

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 440 - L2 Version 4  
Chandra X-Ray Center

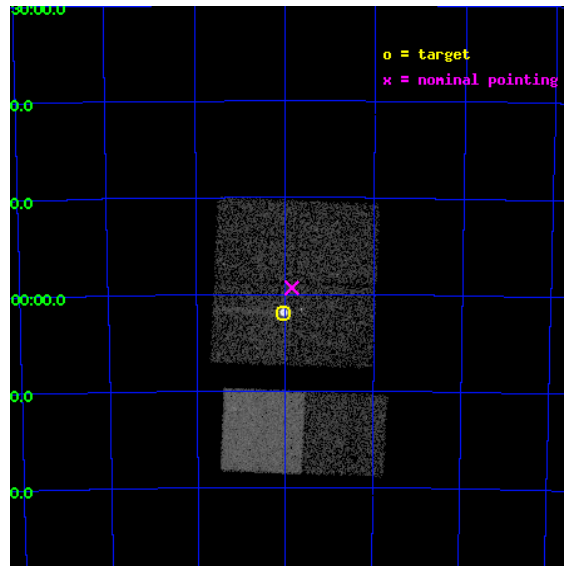
L2 Processing Date : Aug 25 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

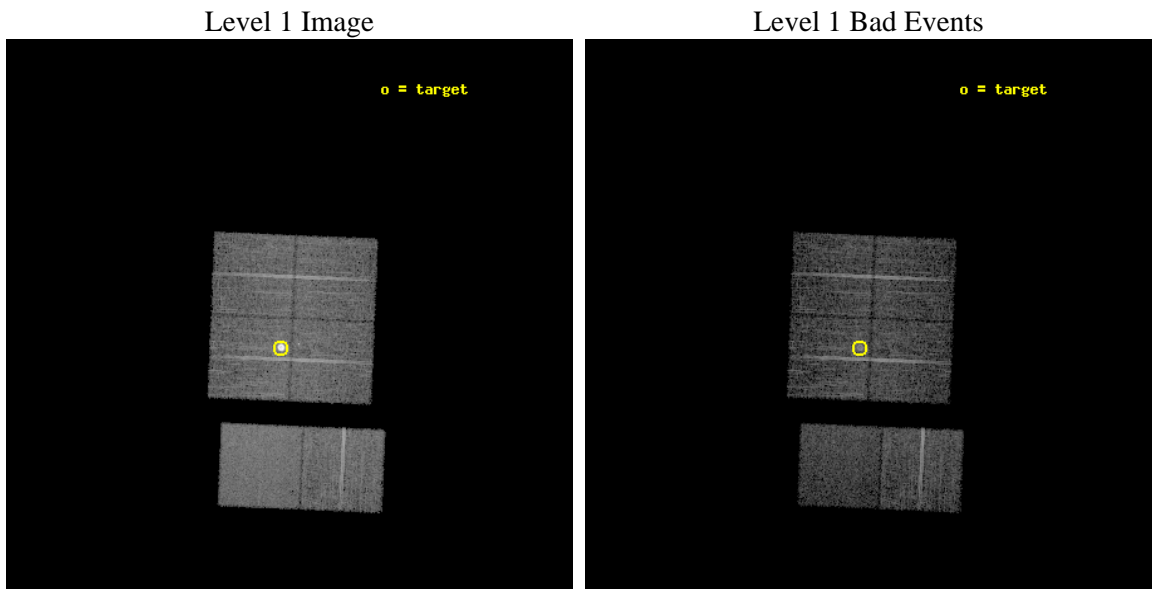
seq_num	590112	Sequence number
obs_id	440	Observation id
title	ACIS CHIP RESPONSE TO LINES WITH E=0.6-1.5 KEV	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72.3 [Chip I3, T=120, Offsets=-0,2,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.962512564646	Nominal RA [deg]
dec_nom	-71.988975193363	Nominal Dec [deg]
roll_nom	182.38545431214	Nominal Roll [deg]
revision	4	Processing version of data
ontime	6955.4834439307	Sum of GTIs [s]
livetime	6867.4089244744	Livetime [s]
ontime0	6958.6012542248	Sum of GTIs [s]
ontime1	6958.6422942281	Sum of GTIs [s]
ontime2	6958.6833342314	Sum of GTIs [s]
ontime3	6955.4834439307	Sum of GTIs [s]
ontime6	6958.8064542264	Sum of GTIs [s]
ontime7	6958.7654142231	Sum of GTIs [s]
l2events	74358	Number of level 2 events



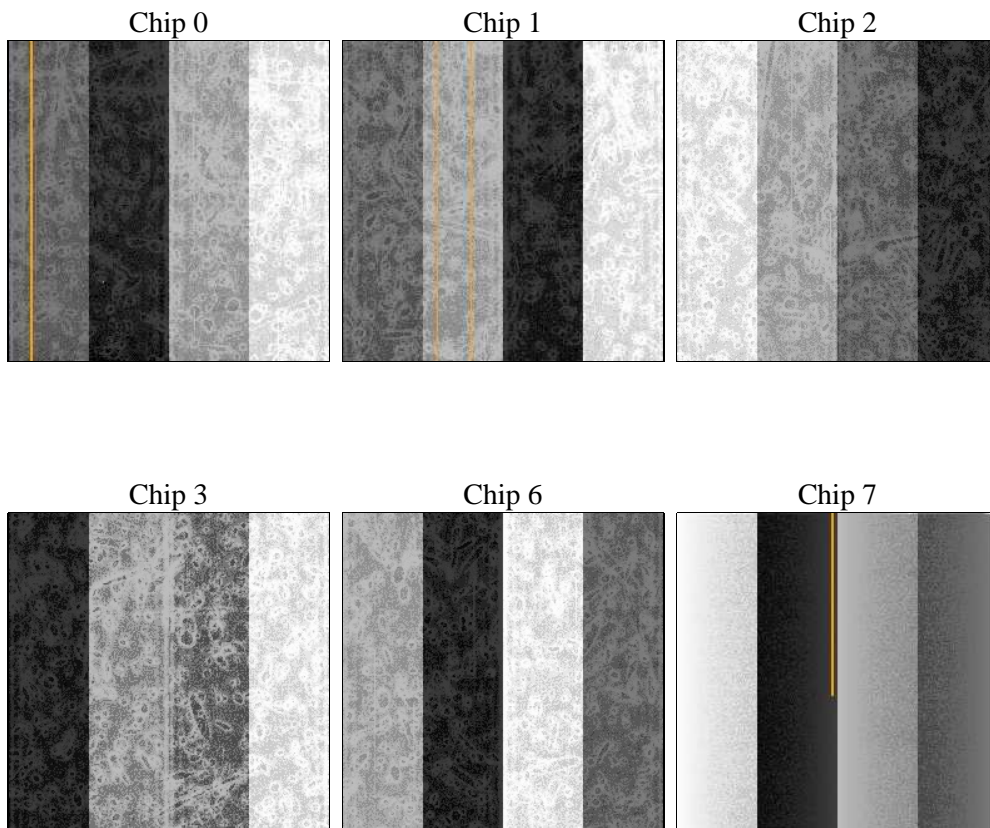
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	7200.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	6955.4834439307	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime0	6958.6012542248	Sum of GTIs [s]
date	2012-08-25T03:25:50	Date and time of file creation	ontime1	6958.6422942281	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	6958.6833342314	Sum of GTIs [s]
			ontime3	6955.4834439307	Sum of GTIs [s]
			ontime6	6958.8064542264	Sum of GTIs [s]
			ontime7	6958.7654142231	Sum of GTIs [s]
			l1events	330583	Number of level 1 events

