

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 845 - L2 Version 4  
Chandra X-Ray Center

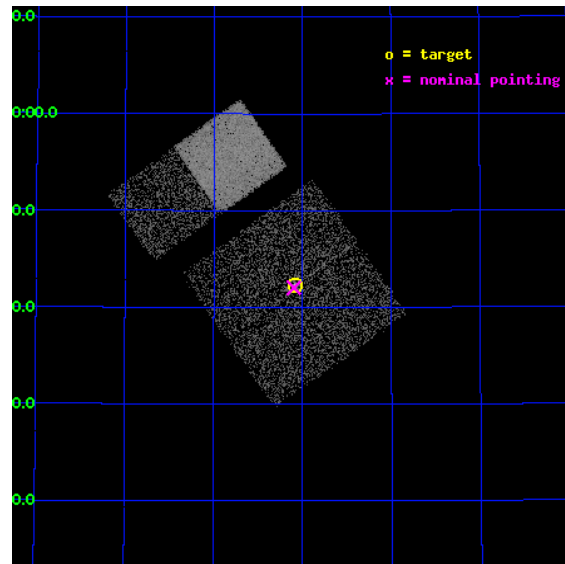
L2 Processing Date : Aug 22 2012

## 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

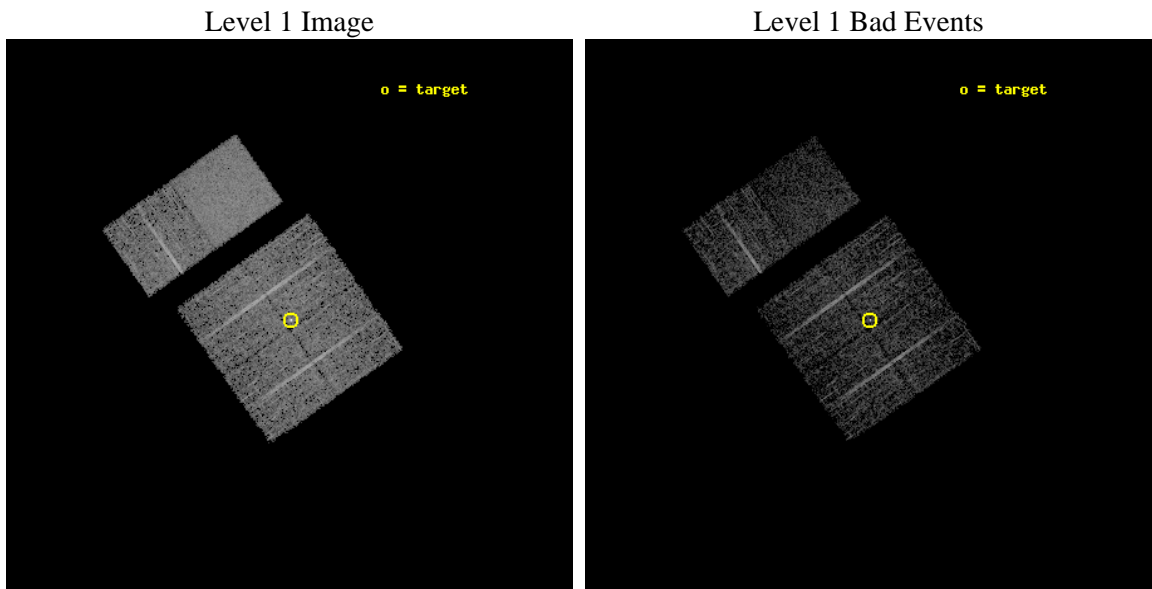
seq_num	700150	Sequence number
obs_id	845	Observation id
title	THE X-RAY CLUSTER ENVIRONMENT OF BLAZARS	Proposal title
observer	Dr. Joseph Pesce	Principal investigator
object	1ES 2344+514	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	356.77	Observer's specified target RA [deg]
dec_targ	51.704833	Observer's specified target Dec [deg]
ra_nom	356.77438182463	Nominal RA [deg]
dec_nom	51.700501407595	Nominal Dec [deg]
roll_nom	324.7540974893	Nominal Roll [deg]
revision	4	Processing version of data
ontime	2758.400002569	Sum of GTIs [s]
livetime	2723.4714808274	Livetime [s]
ontime0	2758.400002569	Sum of GTIs [s]
ontime1	2758.400002569	Sum of GTIs [s]
ontime2	2758.400002569	Sum of GTIs [s]
ontime3	2758.400002569	Sum of GTIs [s]
ontime6	2758.400002569	Sum of GTIs [s]
ontime7	2758.400002569	Sum of GTIs [s]
l2events	29090	Number of level 2 events



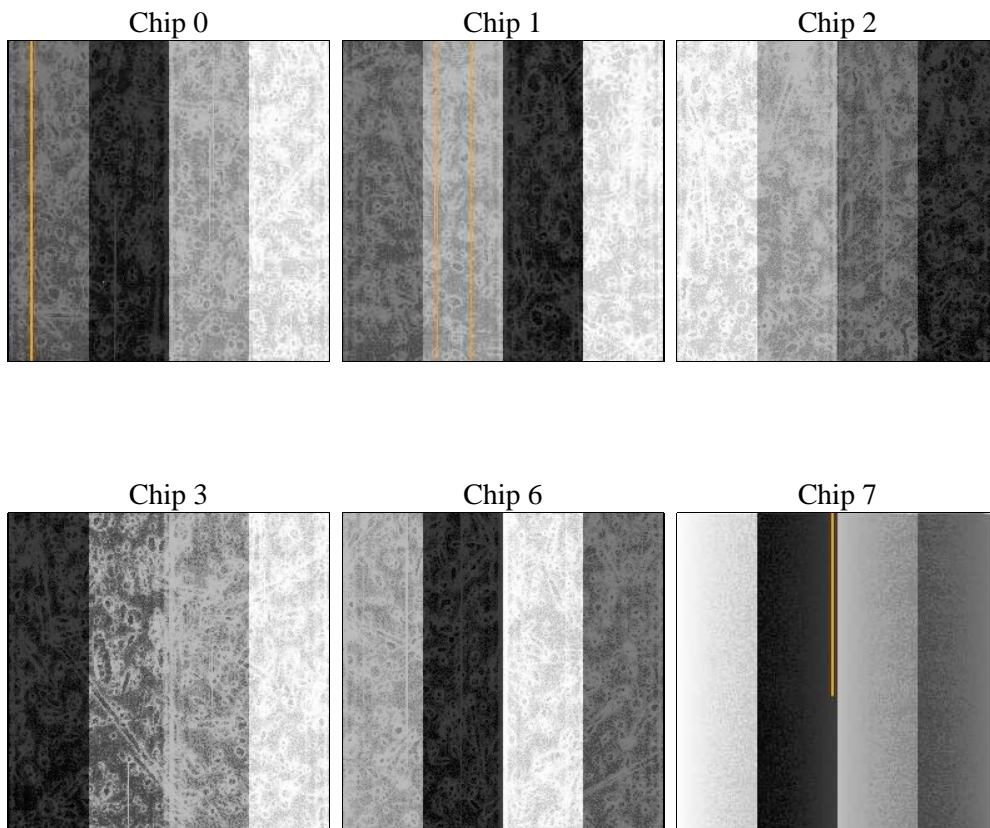
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	2758.400002569	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime0	2758.400002569	Sum of GTIs [s]
date	2012-08-22T12:53:59	Date and time of file creation	ontime1	2758.400002569	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	2758.400002569	Sum of GTIs [s]
			ontime3	2758.400002569	Sum of GTIs [s]
			ontime6	2758.400002569	Sum of GTIs [s]
			ontime7	2758.400002569	Sum of GTIs [s]
			l1events	142116	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	20741	19856	21188	23998	23643	32690	grade 0 events	1149	1171	1063	1434	1114	2040
rejected events	18224	17248	18878	20866	21134	14457		5%	5%	5%	5%	4%	6%
rejected %	87%	86%	89%	86%	89%	44%	grade 1 events	11	8	17	108	11	27
								0%	0%	0%	0%	0%	0%
							grade 2 events	501	512	458	548	474	3510
								2%	2%	2%	2%	2%	10%
							grade 3 events	253	261	239	294	279	1603
								1%	1%	1%	1%	1%	4%
							grade 4 events	210	256	219	267	217	1600
								1%	1%	1%	1%	0%	4%
							grade 5 events	658	712	644	877	812	2415
								3%	3%	3%	3%	3%	7%
							grade 6 events	410	412	333	595	429	9528
								1%	2%	1%	2%	1%	29%
							grade 7 events	17549	16524	18215	19875	20307	11967
								84%	83%	85%	82%	85%	36%

