

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 4947 - L2 Version 3  
Chandra X-Ray Center

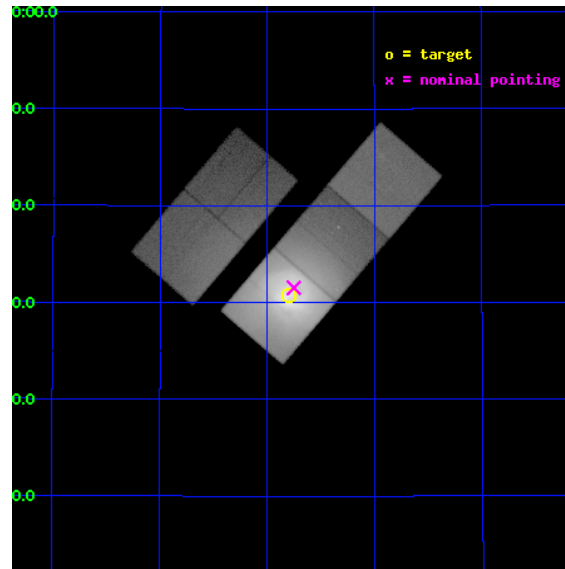
L2 Processing Date : Dec 9 2012

## 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	800397	Sequence number
obs_id	4947	Observation id
title	A Megasecond Image of the Core of the Perseus Cluster	Proposal tit
observer	Professor Andrew Fabian	Principal investigator
object	Abell 426	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	49.950833	Observer's specified target RA [deg]
dec_targ	41.511722	Observer's specified target Dec [deg]
ra_nom	49.938190760421	Nominal RA [deg]
dec_nom	41.525391432508	Nominal Dec [deg]
roll_nom	130.60793666368	Nominal Roll [deg]
revision	3	Processing version of data
ontime	30181.599941939	Sum of GTIs [s]
livetime	29787.255119327	Livetime [s]
ontime2	30181.599941939	Sum of GTIs [s]
ontime3	30181.599941939	Sum of GTIs [s]
ontime5	30181.599941939	Sum of GTIs [s]
ontime6	30181.599941939	Sum of GTIs [s]
ontime7	30181.599941939	Sum of GTIs [s]
l2events	2978058	Number of level 2 events

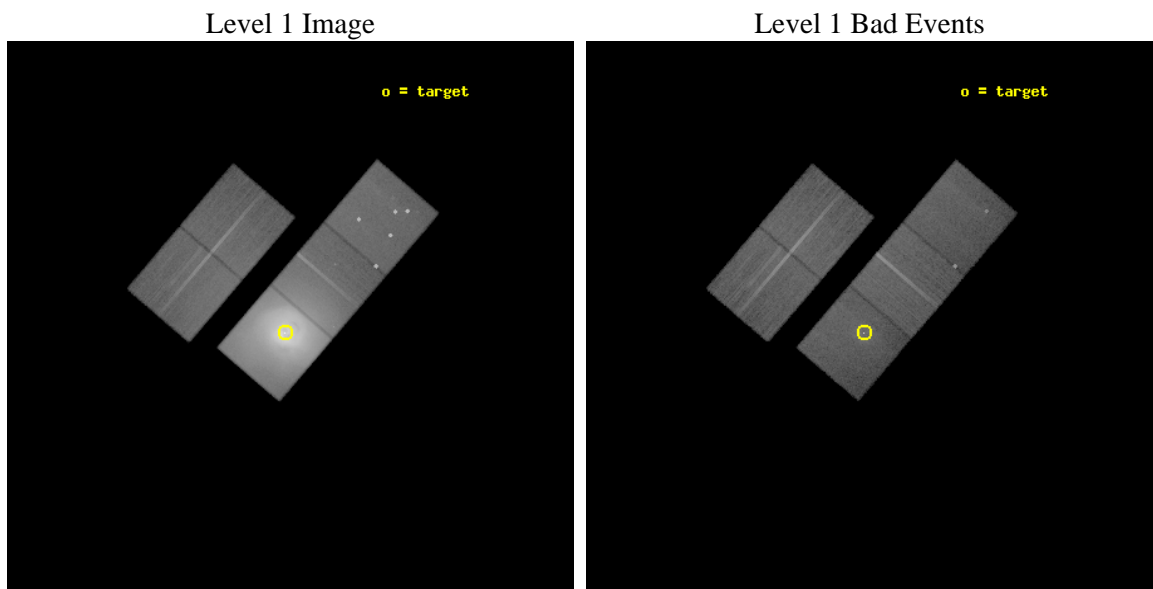




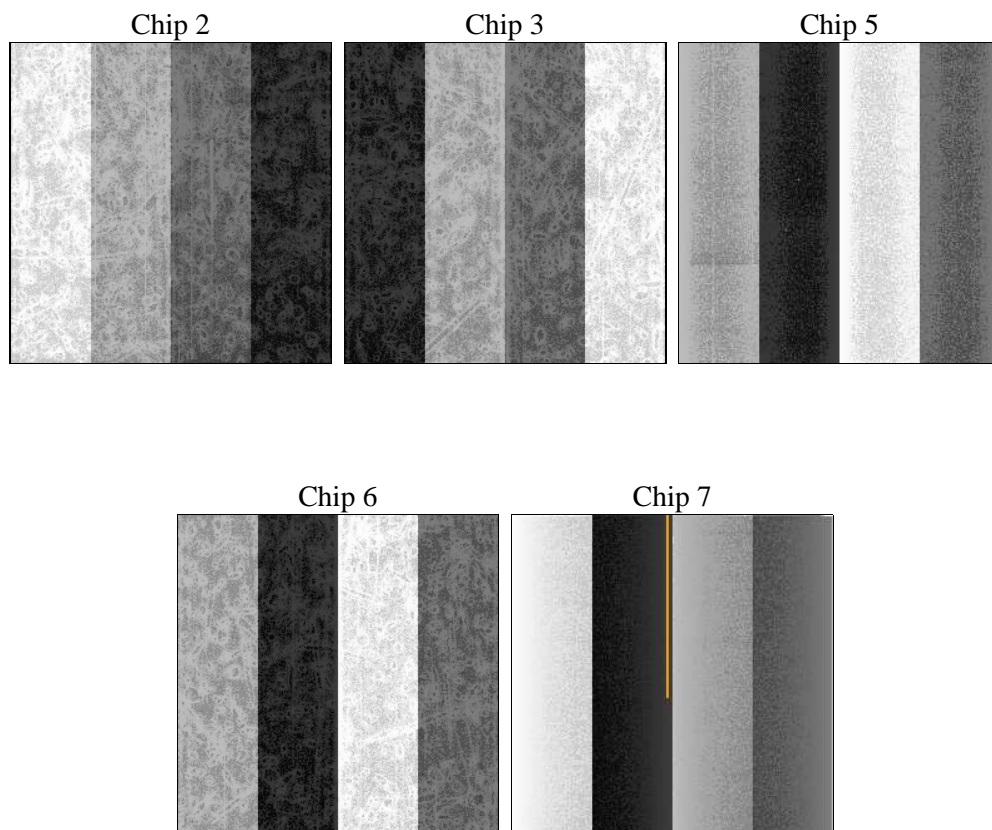
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	8.5	Processing system revision	ontime	30181.599941939	Sum of GTIs [s]
caldsver	4.5.4	&#160	ontime2	30181.599941939	Sum of GTIs [s]
date	2012-12-09T21:08:34	Date and time of file creation	ontime3	30181.599941939	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	30181.599941939	Sum of GTIs [s]
			ontime6	30181.599941939	Sum of GTIs [s]
			ontime7	30181.599941939	Sum of GTIs [s]
			l1events	3985276	Number of level 1 events