### 2.1.4 Events

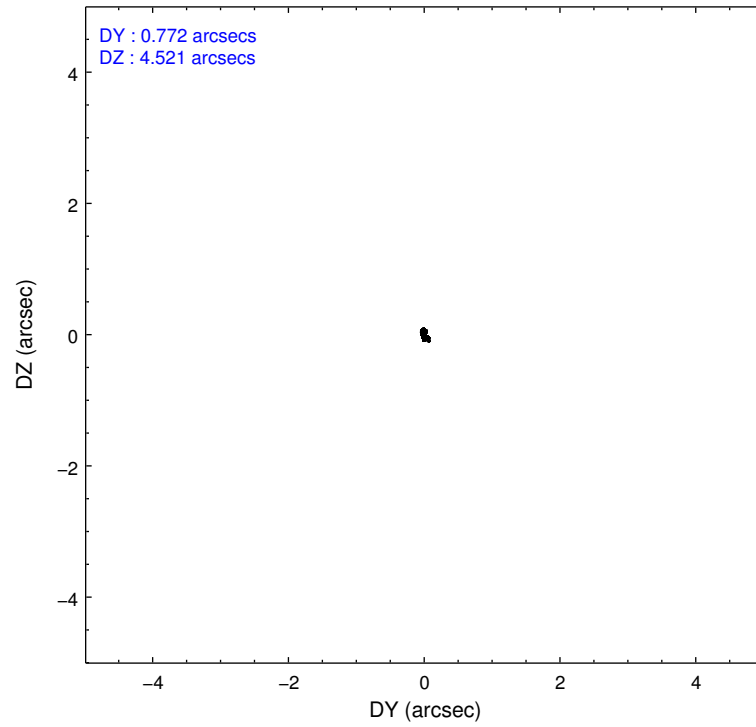
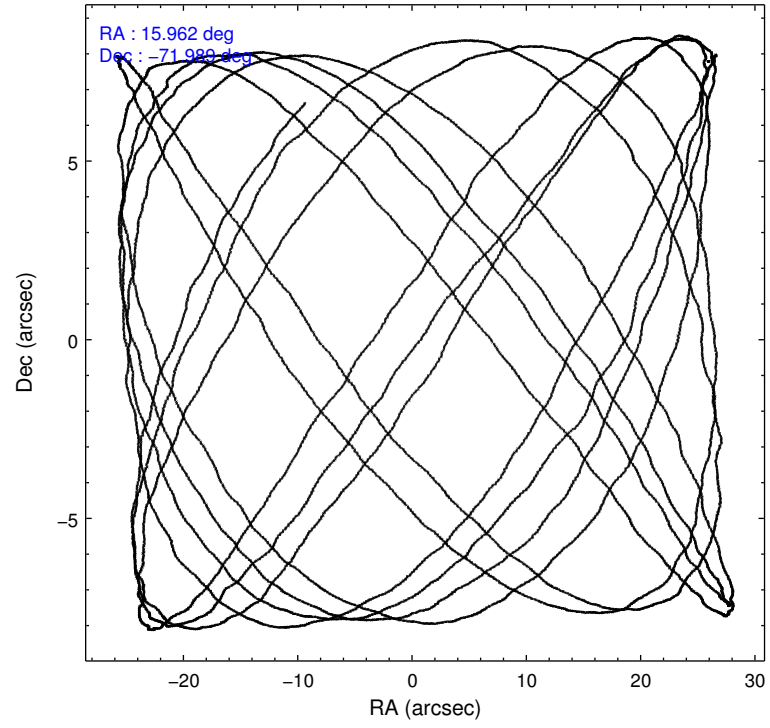
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	45850	45704	48988	79354	52363	58324	grade 0 events	2528	2429	2603	27251	2298	2838
rejected events	40260	40091	43440	46484	46967	32598		5%	5%	5%	34%	4%	4%
rejected %	87%	87%	88%	58%	89%	55%	grade 1 events	27	20	30	323	24	51
								0%	0%	0%	0%	0%	0%
							grade 2 events	1067	1034	1060	2877	1046	5084
								2%	2%	2%	3%	1%	8%
							grade 3 events	555	591	494	820	550	2405
								1%	1%	1%	1%	1%	4%
							grade 4 events	532	579	520	922	523	2376
								1%	1%	1%	1%	0%	4%
							grade 5 events	1552	1640	1494	1779	1939	5515
								3%	3%	3%	2%	3%	9%
							grade 6 events	913	983	877	1039	980	13033
								1%	2%	1%	1%	1%	22%
							grade 7 events	38676	38428	41910	44343	45003	27022
								84%	84%	85%	55%	85%	46%