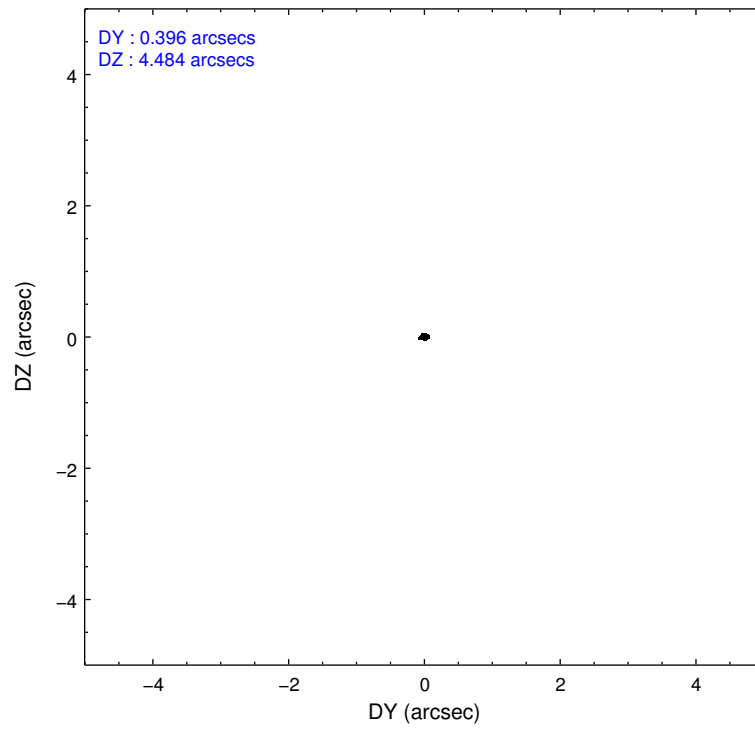
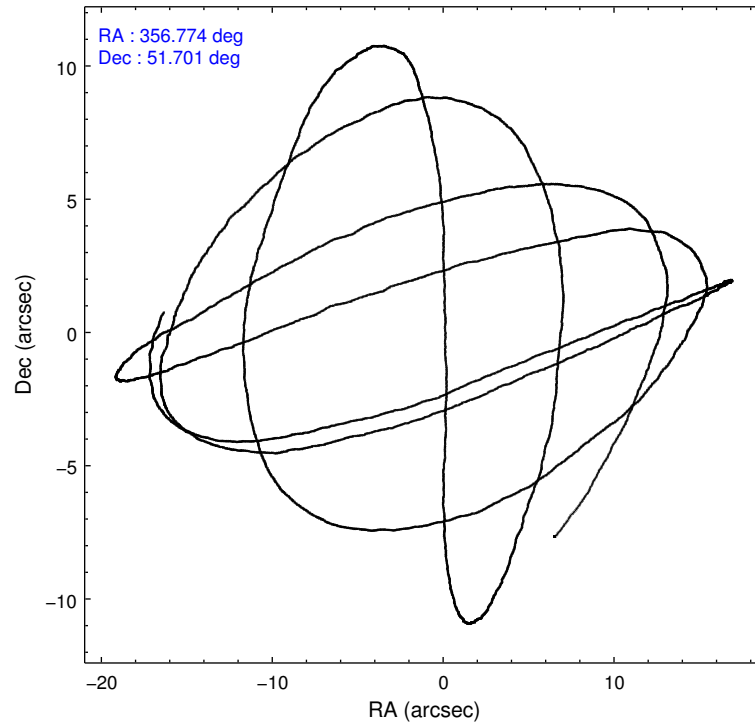


