

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 12454 - L2 Version 2  
Chandra X-Ray Center

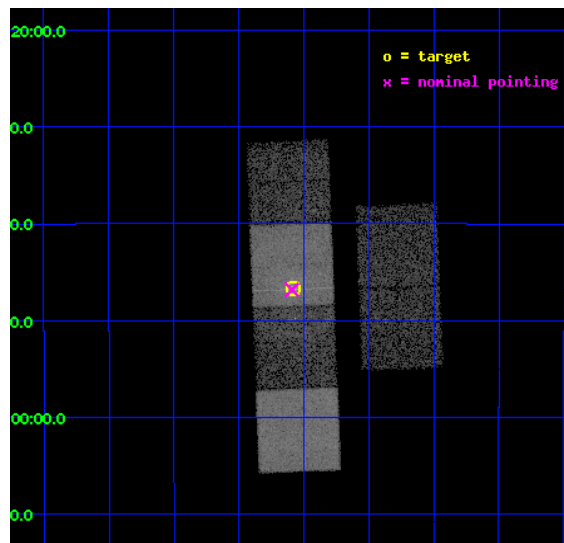
L2 Processing Date : Feb 26 2012

## 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

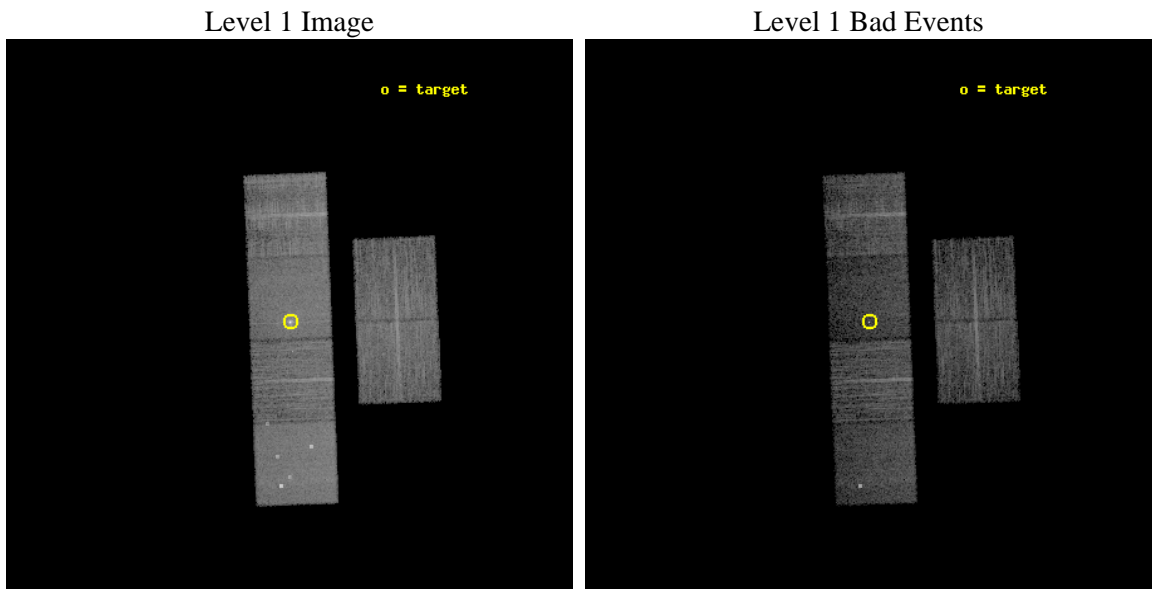
seq_num	401195	Sequence number
obs_id	12454	Observation id
title	Transient LMXBs in Globular Clusters: More Numerous than We Thought?	&#160
observer	David Pooley	Principal investigator
object	Terzan 5	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	267.020417	Observer's specified target RA [deg]
dec_targ	-24.779167	Observer's specified target Dec [deg]
ra_nom	267.02317699817	Nominal RA [deg]
dec_nom	-24.780882912229	Nominal Dec [deg]
roll_nom	267.76507120451	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9964.7999629378	Sum of GTIs [s]
livetime	9838.6196657249	Livetime [s]
ontime2	9961.5589926243	Sum of GTIs [s]
ontime3	9964.7999629378	Sum of GTIs [s]
ontime5	9964.7999629378	Sum of GTIs [s]
ontime6	9964.7999629378	Sum of GTIs [s]
ontime7	9964.7999629378	Sum of GTIs [s]
ontime8	9964.7999629378	Sum of GTIs [s]
l2events	105641	Number of level 2 events