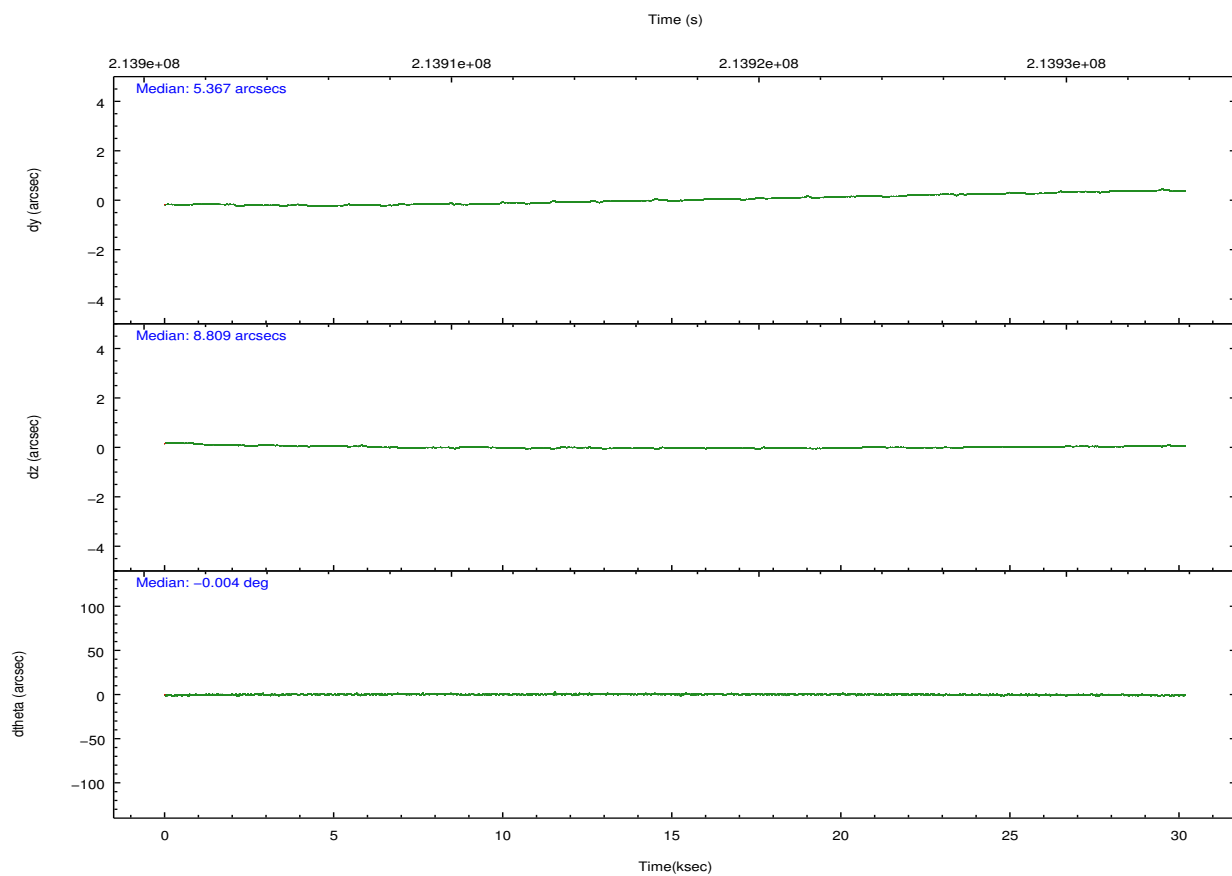
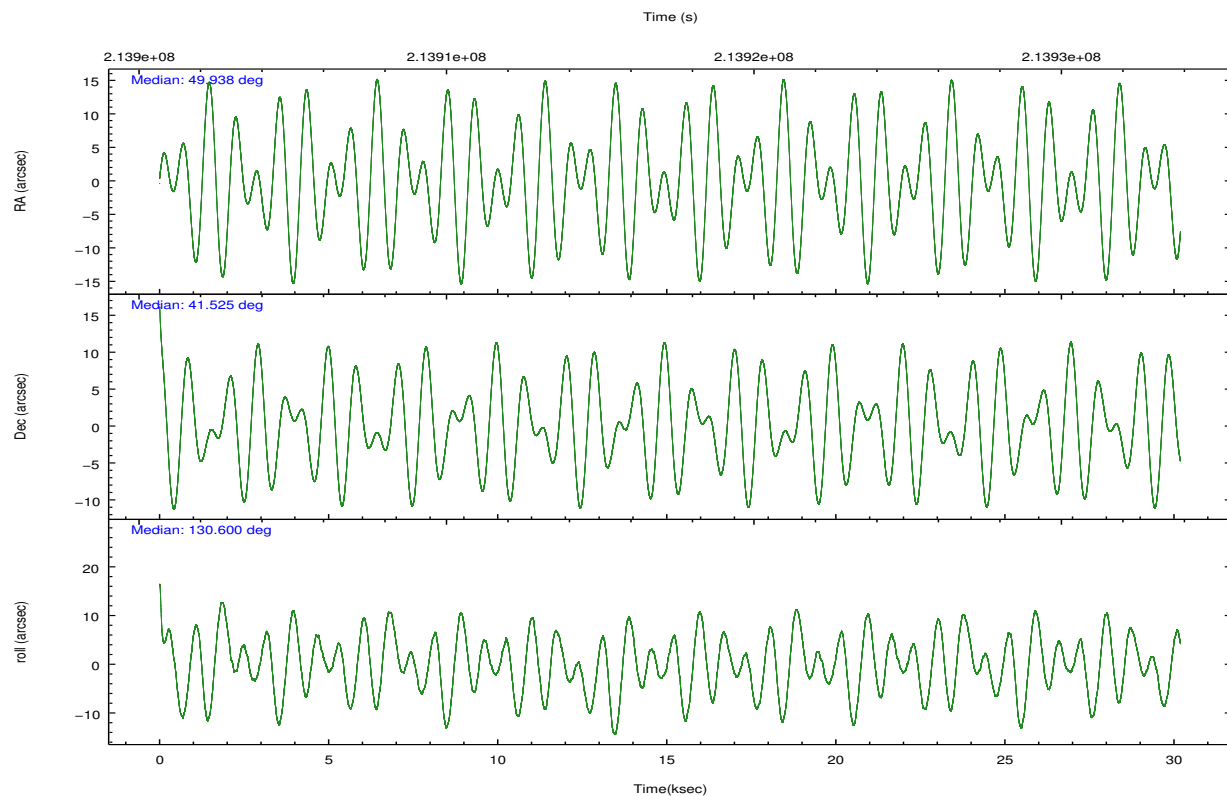
### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	288197	326451	364994	511913	2493721	grade 0 events	60650	100244	54858	246874	637920
rejected events	204029	193359	150816	198085	165410		21%	30%	15%	48%	25%
rejected %	70%	59%	41%	38%	6%	grade 1 events	367	563	1464	1037	1796
							0%	0%	0%	0%	0%
						grade 2 events	10900	15718	60484	34885	616629
							3%	4%	16%	6%	24%
						grade 3 events	4215	5901	11397	11586	273813
							1%	1%	3%	2%	10%
						grade 4 events	4361	5903	11429	11662	270369
							1%	1%	3%	2%	10%
						grade 5 events	6901	8274	24132	9113	39709
							2%	2%	6%	1%	1%
						grade 6 events	5262	6600	83449	13027	543973
							1%	2%	22%	2%	21%
						grade 7 events	195541	183248	117781	183729	109512
							67%	56%	32%	35%	4%

