

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 3717 - L2 Version 001  
Chandra X-Ray Center

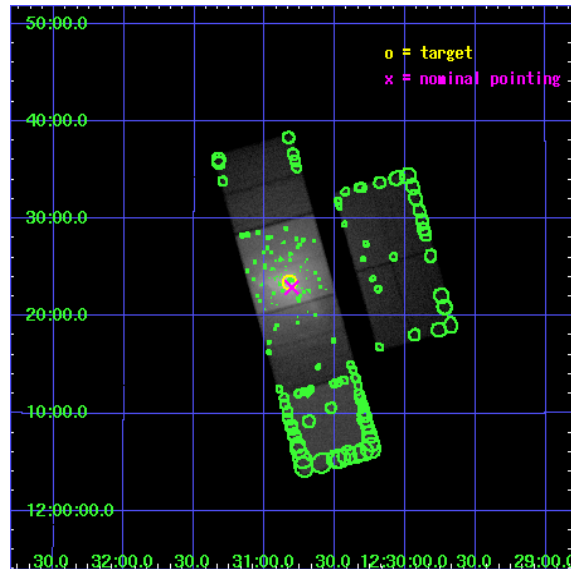
L2 Processing Date : Sep 22 2006

## 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>3</b>	<b>Point Sources</b>	<b>17</b>
<b>A</b>	<b>Summary</b>	<b>18</b>
A.1	Status . . . . .	18
A.2	Comments . . . . .	18

# 1 Front

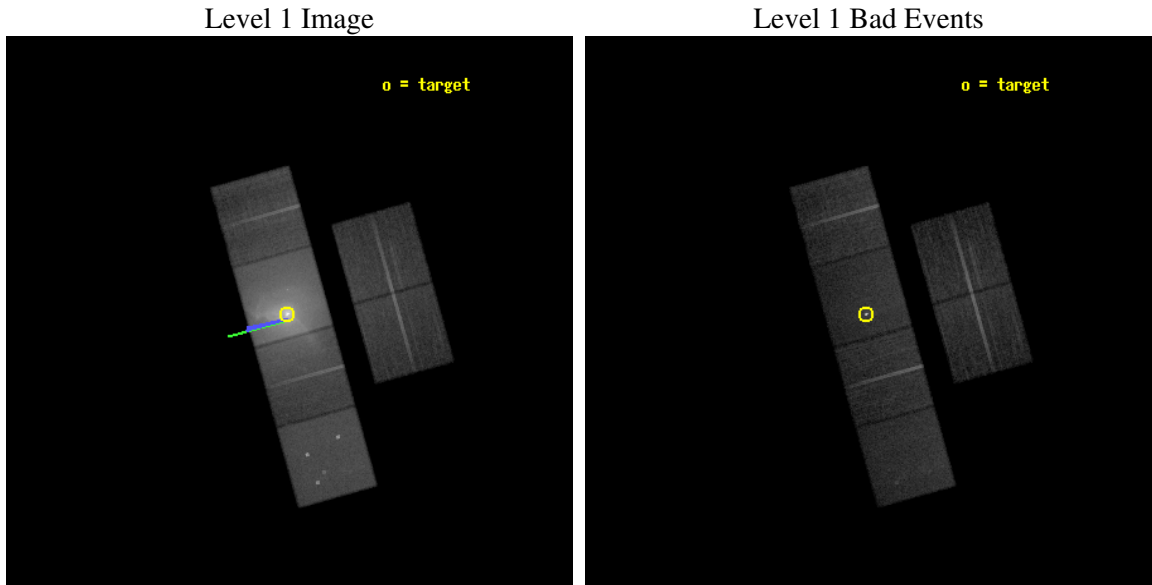
seq_num	400187
obs_id	3717
title	THE EXTRAORDINARY GLOBULAR CLUSTER SYSTEM OF M87: THE VIEW FROM CHANDRA
observer	PROF. PATRICK COTE
object	NGC4486
dtcycle	0
cycle	P
ra_targ	187.705833
dec_targ	12.391111
ra_nom	187.70150895698
dec_nom	12.382370842925
roll_nom	254.35758120191
revision	2
ontime	20825.599922419
livetime	20561.89363653
ontime2	20825.599922419
ontime3	20825.599922419
ontime5	20825.599922419
ontime6	20825.599922419
ontime7	20825.599922419
ontime8	20825.599922419
l2events	1369023



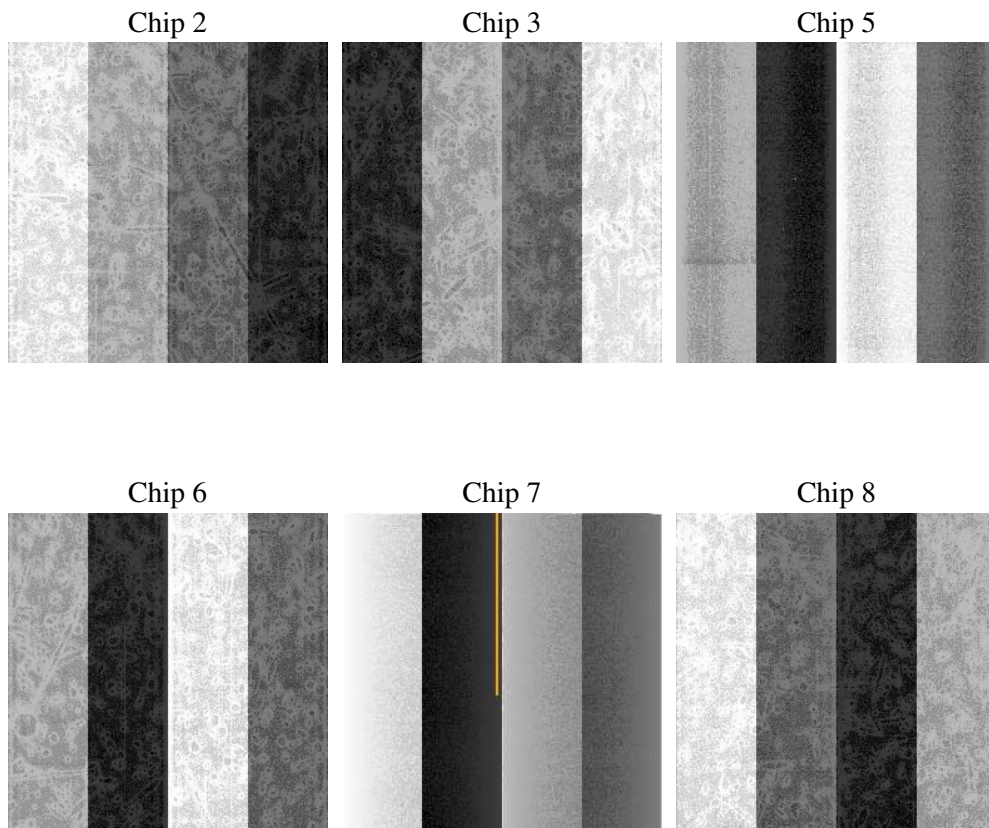
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.3
date	2006-09-22T18:02:19
revision	2

sched_exp_time	21009.355000
ontime	20829.911864787
ontime2	20829.911834866
ontime3	20829.911834866
ontime5	20829.911864787
ontime6	20829.911834866
ontime7	20829.911864787
ontime8	20829.911834866
l1events	2192701