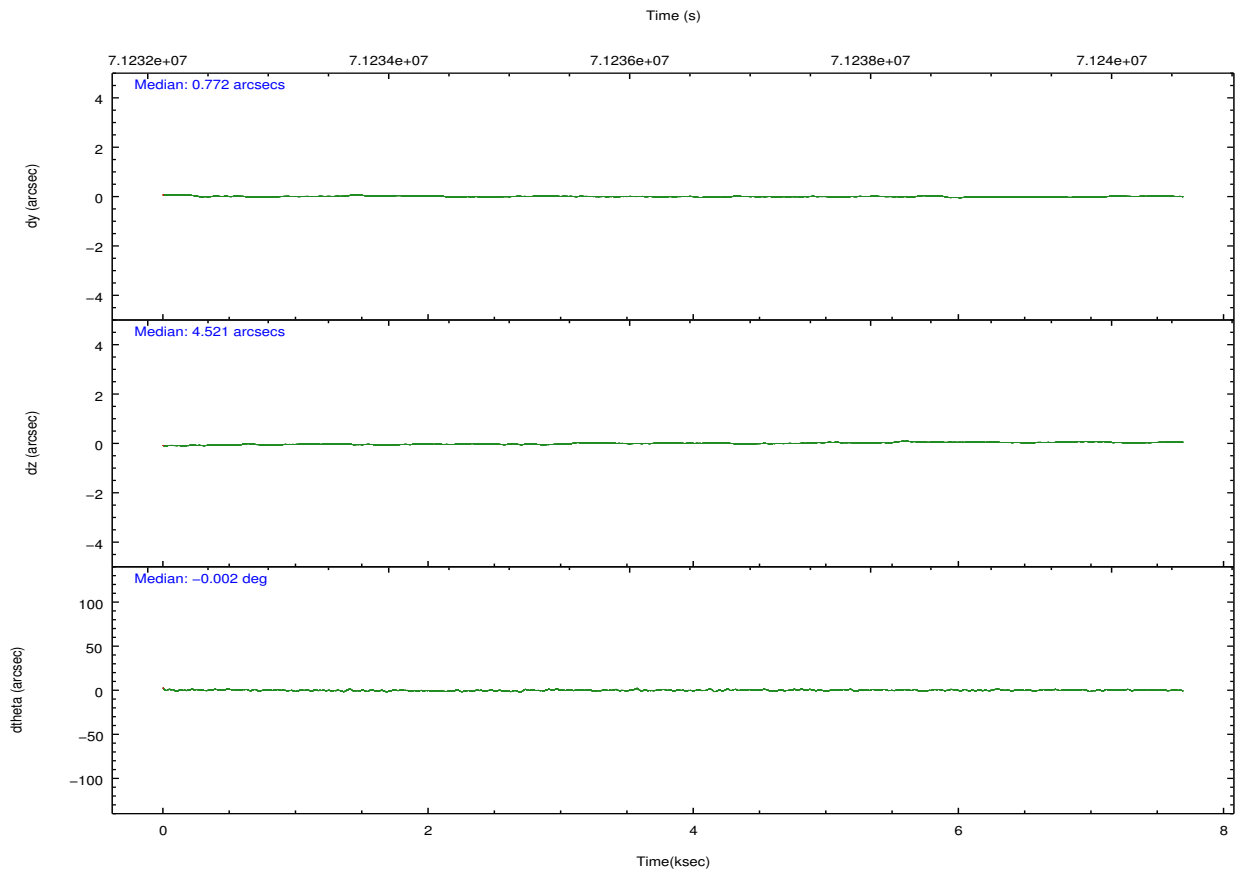
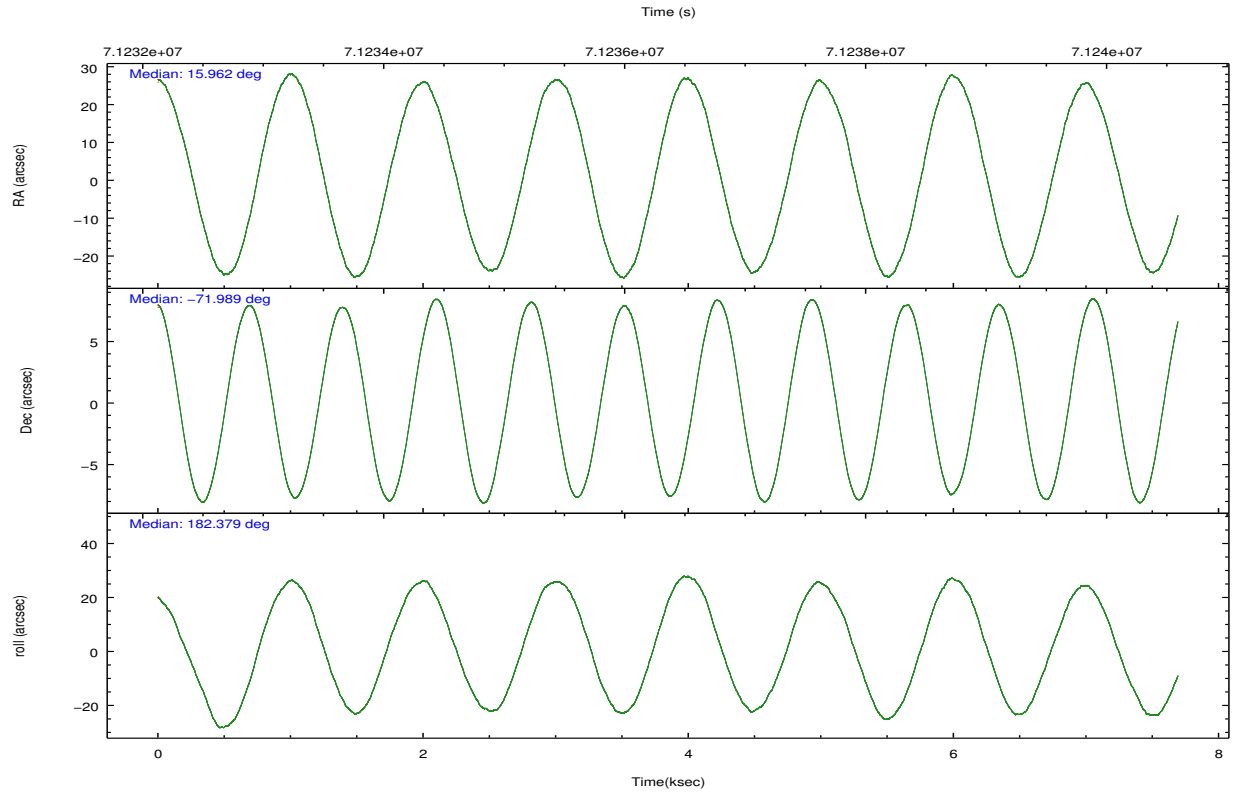


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	16.038333	15.96251256464583	Subarray requested	NONE	NONE
[deg] Pointing Dec	-71.974294	-71.98897519336293	Alternating exposures requested	N	N
[deg] Pointing Roll	182.248881	182.3854543121426	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	71233006.184000	71232339.474222			
Observation start date	2000-04-04T10:55:42	2000-04-04T10:45:39			
[s] Observation end time (MET)	71240206.184000	71241271.83704901			
Observation end date	2000-04-04T12:55:42	2000-04-04T13:14:31			
Read mode	TIMED	TIMED			