## 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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	49.972677	49.93819076042055	Subarray requested	NONE	NONE
[deg] Pointing Dec	41.516686	41.52539143250794	Alternating exposures requested	N	N
[deg] Pointing Roll	130.428440	130.6079366636753	[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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	213902368.184000	213900797.65911			
Observation start date	2004-10-11T17:18:24	2004-10-11T16:53:17			
[s] Observation end time (MET)	213932368.184000	213932501.93553			
Observation end date	2004-10-12T01:38:24	2004-10-12T01:41:41			
Read mode	TIMED	TIMED			

## 2.3 Aspect

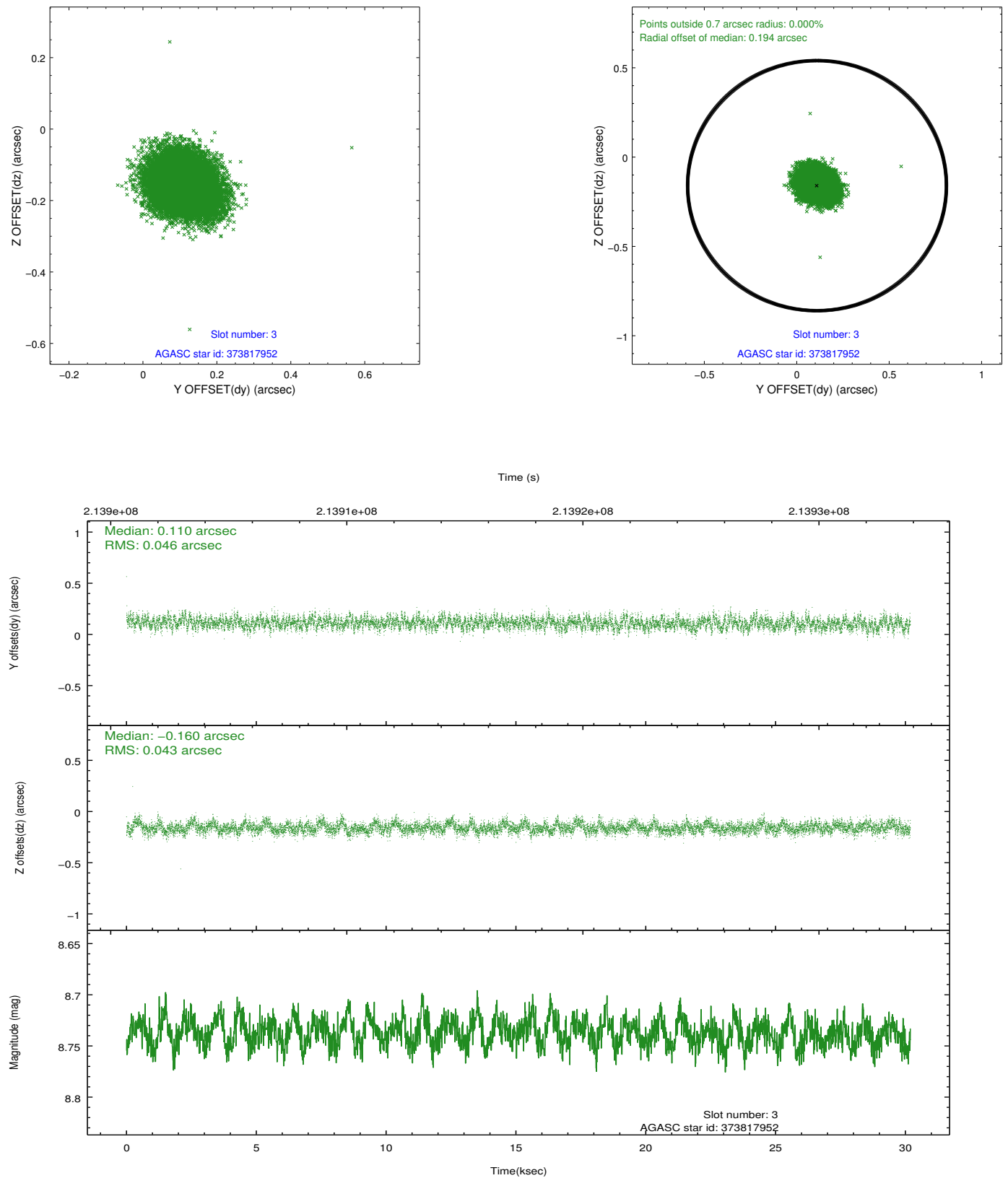


### Slot Statistics

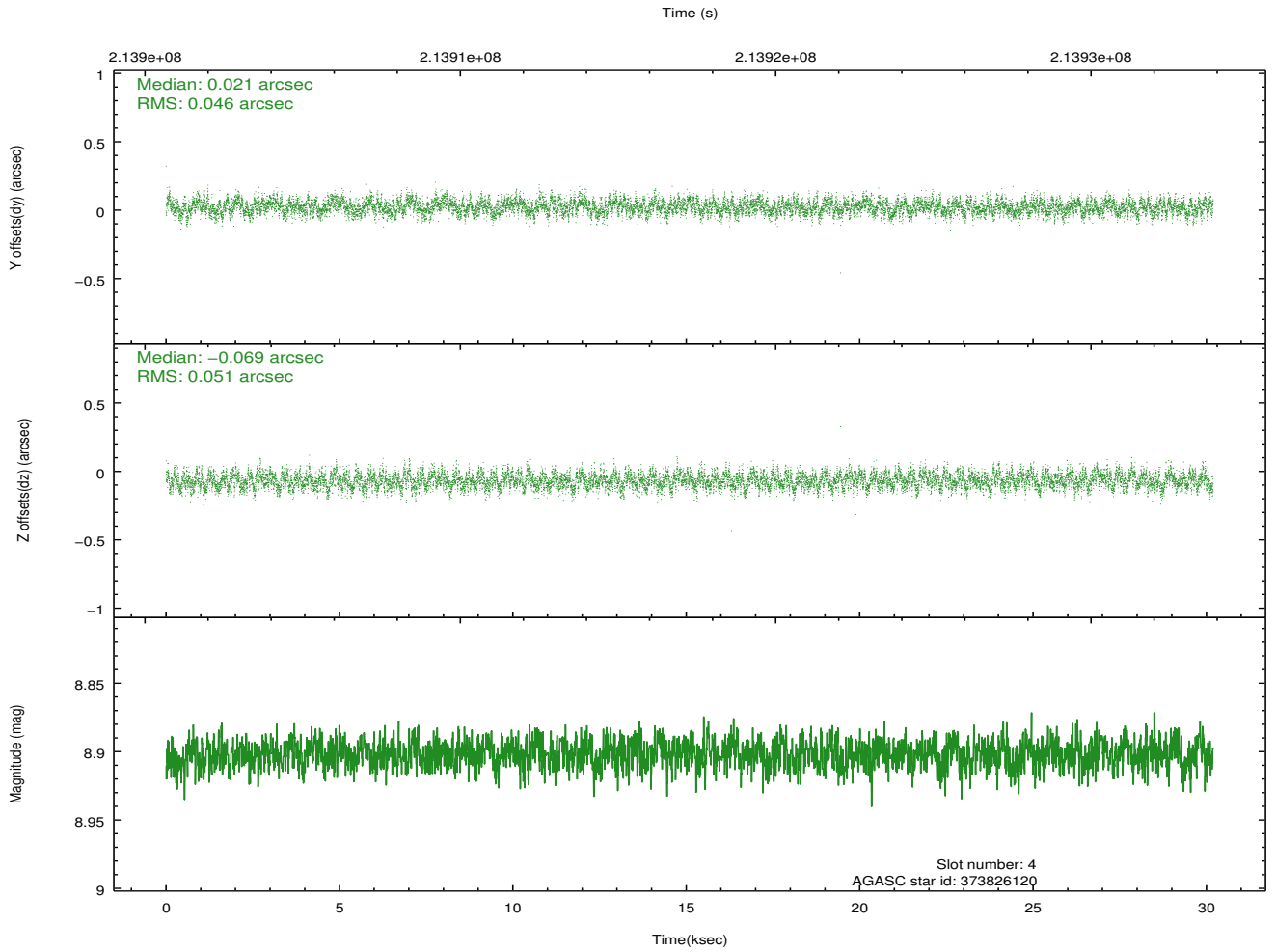
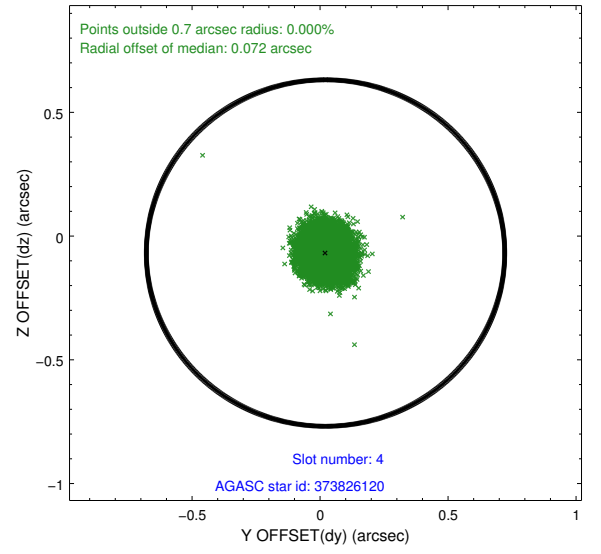
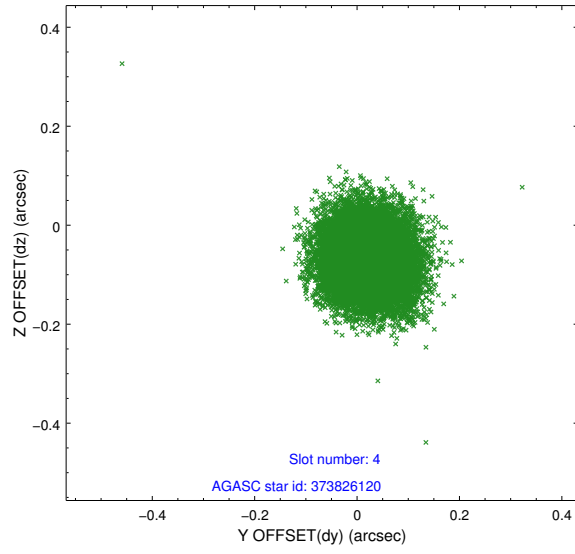
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	7364	0.029	-0.001	0.007	0.013	0.000000	0.000000	937.91	-1725.69
1	FID	ACIS-S-5	7.24	7362	-0.093	0.019	0.007	0.012	0.000000	0.000000	-1811.11	171.89
2	FID	ACIS-S-6	7.36	7364	0.043	-0.006	0.009	0.014	0.000000	0.000000	403.48	815.84
3	GUIDE	373817952	8.74	14723	0.110	-0.160	0.067	0.110	49.913424	40.978510	-1370.31	1378.77
4	GUIDE	373826120	8.90	14727	0.021	-0.069	0.074	0.116	49.738165	41.186341	-492.65	1254.38
5	GUIDE	374357808	8.68	14715	-0.165	0.087	0.065	0.108	49.921429	42.176083	1895.83	-1434.91
6	GUIDE	374345008	9.38	14715	0.002	-0.025	0.093	0.152	48.768668	41.619367	2399.65	2212.56
7	GUIDE	376057824	8.35	14655	0.033	0.175	0.080	0.129	50.665569	41.926280	-74.87	-2373.32