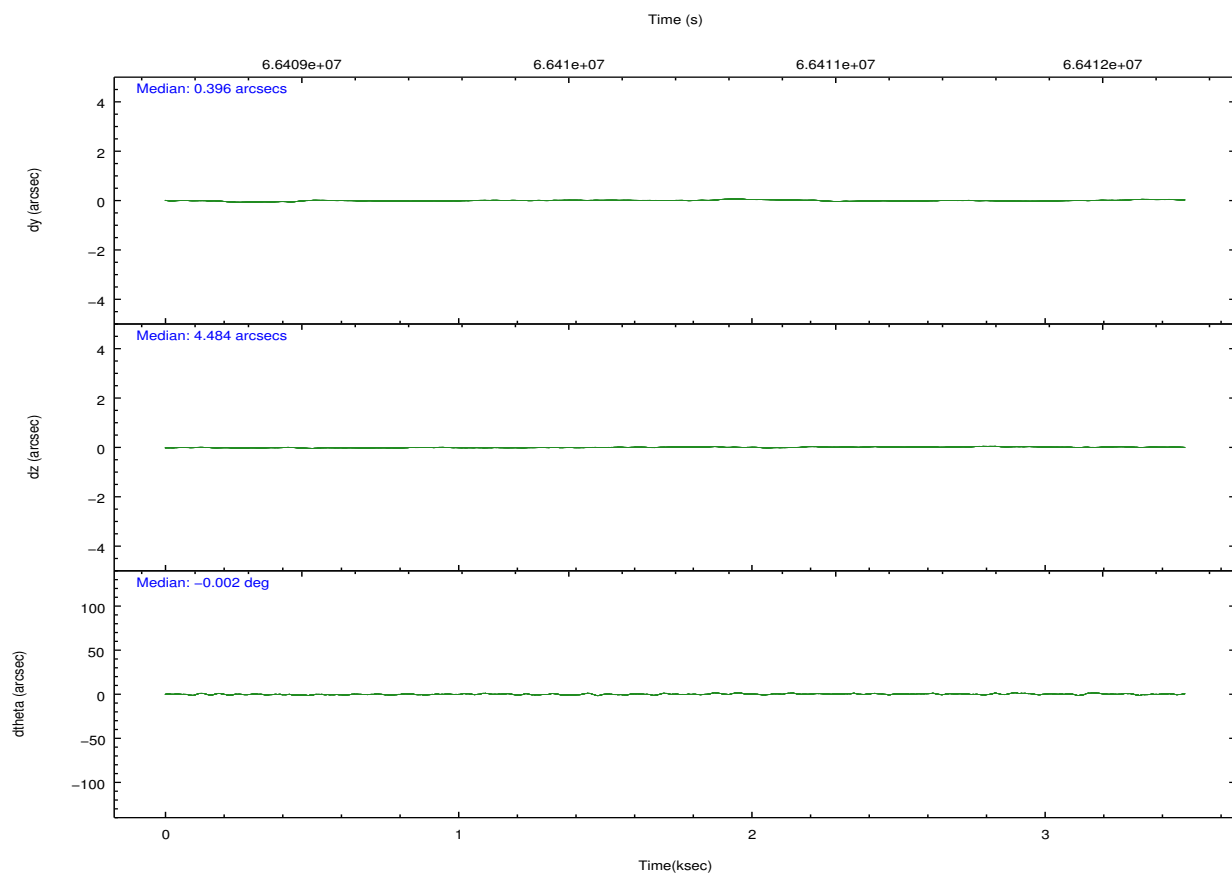
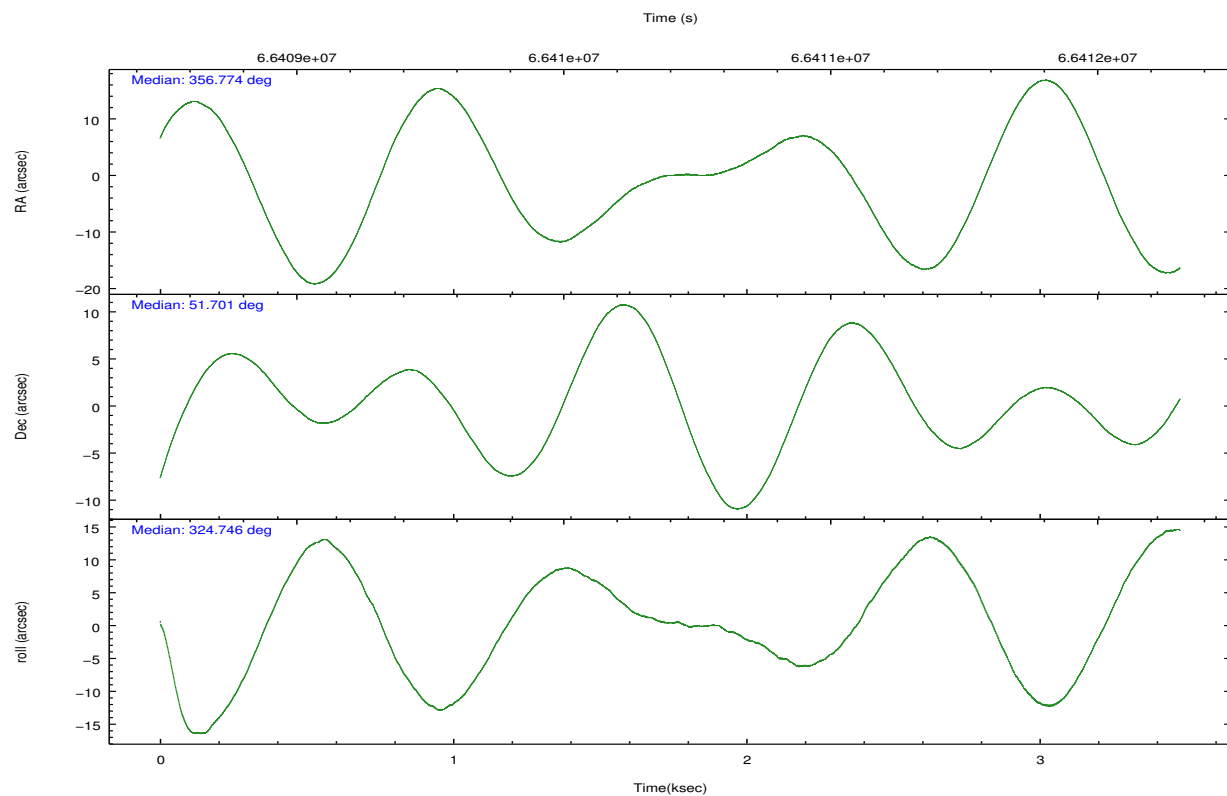
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	356.729925	356.7743818246265
[deg] Pointing Dec	51.703271	51.70050140759481
[deg] Pointing Roll	324.580308	324.7540974892988
[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)	66409136.184000	66408271.556633
Observation start date	2000-02-08T14:57:52	2000-02-08T14:44:31
[s] Observation end time (MET)	66412136.184000	66412778.994297
Observation end date	2000-02-08T15:47:52	2000-02-08T15:59:38
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