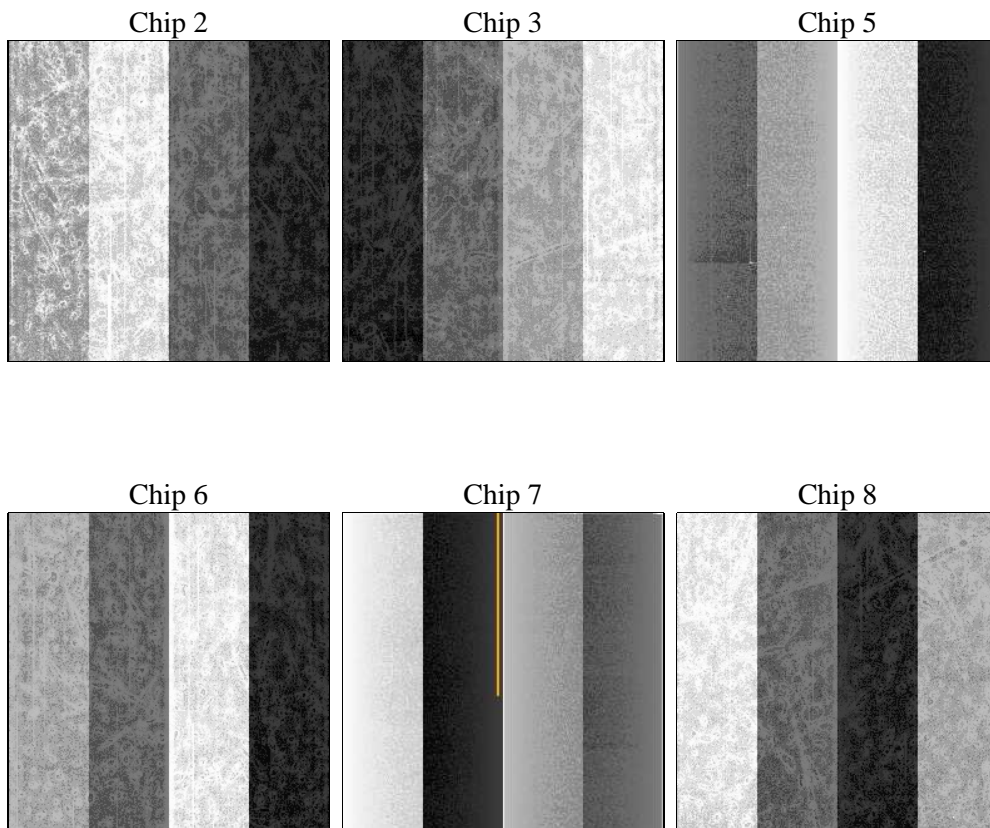
## 2 OBI

### 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	8.4.3	Processing system revision	ontime	9964.7999629378	Sum of GTIs [s]
caldsver	4.4.8	&#160	ontime2	9961.5589926243	Sum of GTIs [s]
date	2012-02-26T02:37:22	Date and time of file creation	ontime3	9964.7999629378	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	9964.7999629378	Sum of GTIs [s]
			ontime6	9964.7999629378	Sum of GTIs [s]
			ontime7	9964.7999629378	Sum of GTIs [s]
			ontime8	9964.7999629378	Sum of GTIs [s]
			l1events	395687	Number of level 1 events