## 2.4 Star Slots

### 2.4.1 Slot 3

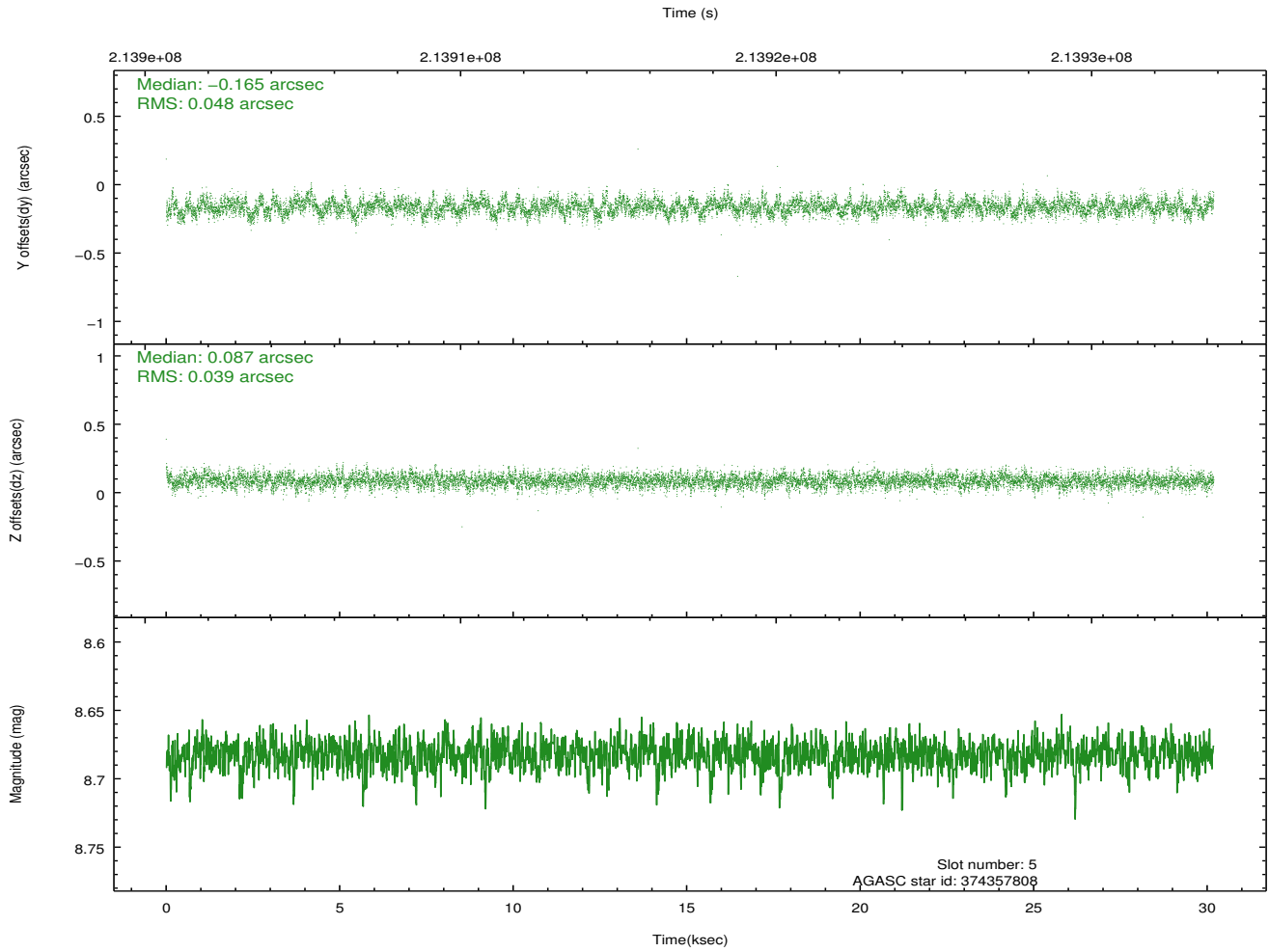
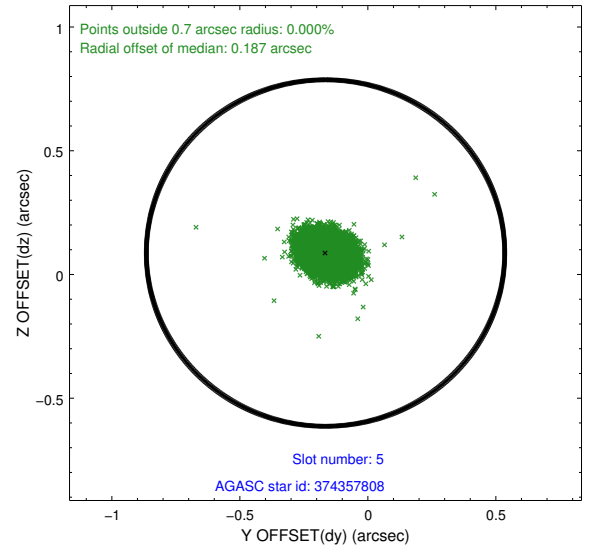
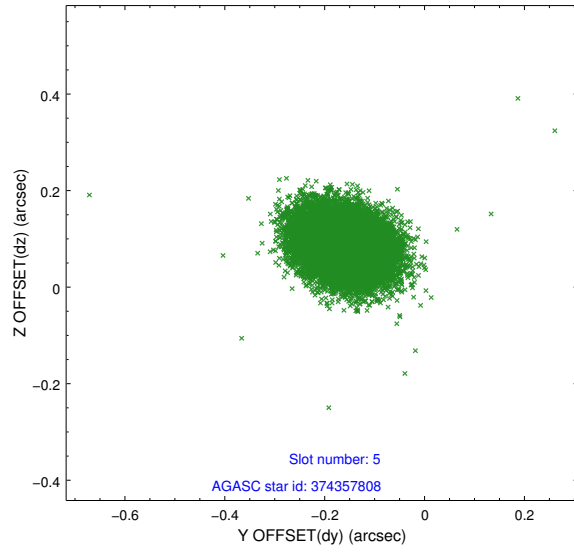


