

# V&V Reference Report

## L2 ASCDS Version : 10.5

Observation 18636 - L2 Version 1  
Chandra X-Ray Center

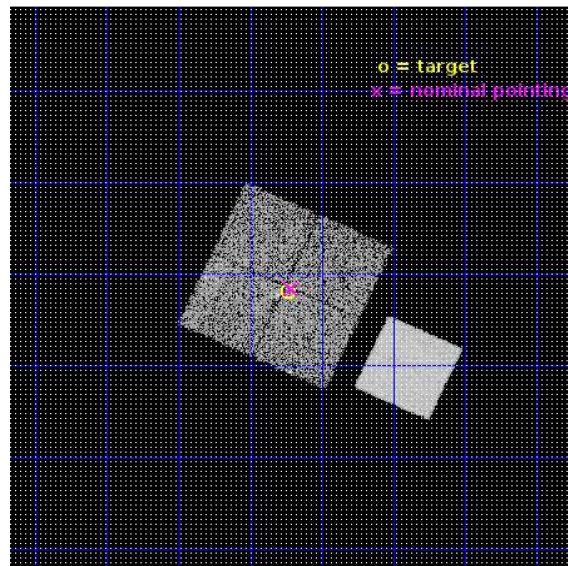
L2 Processing Date : Aug 13 2016

## 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

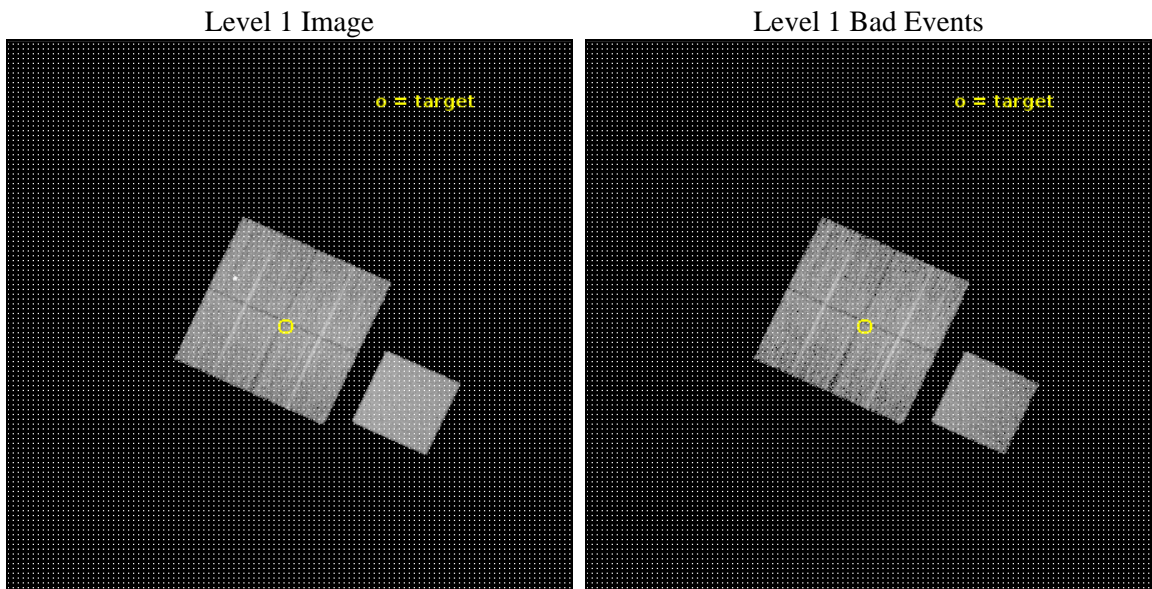
seq_num	801644	Sequence number
obs_id	18636	Observation id
title	Lensing Calibration of the Evolution of Cluster Scaling Relations for eROSITA	Proposal title
observer	Dr. Peter Predehl	Principal investigator
object	CODEX 59603	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	359.433333	Observer's specified target RA [deg]
dec_targ	0.801833	Observer's specified target Dec [deg]
ra_nom	359.42840825344	Nominal RA [deg]
dec_nom	0.80650391609642	Nominal Dec [deg]
roll_nom	114.7821249662	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10059.110354066	Sum of GTIs [s]
livetime	9927.6806718807	Livetime [s]
ontime0	10062.128294349	Sum of GTIs [s]
ontime1	10062.169334412	Sum of GTIs [s]
ontime2	10062.210374355	Sum of GTIs [s]
ontime3	10059.110354066	Sum of GTIs [s]
ontime7	10062.292454362	Sum of GTIs [s]
l2events	59313	Number of level 2 events



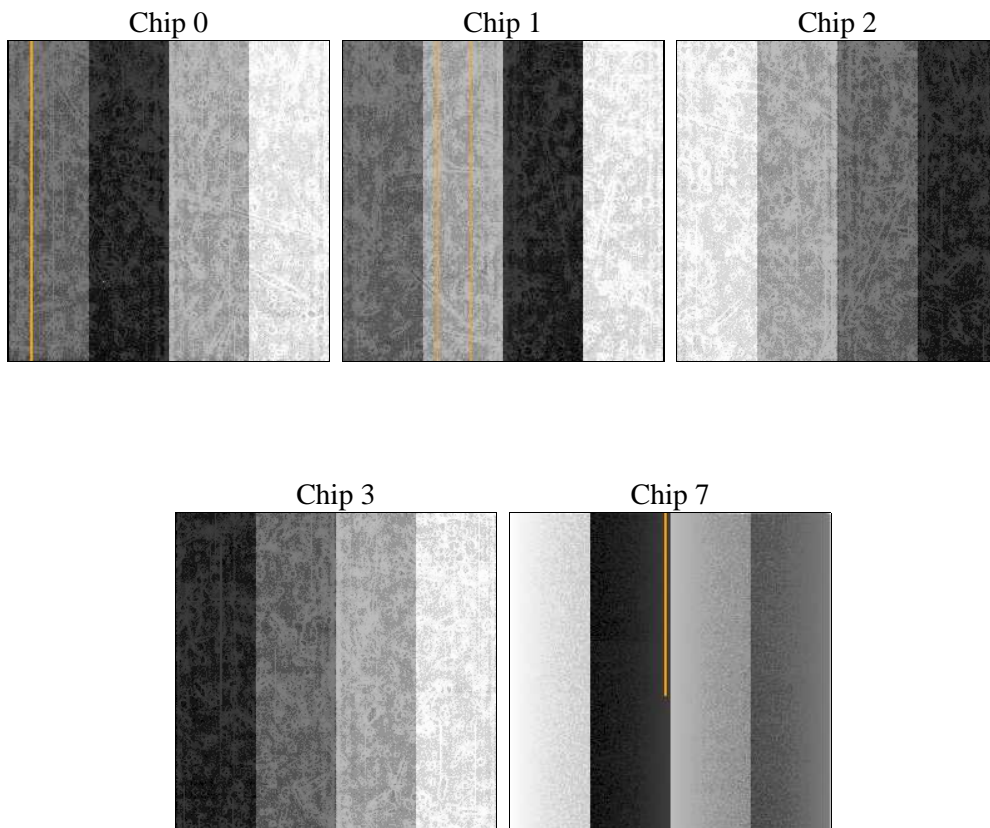
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.5	Processing system revision	ontime	10059.110354066	Sum of GTIs [s]
caldbver	4.7.2	&#160	ontime0	10062.128294349	Sum of GTIs [s]
date	2016-08-13T16:42:37	Date and time of file creation	ontime1	10062.169334412	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	10062.210374355	Sum of GTIs [s]
			ontime3	10059.110354066	Sum of GTIs [s]
			ontime7	10062.292454362	Sum of GTIs [s]
			l1events	327547	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	61407	58516	65160	58935	83529
rejected events	50644	50376	58057	52080	47655
rejected %	82%	86%	89%	88%	57%