### 2.1.4 Events

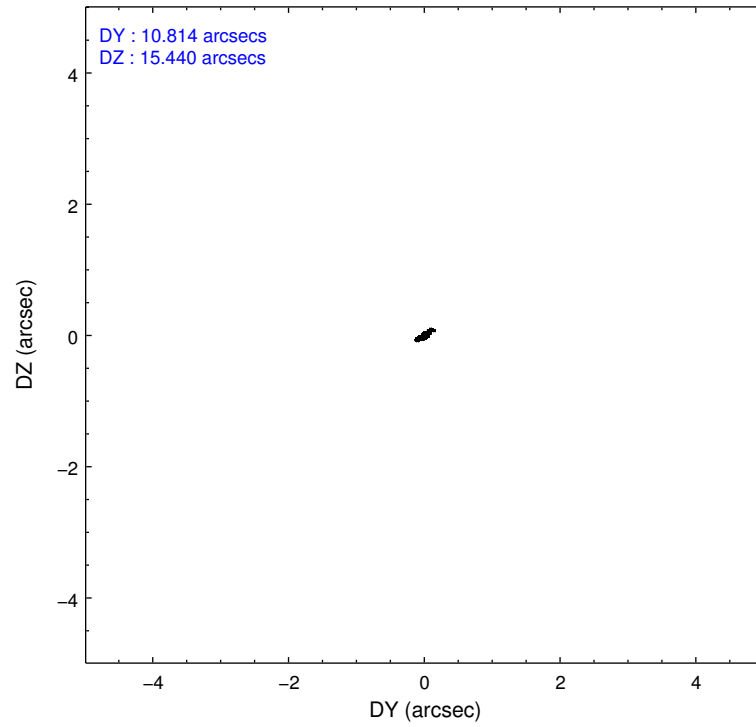
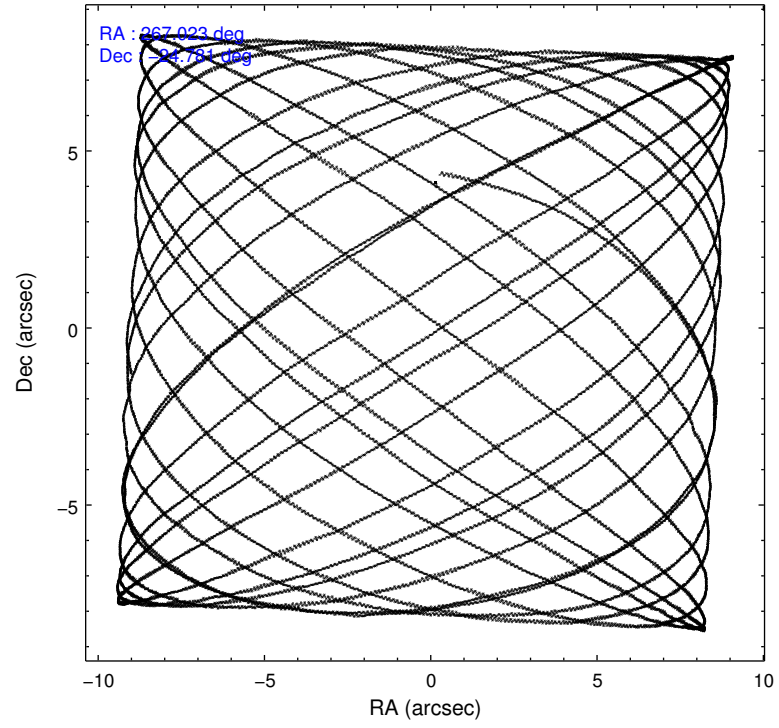
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	54163	51183	85446	59044	73823	72028	grade 0 events	2840	2486	6489	4708	5390	5918
rejected events	47328	44964	39893	49598	32640	51953		5%	4%	7%	7%	7%	8%
rejected %	87%	87%	46%	84%	44%	72%	grade 1 events	41	39	192	33	146	76
								0%	0%	0%	0%	0%	0%
							grade 2 events	1614	1322	14541	1751	9330	4690
								2%	2%	17%	2%	12%	6%
							grade 3 events	579	622	1545	788	3976	2075
								1%	1%	1%	1%	5%	2%
							grade 4 events	693	615	1620	723	3893	2099
								1%	1%	1%	1%	5%	2%
							grade 5 events	2007	2315	6819	2202	6864	3360
								3%	4%	7%	3%	9%	4%
							grade 6 events	1110	1175	21374	1478	18612	5294
								2%	2%	25%	2%	25%	7%
							grade 7 events	45279	42609	32866	47361	25612	48516
								83%	83%	38%	80%	34%	67%

