

# V&V Reference Report

## L2 ASCDS Version : 10.4.3.1

Observation 18294 - L2 Version 2  
Chandra X-Ray Center

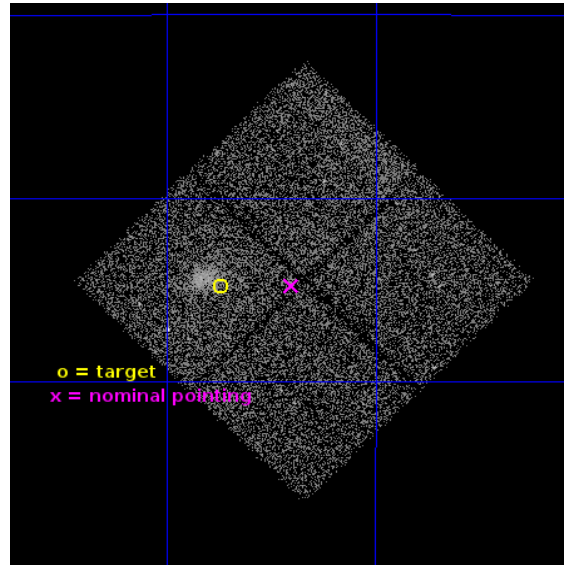
L2 Processing Date : May 31 2016

## 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

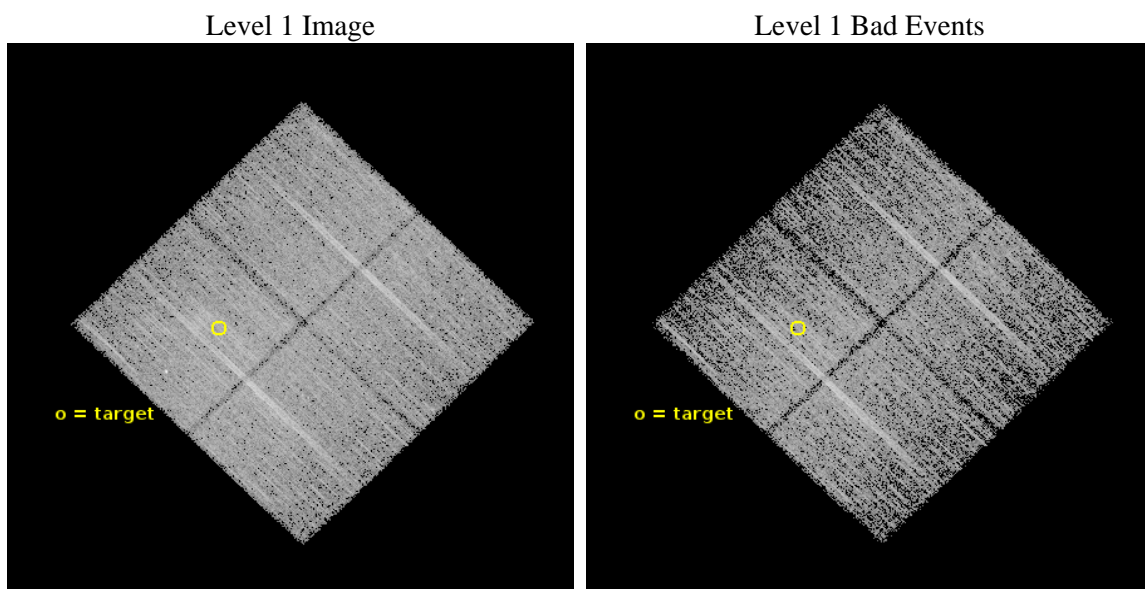
seq_num	801612	Sequence number
obs_id	18294	Observation id
title	Building a Cheap and Cheerful SZ-selected sample of galaxy clusters with the Planck Catalogue.	Proposal title
observer	Mariachiara Rossetti	Principal investigator
object	PSZ2 G254.46-14.44	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	108.435833	Observer's specified target RA [deg]
dec_targ	-43.247	Observer's specified target Dec [deg]
ra_nom	108.35072902099	Nominal RA [deg]
dec_nom	-43.246260132608	Nominal Dec [deg]
roll_nom	224.82697965633	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14070.014704108	Sum of GTIs [s]
livetime	13886.179603805	Livetime [s]
ontime0	14066.750613809	Sum of GTIs [s]
ontime1	14069.932703972	Sum of GTIs [s]
ontime2	14073.114724398	Sum of GTIs [s]
ontime3	14070.014704108	Sum of GTIs [s]
l2events	34657	Number of level 2 events



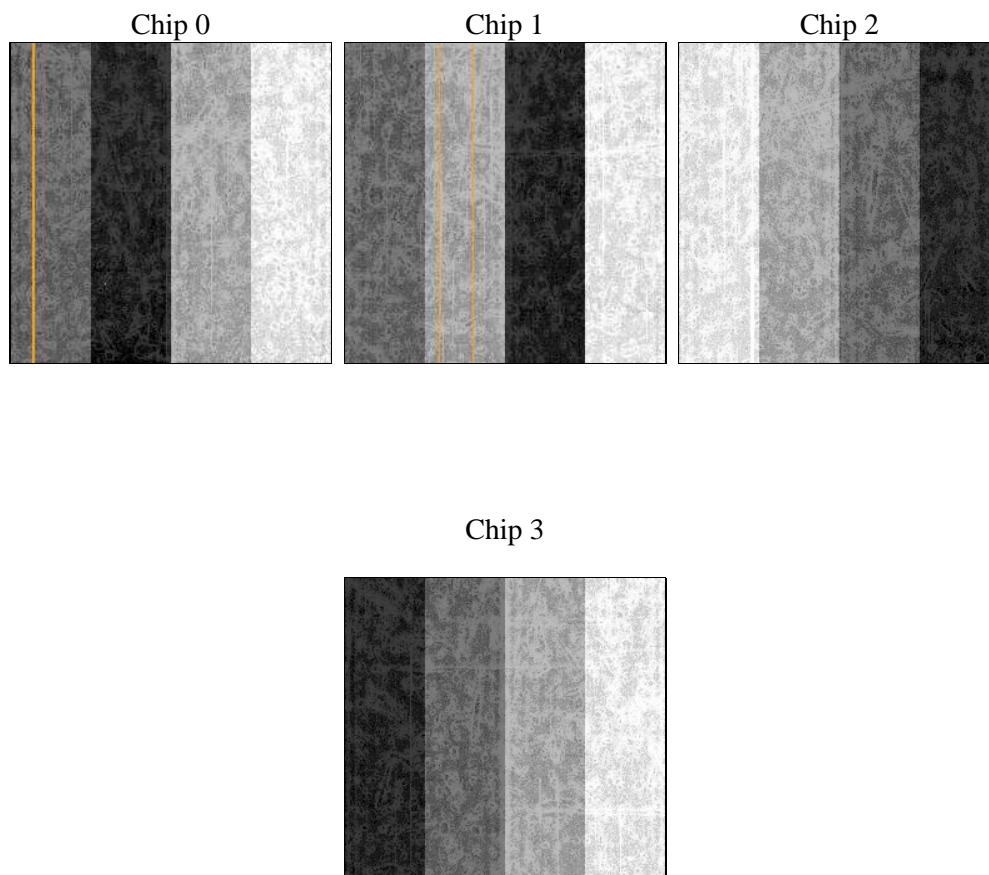
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	14070.014704108	Sum of GTIs [s]
caldsver	4.7.1	&#160	ontime0	14066.750613809	Sum of GTIs [s]
date	2016-05-31T14:43:59	Date and time of file creation	ontime1	14069.932703972	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	14073.114724398	Sum of GTIs [s]
			ontime3	14070.014704108	Sum of GTIs [s]
			l1events	344116	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	80524	82712	89214	91666
rejected events	70890	71885	79920	80590
rejected %	88%	86%	89%	87%