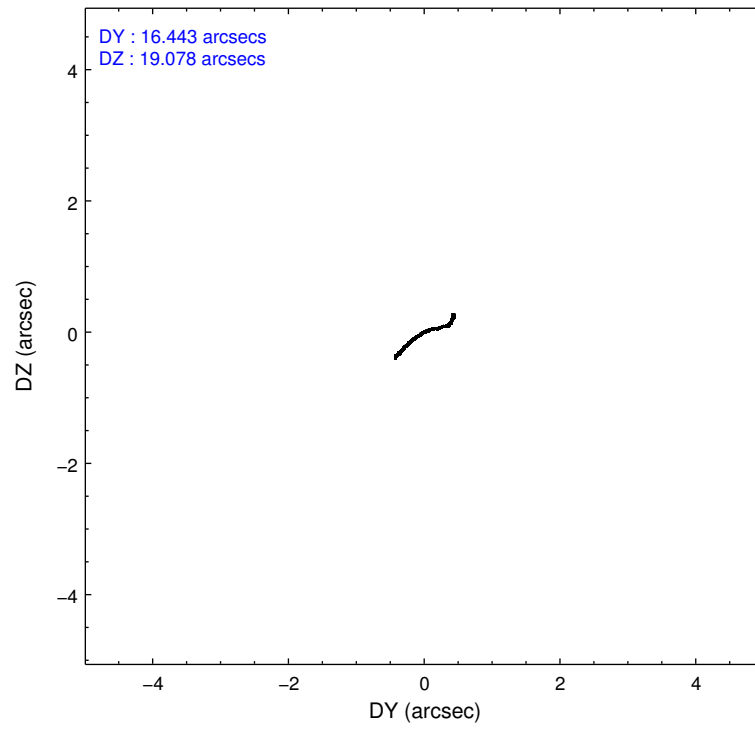
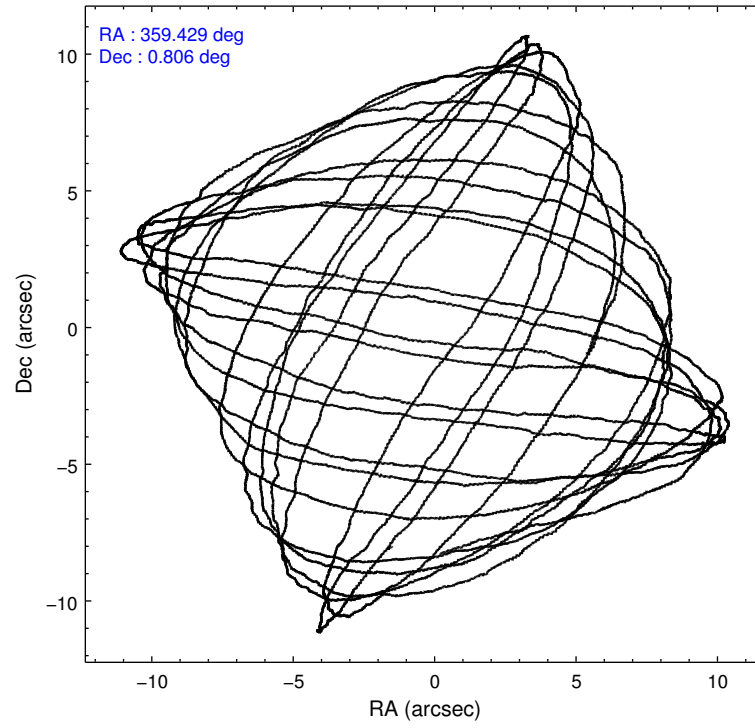
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	2442	2949	2531	2395	3023
	3%	5%	3%	4%	3%
grade 1 events	41	45	33	36	107
	0%	0%	0%	0%	0%
grade 2 events	5415	1907	1828	1563	7482
	8%	3%	2%	2%	8%
grade 3 events	759	784	641	739	2946
	1%	1%	0%	1%	3%
grade 4 events	686	811	732	758	2872
	1%	1%	1%	1%	3%
grade 5 events	2837	2964	2662	3098	8583
	4%	5%	4%	5%	10%
grade 6 events	1466	1692	1375	1406	19580
	2%	2%	2%	2%	23%
grade 7 events	47761	47364	55358	48940	38936
	77%	80%	84%	83%	46%