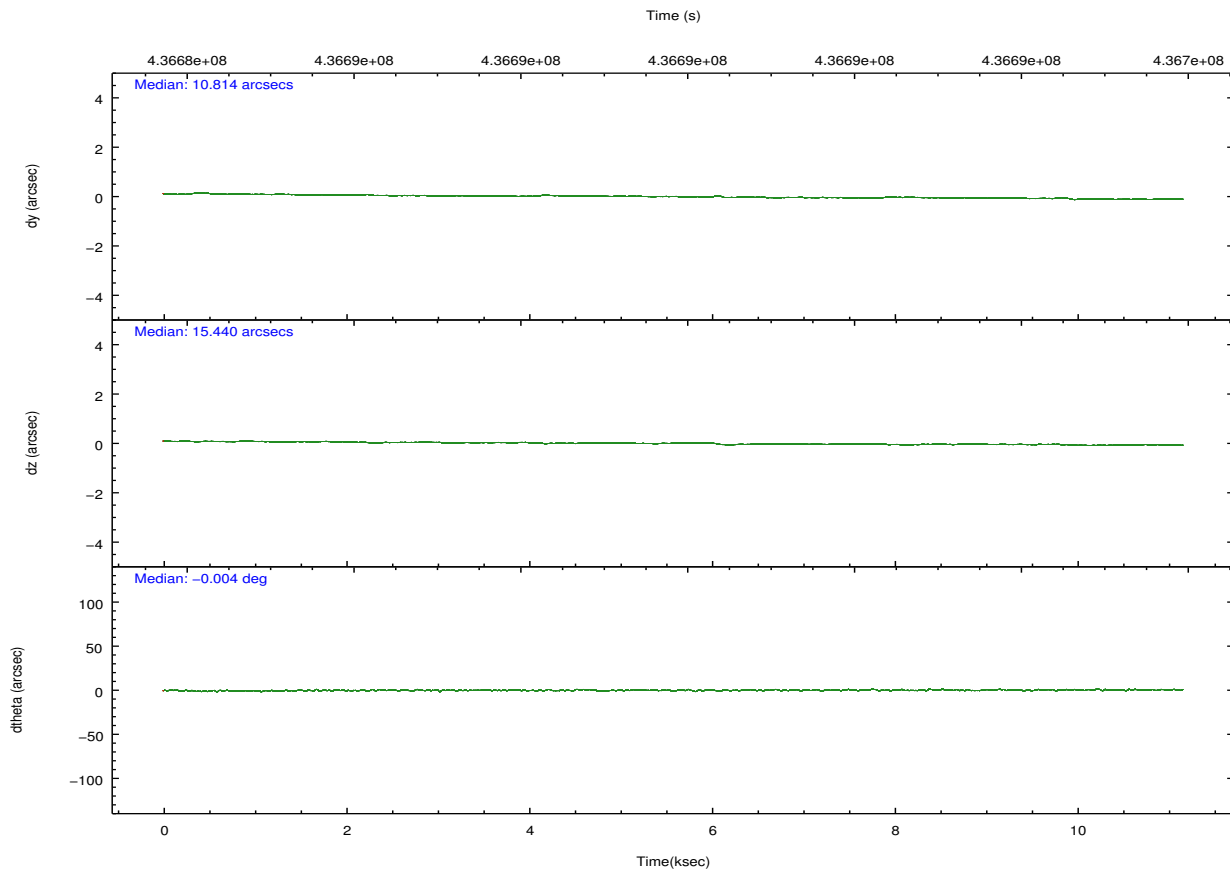