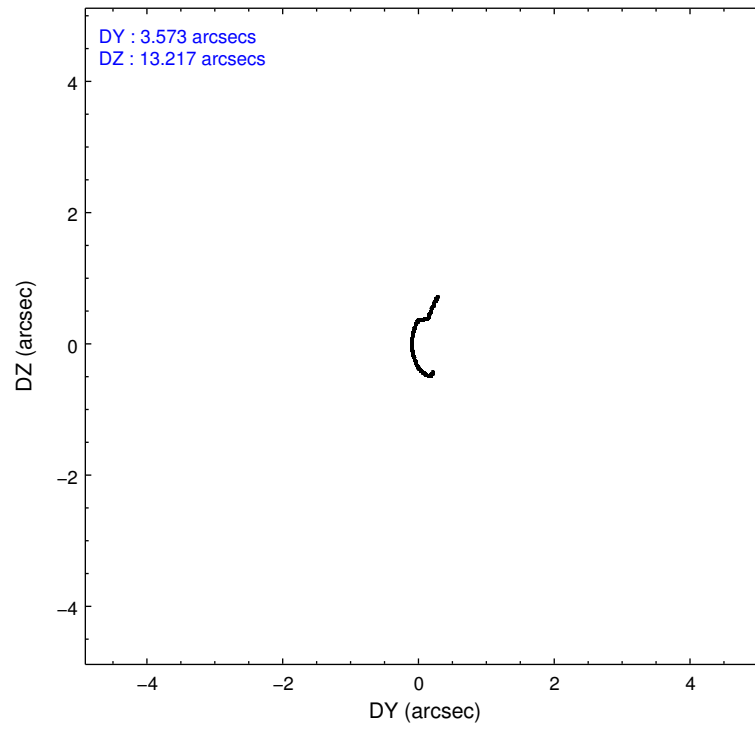
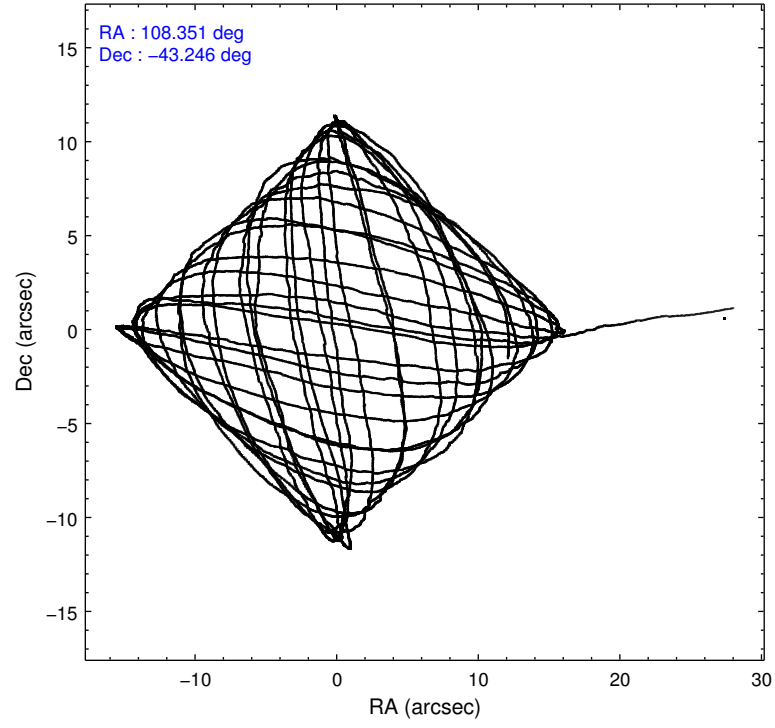
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	3365	3462	3377	4688
	4%	4%	3%	5%
grade 1 events	34	40	58	61
	0%	0%	0%	0%
grade 2 events	2333	2841	2126	2213
	2%	3%	2%	2%
grade 3 events	967	1013	969	1047
	1%	1%	1%	1%
grade 4 events	920	1034	980	1010
	1%	1%	1%	1%
grade 5 events	3681	3757	3526	4123
	4%	4%	3%	4%
grade 6 events	2053	2481	1848	2126
	2%	2%	2%	2%
grade 7 events	67171	68084	76330	76398
	83%	82%	85%	83%