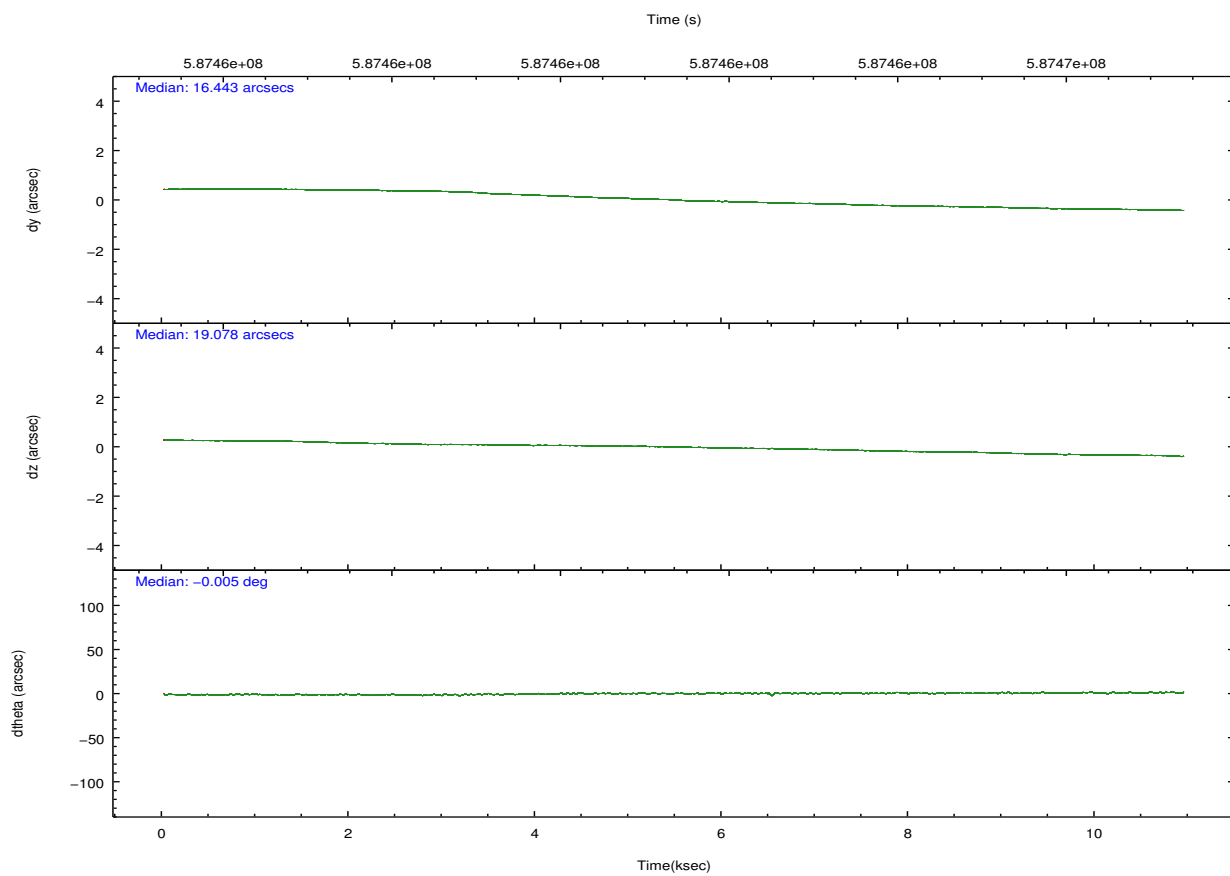
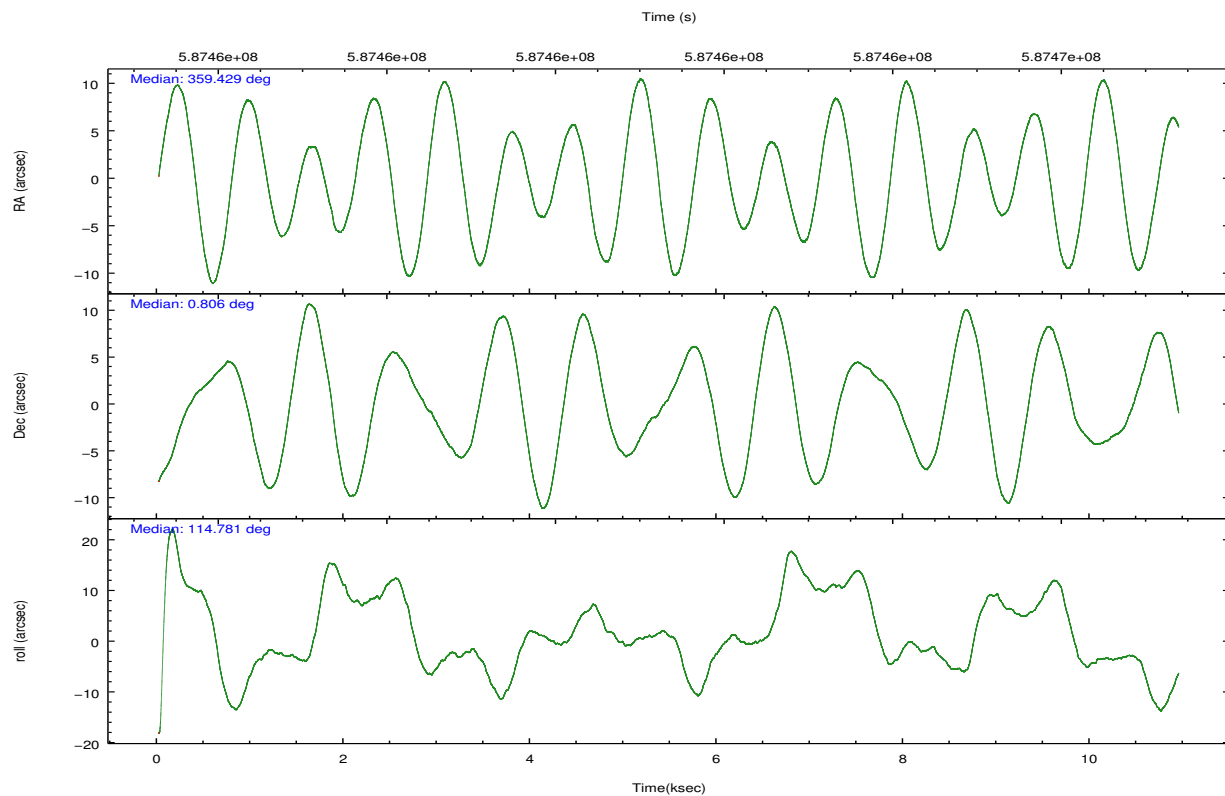
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01237	ACIS-01237
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	359.451001	359.4284082534355
[deg] Pointing Dec	0.790652	0.8065039160964206
[deg] Pointing Roll	114.573167	114.7821249661972
[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)	587456834.184000	587455437.5372601
Observation start date	2016-08-13T06:26:06	2016-08-13T06:03:57
[s] Observation end time (MET)	587466834.184000	587467767.26297
Observation end date	2016-08-13T09:12:46	2016-08-13T09:29:27
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	N	N
CCD S3 on	O1	Y
CCD S4 on	N	N
CCD S5 on	N	N
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	3.1