## 2.4.2 Slot 4

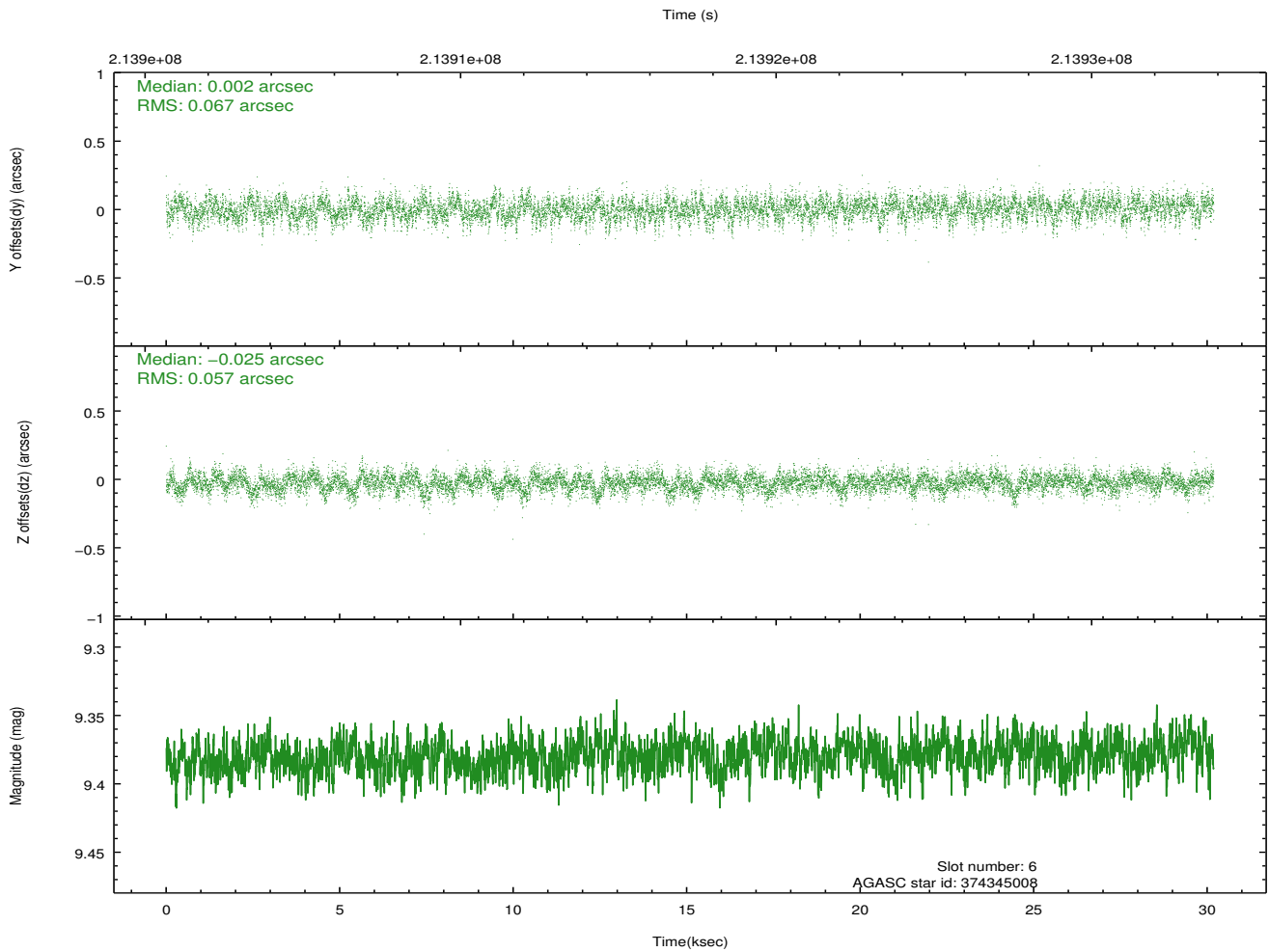
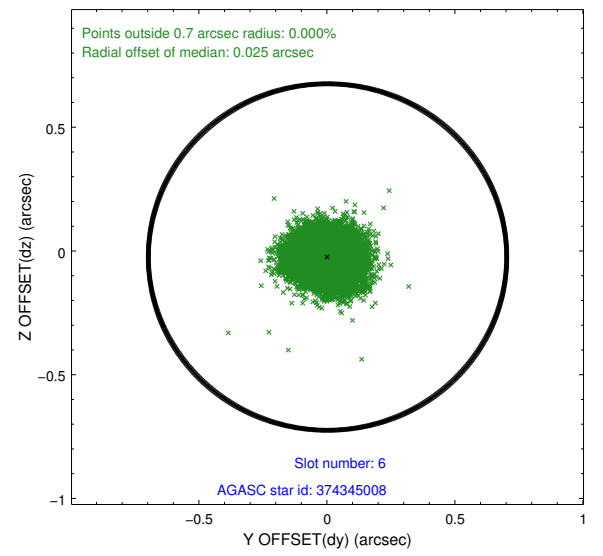
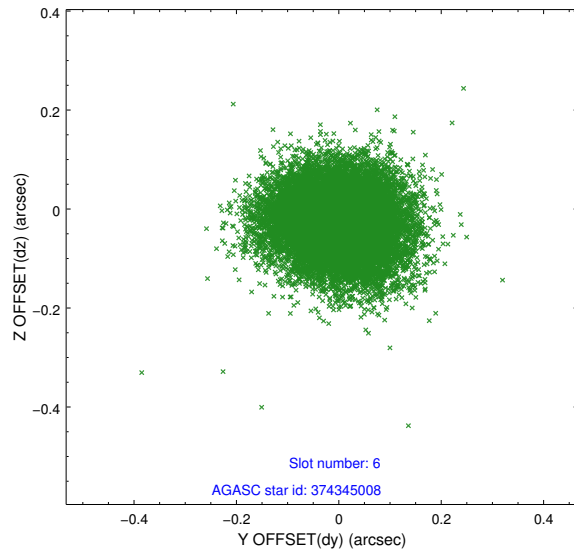