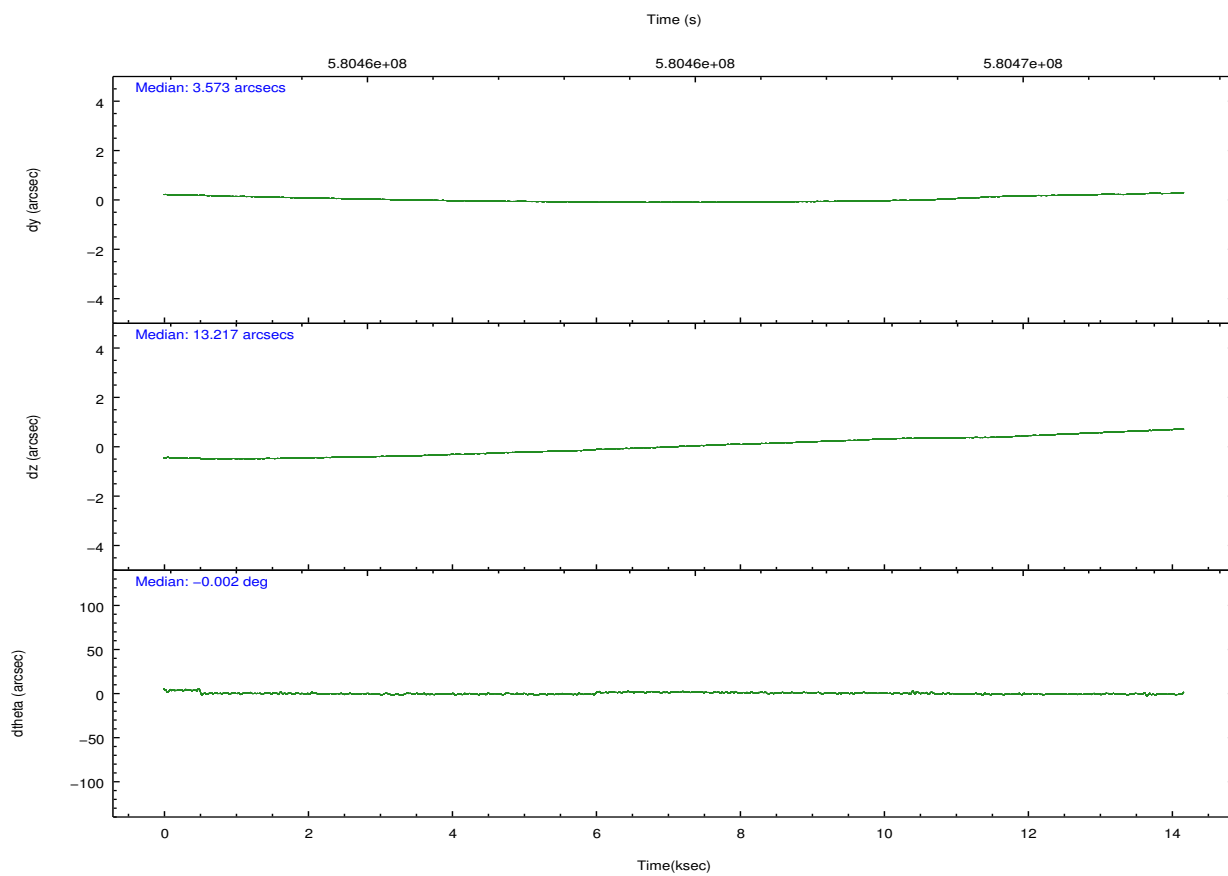
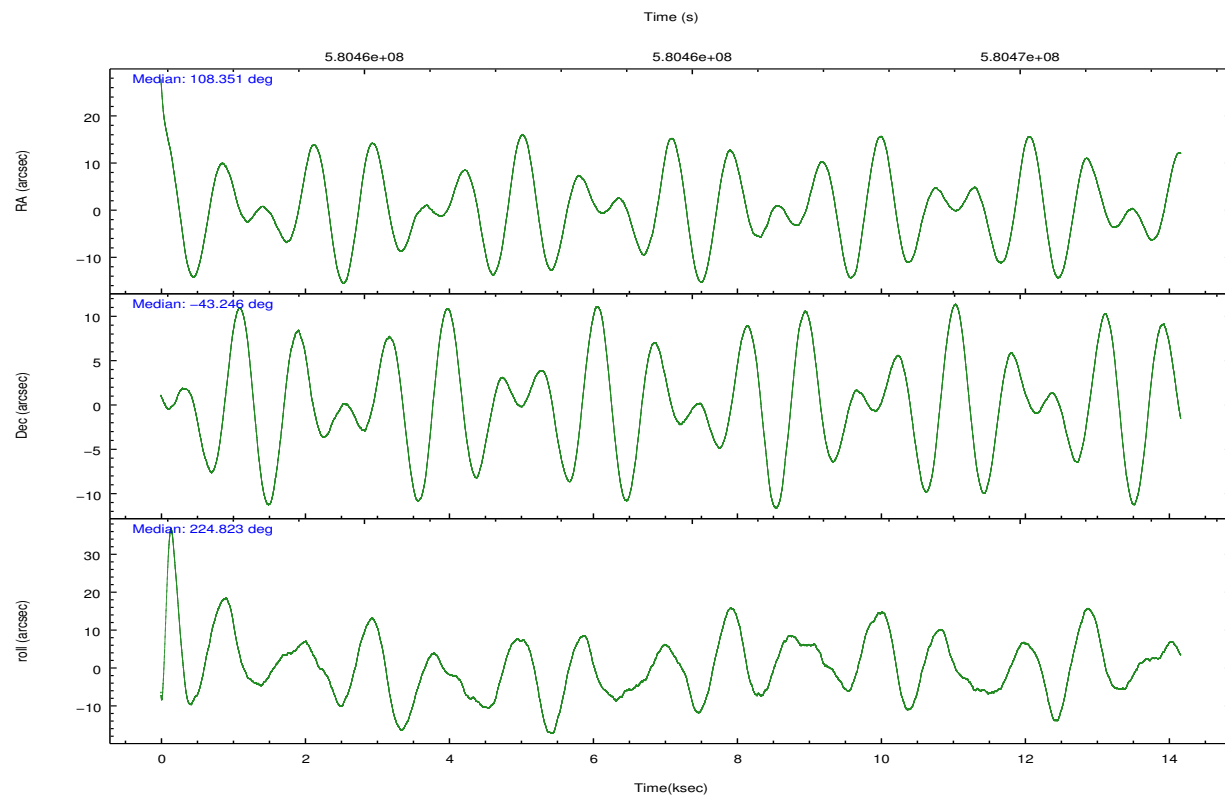


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	108.360486	108.3507290209905	Subarray requested	NONE	NONE
[deg] Pointing Dec	-43.219614	-43.2462601326084	Alternating exposures requested	N	N
[deg] Pointing Roll	224.625028	224.8269796563349	[s] Primary exposure time	0.000000	3.1
[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)	580457756.184000	580456634.1234			
Observation start date	2016-05-24T06:14:48	2016-05-24T05:57:14			
[s] Observation end time (MET)	580471756.184000	580472586.71182			
Observation end date	2016-05-24T10:08:08	2016-05-24T10:23:06			
Read mode	TIMED	TIMED			