## 2.3 Aspect



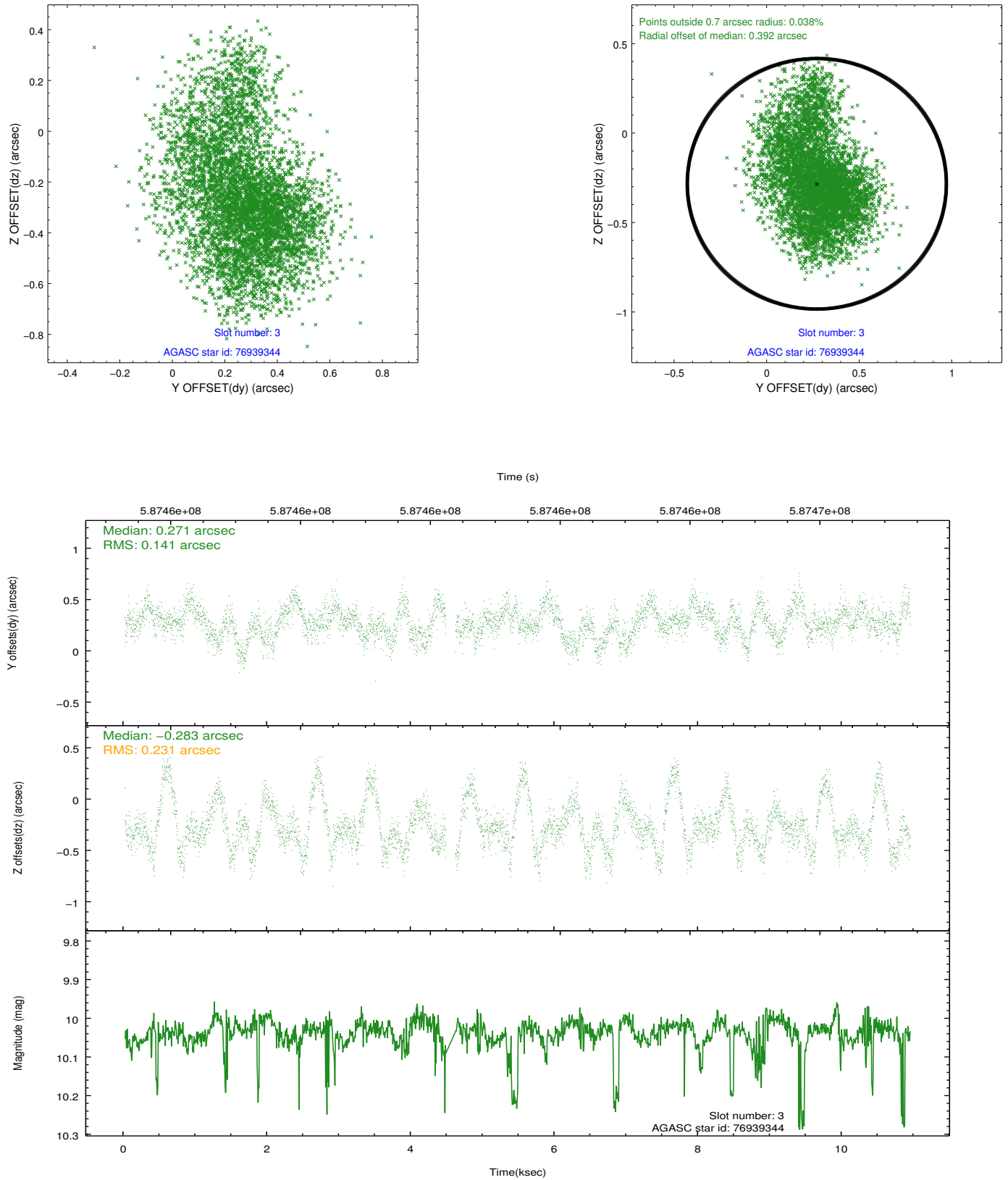


### Slot Statistics

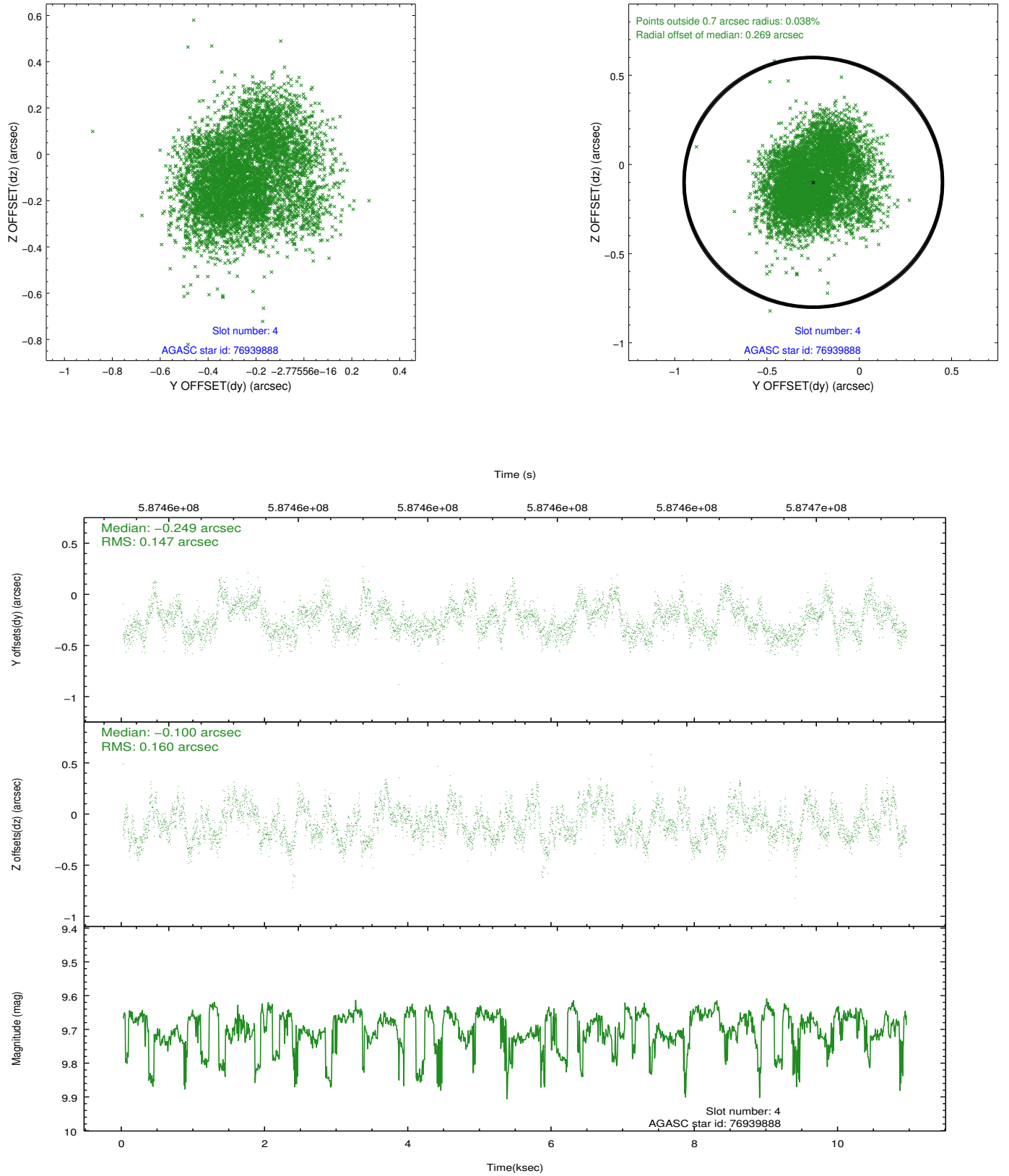
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.10	2668	0.036	0.016	0.011	0.018	0.000000	0.000000	923.03	-842.68
1	FID		ACIS-I-5	7.10	2668	-0.334	0.011	0.010	0.016	0.000000	0.000000	-1825.30	1054.41
2	FID		ACIS-I-6	7.12	2668	0.207	0.044	0.012	0.019	0.000000	0.000000	388.08	1699.60
3	GUIDE	used	76939344	10.04	5256	0.271	-0.283	0.285	0.488	359.239870	0.159162	-1751.57	1636.78
4	GUIDE	used	76939888	9.70	5329	-0.249	-0.100	0.236	0.361	358.971554	1.120175	1796.36	1076.82
5	GUIDE	used	76942352	9.99	5327	-0.133	0.749	0.242	0.381	359.858119	1.258632	923.46	-2031.74
6	GUIDE	used	76943592	8.42	5335	-0.159	-0.312	0.111	0.174	359.136777	1.251082	1978.09	337.99
7	GUIDE	used	76943648	9.91	5321	0.275	-0.049	0.253	0.460	359.582888	0.324799	-1721.64	266.14