## 2.3 Aspect



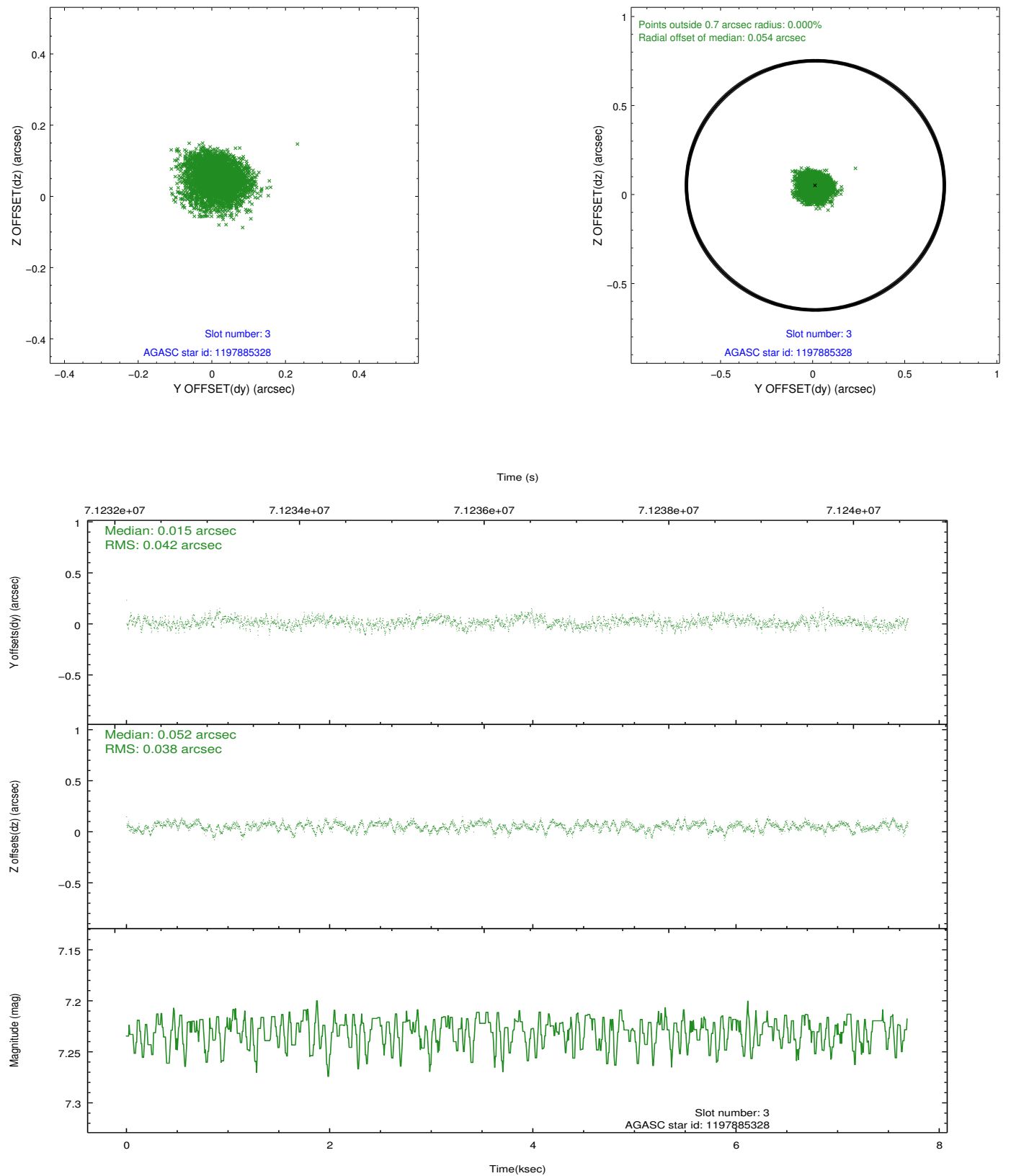


### Slot Statistics

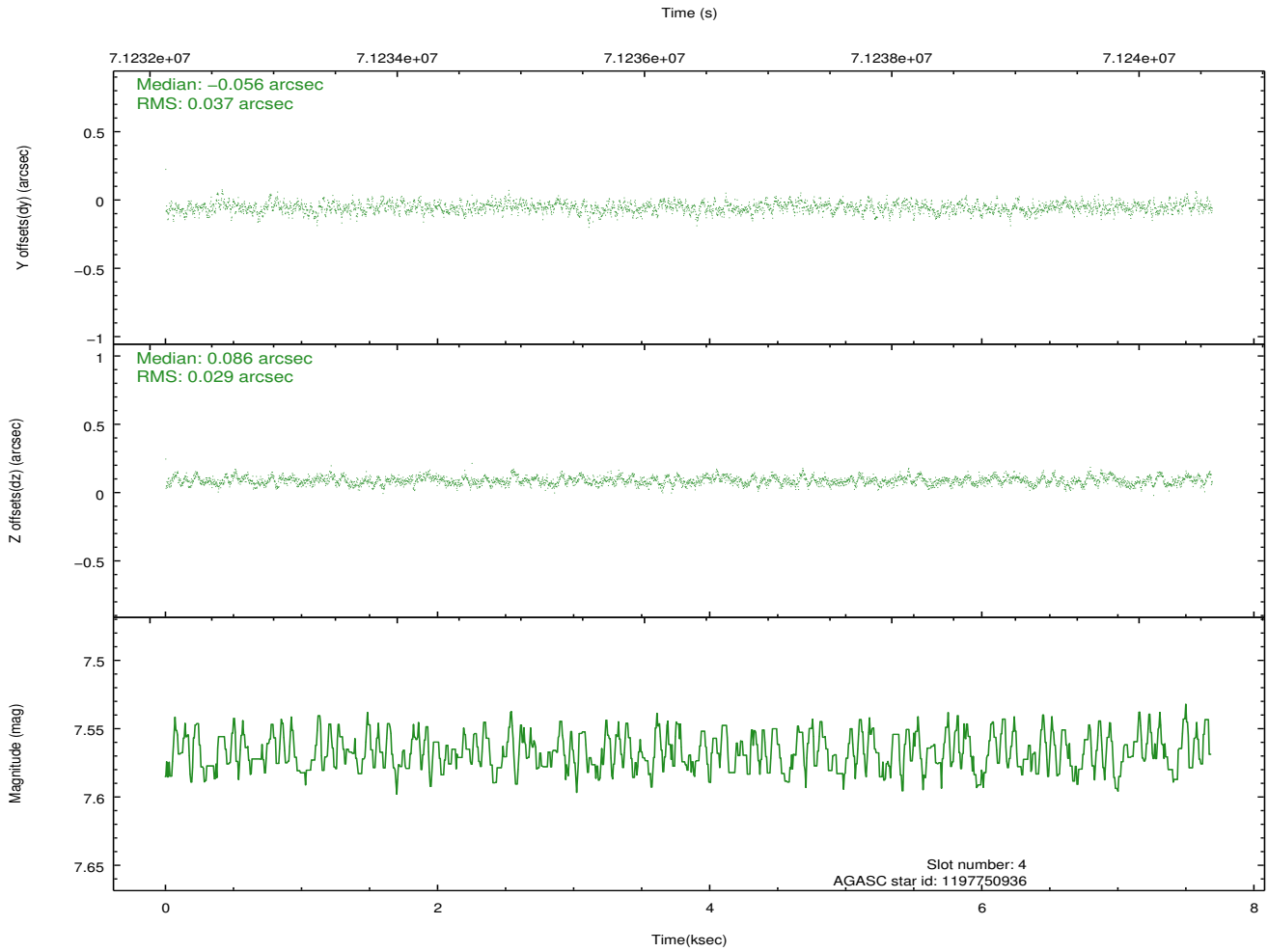
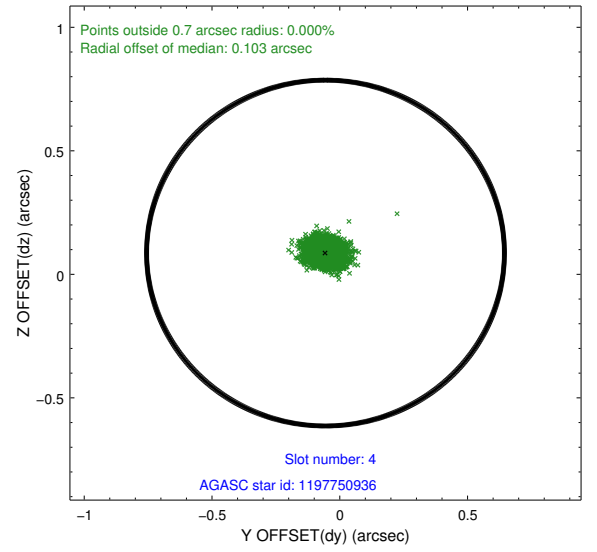
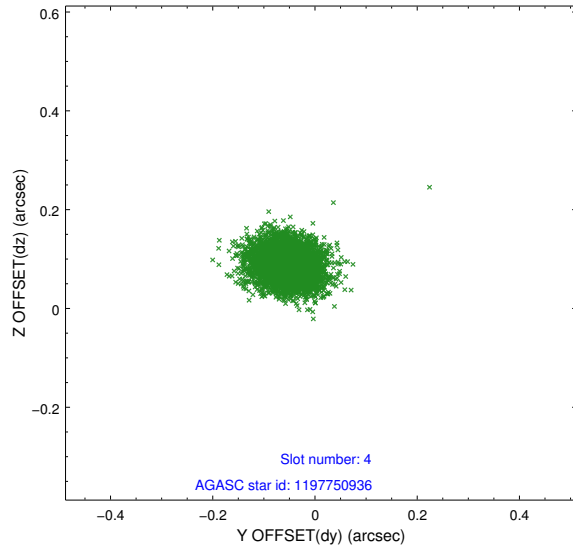
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.15	1877	-0.030	-0.022	0.008	0.015	0.000000	0.000000	-755.12	-834.23
1	FID	ACIS-I-4	7.19	1877	-0.029	0.032	0.006	0.011	0.000000	0.000000	2158.61	1071.62
2	FID	ACIS-I-5	7.23	1877	-0.041	0.059	0.008	0.014	0.000000	0.000000	-1808.00	1070.35
3	GUIDE	1197885328	7.23	3753	0.015	0.052	0.060	0.096	16.283090	-71.733943	-310.35	-853.48
4	GUIDE	1197750936	7.57	3753	-0.056	0.086	0.050	0.081	15.387940	-71.549550	680.11	-1553.33
5	GUIDE	1197750640	9.73	3750	-0.009	-0.071	0.092	0.152	15.758835	-72.088048	324.92	397.04
6	GUIDE	1197749664	9.58	3752	-0.112	-0.042	0.095	0.152	15.809015	-72.366369	304.59	1400.86
7	GUIDE	1197885104	9.36	3749	0.160	-0.025	0.087	0.137	17.845067	-72.189368	-1956.48	881.44