## 2.3 Aspect



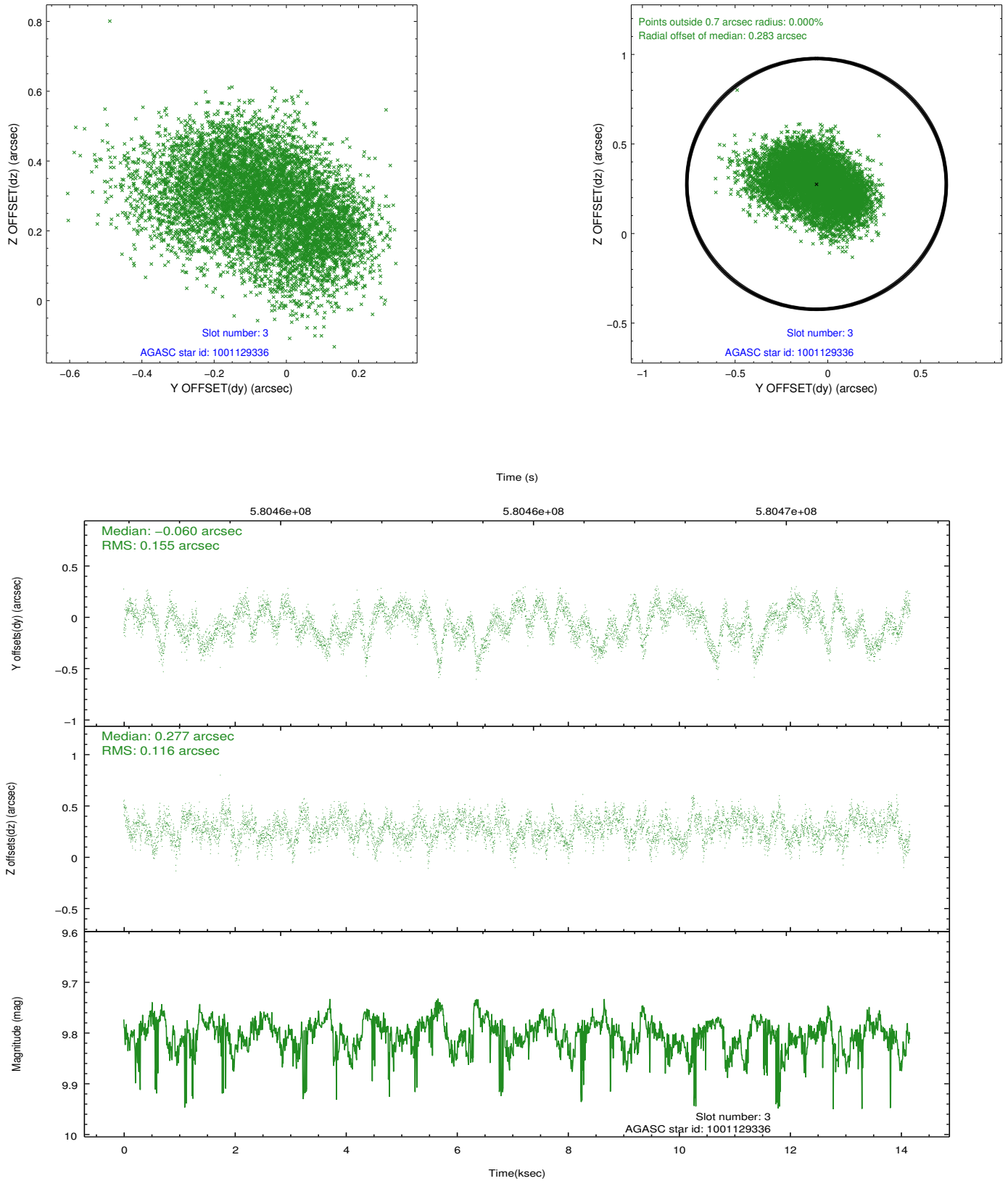


### Slot Statistics

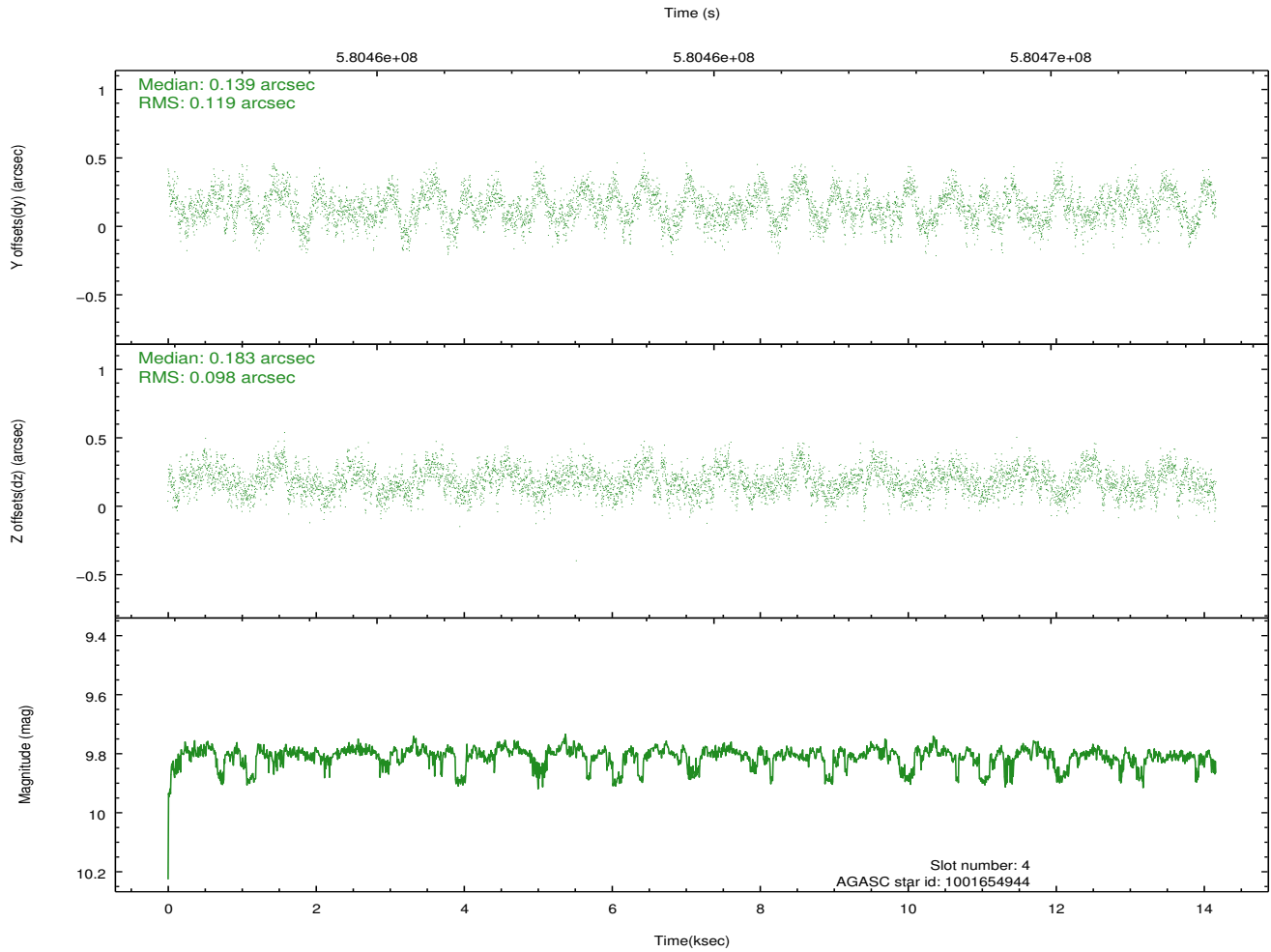
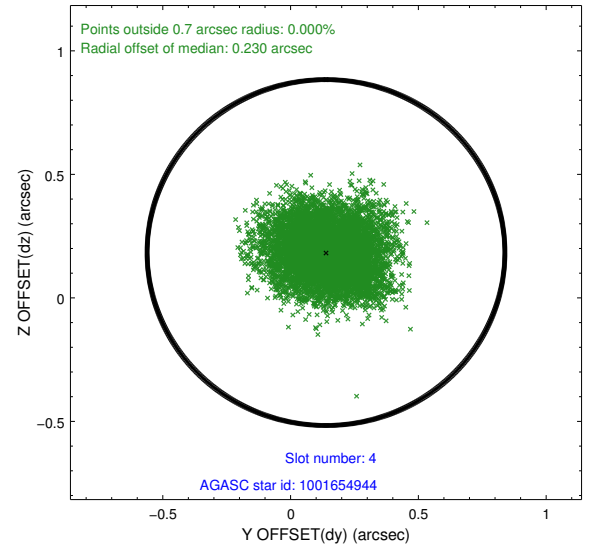
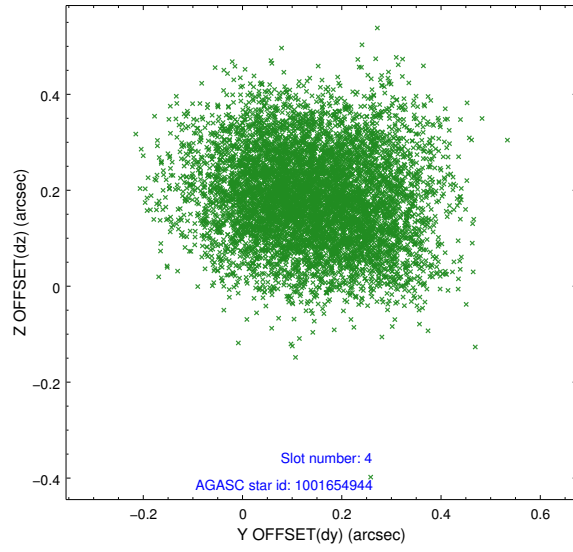
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.26	3454	0.051	-0.023	0.039	0.055	0.000000	0.000000	936.21	-836.83
1	FID		ACIS-I-4	7.21	3455	0.225	0.014	0.028	0.039	0.000000	0.000000	2156.62	1062.87
2	FID		ACIS-I-5	7.22	3453	-0.374	0.080	0.014	0.020	0.000000	0.000000	-1811.78	1061.16
3	GUIDE	used	1001129336	9.80	6902	-0.060	0.277	0.210	0.323	108.700126	-42.813323	-1663.78	-409.42
4	GUIDE	used	1001654944	9.80	6894	0.139	0.183	0.165	0.264	107.750921	-43.481100	1798.88	-444.02
5	GUIDE	used	1001660384	8.52	6909	0.038	-0.214	0.107	0.168	108.237605	-43.658786	1339.16	900.57
6	GUIDE	used	1001663408	9.27	6906	0.018	-0.037	0.132	0.206	108.286927	-43.932253	1938.73	1692.53
7	GUIDE	used	1001657920	9.53	6904	-0.129	-0.212	0.154	0.258	109.273227	-43.482437	-1022.72	2357.60