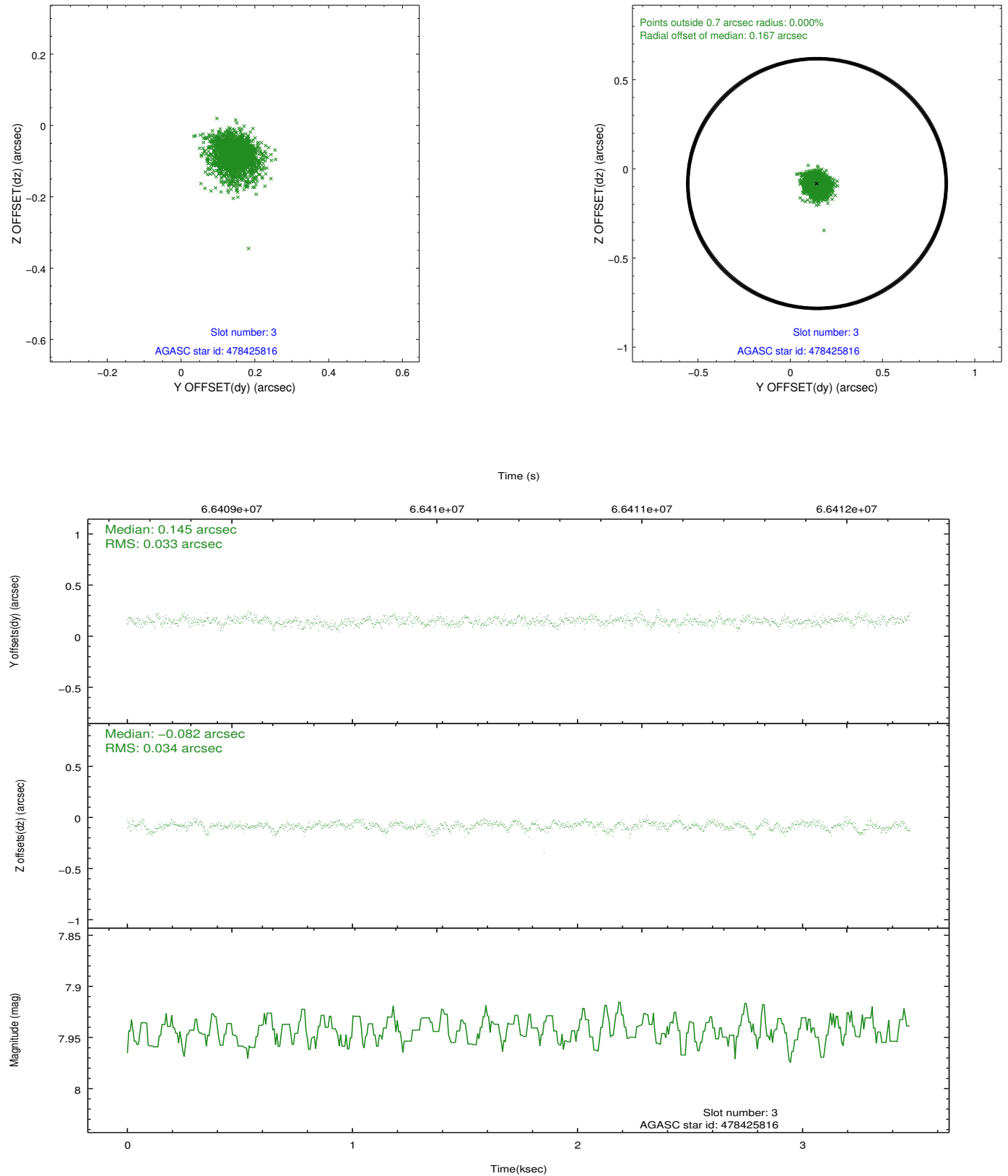


### Slot Statistics

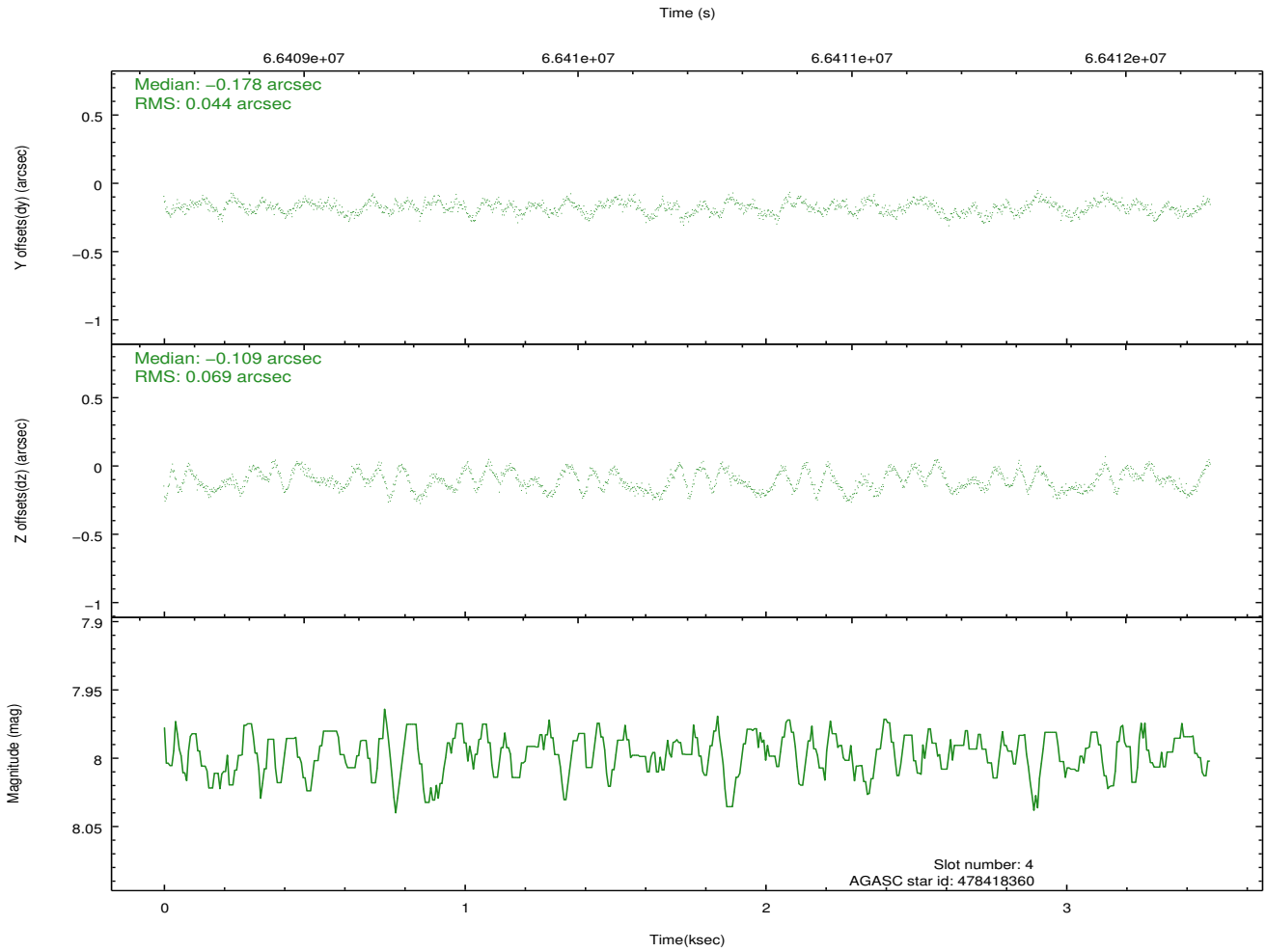
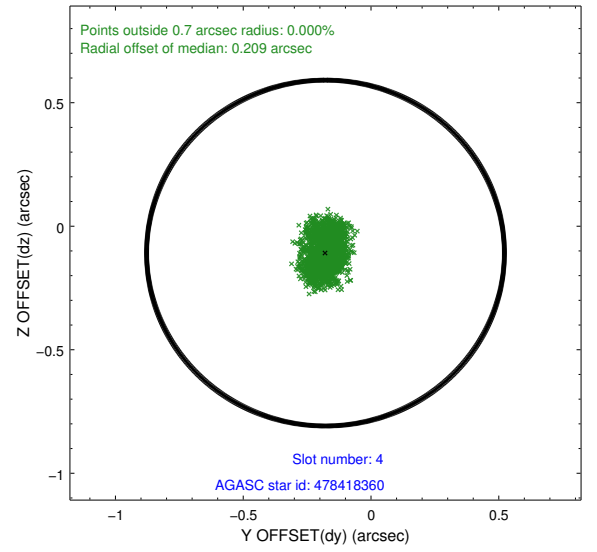
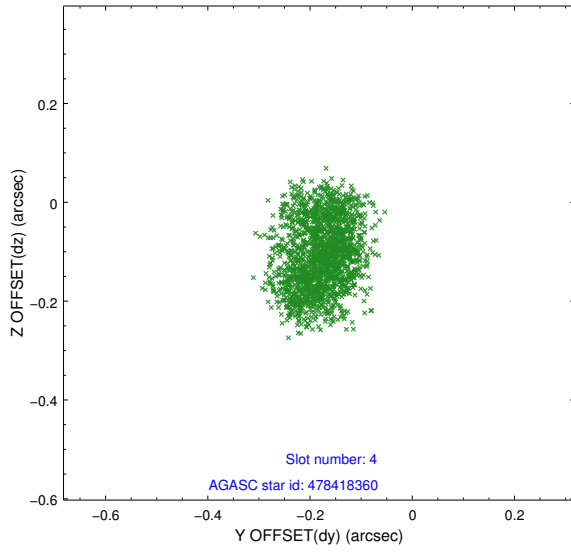
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-3	7.44	849	0.020	0.189	0.008	0.013	0.000000	0.000000	56.91	-960.85
1	FID	ACIS-I-4	7.19	849	-0.054	-0.083	0.006	0.010	0.000000	0.000000	2159.44	1070.86
2	FID	ACIS-I-5	7.23	849	-0.066	-0.036	0.006	0.011	0.000000	0.000000	-1806.25	1070.97
3	GUIDE	478425816	7.94	1698	0.145	-0.082	0.049	0.085	356.734581	51.228995	999.09	-1385.44
4	GUIDE	478418360	8.00	1698	-0.178	-0.109	0.091	0.133	355.669670	51.427702	-1373.08	-2174.95
5	GUIDE	478561104	8.93	1697	-0.015	0.080	0.094	0.145	357.467802	52.118356	457.87	2168.48
6	GUIDE	478431064	9.21	1697	-0.077	0.097	0.076	0.124	356.564417	52.338524	-1621.78	1654.00
7	GUIDE	478413520	9.79	1696	0.126	0.017	0.090	0.146	357.106489	51.358344	1408.13	-518.53