### 2.1.4 Events

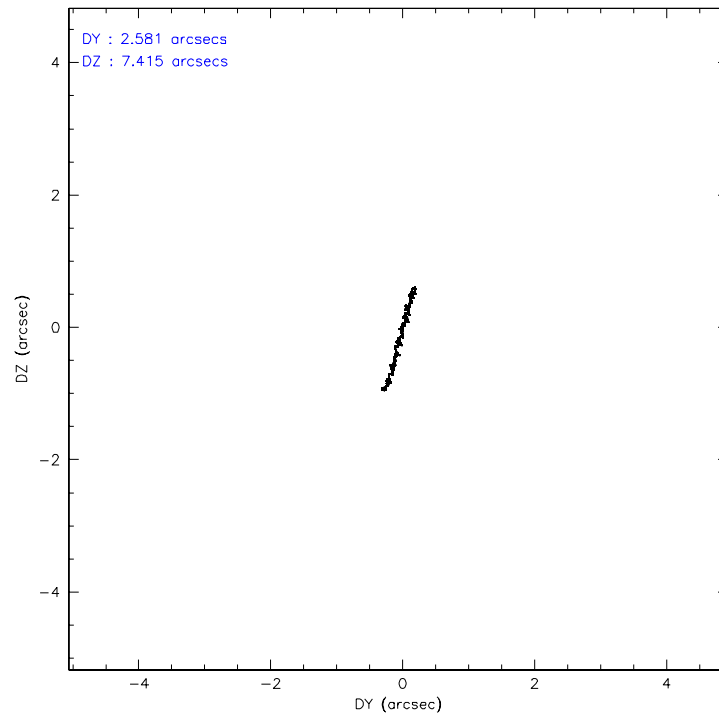
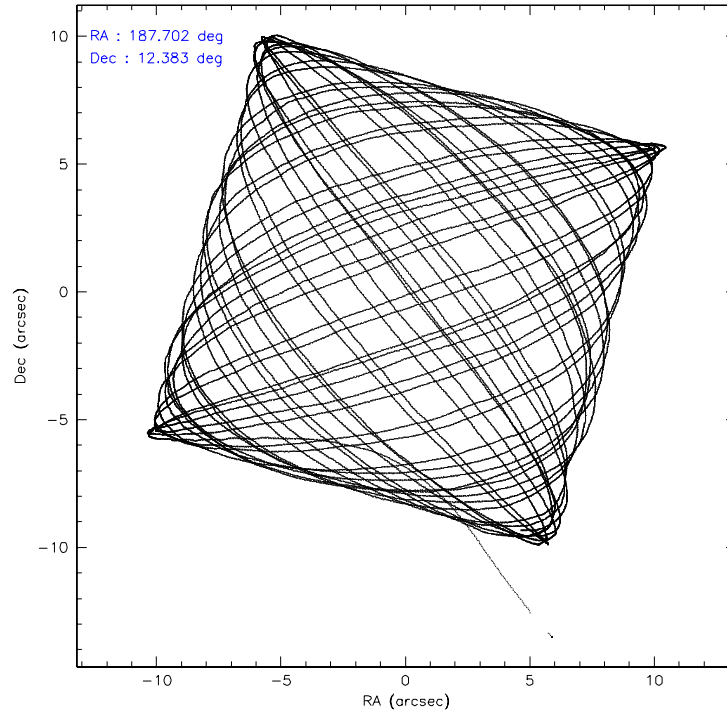
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	177711	188791	283521	309399	984230	249049
rejected events	122621	120948	115785	126623	129330	138927
rejected %	69%	64%	40%	40%	13%	55%