## 2.4 Star Slots

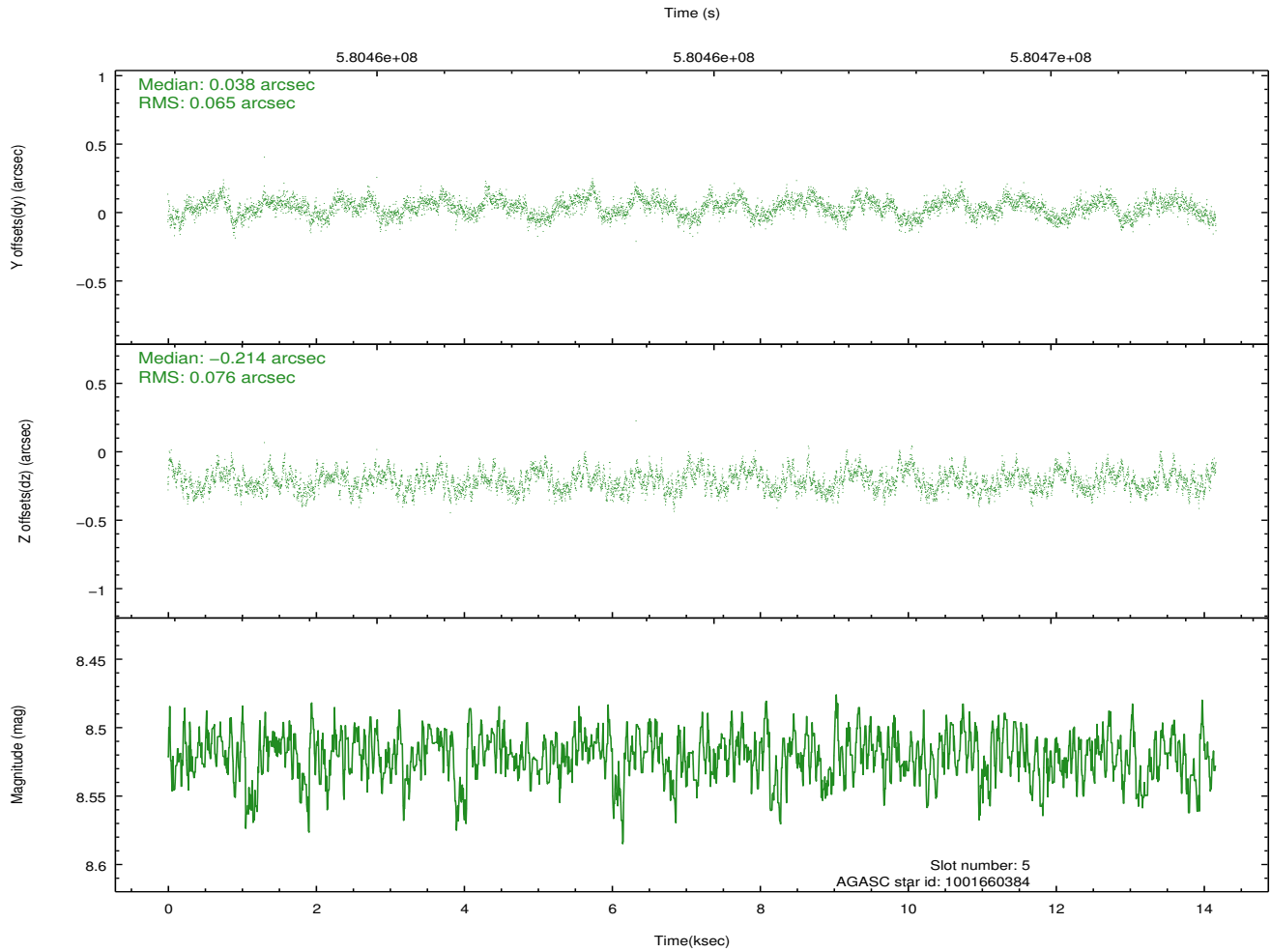
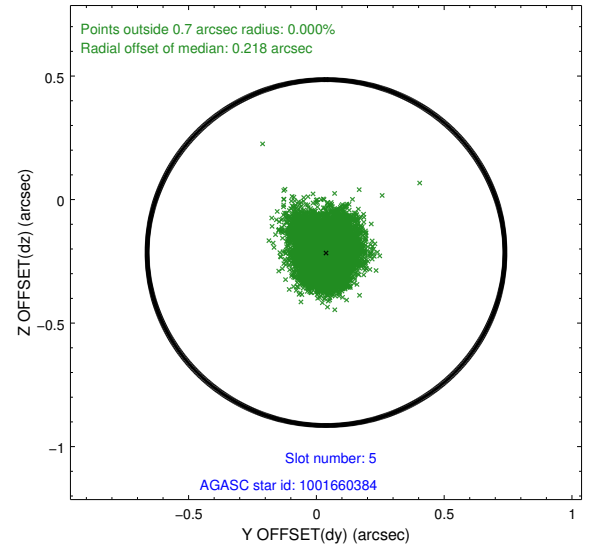
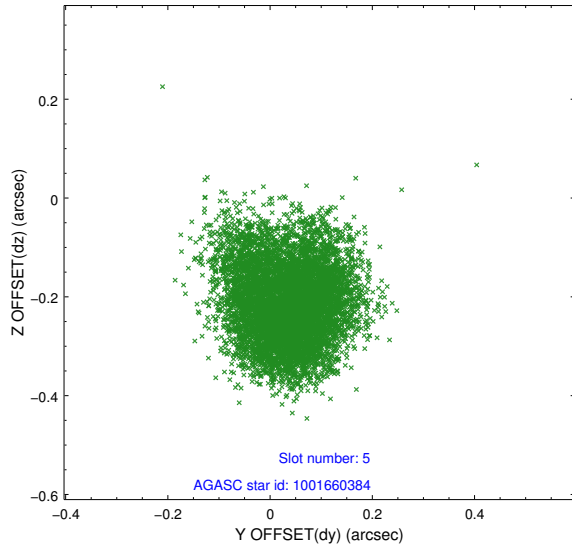
### 2.4.1 Slot 3



