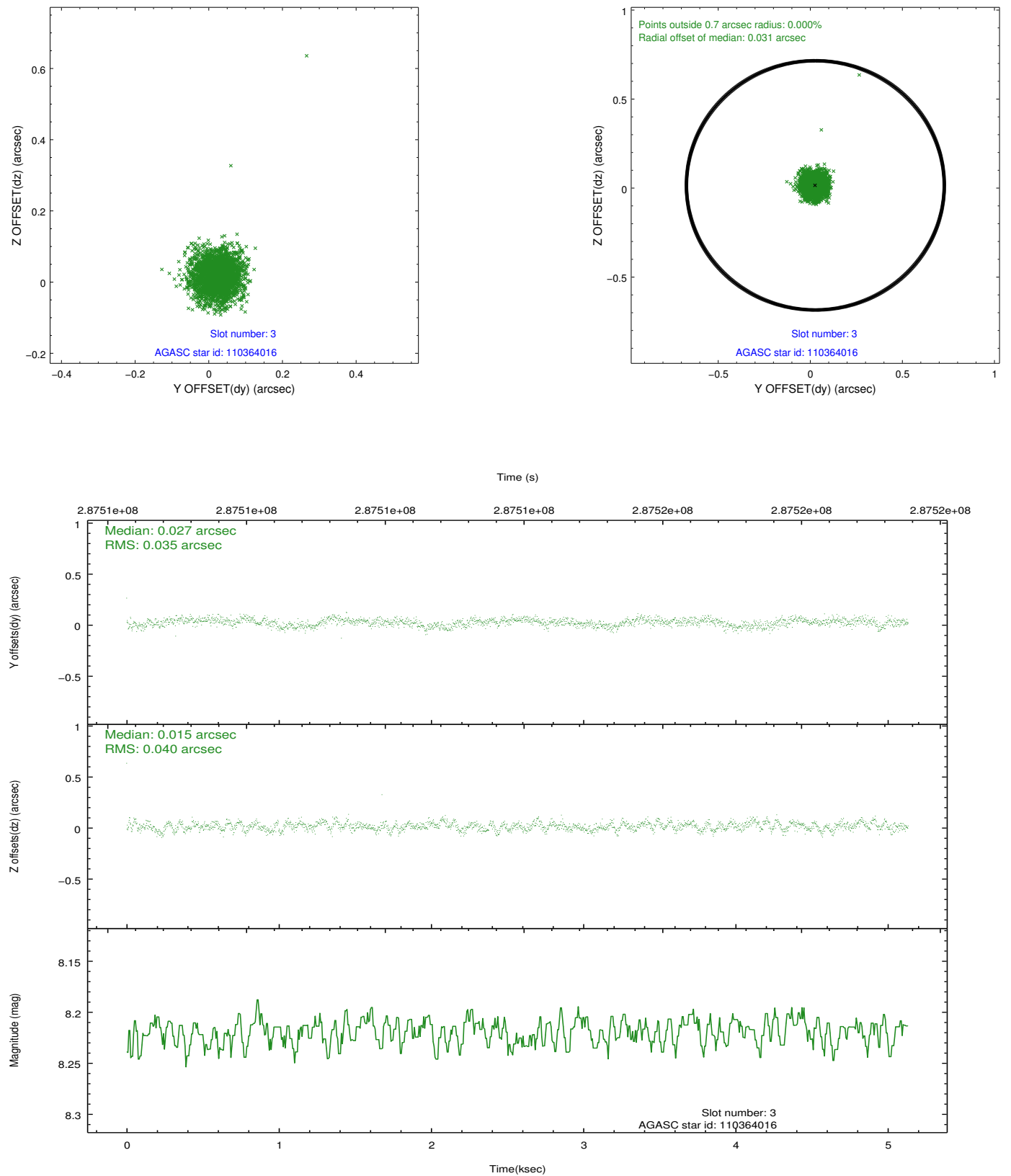


### Slot Statistics

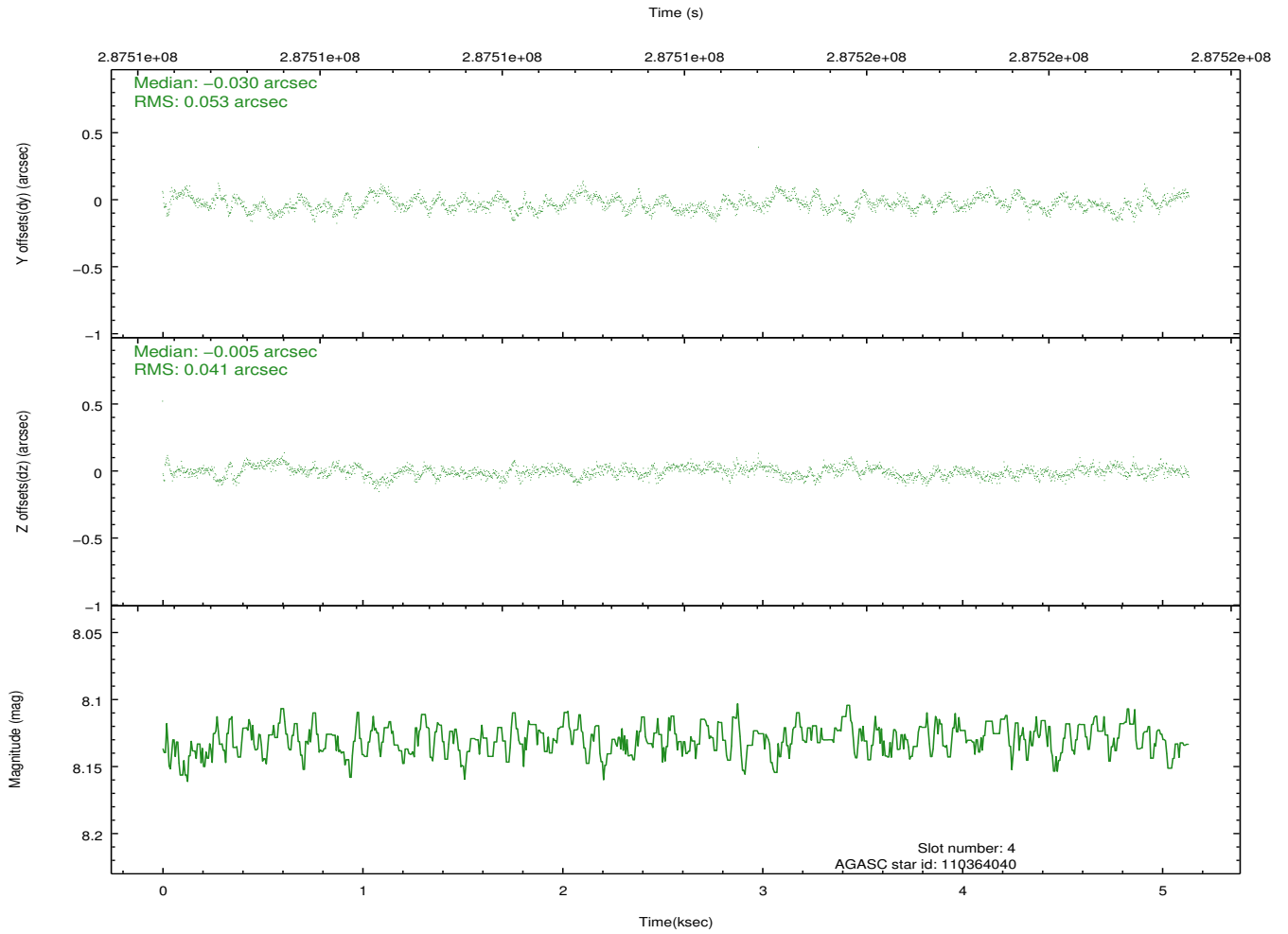
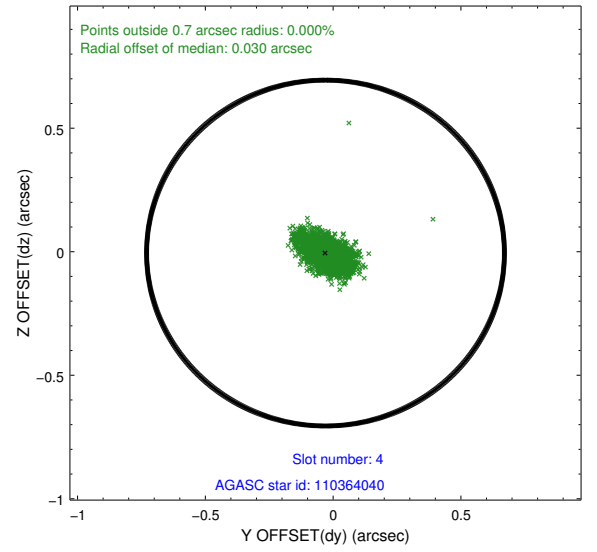
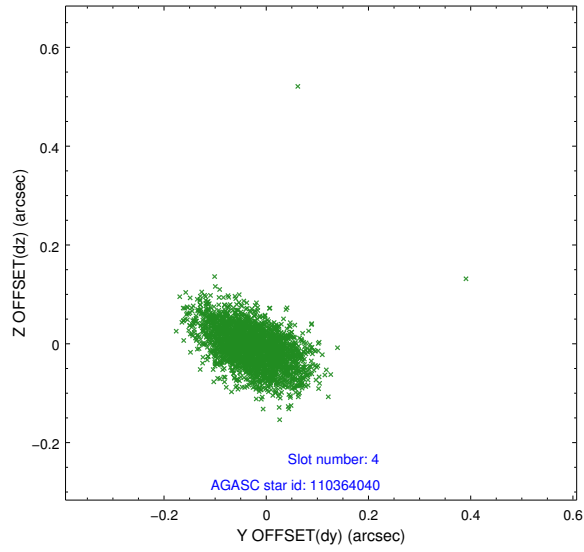
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	1253	0.092	-0.078	0.011	0.020	0.000000	0.000000	929.66	-1733.01
1	FID	ACIS-S-2	7.09	1253	-0.092	-0.007	0.007	0.012	0.000000	0.000000	-765.77	-1738.68
2	FID	ACIS-S-6	7.33	1253	-0.021	0.089	0.009	0.014	0.000000	0.000000	394.71	807.28
3	GUIDE	110364016	8.22	2505	0.027	0.015	0.054	0.089	159.393096	12.353151	-1031.87	-1150.89
4	GUIDE	110364040	8.13	2504	-0.030	-0.005	0.069	0.119	158.530343	12.374439	-1394.95	1861.88
5	GUIDE	110762304	8.21	2503	0.054	0.012	0.062	0.101	159.256757	12.866111	724.57	-406.49
6	GUIDE	110763528	8.03	2504	-0.114	0.071	0.058	0.097	159.698615	12.761320	579.15	-1996.68
7	GUIDE	110366760	8.52	2503	0.063	-0.090	0.059	0.099	158.594433	12.180801	-2051.88	1538.58