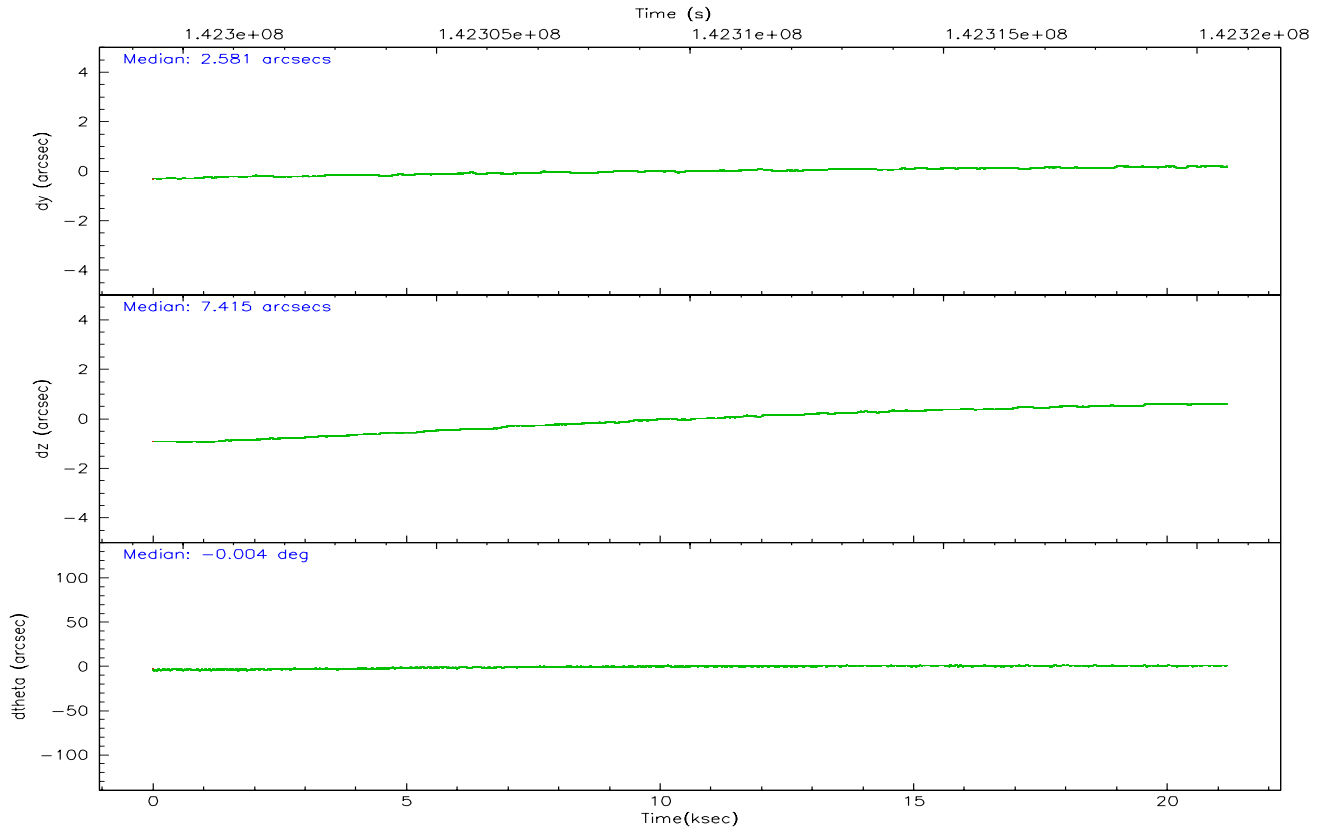
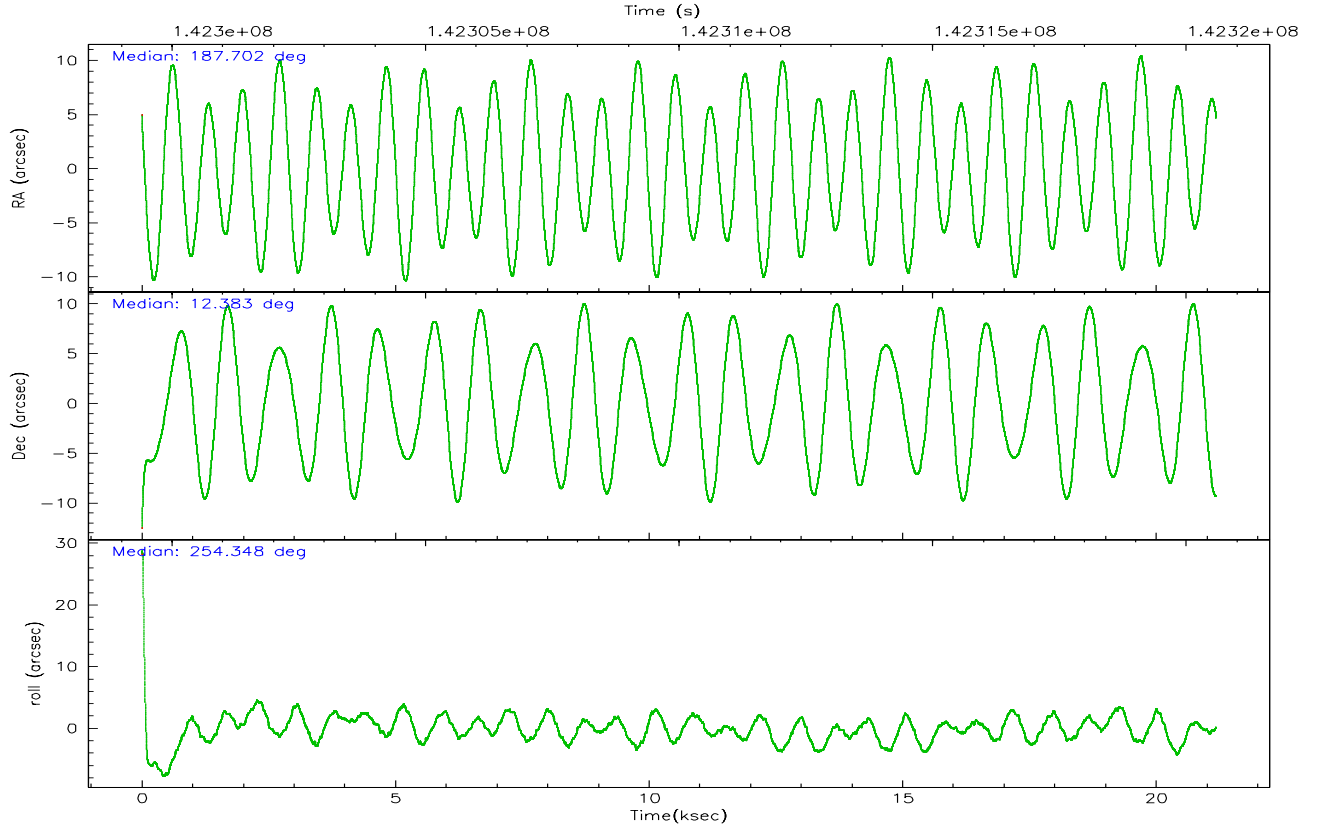
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	39073	50031	32603	146928	238666	71172
	21%	26%	11%	47%	24%	28%
grade 1 events	225	249	373	593	862	330
	0%	0%	0%	0%	0%	0%
grade 2 events	7335	8267	52009	18392	233259	14776
	4%	4%	18%	5%	23%	5%
grade 3 events	2470	2847	6731	5804	90822	6741
	1%	1%	2%	1%	9%	2%
grade 4 events	2562	2831	6731	5646	88937	6268
	1%	1%	2%	1%	9%	2%
grade 5 events	4985	5590	10415	6374	18913	8056
	2%	2%	3%	2%	1%	3%
grade 6 events	3663	3886	69701	6058	203492	11192
	2%	2%	24%	1%	20%	4%
grade 7 events	117398	115090	104958	119604	109279	130514
	66%	60%	37%	38%	11%	52%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
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
Pointing RA	187.694260	187.7015089569801	Subarray requested	NONE	NONE
Pointing Dec	12.408689	12.38237084292465	Alternating exposures requested	N	N
Pointing Roll	254.202483	254.3575812019121	Primary exposure time	0.000000	3.2
Roll angle	256.200000	256.200000			
Roll tolerance	2.000000	2.000000			
Roll constraint allows 180D rotation	N	N			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	142299582.184000	142298561.66409			
Observation start date	2002-07-05T23:38:38	2002-07-05T23:22:41			
Observation end time	142320591.184000	142320905.64001			
Observation end date	2002-07-06T05:28:47	2002-07-06T05:35:05			
Read mode	TIMED	TIMED			