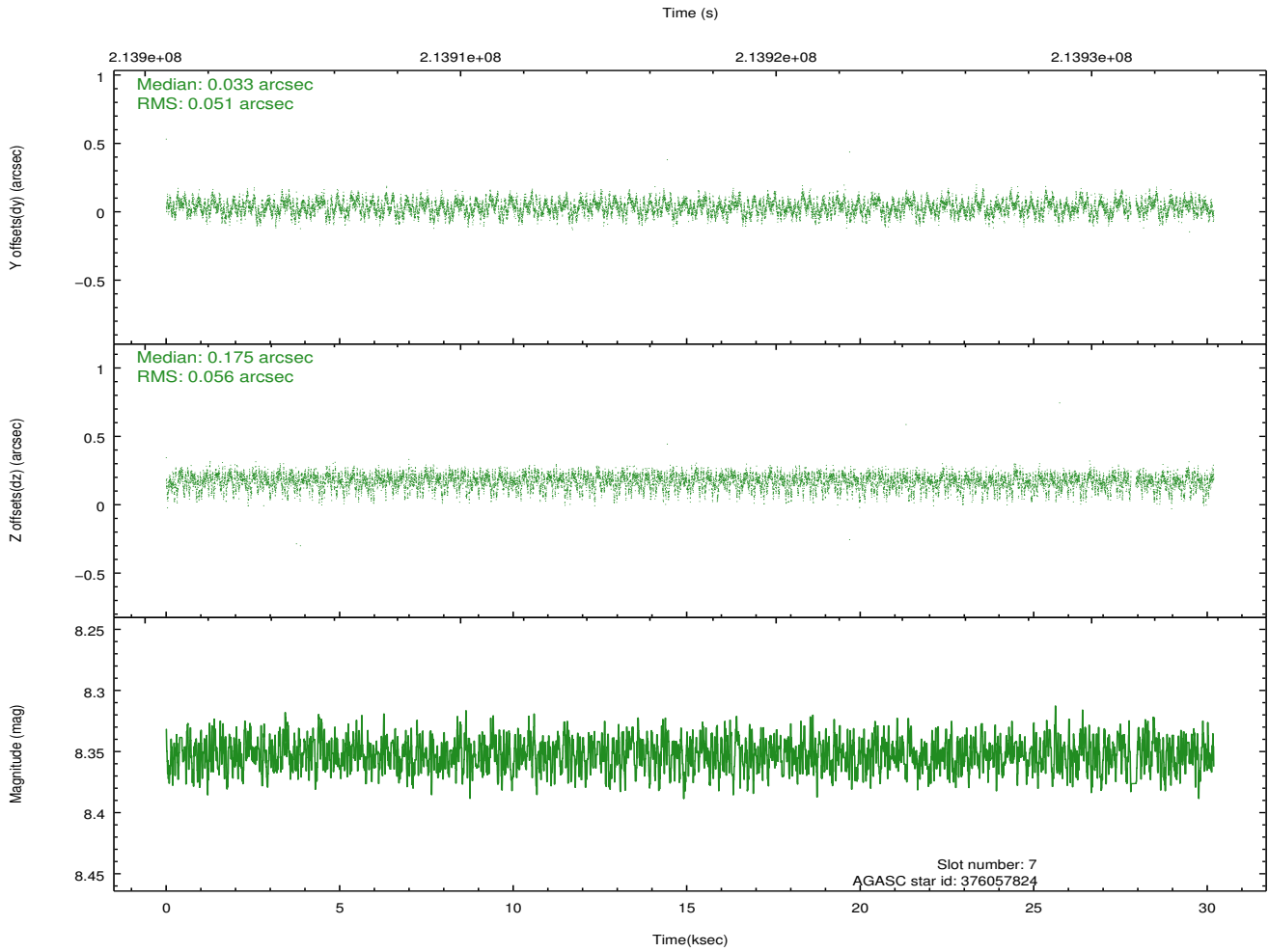
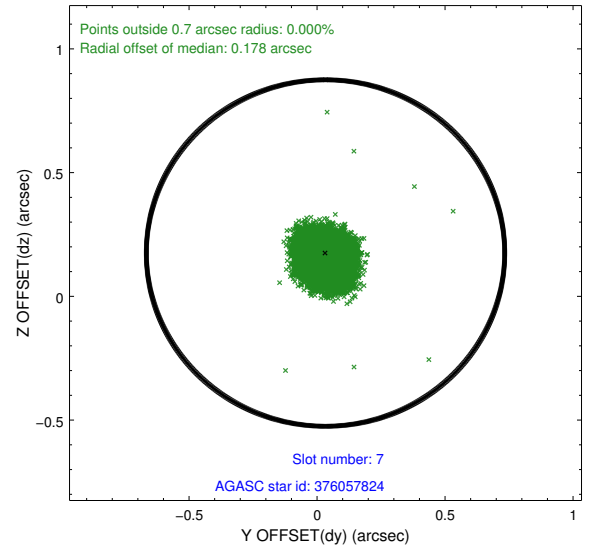
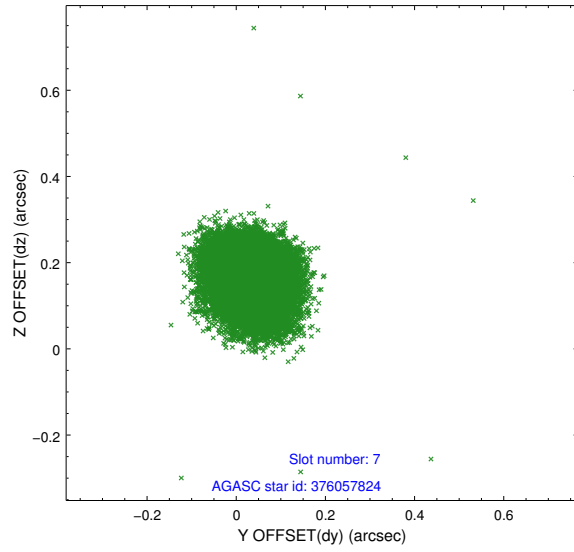
### 2.4.3 Slot 5