## 2.4 Star Slots

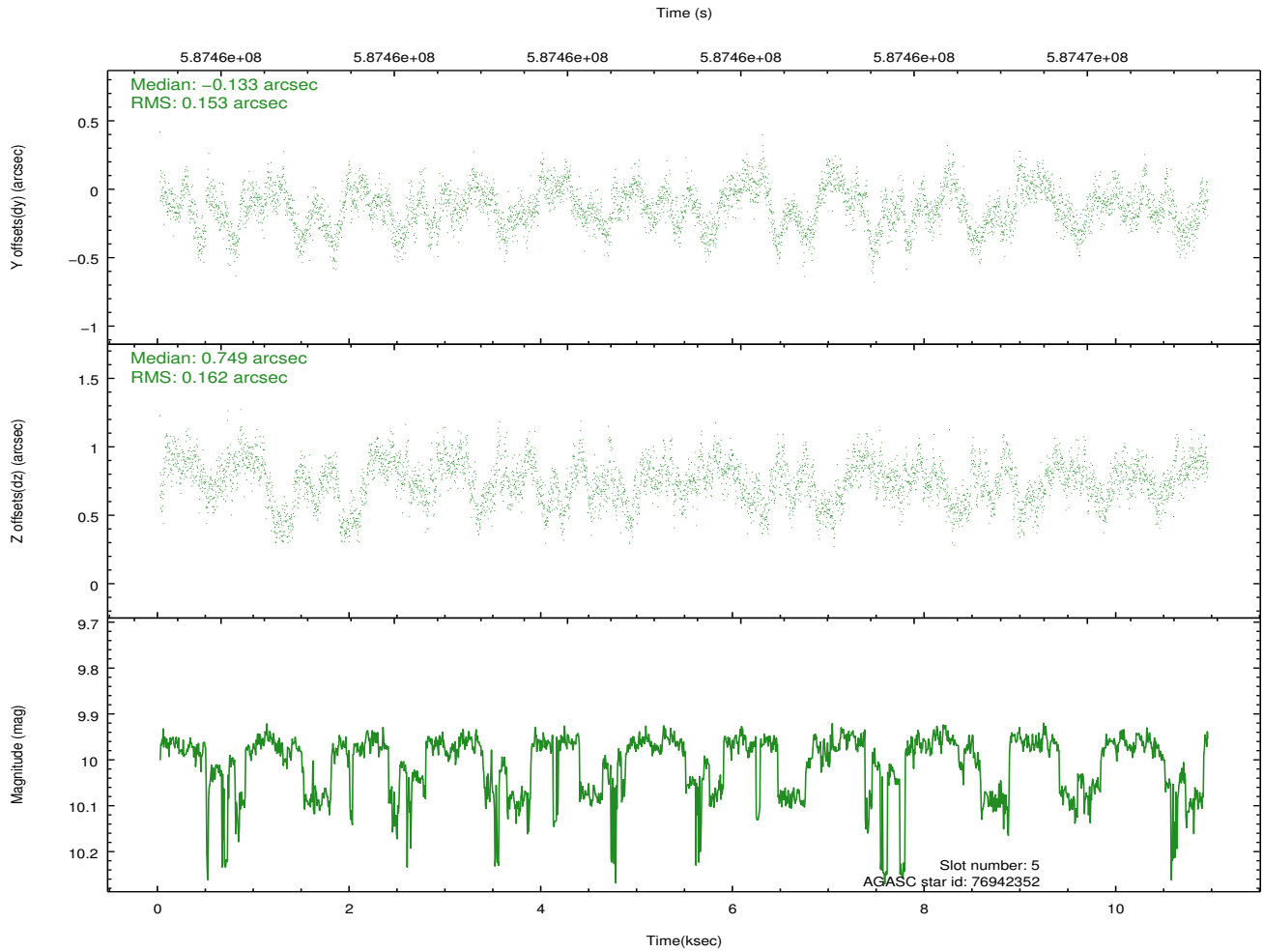
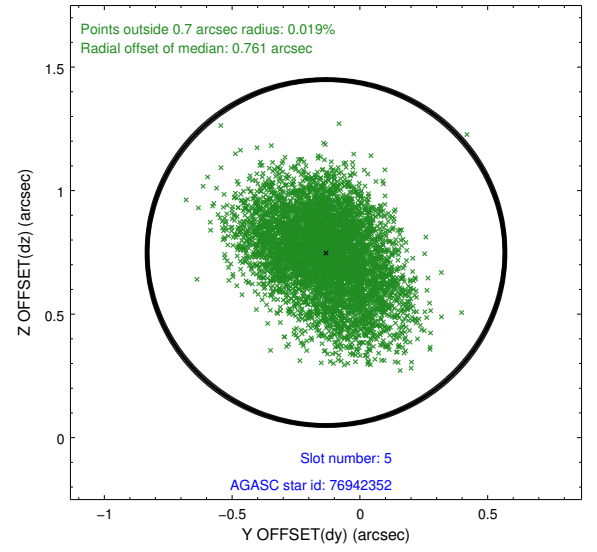
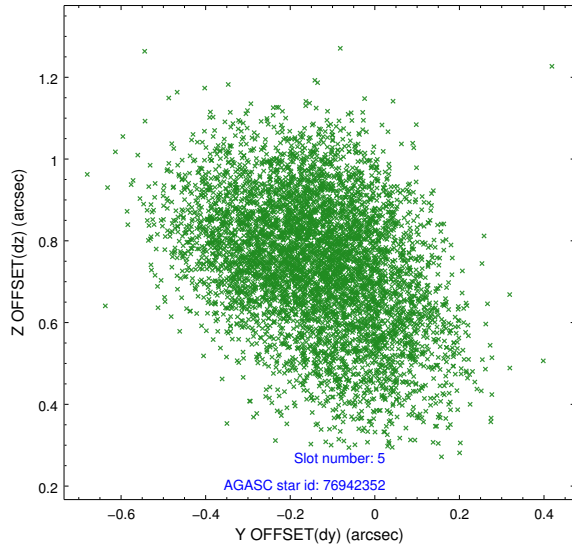
### 2.4.1 Slot 3