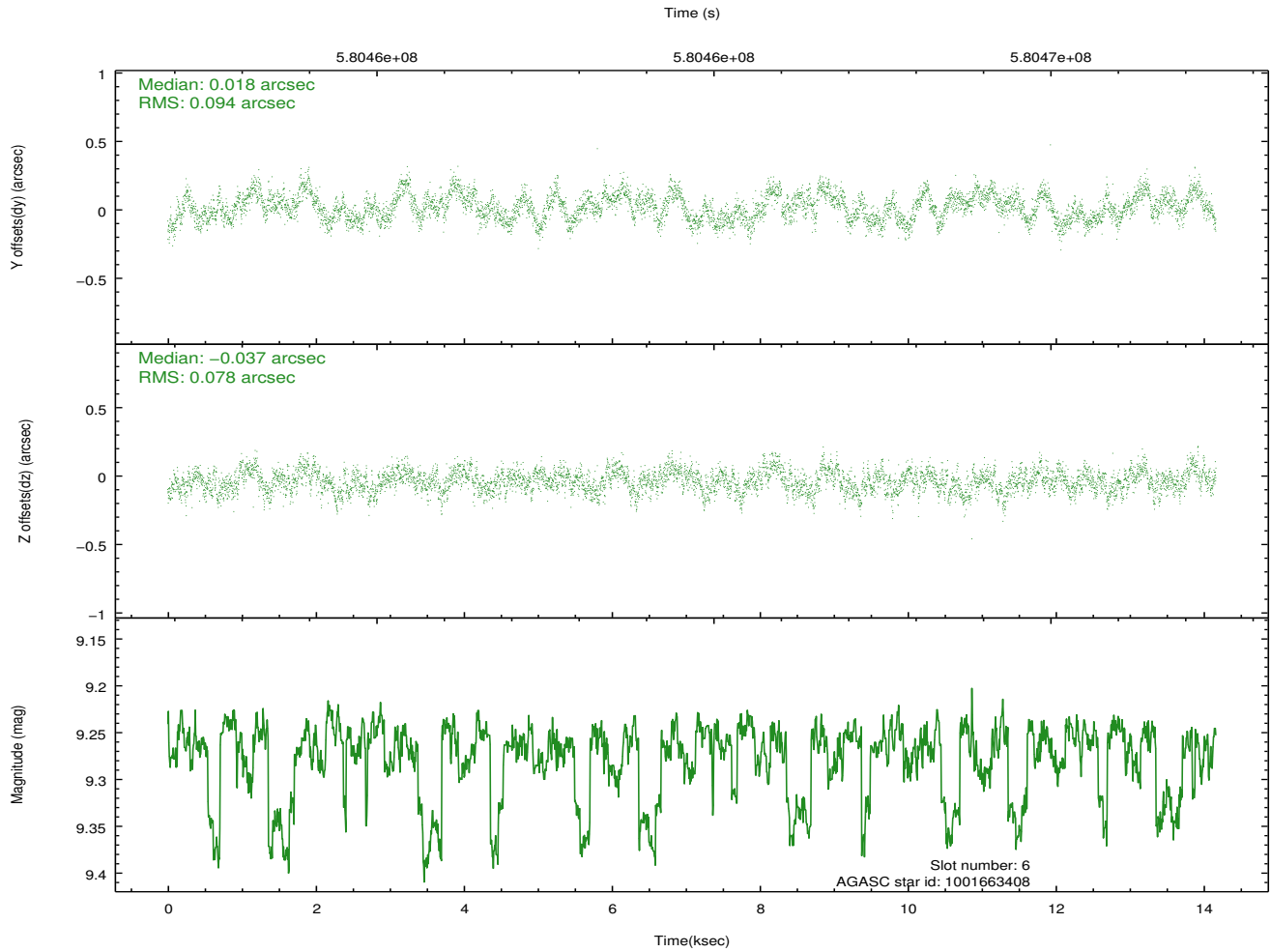
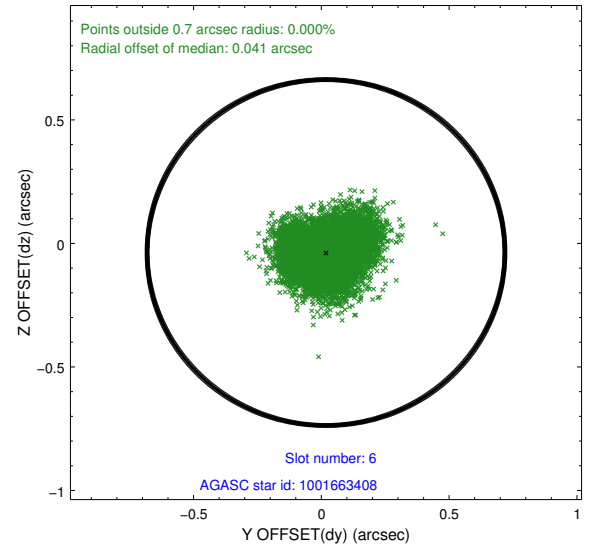
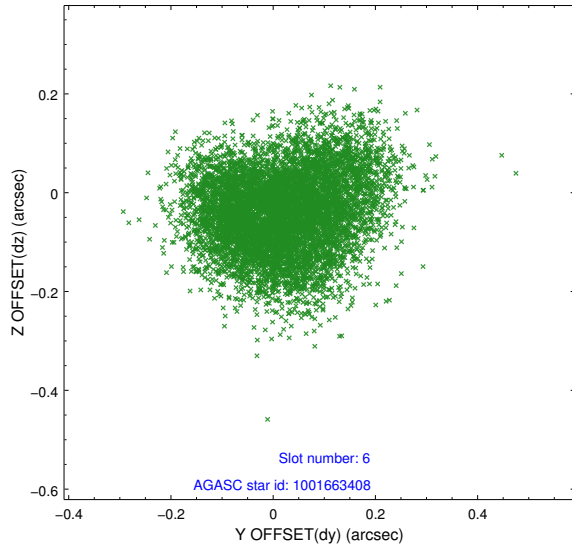
## 2.4.2 Slot 4