## 2.4 Star Slots

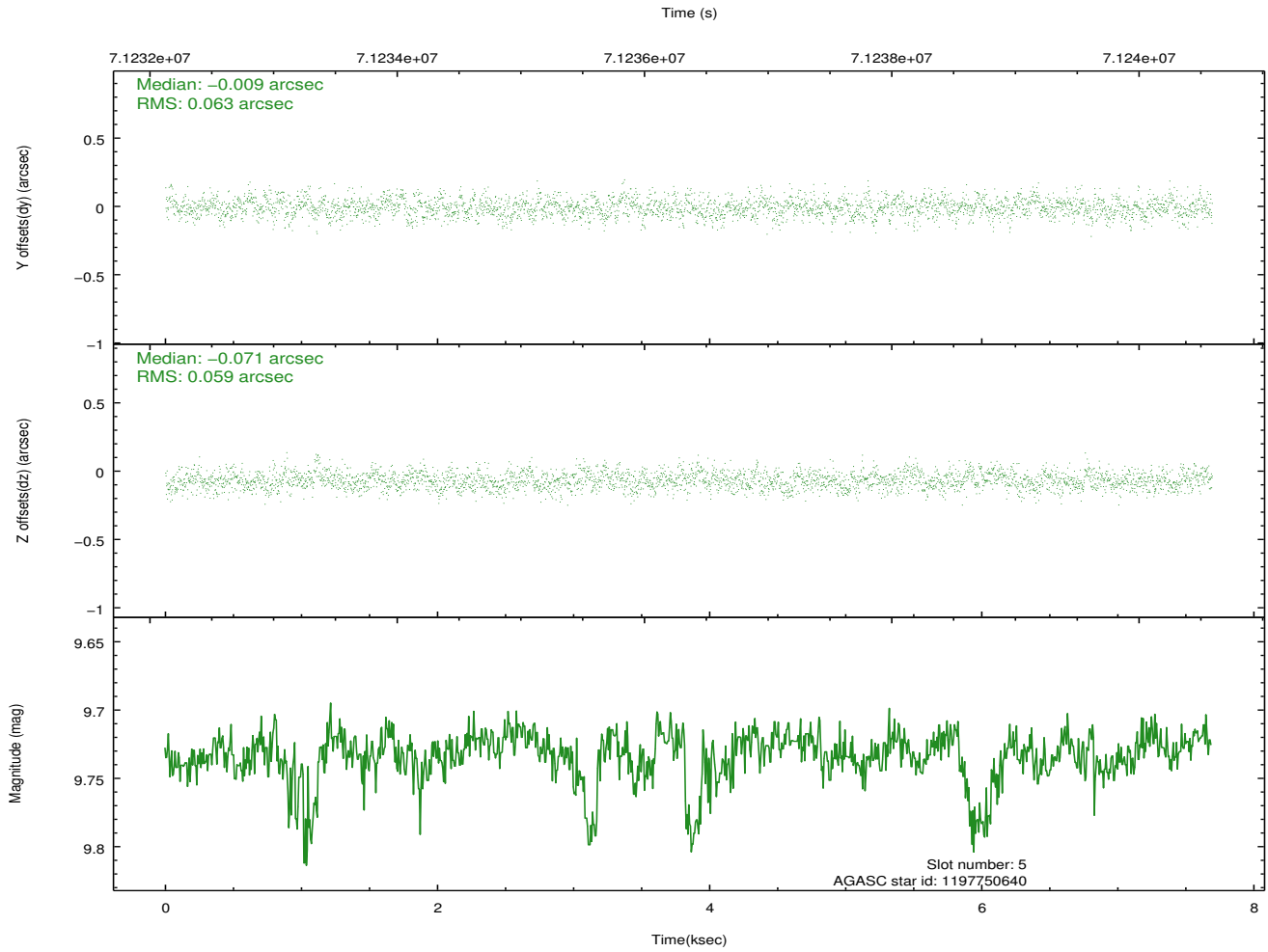
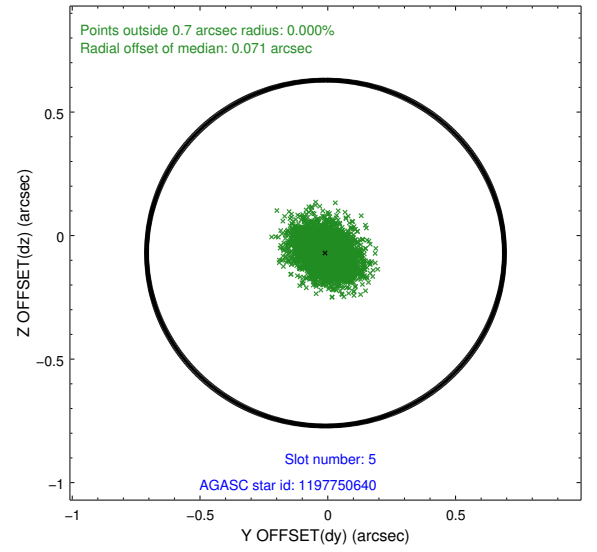
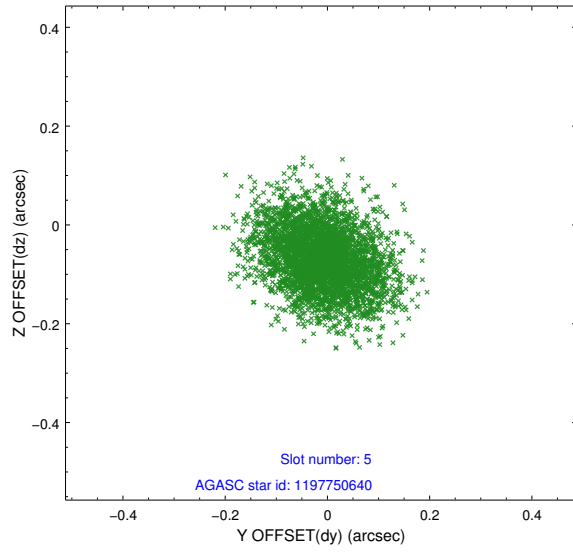
### 2.4.1 Slot 3