## 2.4 Star Slots

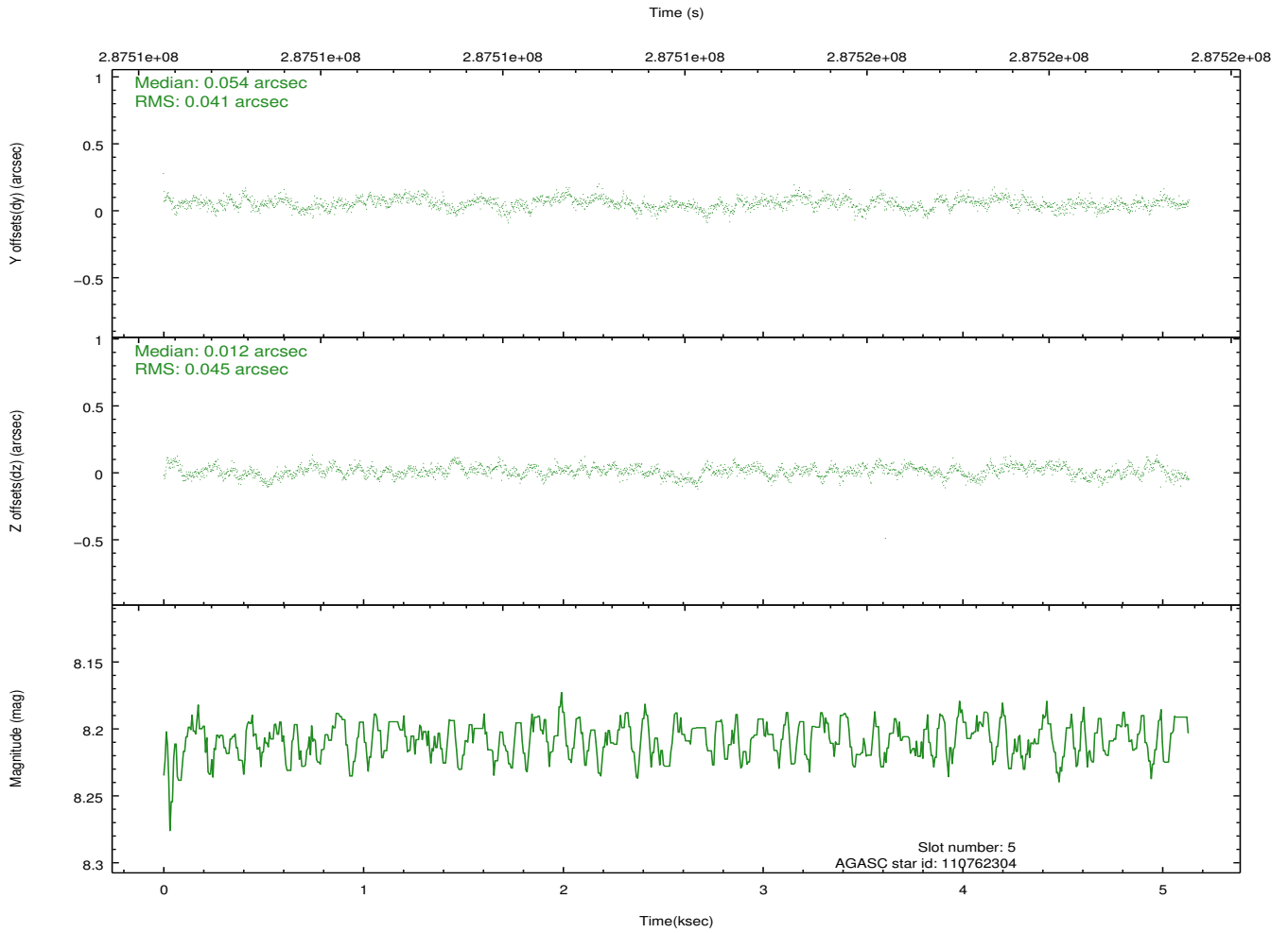
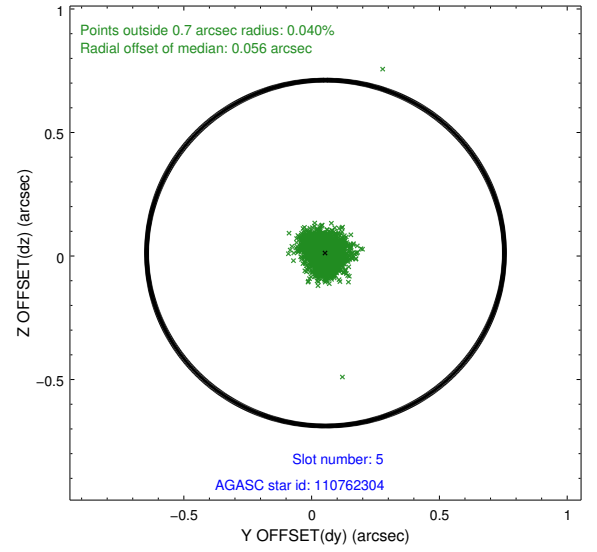
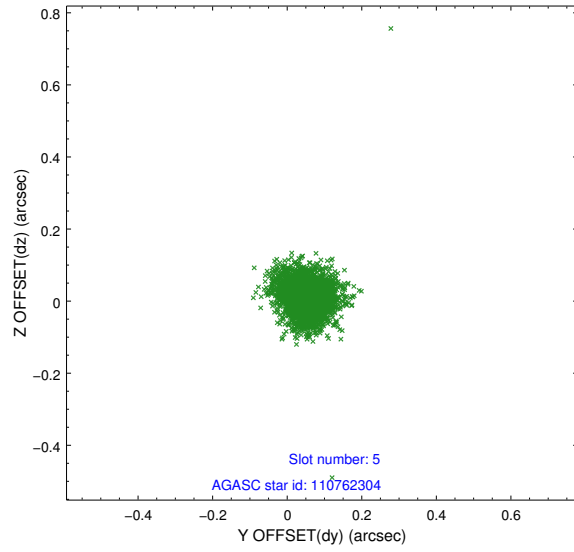
### 2.4.1 Slot 3