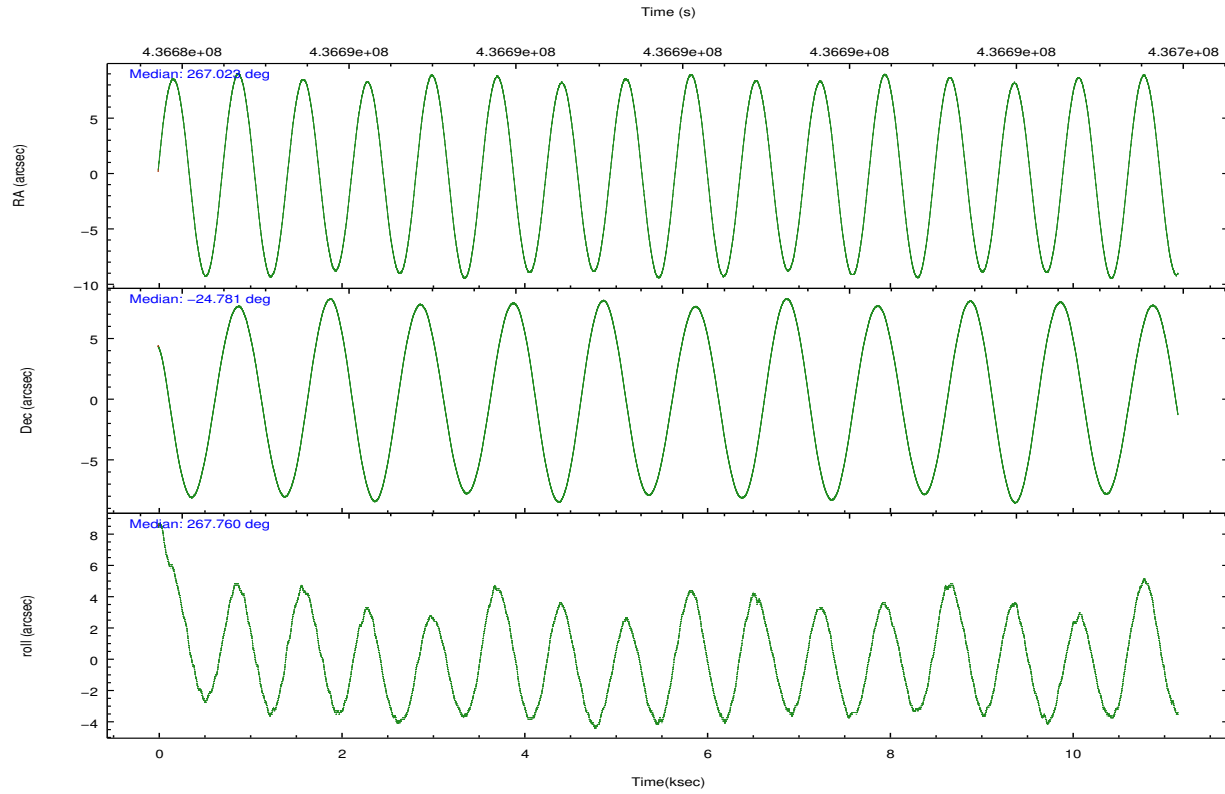