## 2.4.4 Slot 6

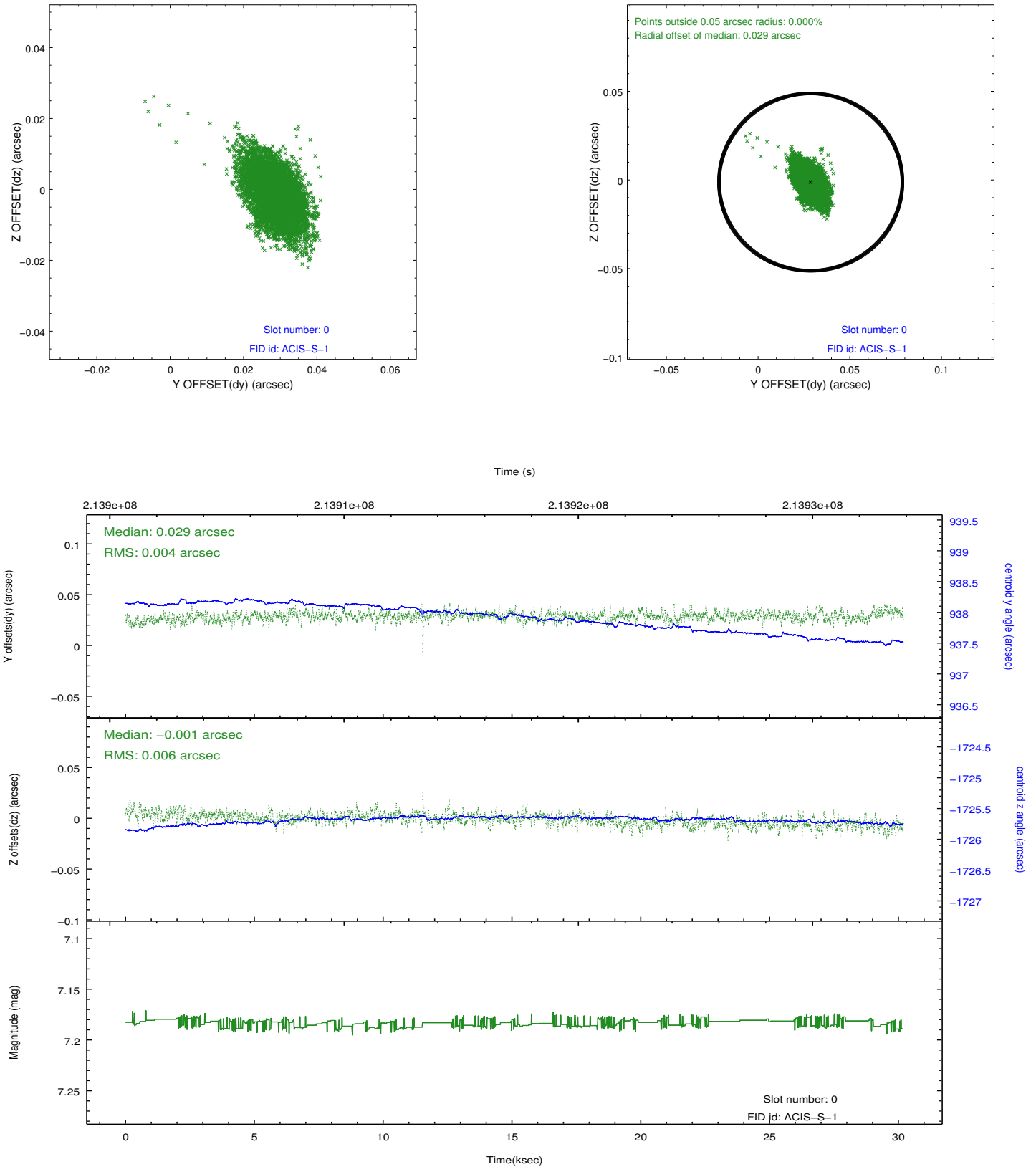


## 2.4.5 Slot 7

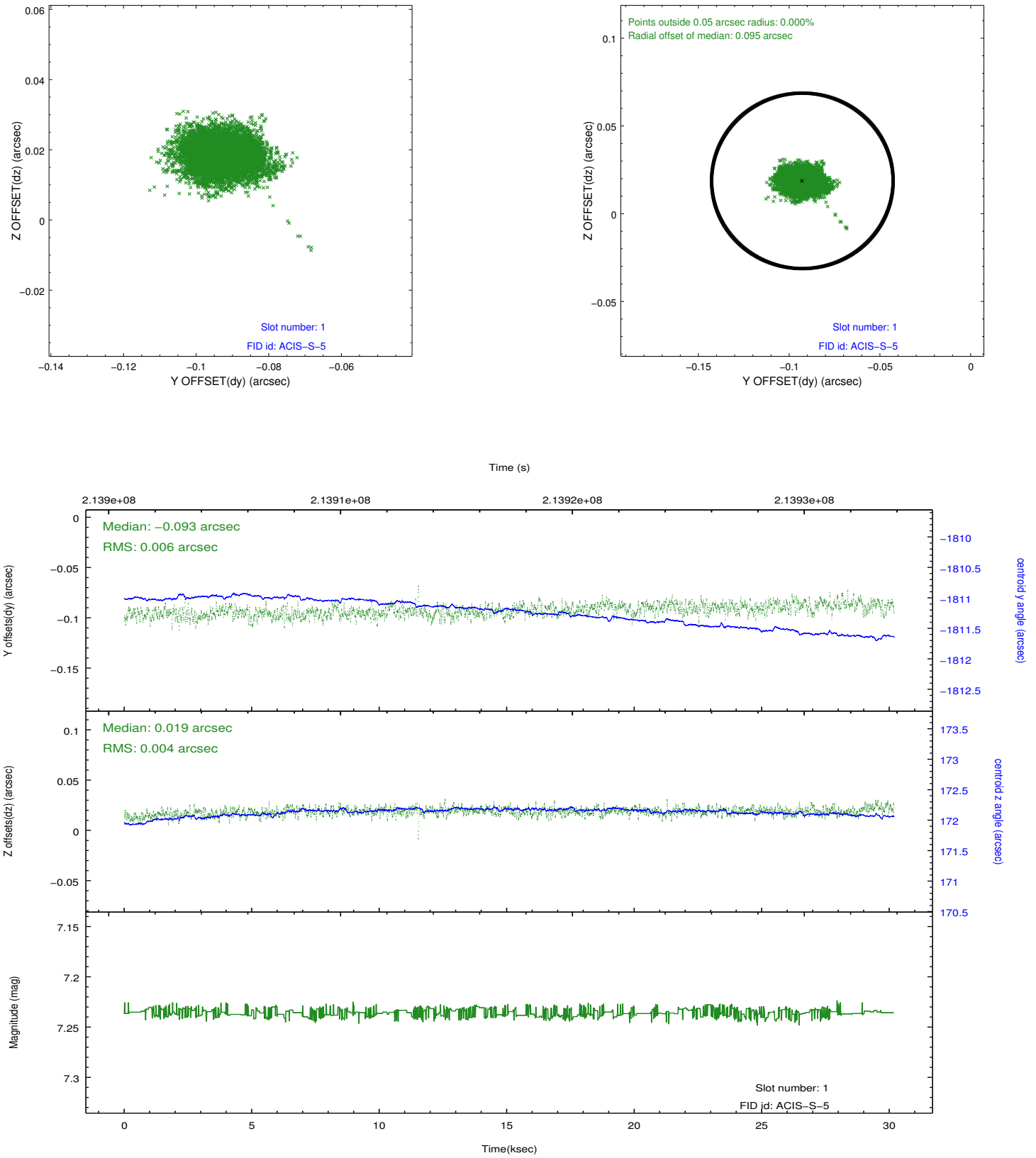


## 2.5 FID Slots

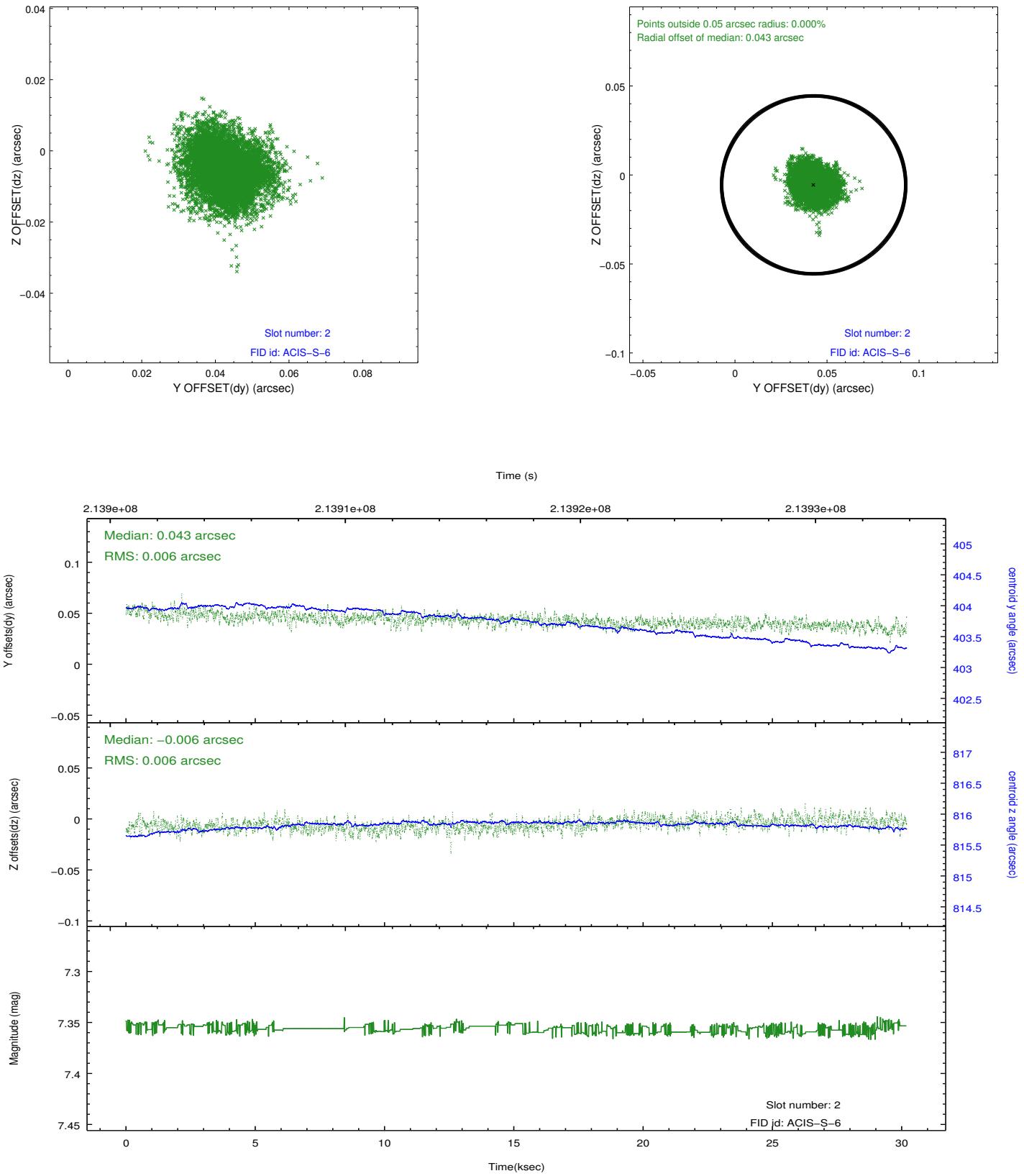
### 2.5.1 Slot 0



## 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)	2012.12.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.181

### A.2 Comments