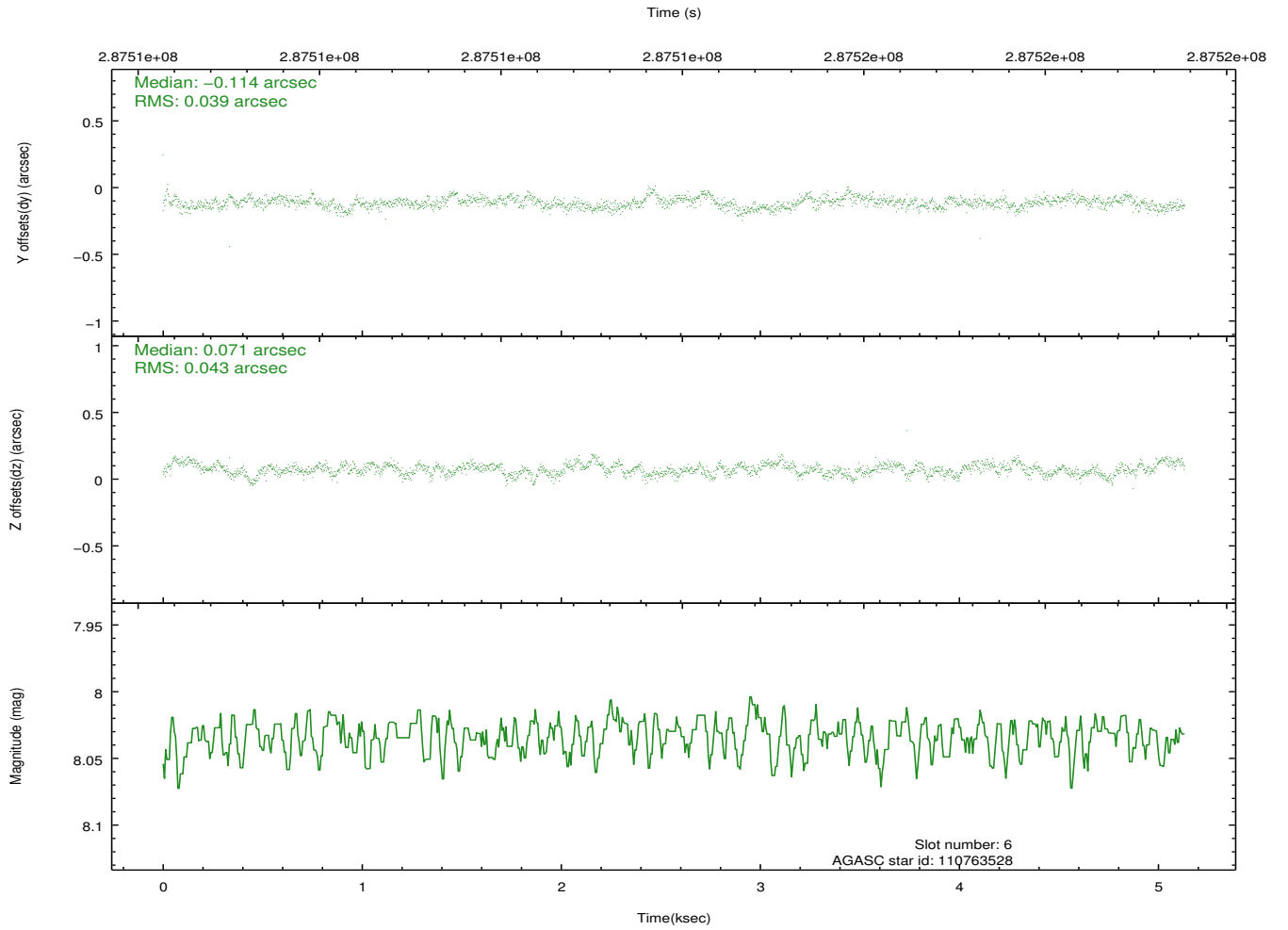
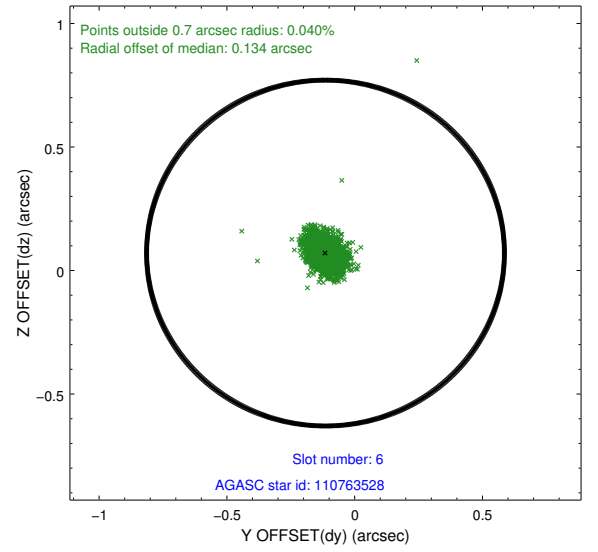
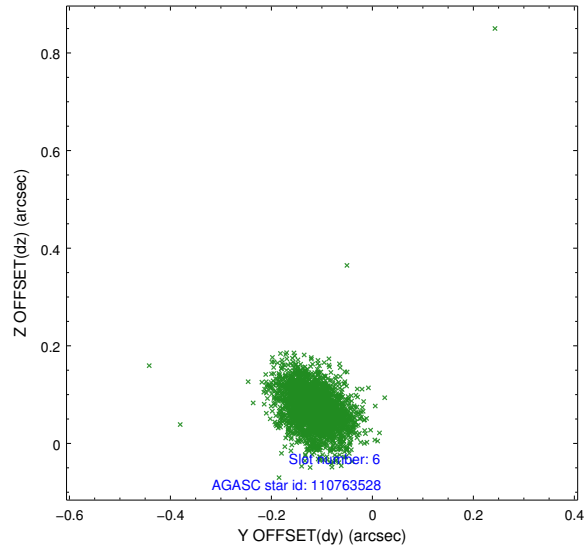
## 2.4.2 Slot 4