## 2.3 Aspect





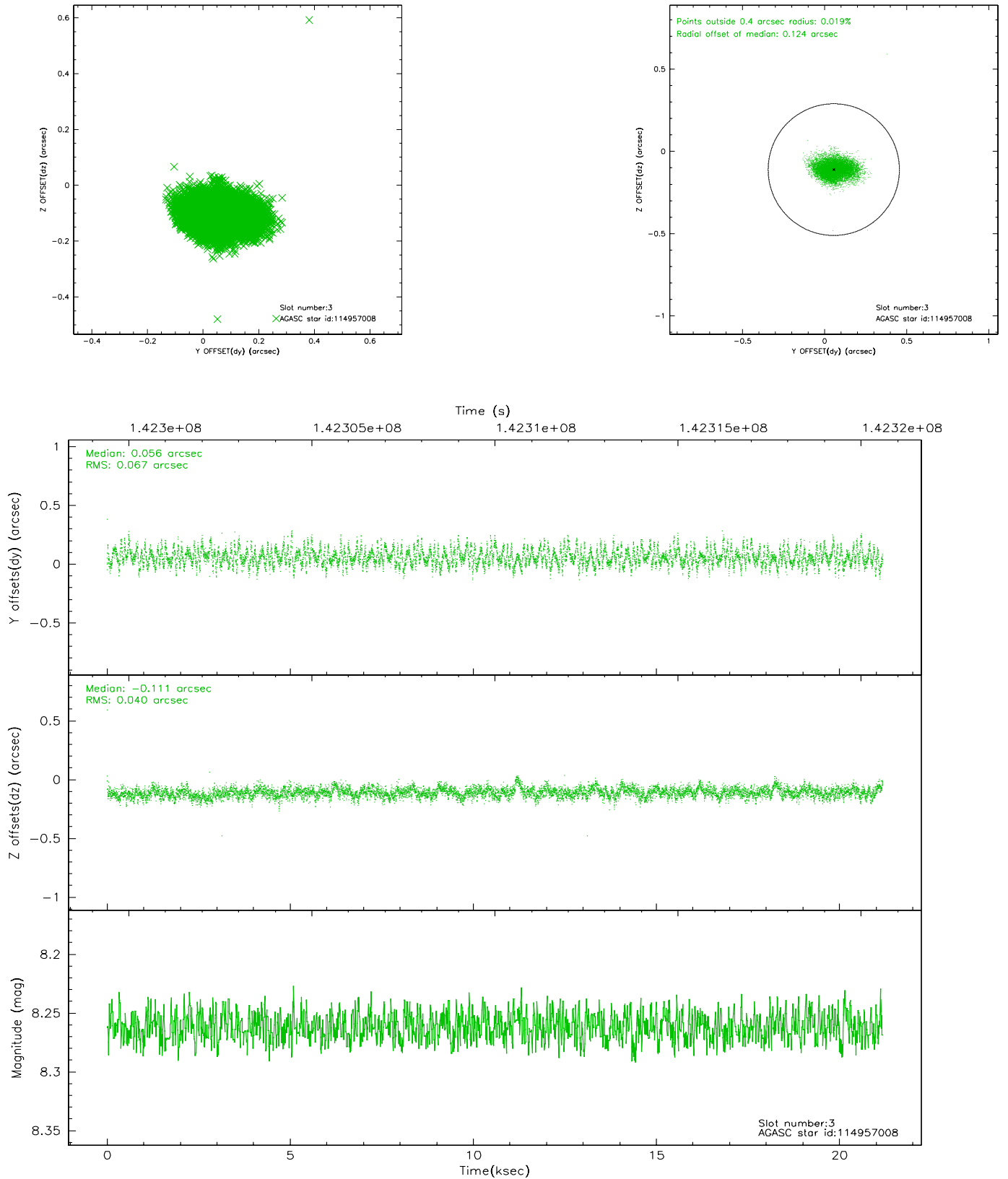
### Slot Statistics

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	5166	0.004	0.032	0.013	0.036	0.000000	0.000000	-755.20	-1728.48
1	FID	ACIS-S-4	7.20	5166	-0.080	-0.011	0.008	0.044	0.000000	0.000000	2157.93	179.79
2	FID	ACIS-S-5	7.24	5166	0.044	-0.015	0.010	0.016	0.000000	0.000000	-1807.78	173.64
3	GUIDE	114957008	8.26	10332	0.056	-0.111	0.082	0.137	186.894794	12.099160	1836.05	-2406.17
4	GUIDE	114955056	8.32	10330	-0.036	0.063	0.069	0.107	187.914001	12.127854	763.07	1018.77
5	GUIDE	114954440	9.21	10330	0.034	-0.007	0.107	0.176	186.915066	12.219118	1400.90	-2453.28
6	GUIDE	114952424	9.33	10323	0.058	0.080	0.094	0.157	187.477948	11.953762	1784.51	-288.01
7	GUIDE	114952792	9.50	10329	-0.116	-0.024	0.103	0.166	187.070263	12.344747	818.16	-2050.22