## 2.4 Star Slots

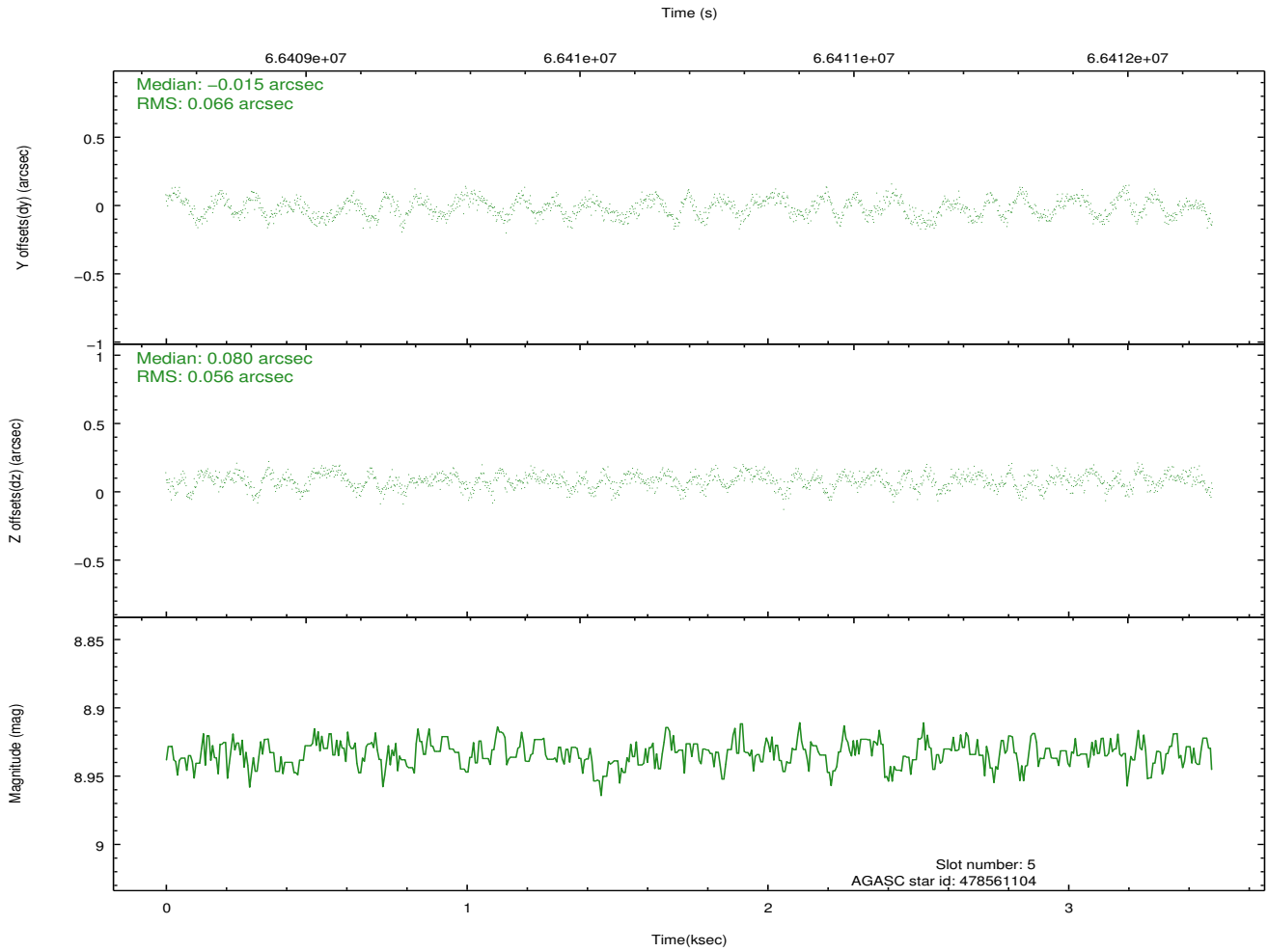
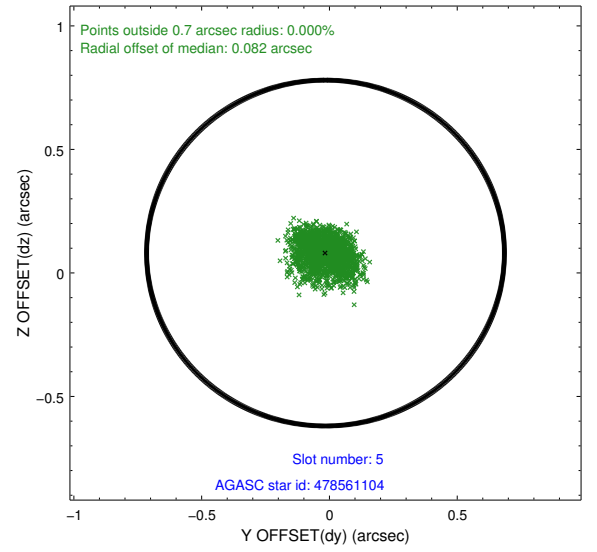
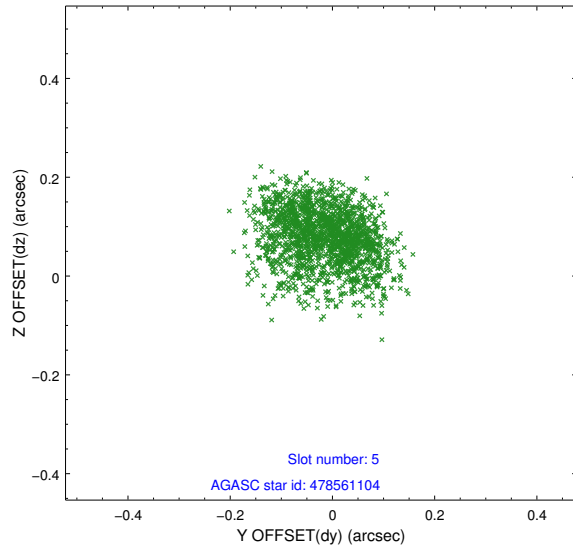
### 2.4.1 Slot 3