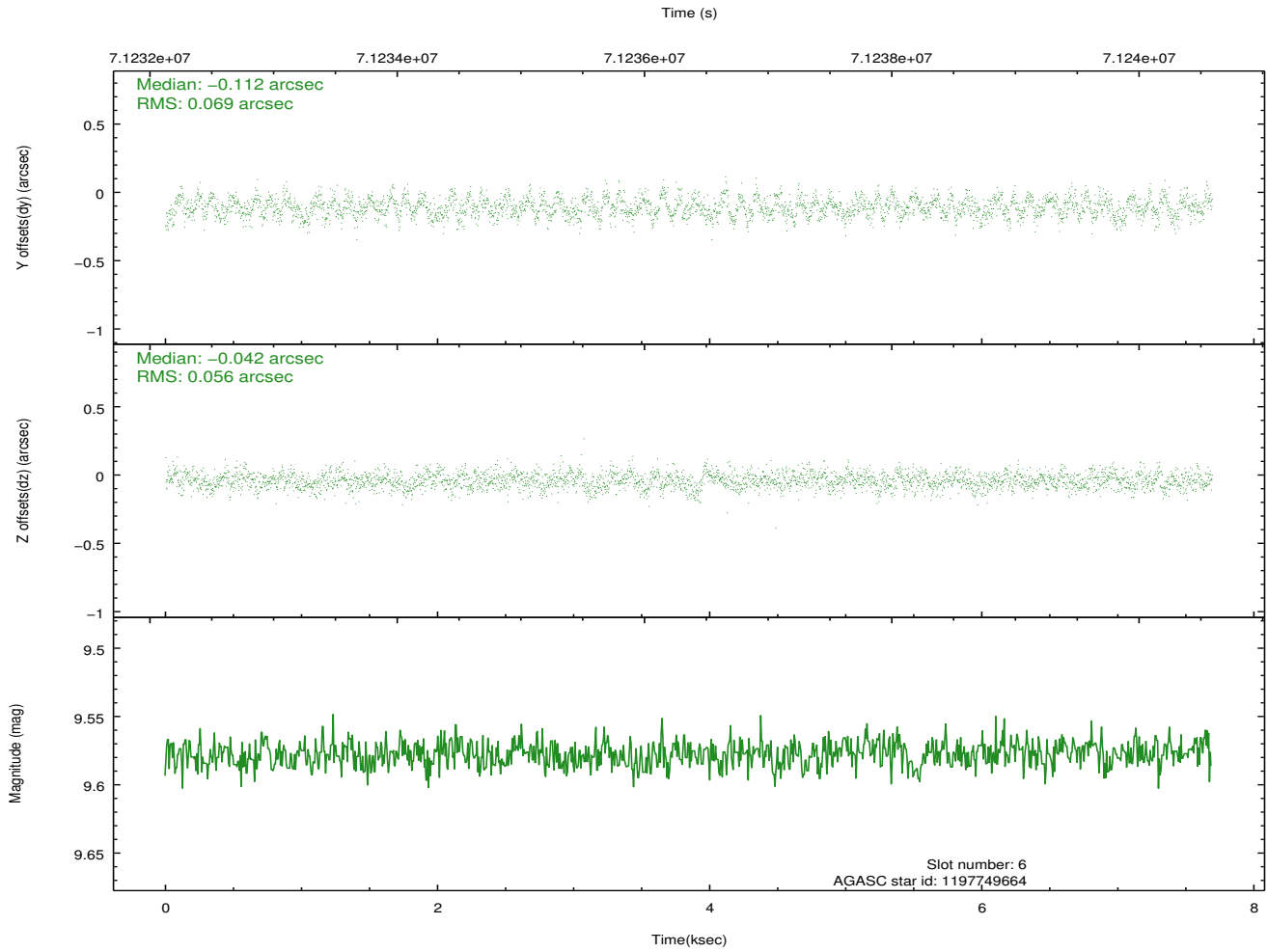
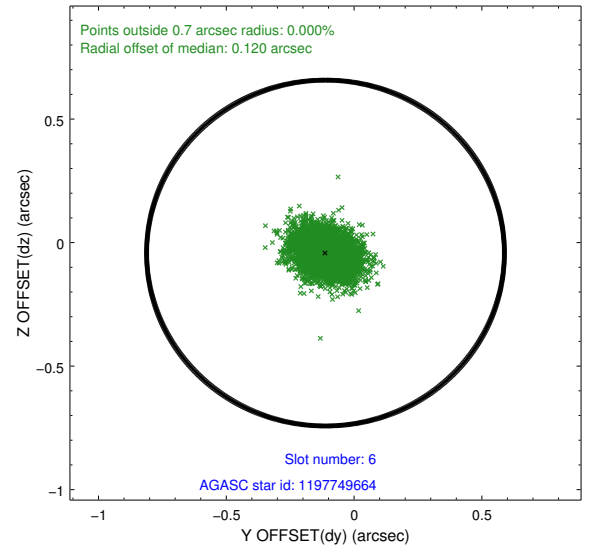
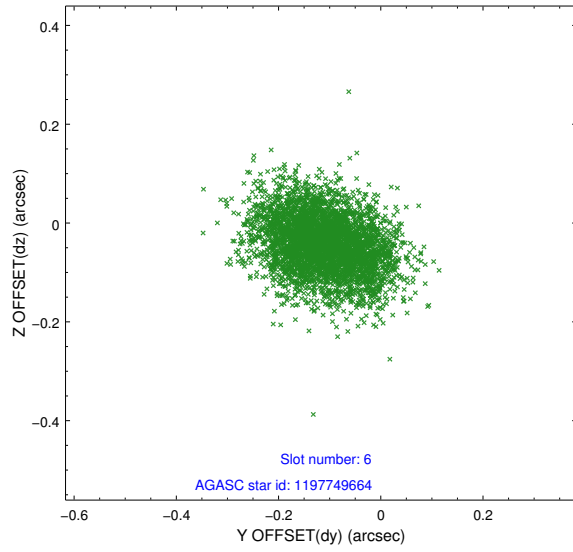
## 2.4.2 Slot 4