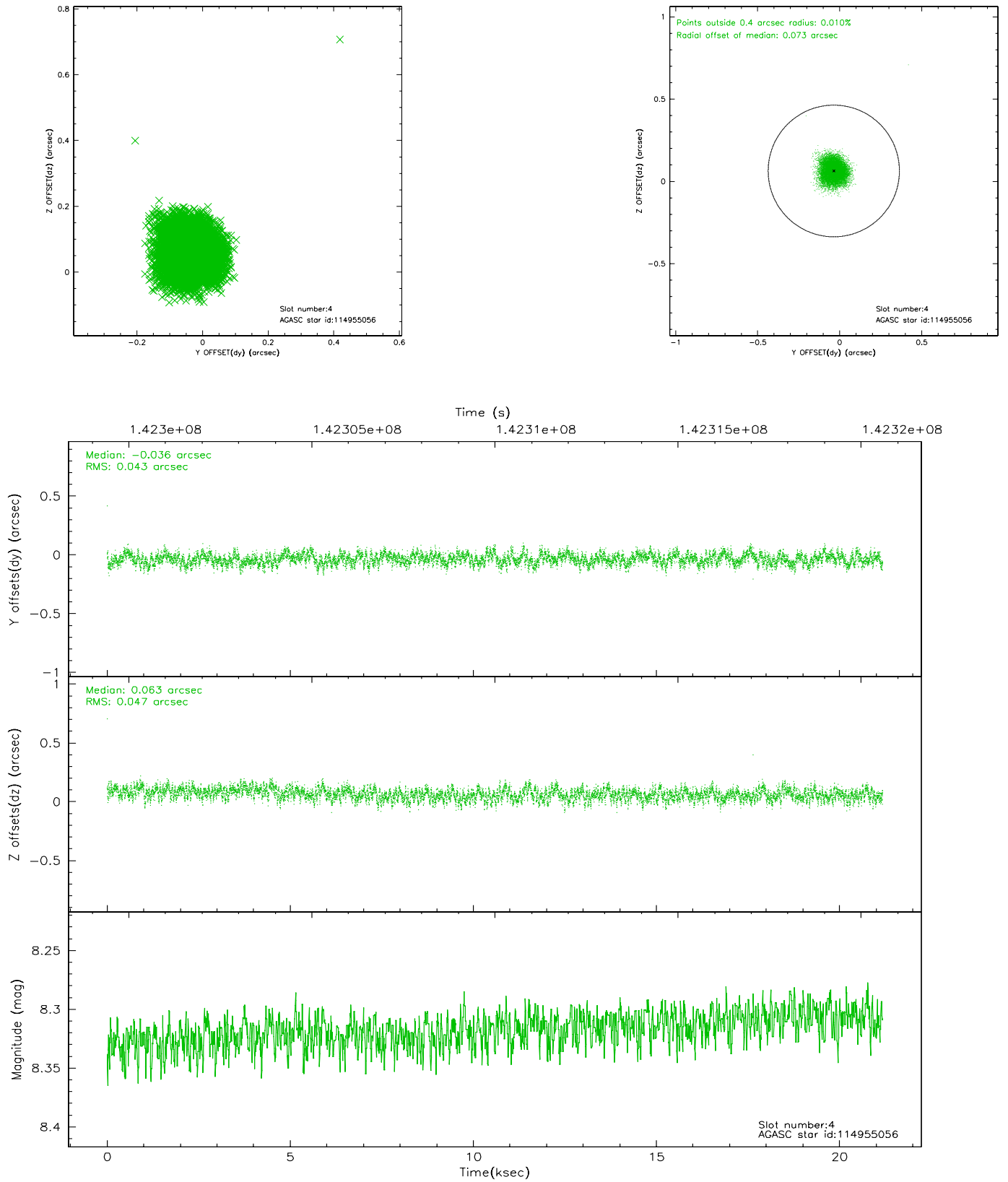


## 2.4 Star Slots

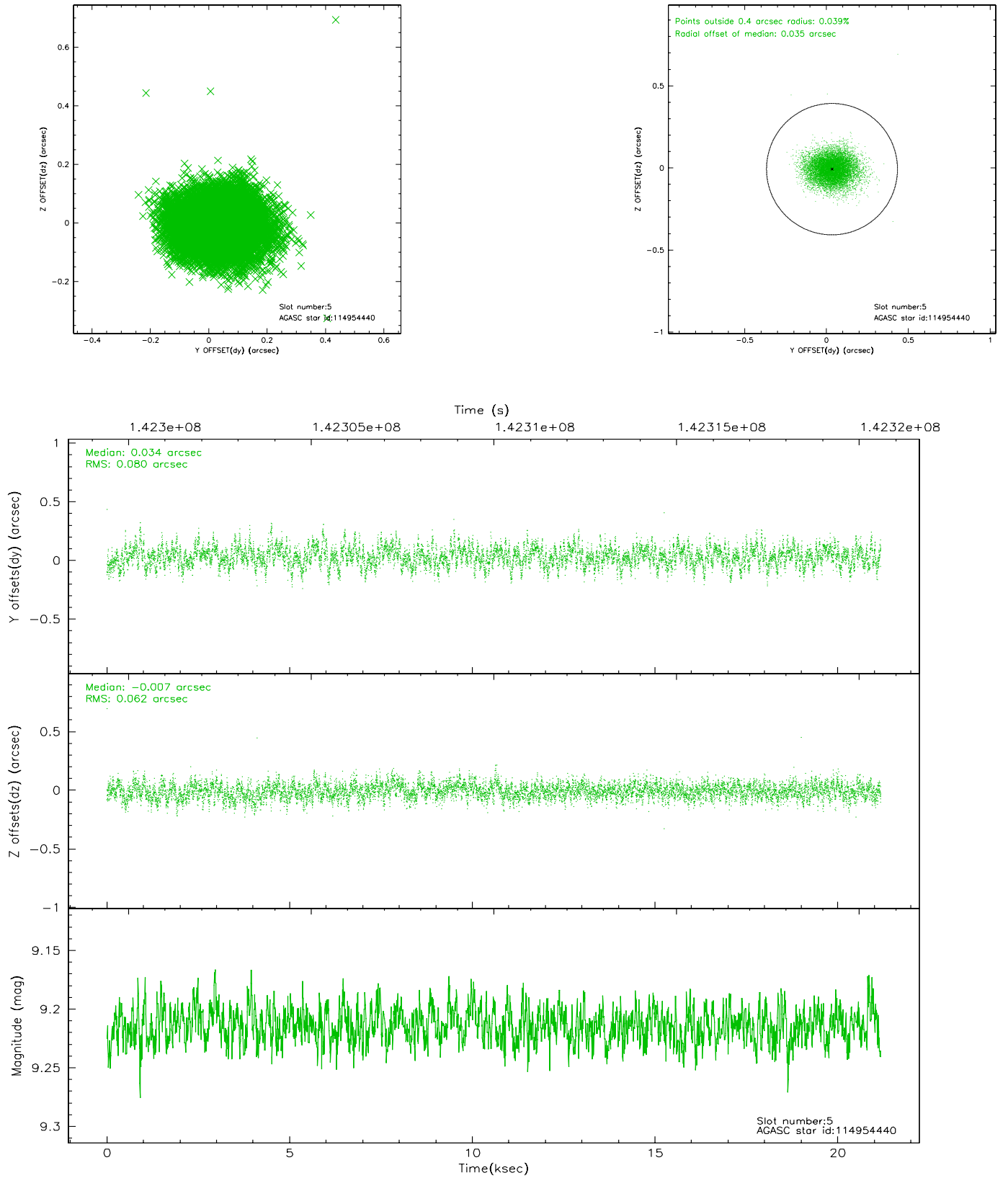
### 2.4.1 Slot 3



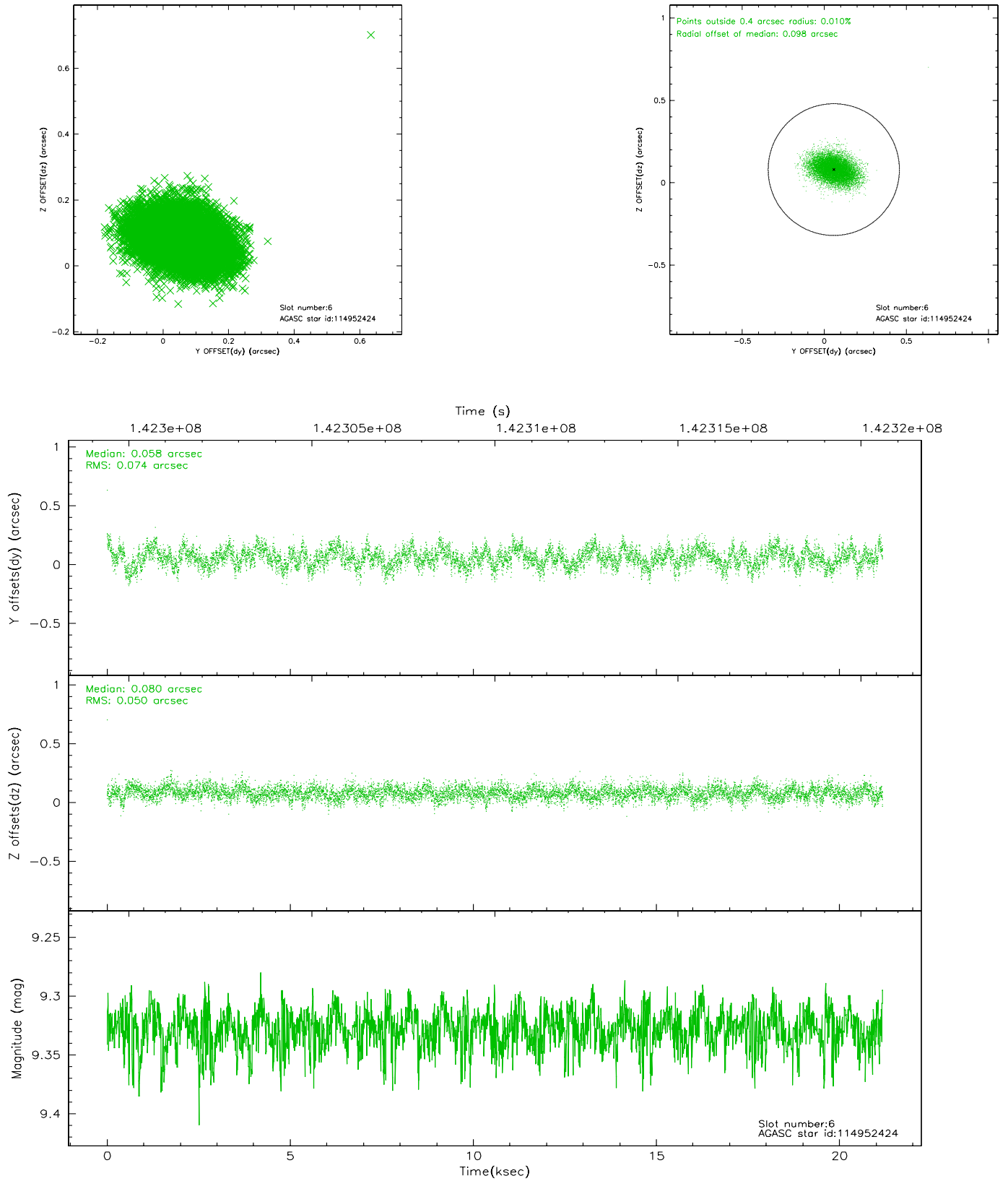