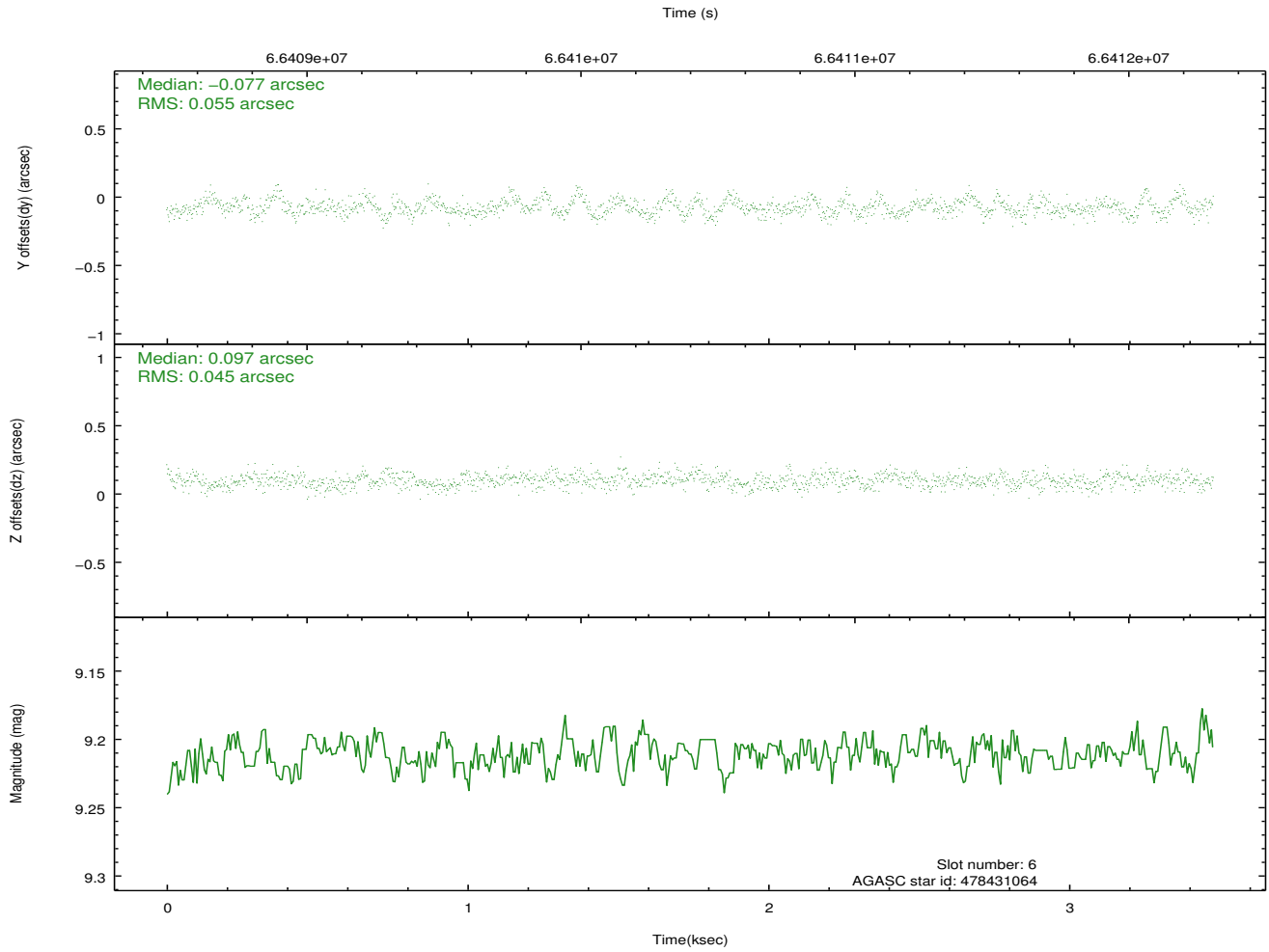
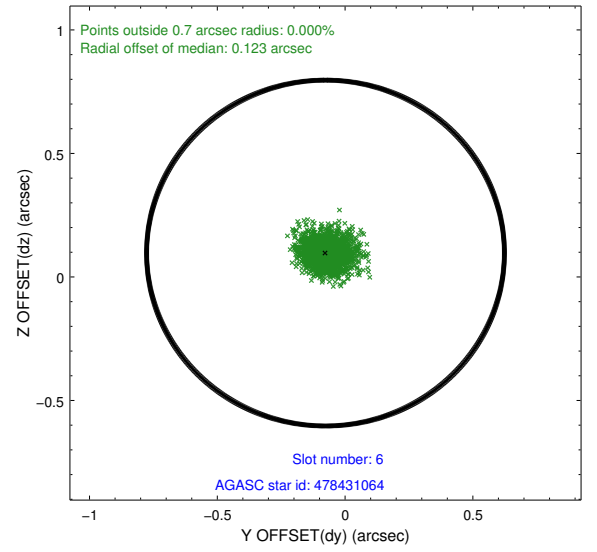
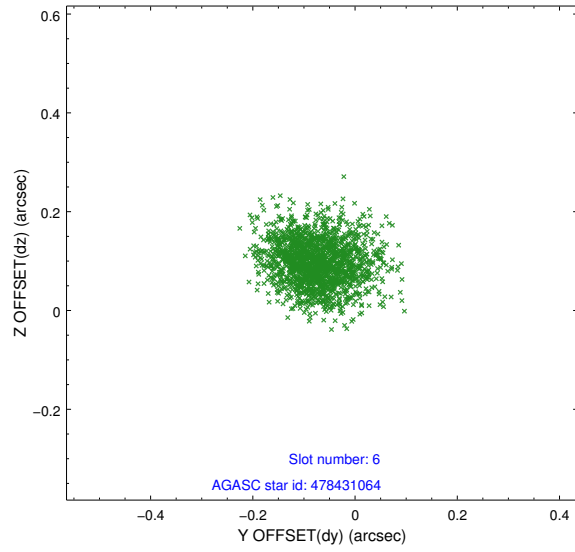
## 2.4.2 Slot 4