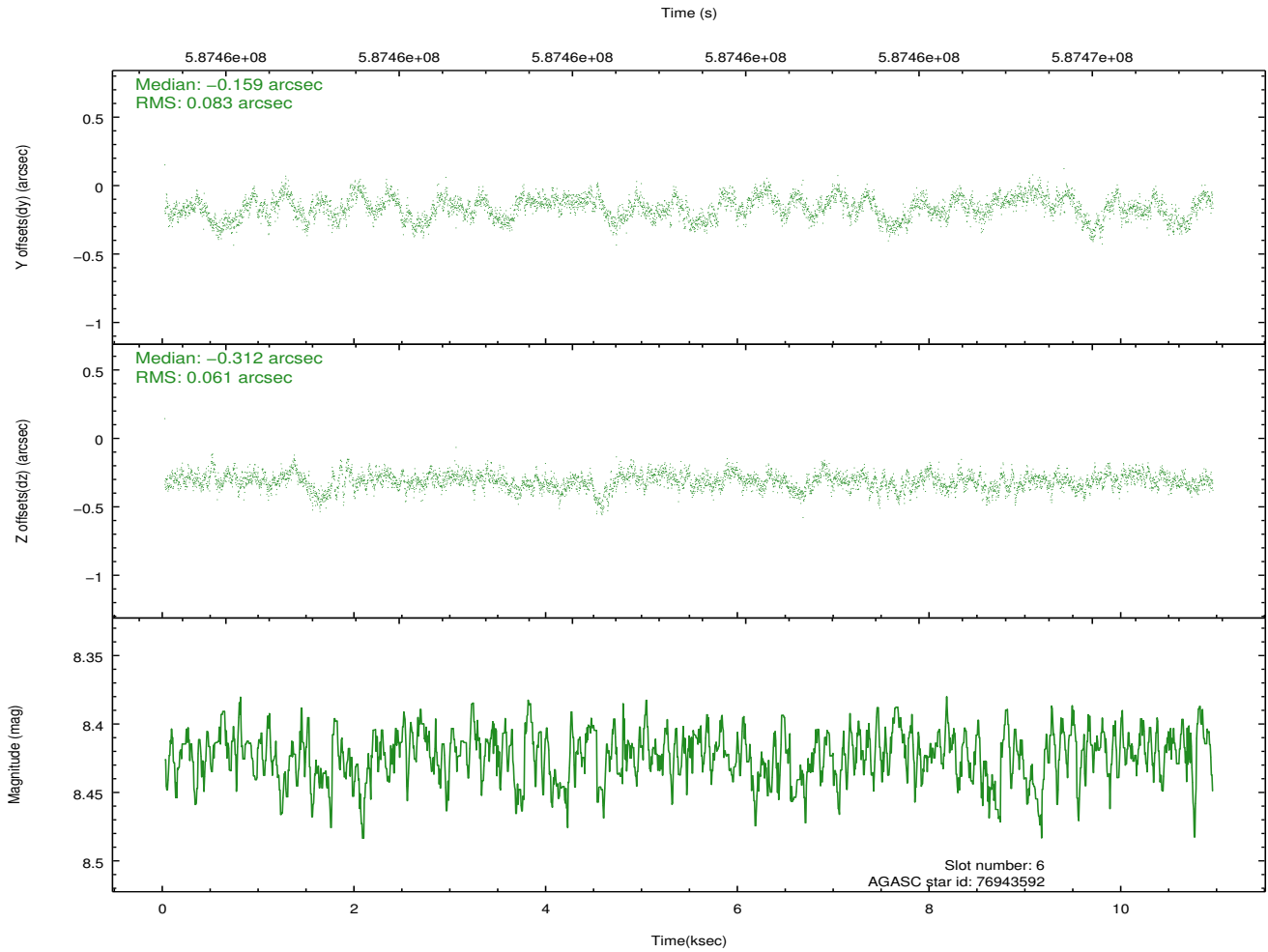
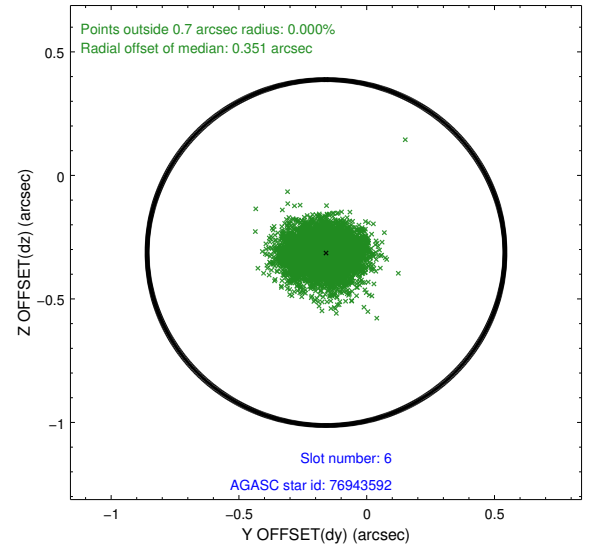
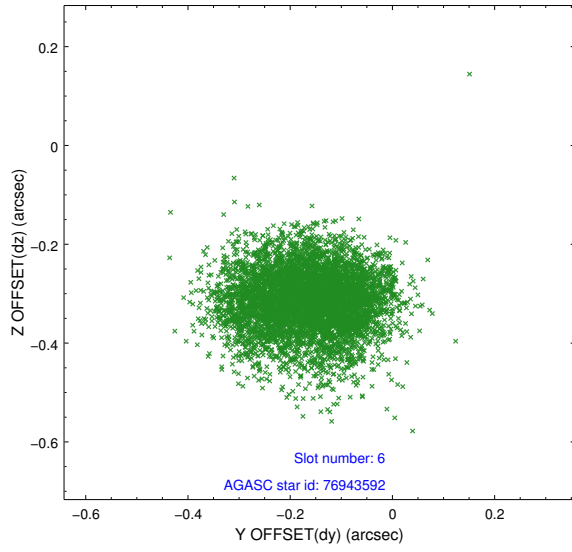