## 2.4.2 Slot 4



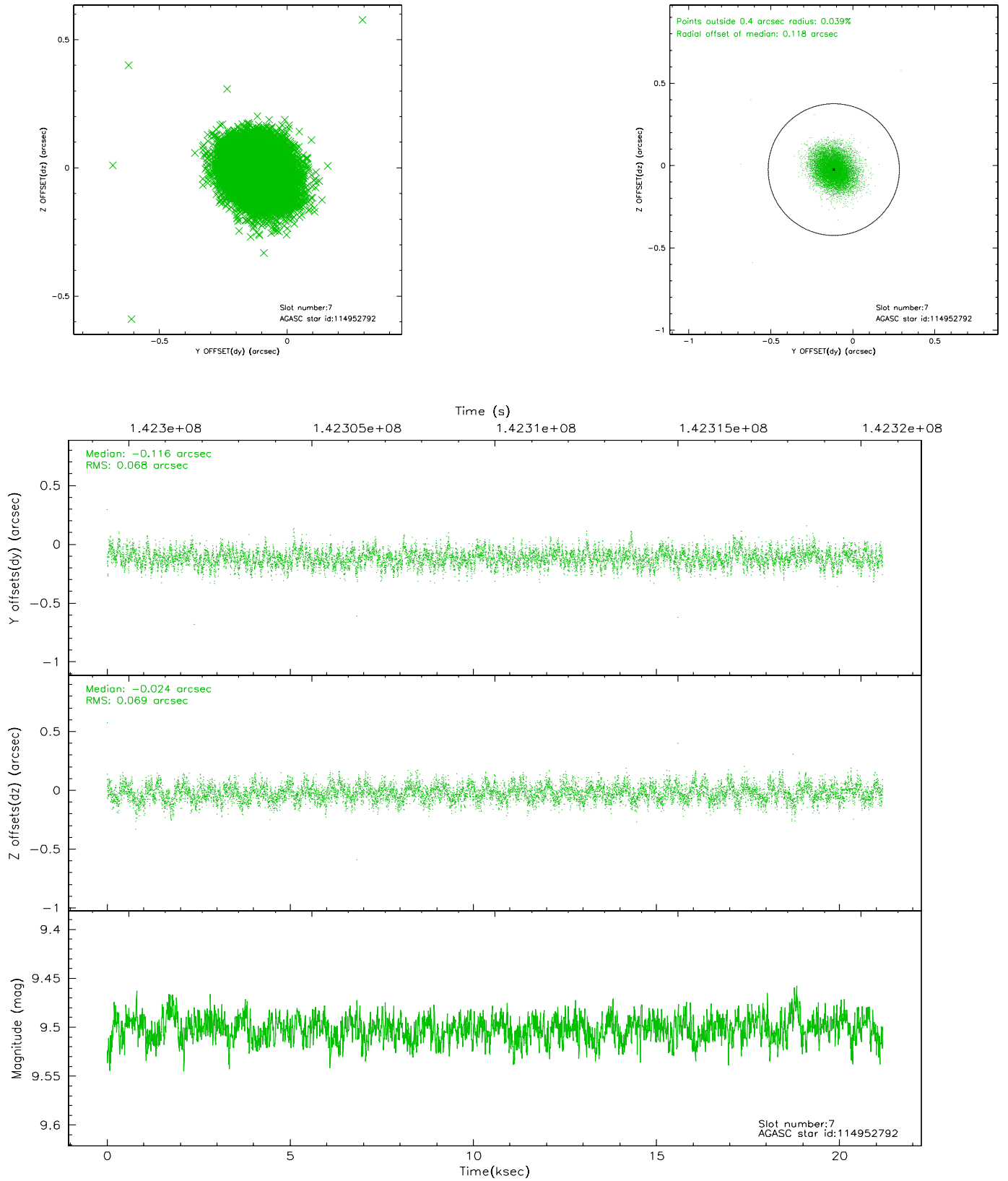
### 2.4.3 Slot 5



## 2.4.4 Slot 6

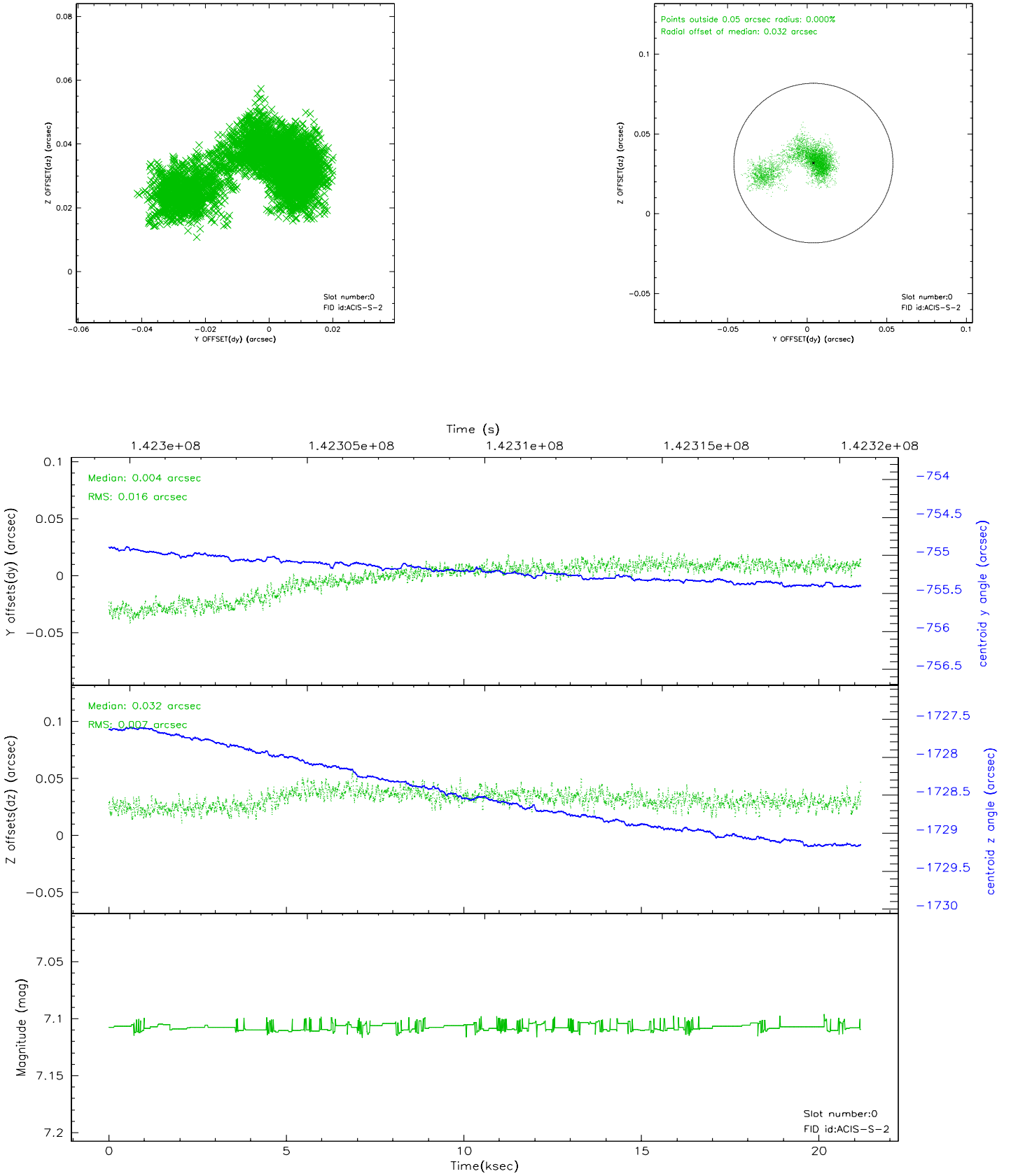


## 2.4.5 Slot 7

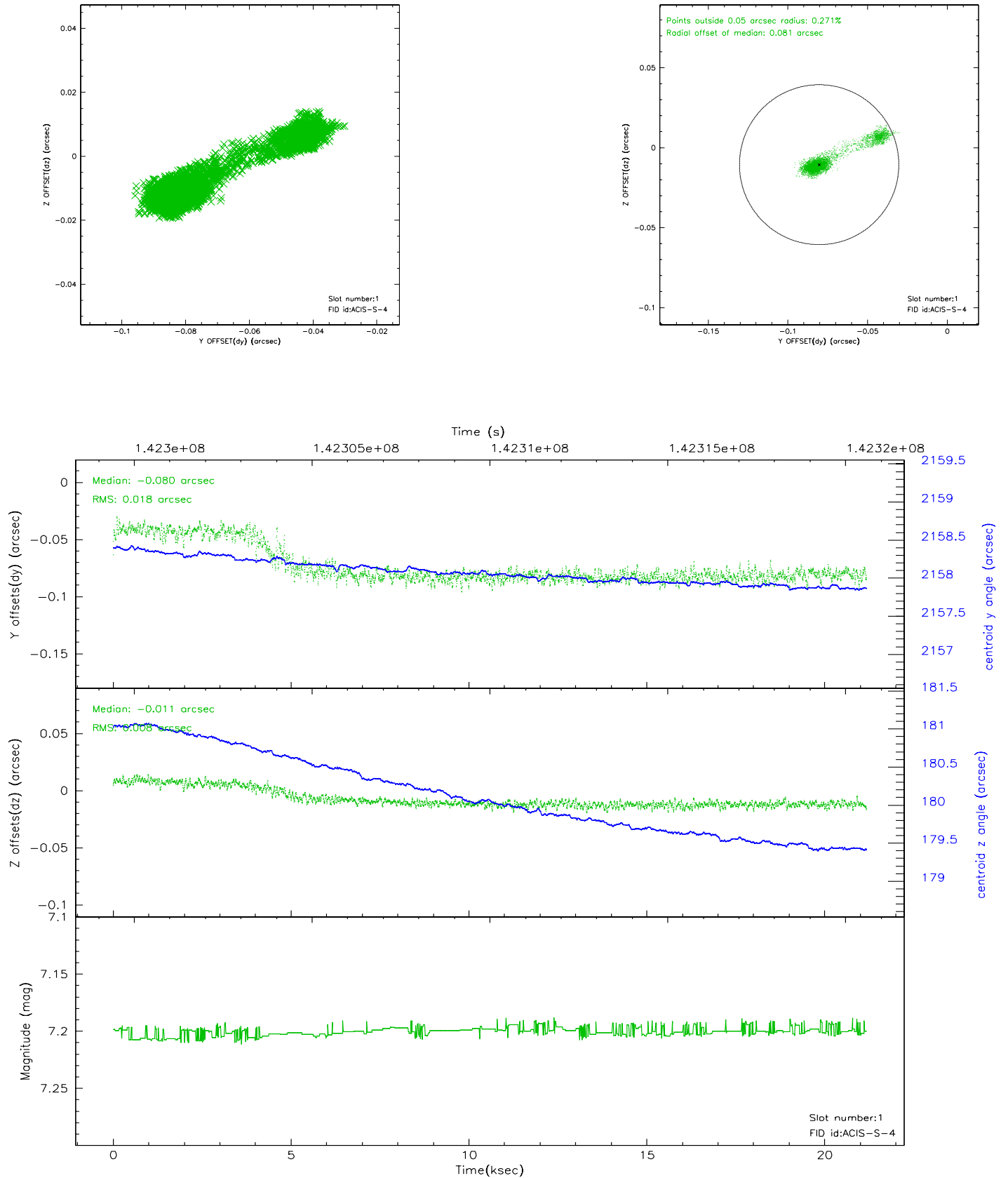