### 2.4.3 Slot 5

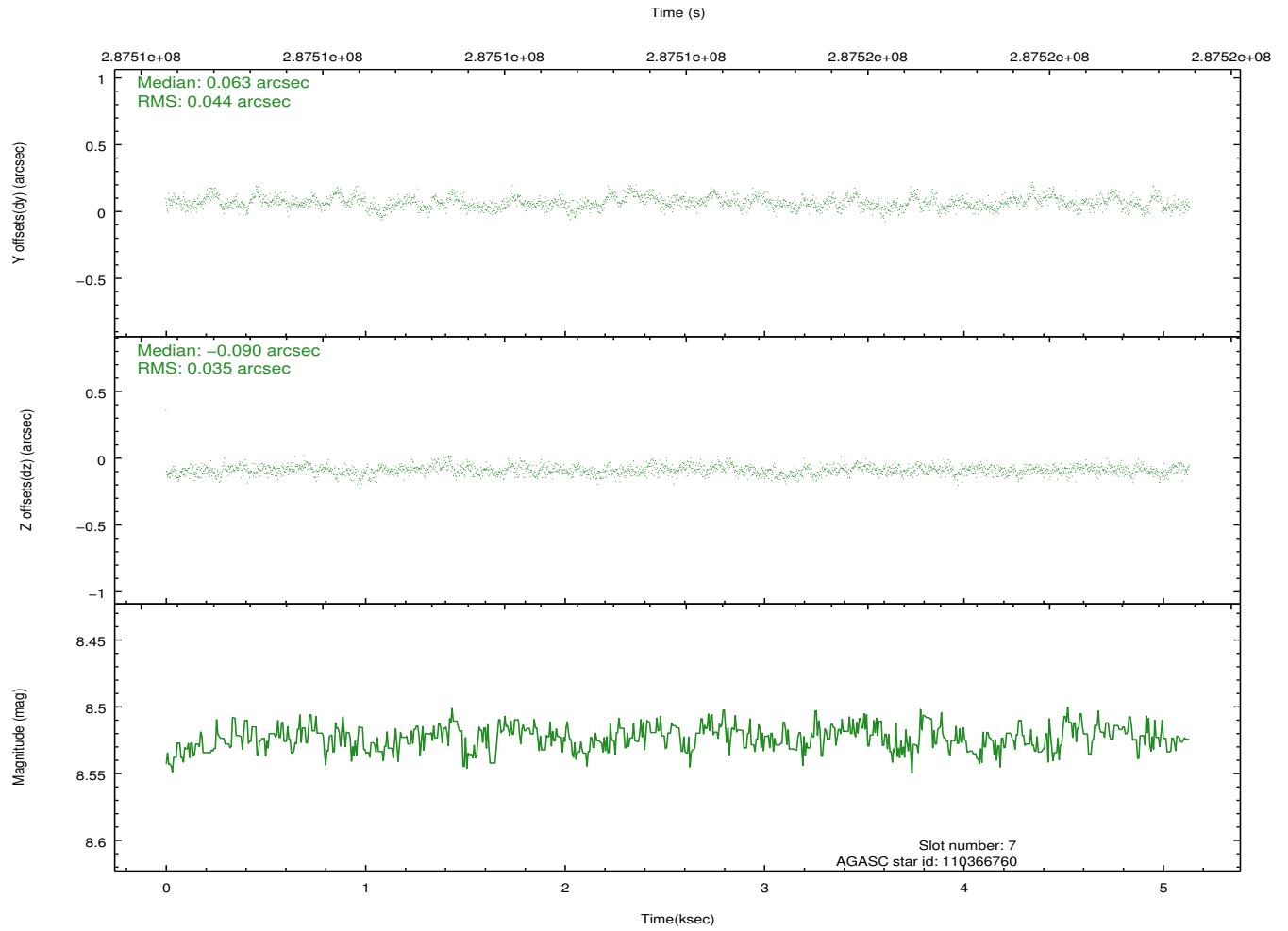
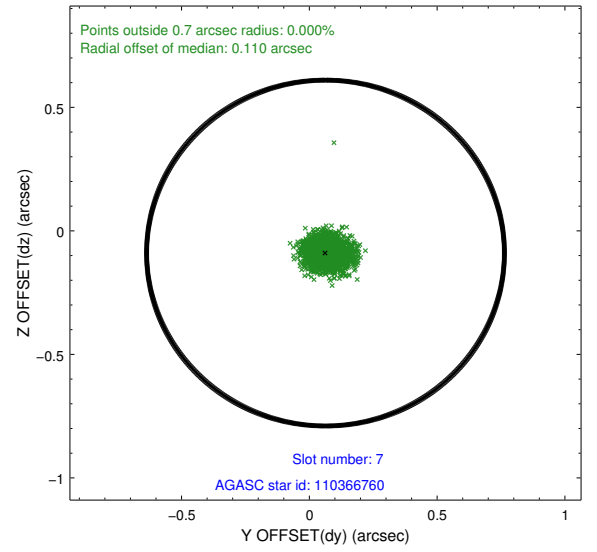
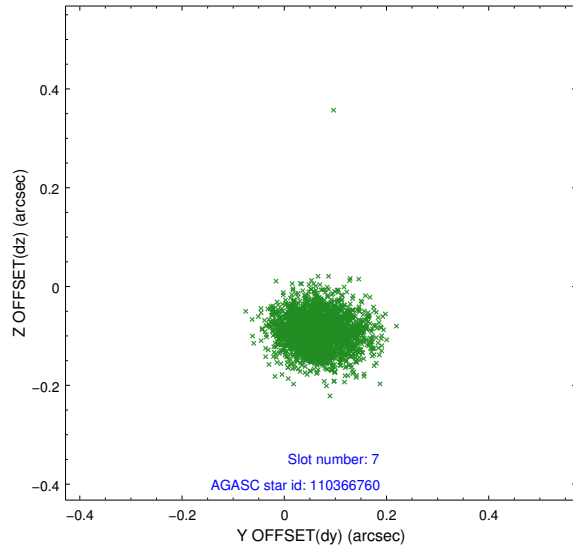