### 2.4.3 Slot 5

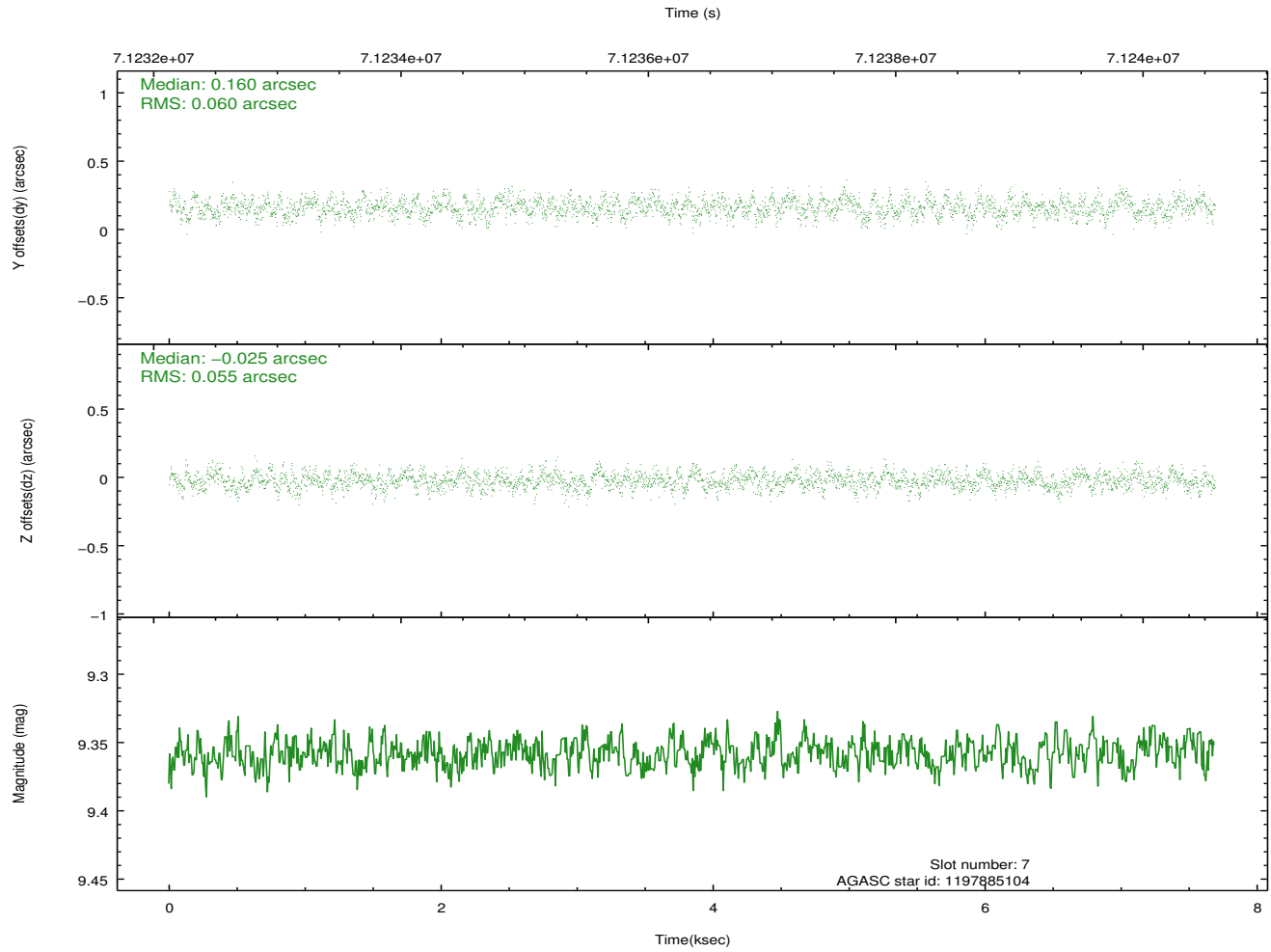
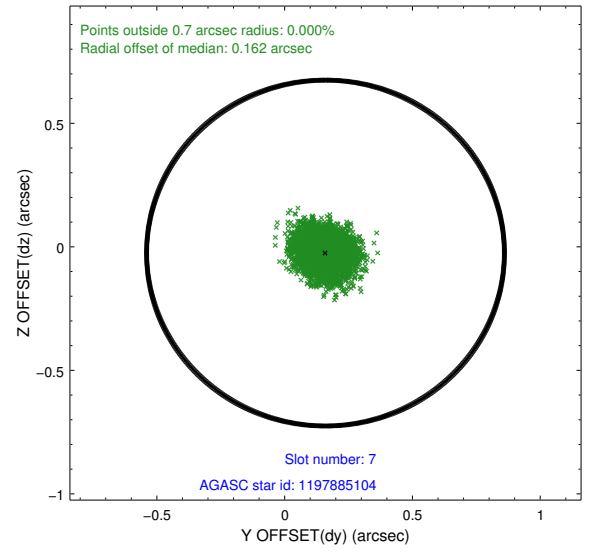
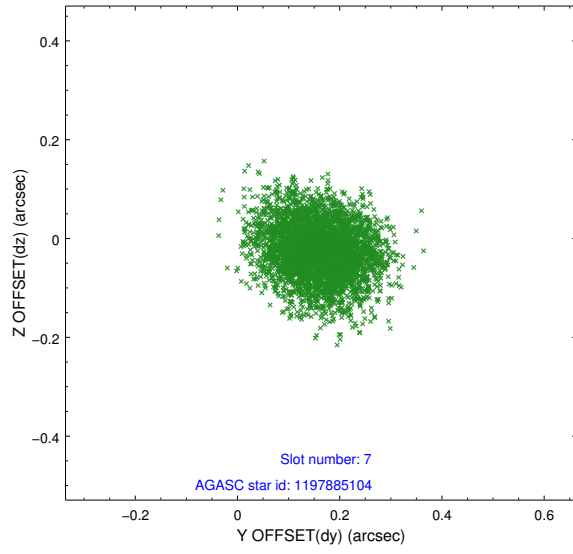