### 2.4.3 Slot 5

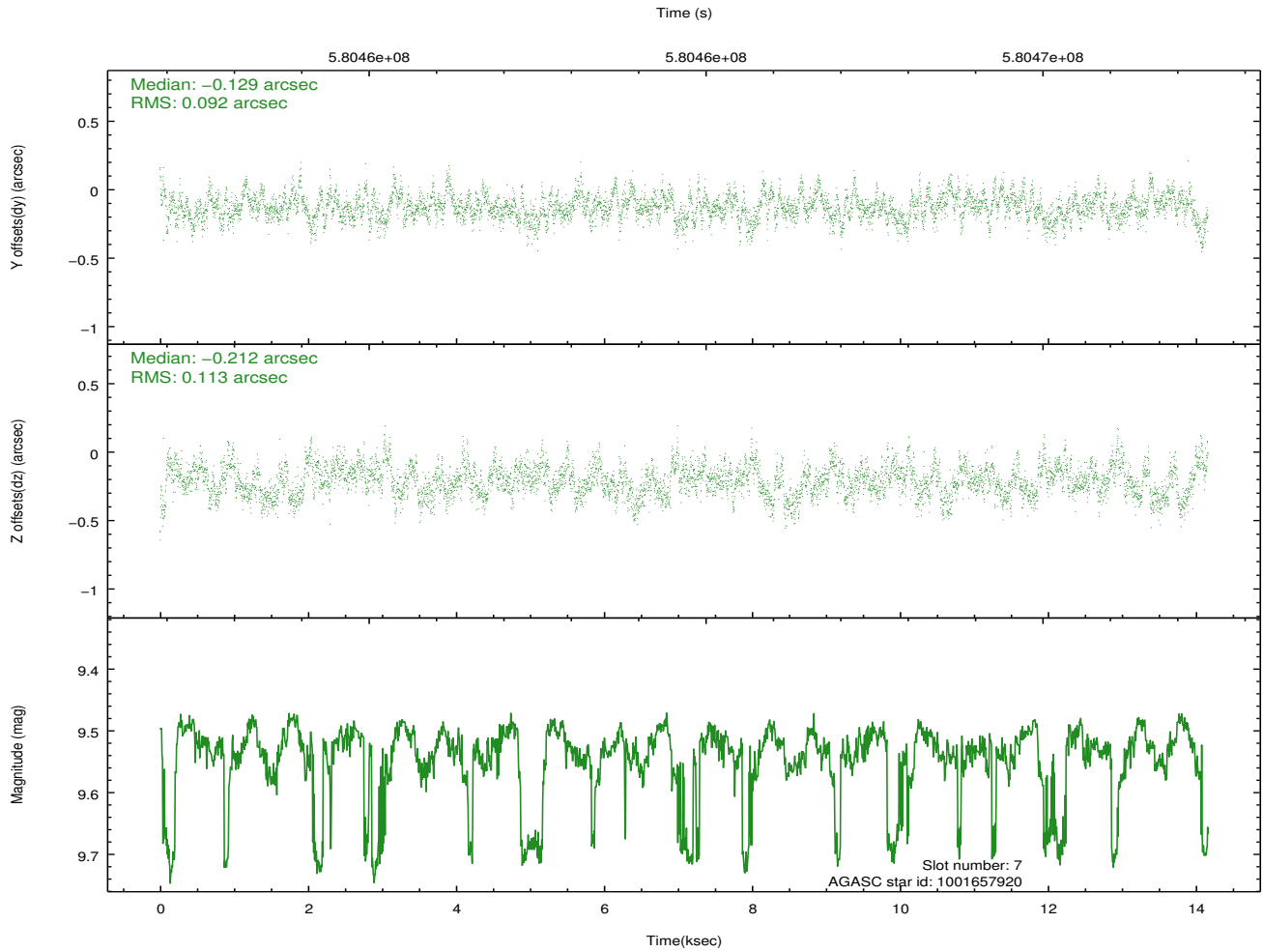
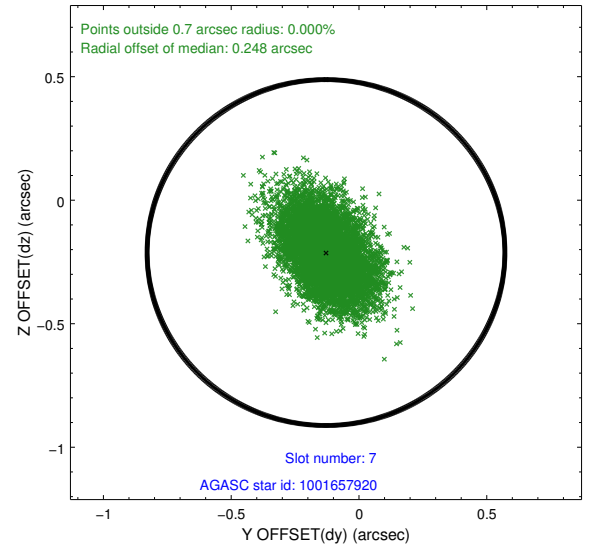
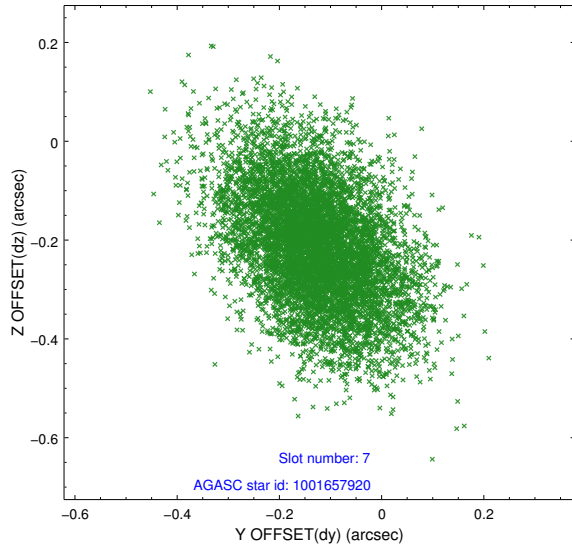