## 2.4.2 Slot 4



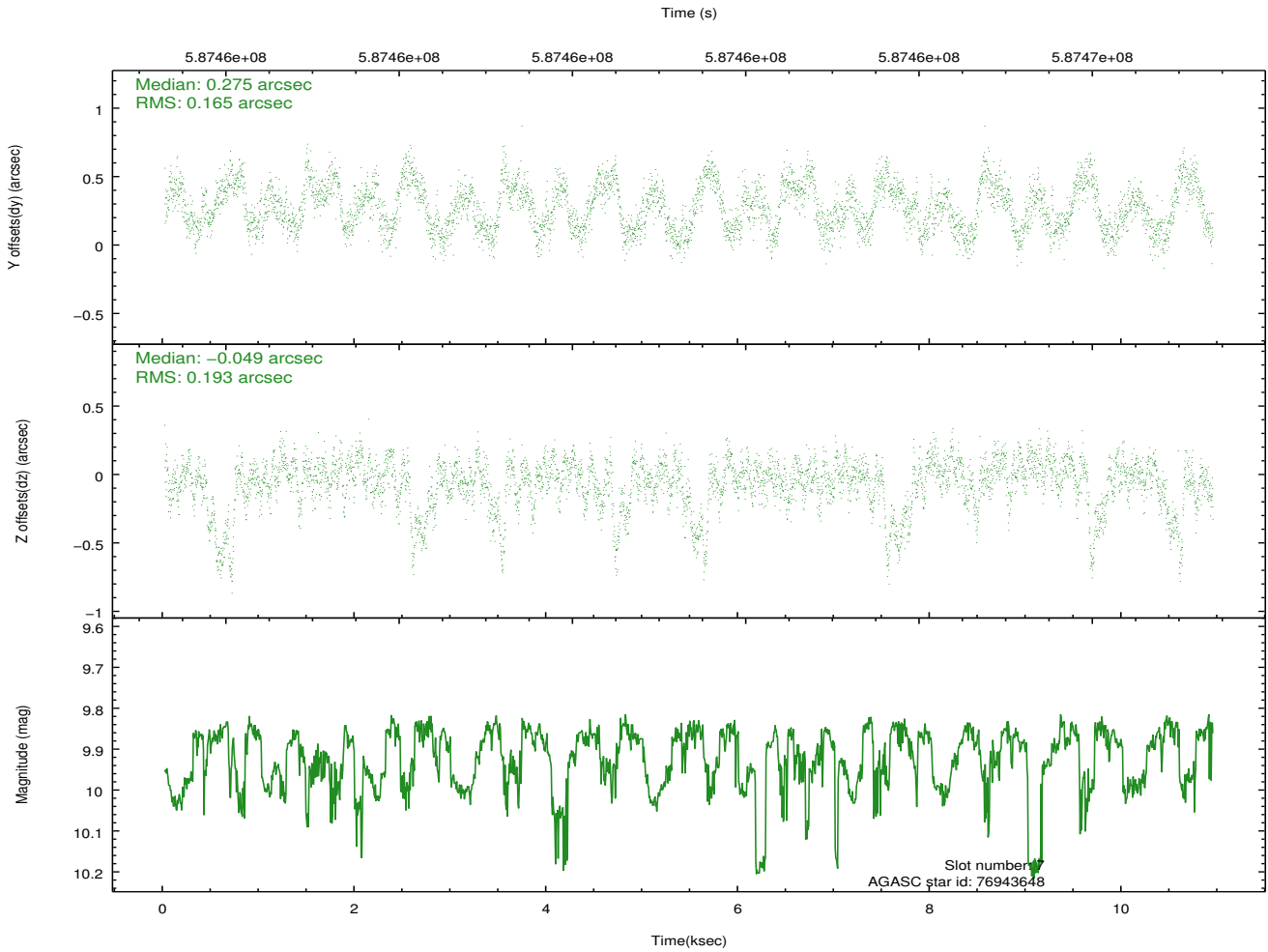
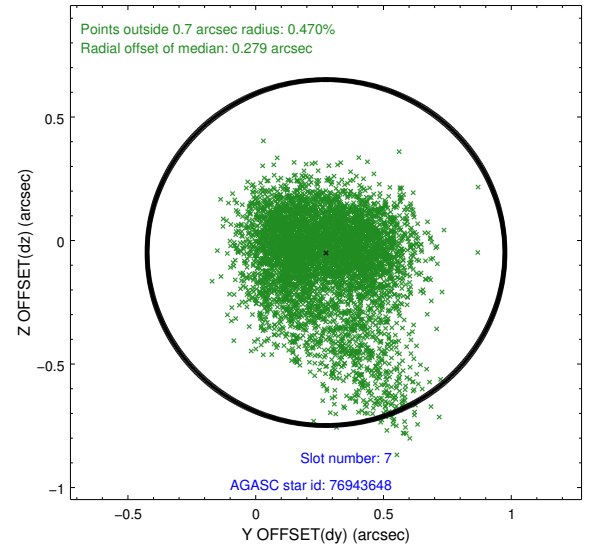
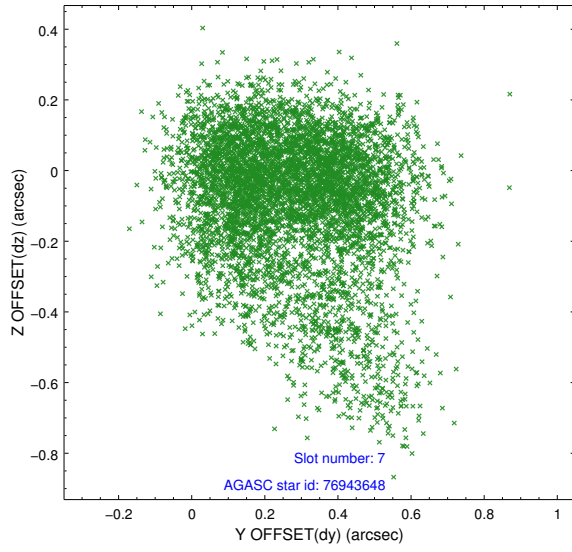
### 2.4.3 Slot 5