## 2.4.4 Slot 6



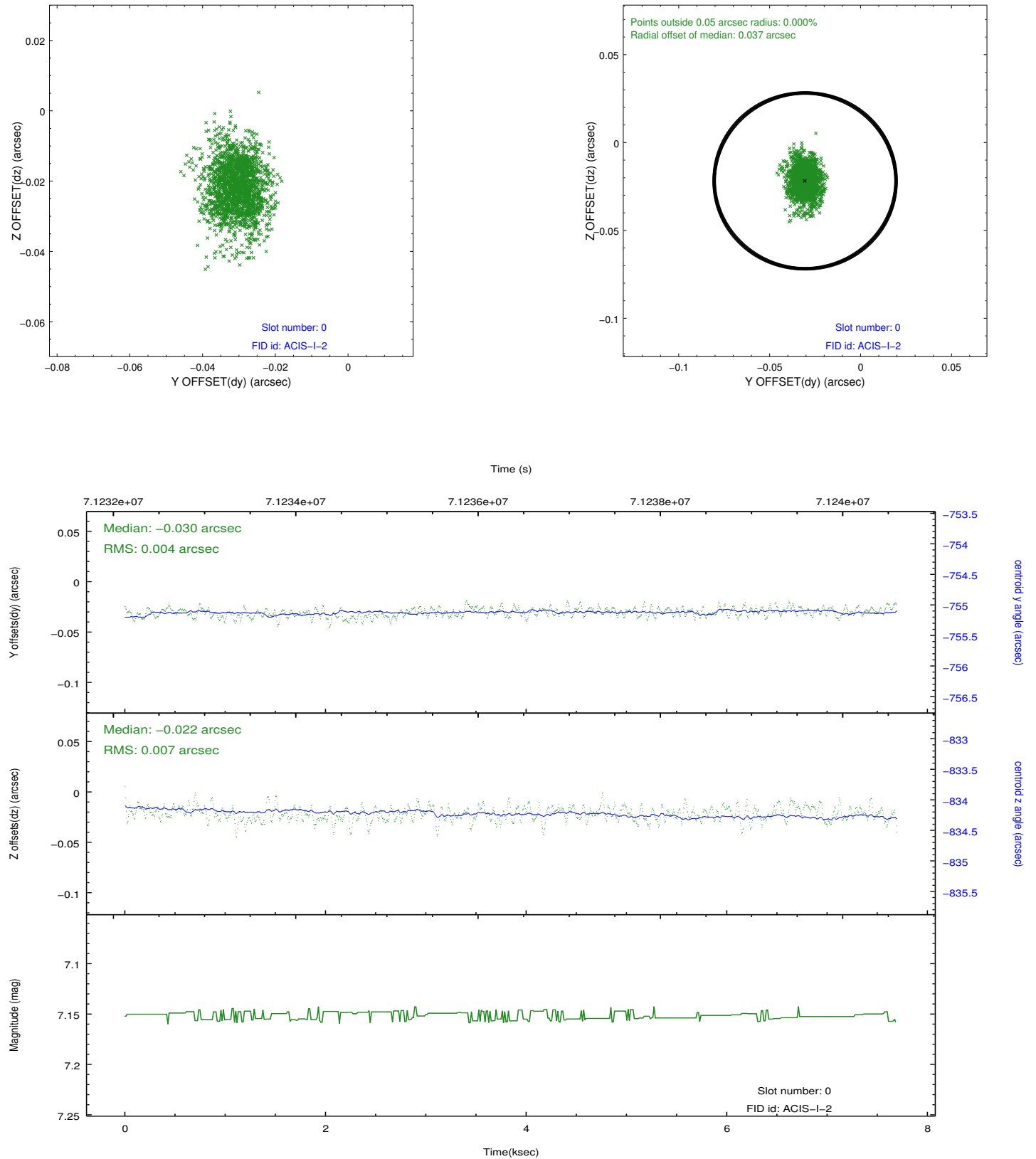


## 2.4.5 Slot 7

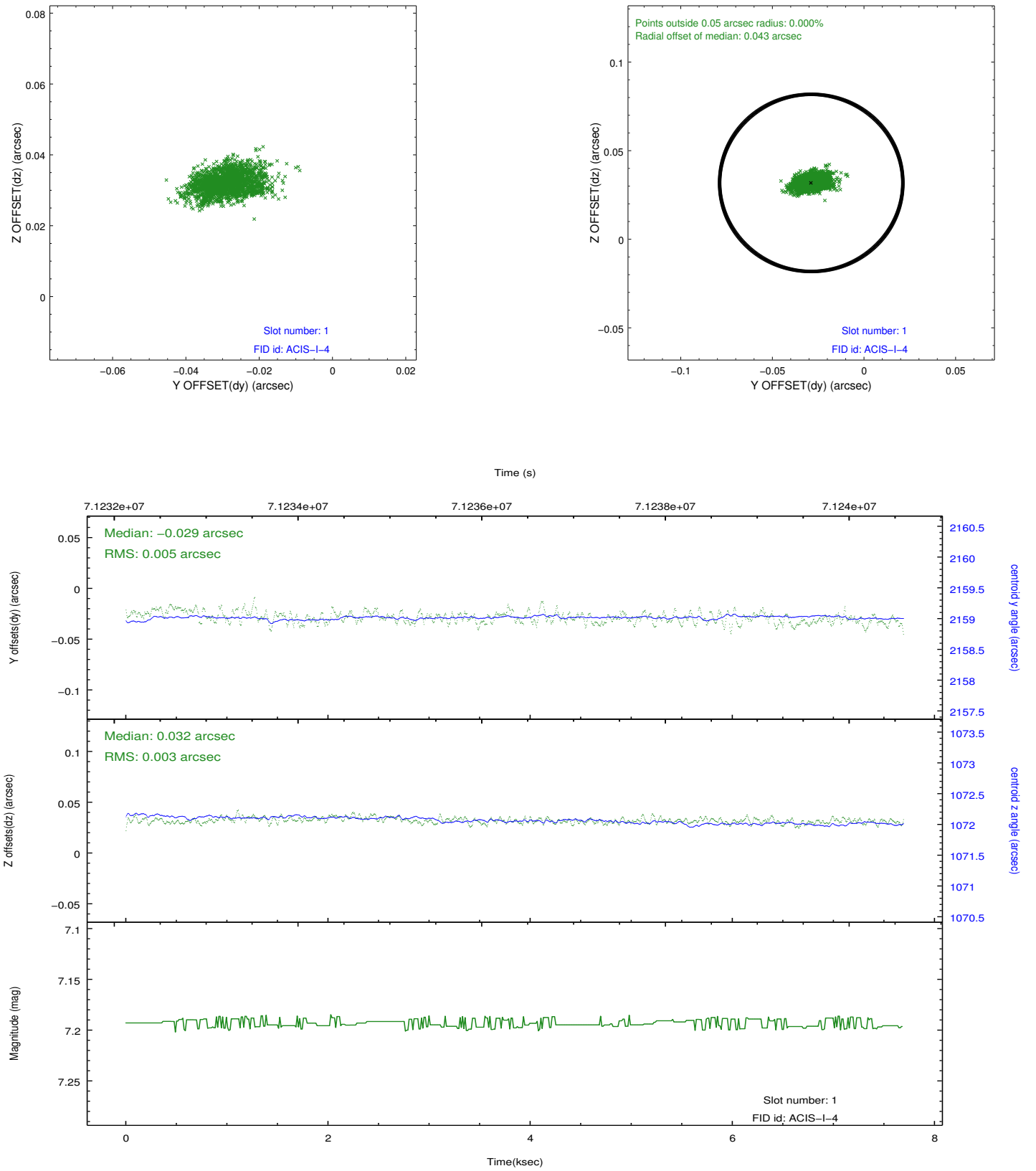


## 2.5 FID Slots

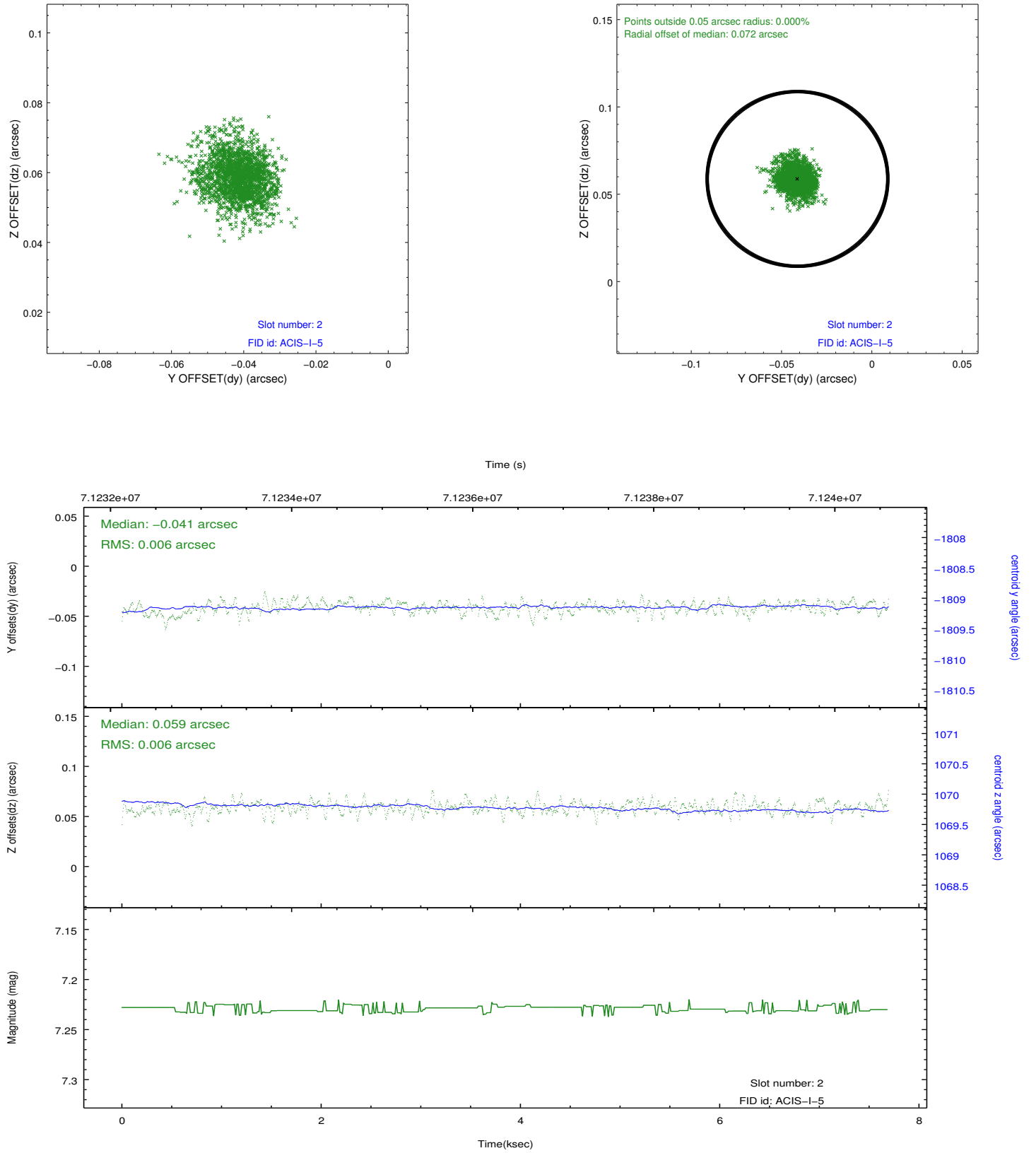
### 2.5.1 Slot 0



## 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)	2012.08.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.956

### A.2 Comments