### 2.4.3 Slot 5

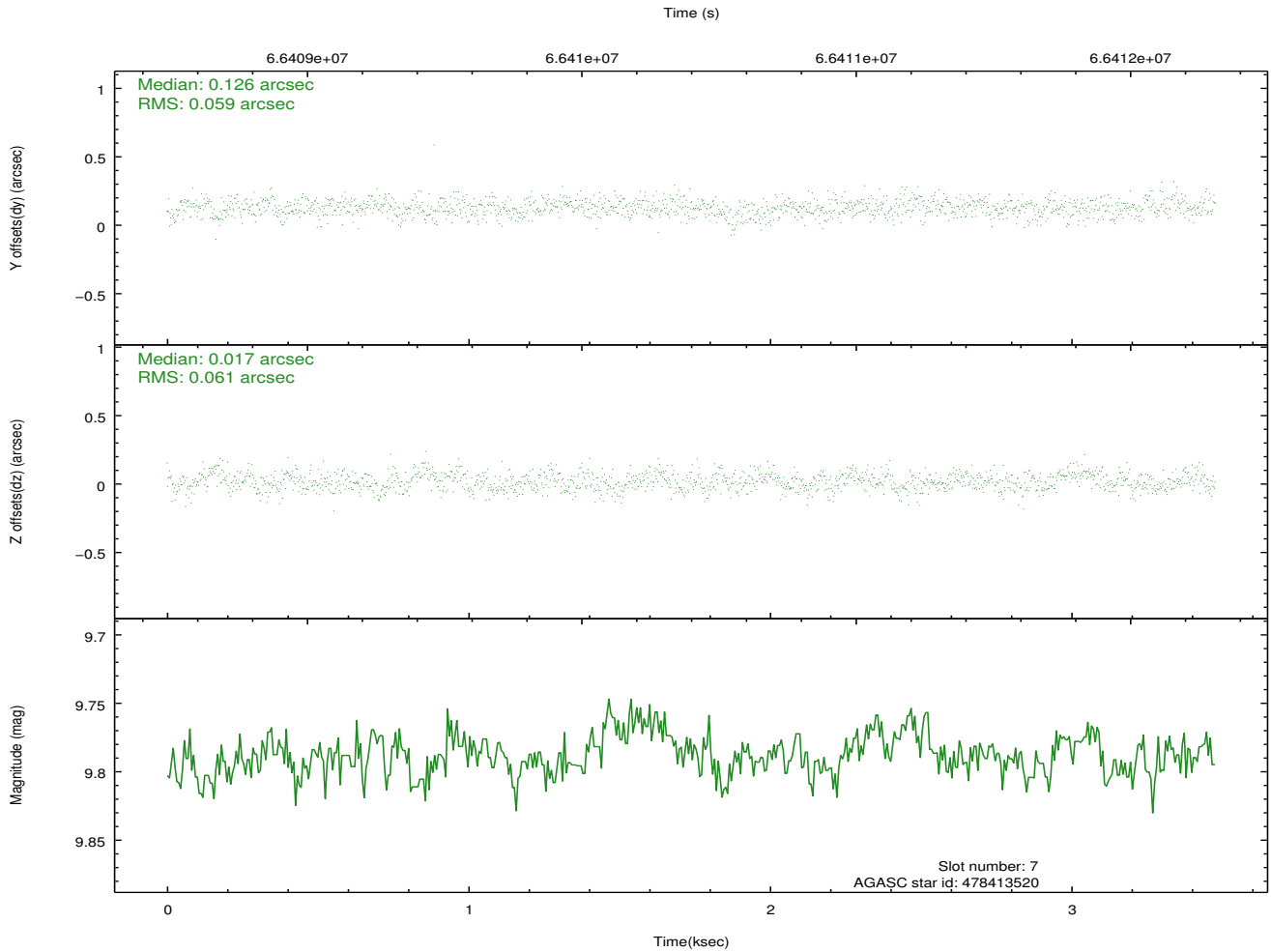
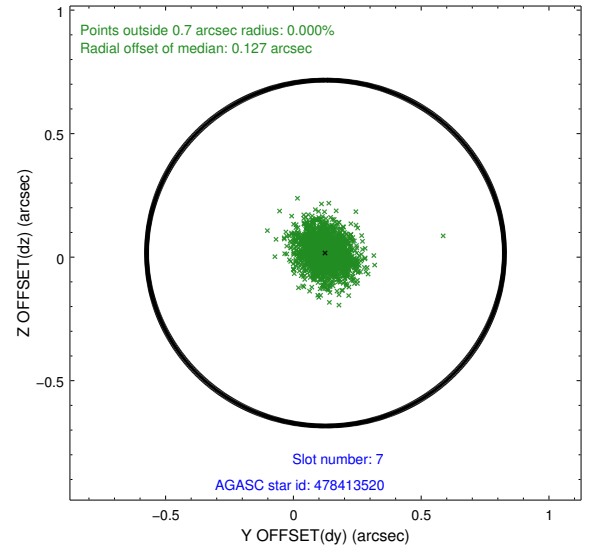
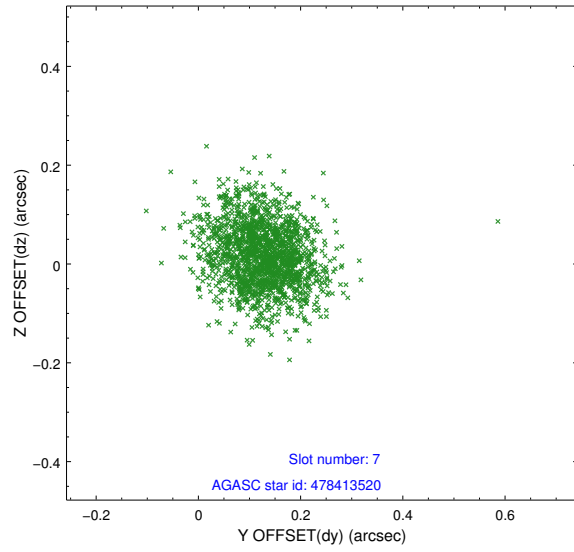