## 2.4.4 Slot 6



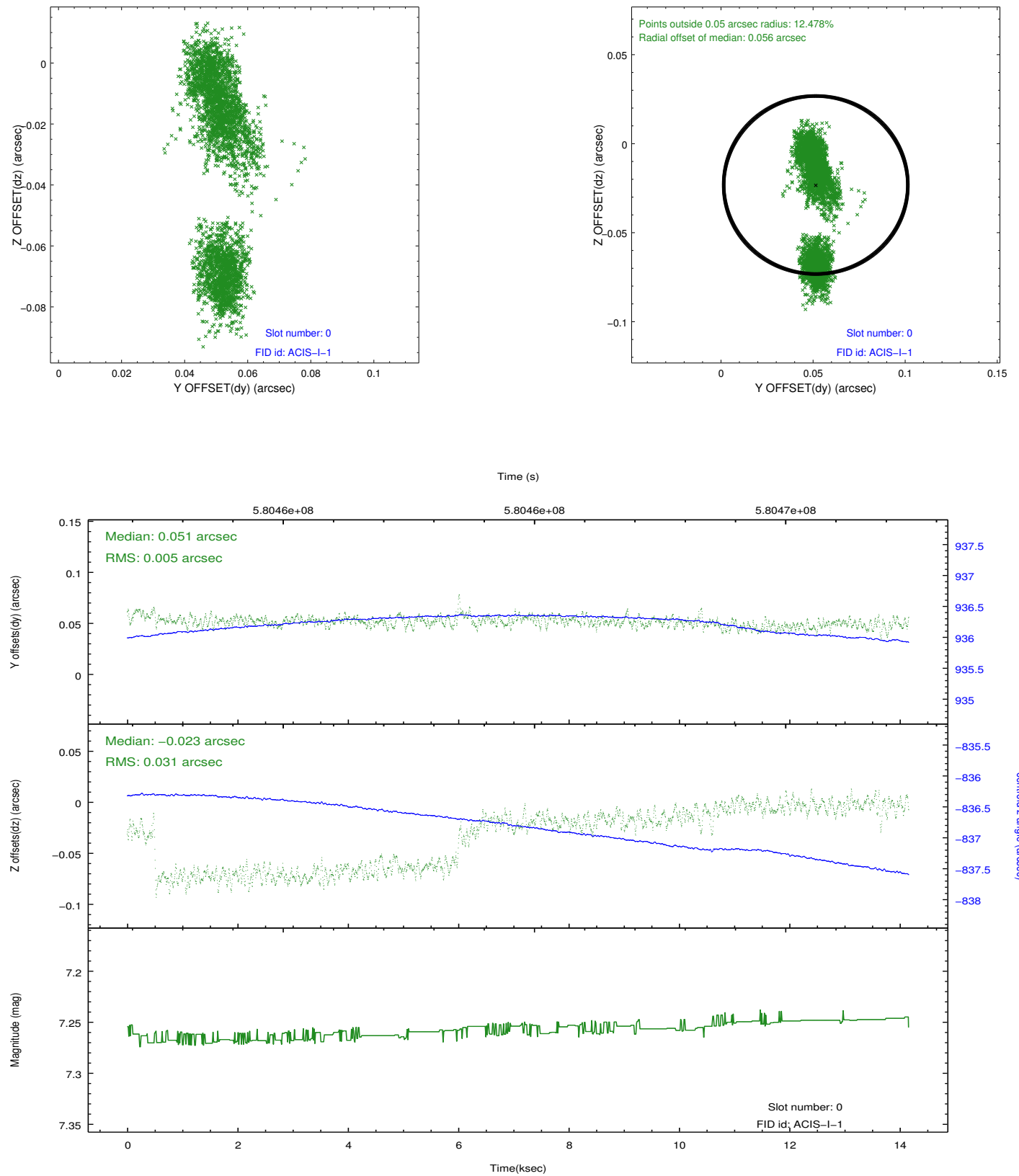


## 2.4.5 Slot 7

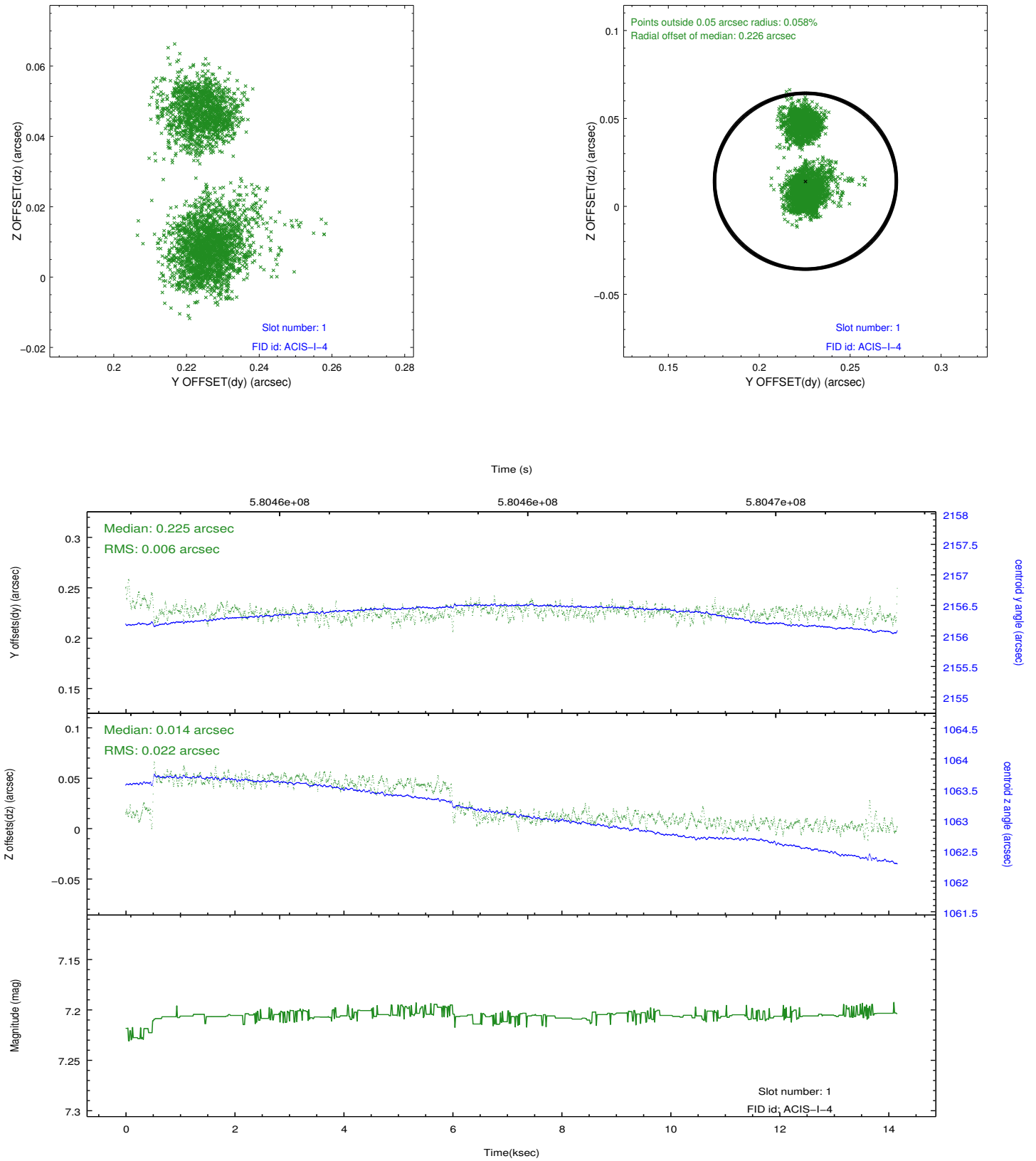


## 2.5 FID Slots

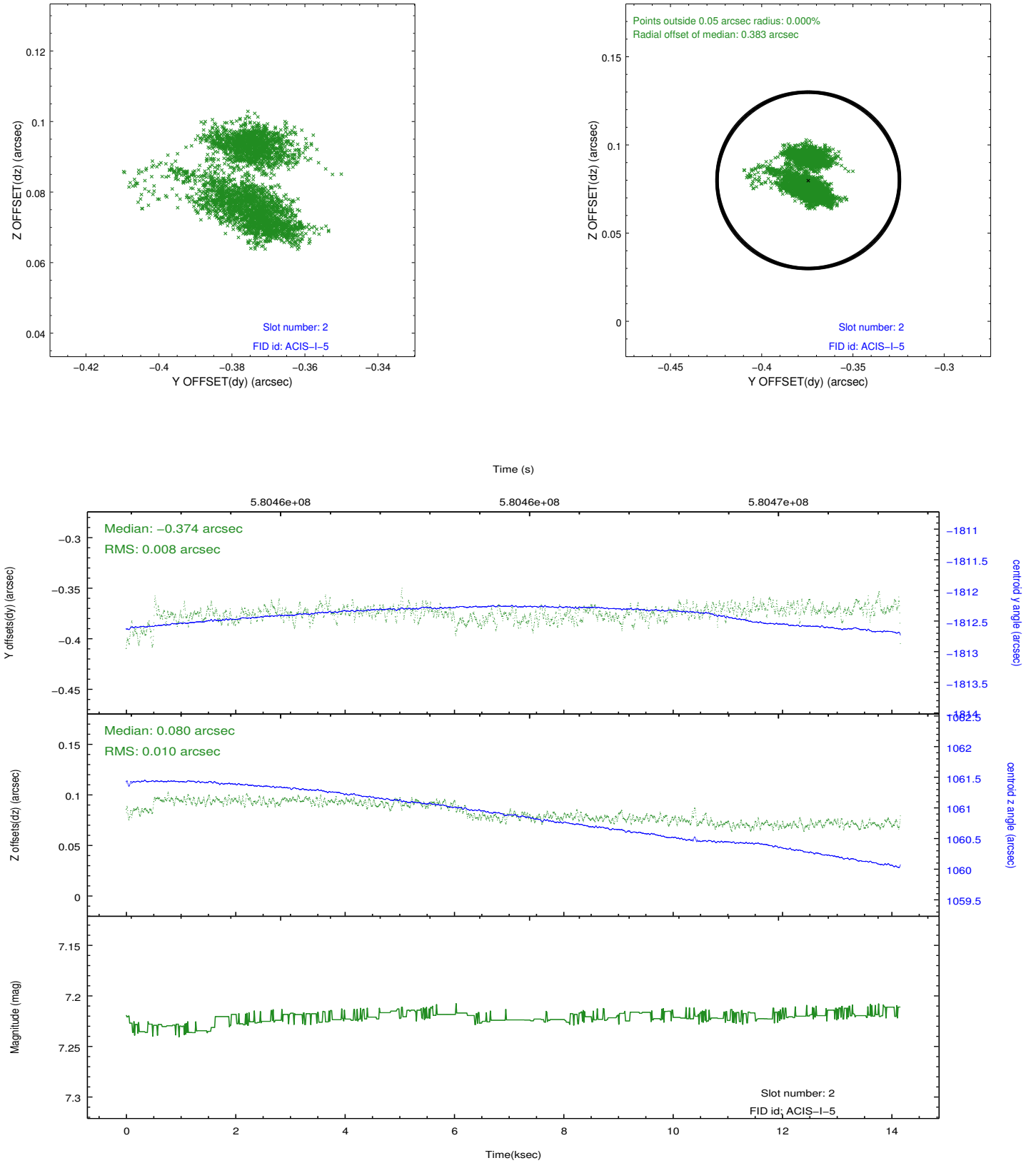
### 2.5.1 Slot 0



## 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)	2016.06.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.070014704108

## A.2 Comments

The bias file for CCD\_ID = 1 showed signs of data corruption. A single bad packet in the dump has been repaired, and the data have been reprocessed.