## 2.4.4 Slot 6



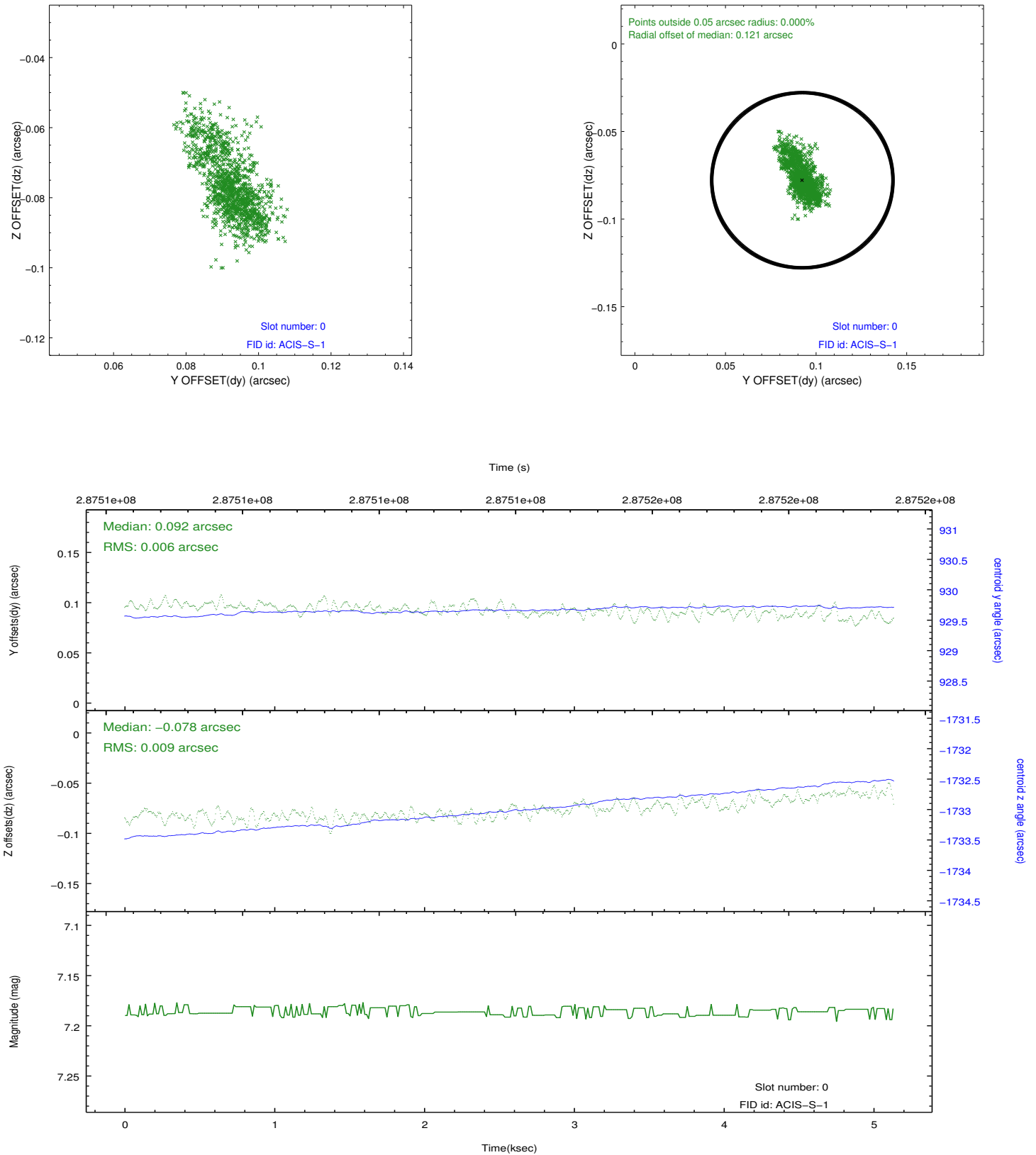


## 2.4.5 Slot 7

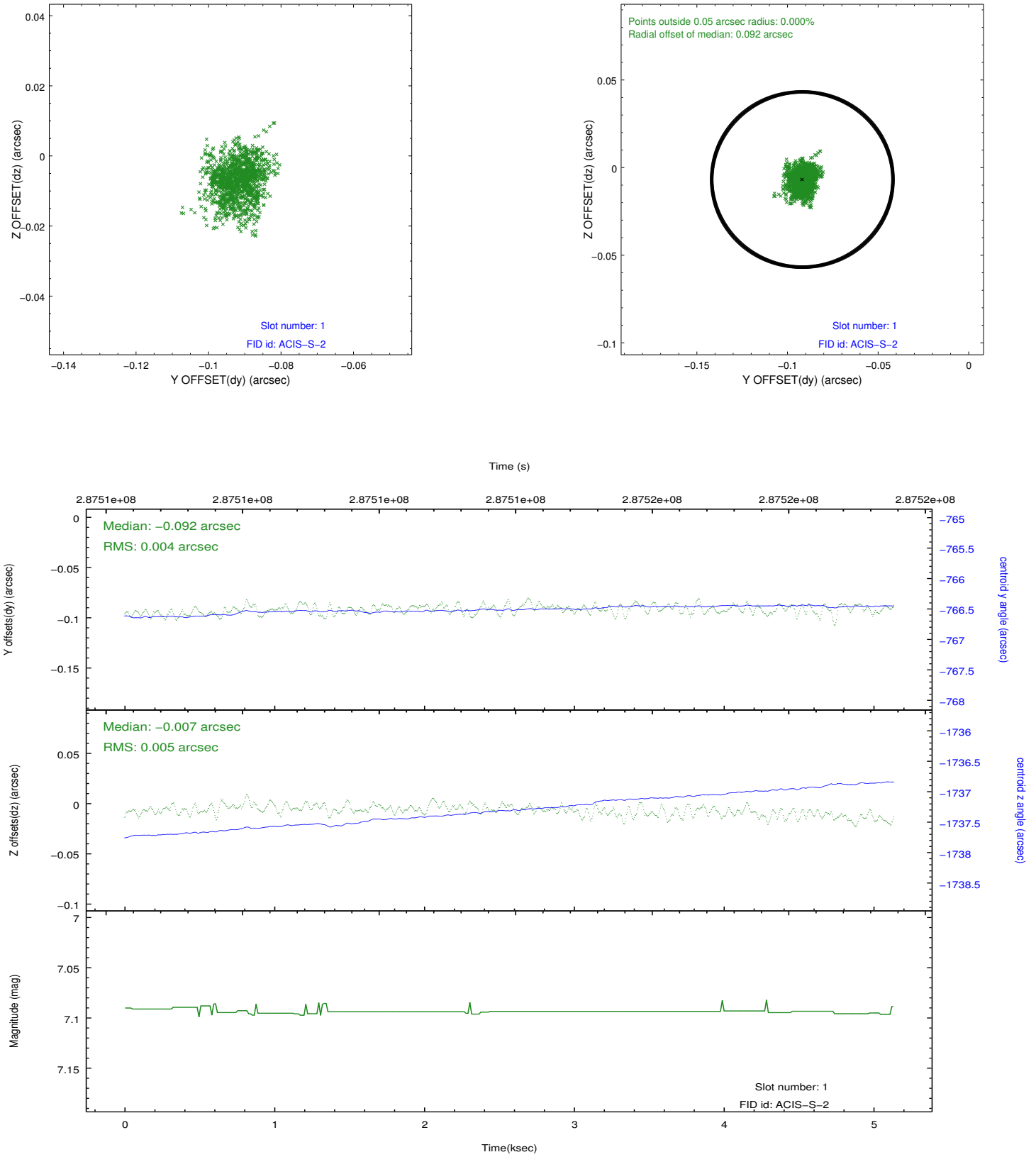