## 2.4.4 Slot 6



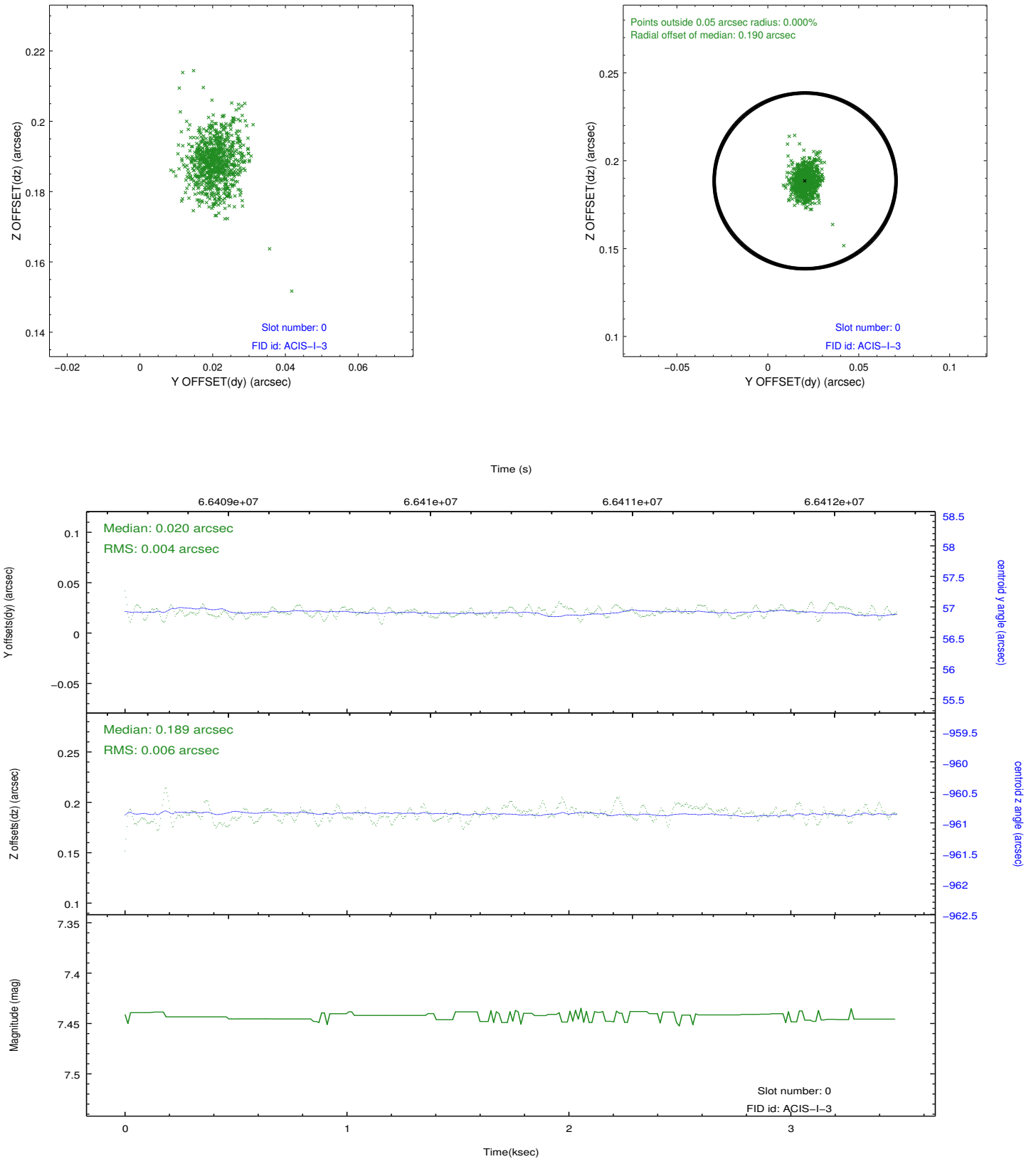


## 2.4.5 Slot 7

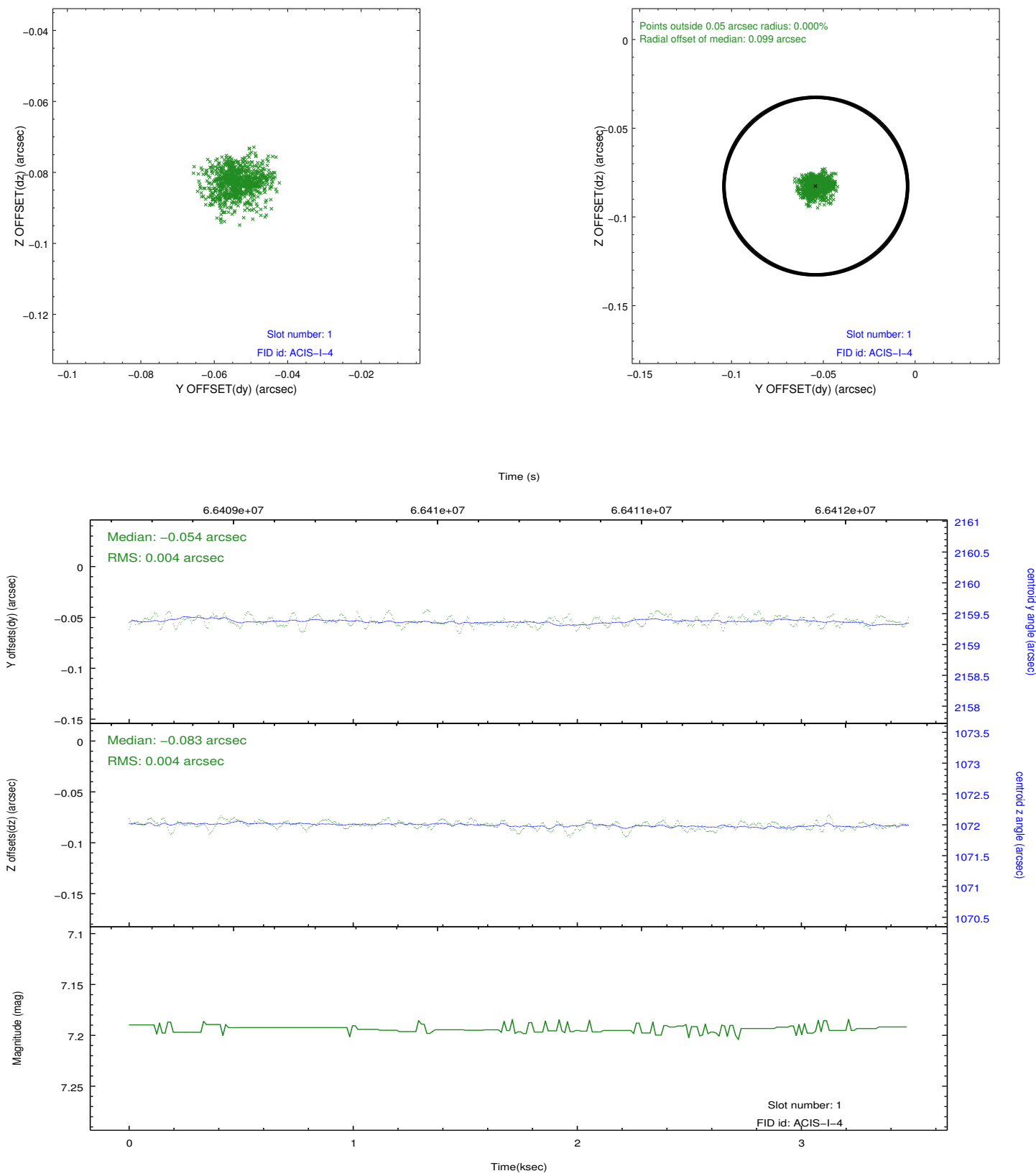


## 2.5 FID Slots

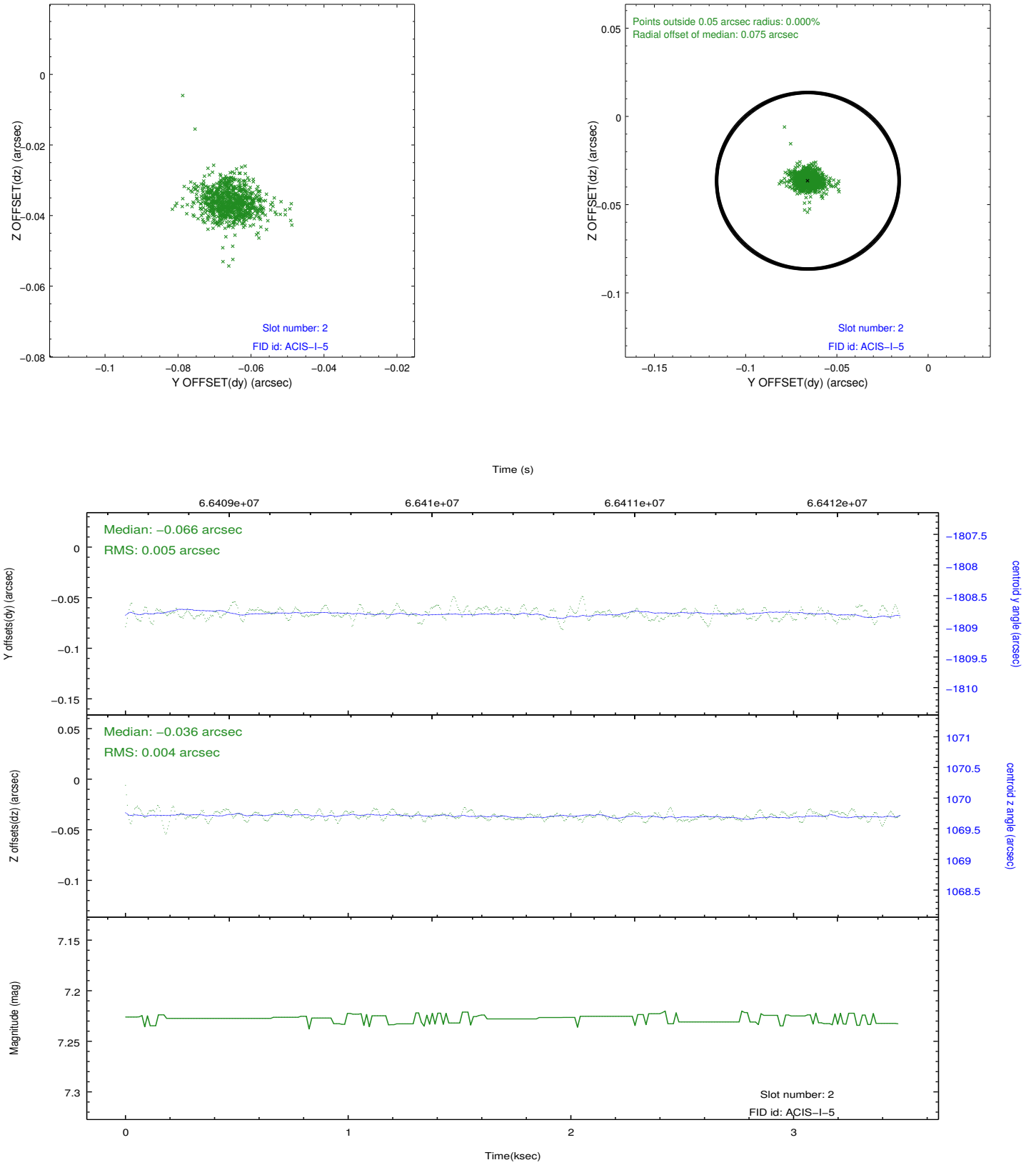
### 2.5.1 Slot 0



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)	2012.08.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.761

### A.2 Comments