## 2.5 FID Slots

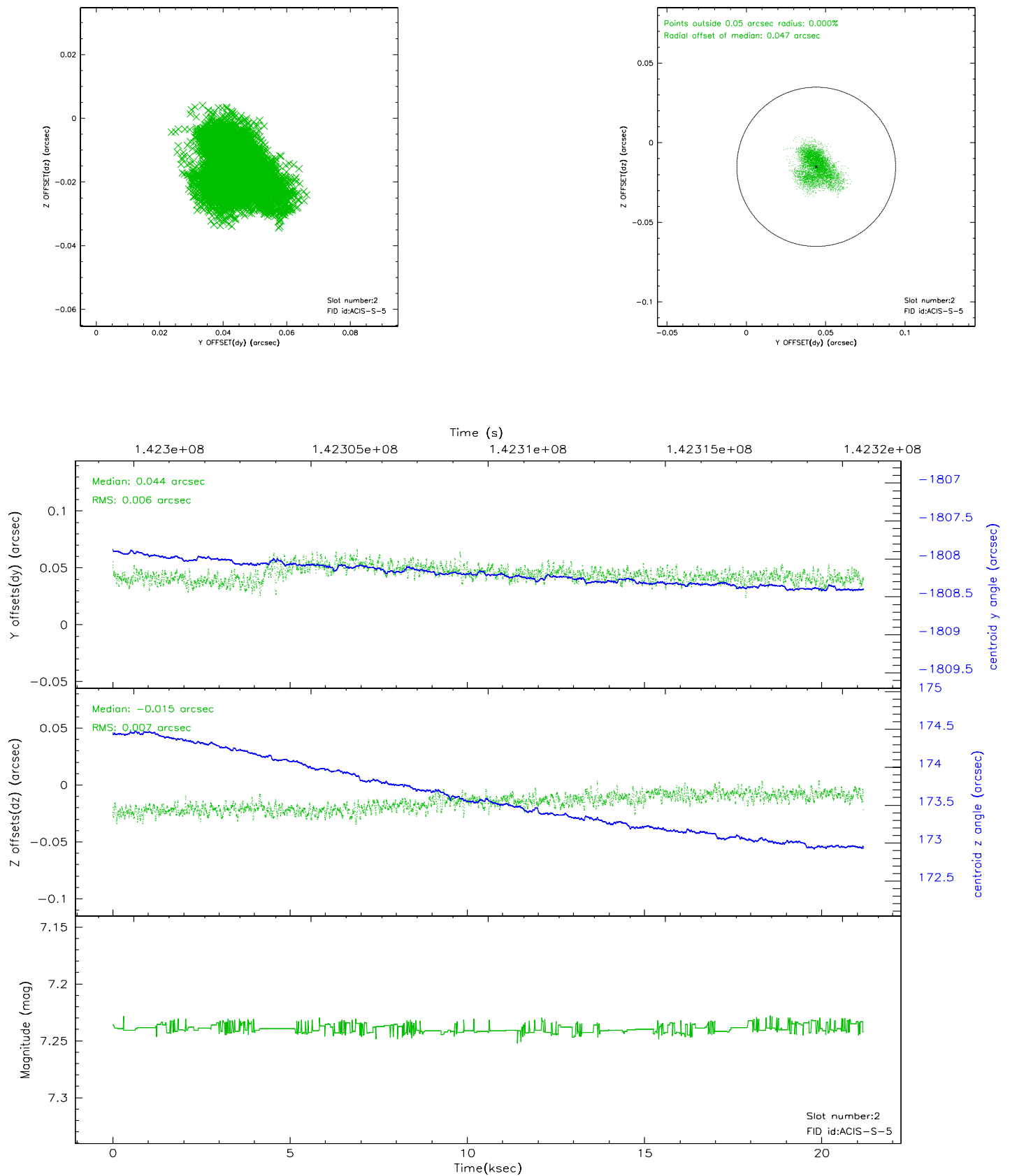
### 2.5.1 Slot 0



## 2.5.2 Slot 1

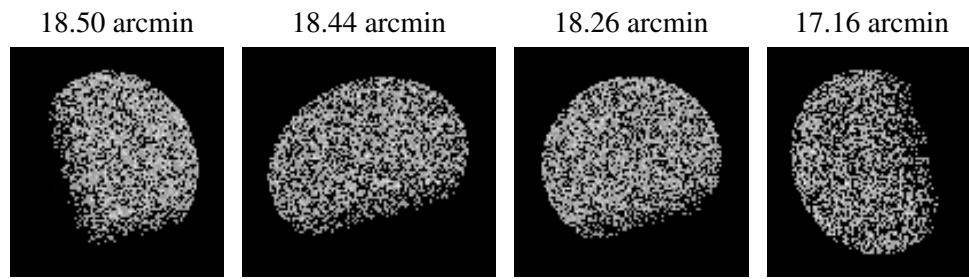


### 2.5.3 Slot 2





### 3 Point Sources



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.09.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.828

### A.2 Comments

Roll constraint OK.