## 2.5 FID Slots

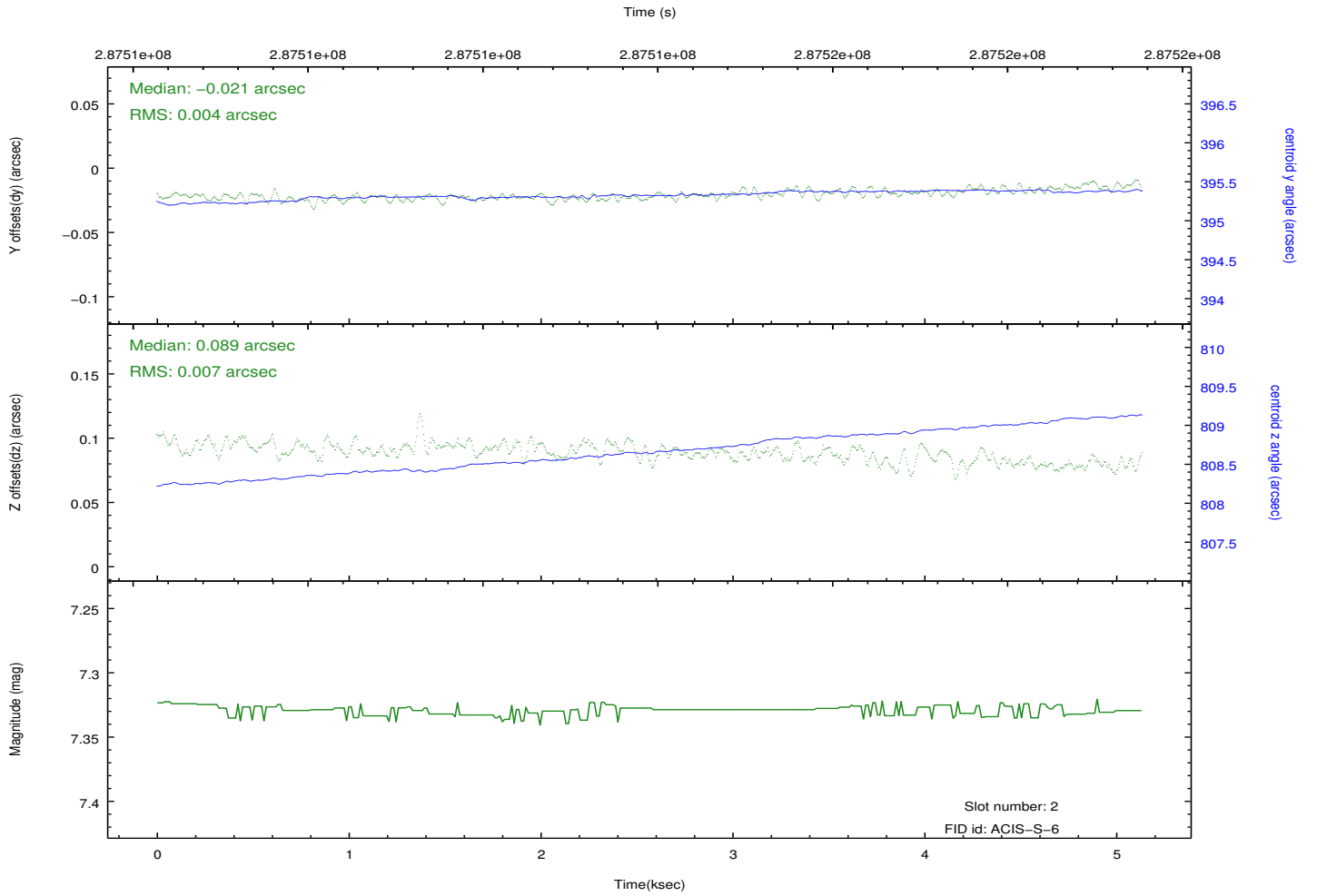
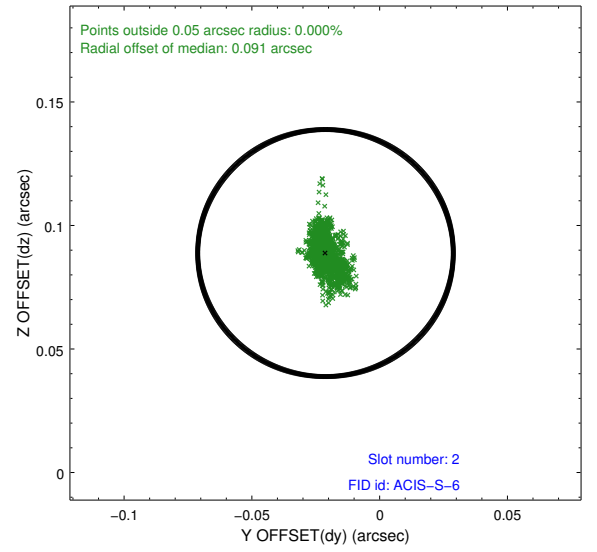
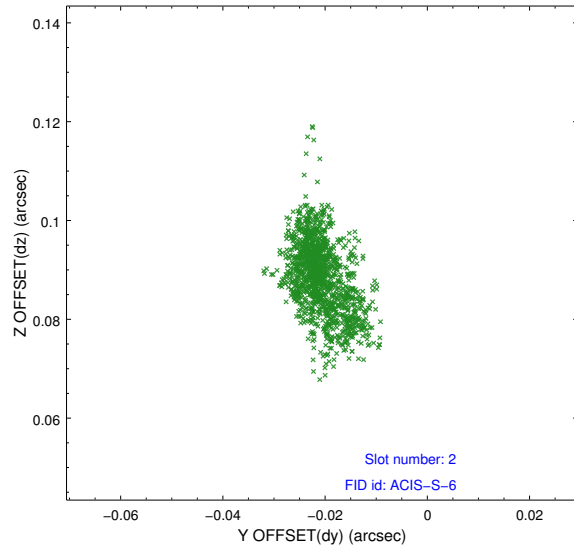
### 2.5.1 Slot 0



## 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)	2012.04.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.12639998

### A.2 Comments