## 2.4.4 Slot 6

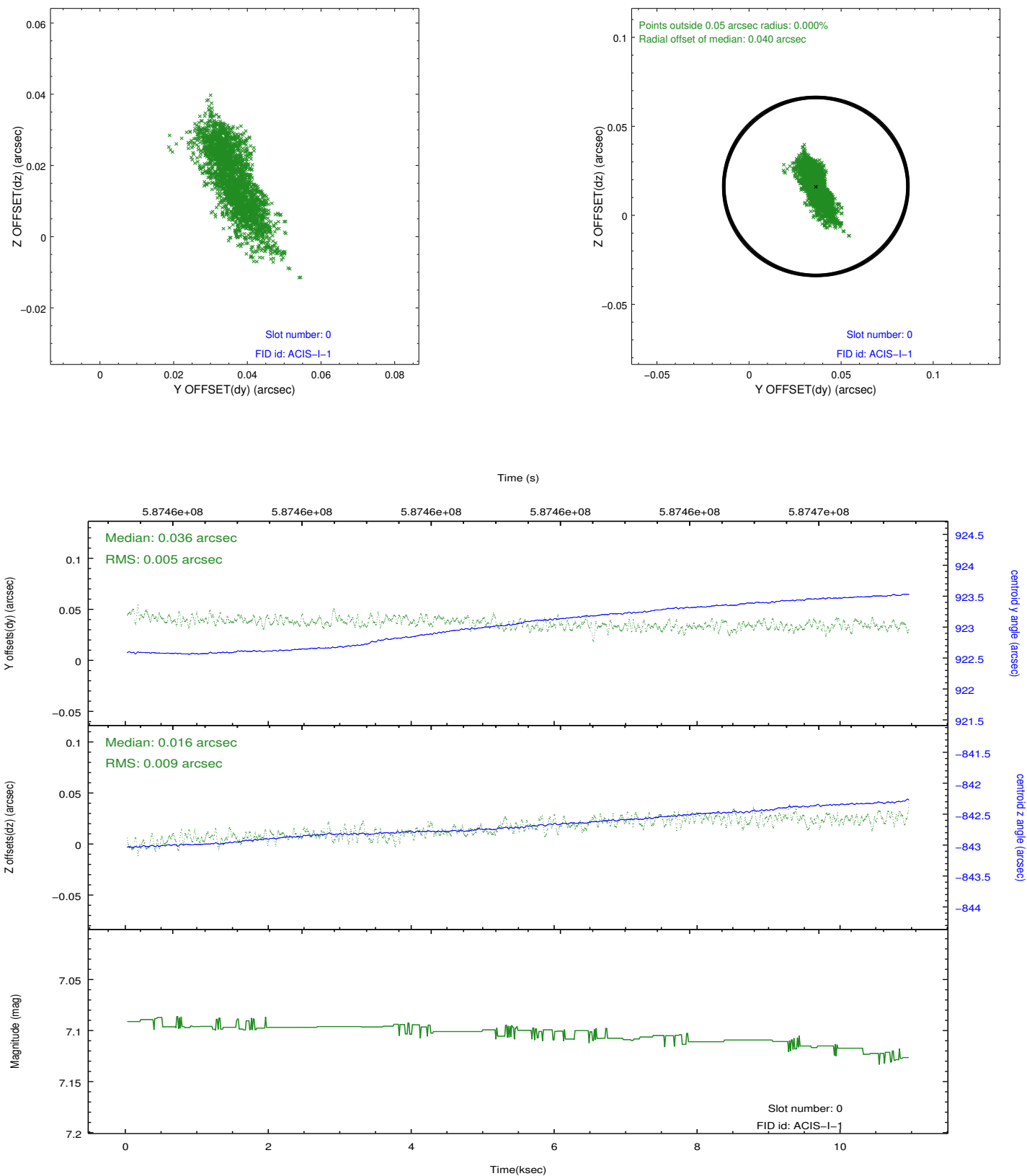


## 2.4.5 Slot 7

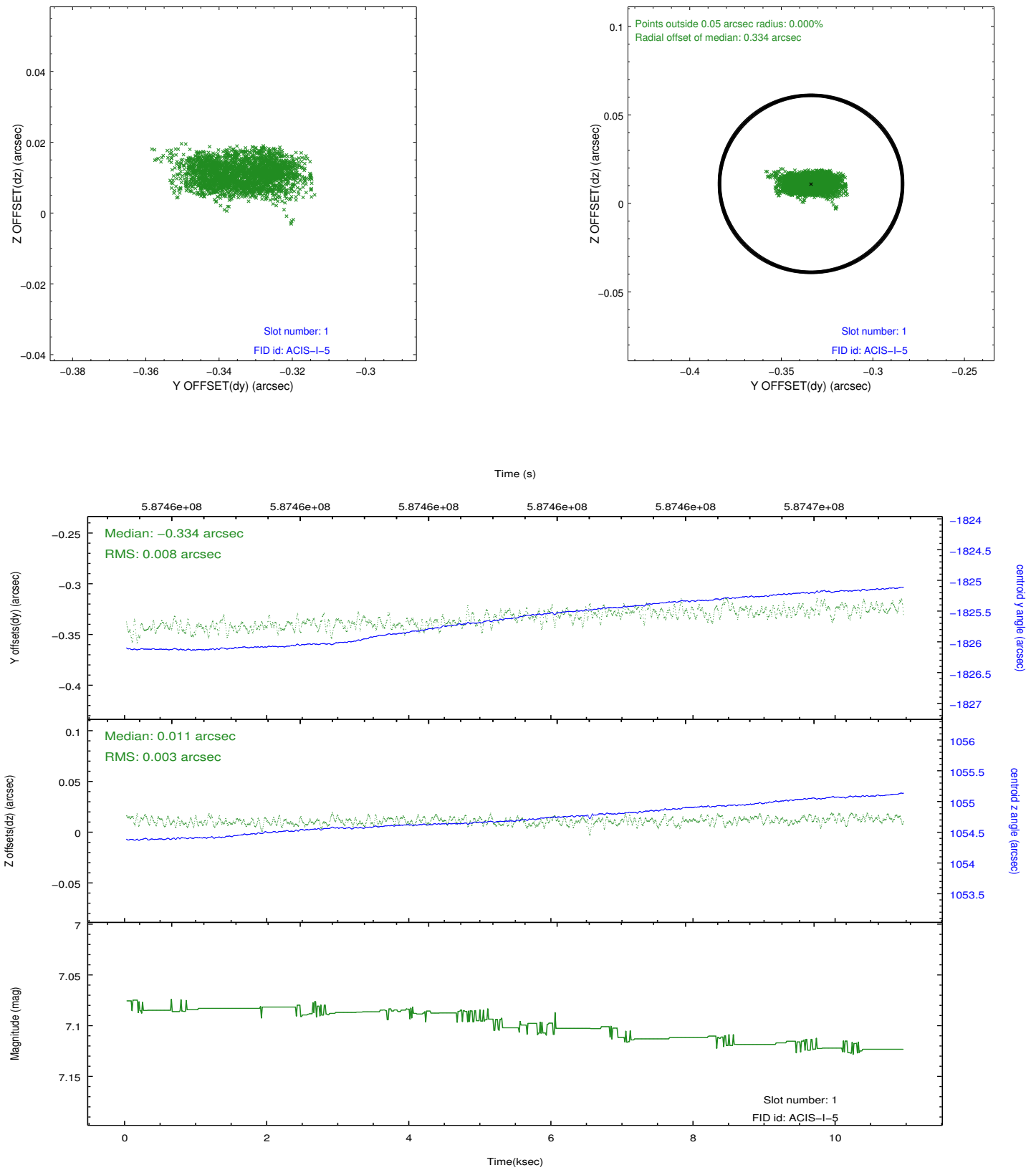


## 2.5 FID Slots

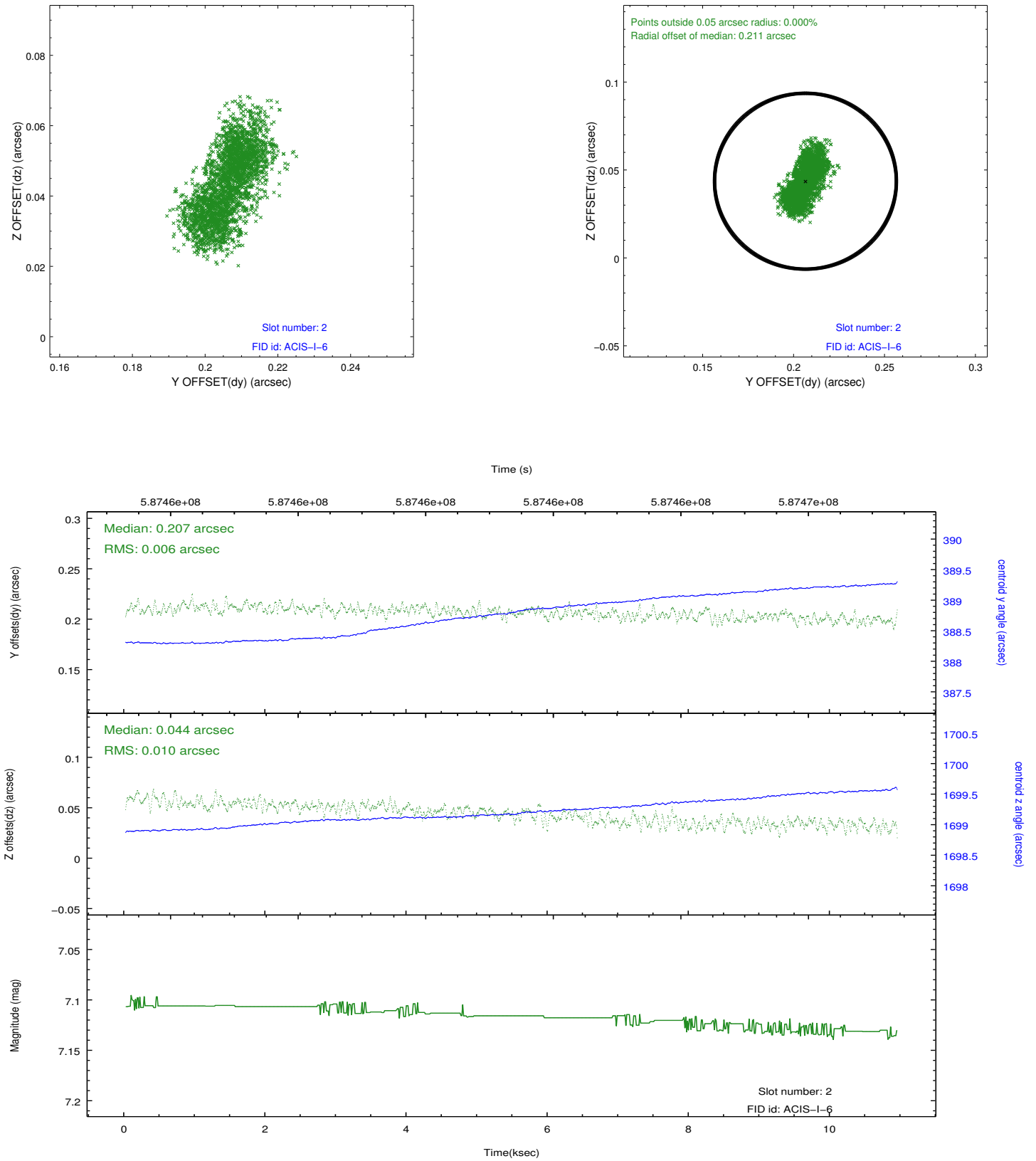
### 2.5.1 Slot 0



## 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)	2016.08.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.059110354066

### A.2 Comments