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	267.008765	267.0231769981729	CCD I2 on	O1	Y
[deg] Pointing Dec	-24.756877	-24.780882912229	CCD I3 on	O2	Y
[deg] Pointing Roll	267.602409	267.7650712045067	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.145094680475	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01257209746719923	CCD S4 on	Y	Y
[s] Observation start time (MET)	436685402.184000	436683957.05298	CCD S5 on	N	N
Observation start date	2011-11-03T05:28:56	2011-11-03T05:05:57	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	436695402.184000	436696699.34115	On-chip summing requested	N	N
Observation end date	2011-11-03T08:15:36	2011-11-03T08:38:19	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



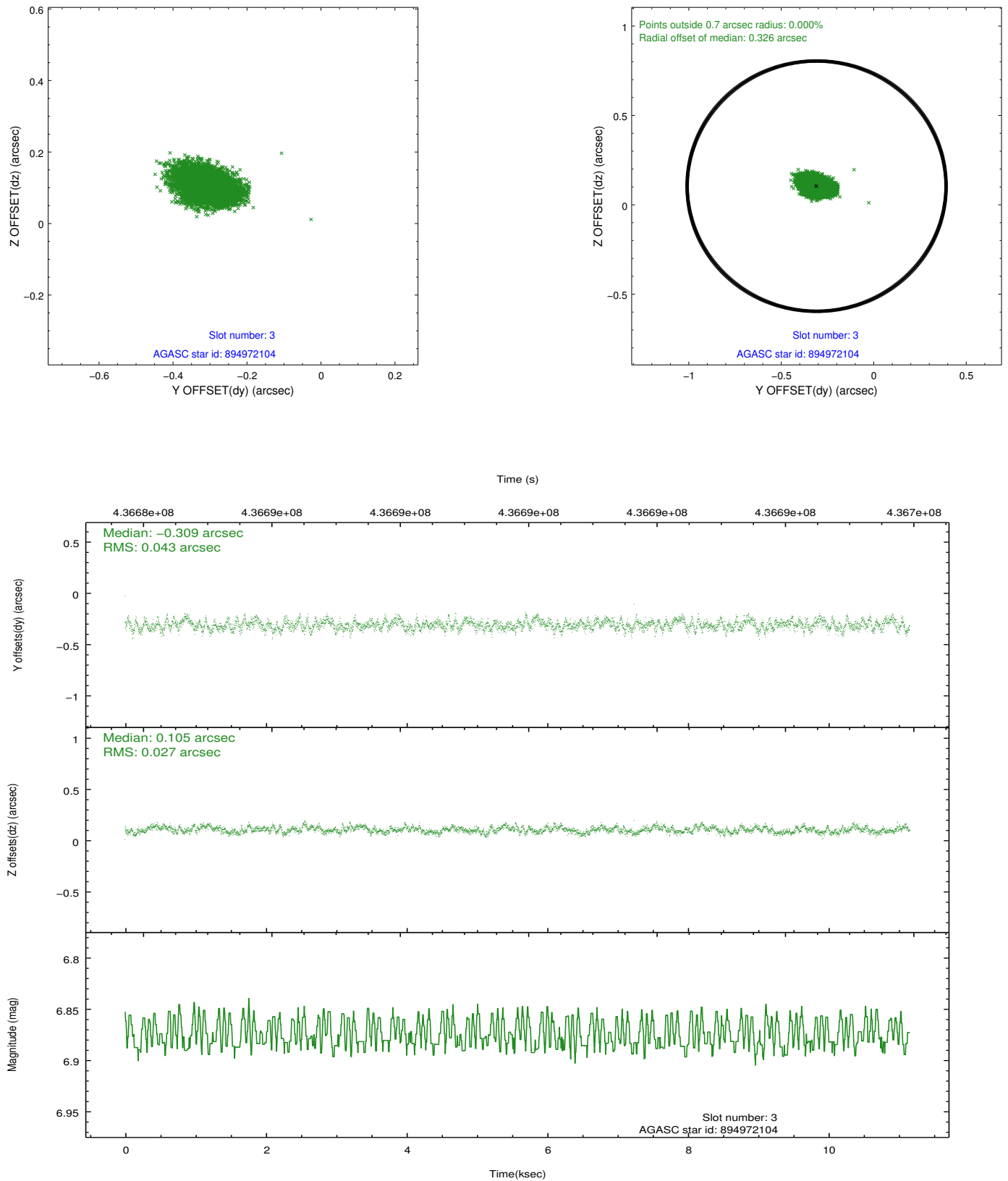


### Slot Statistics

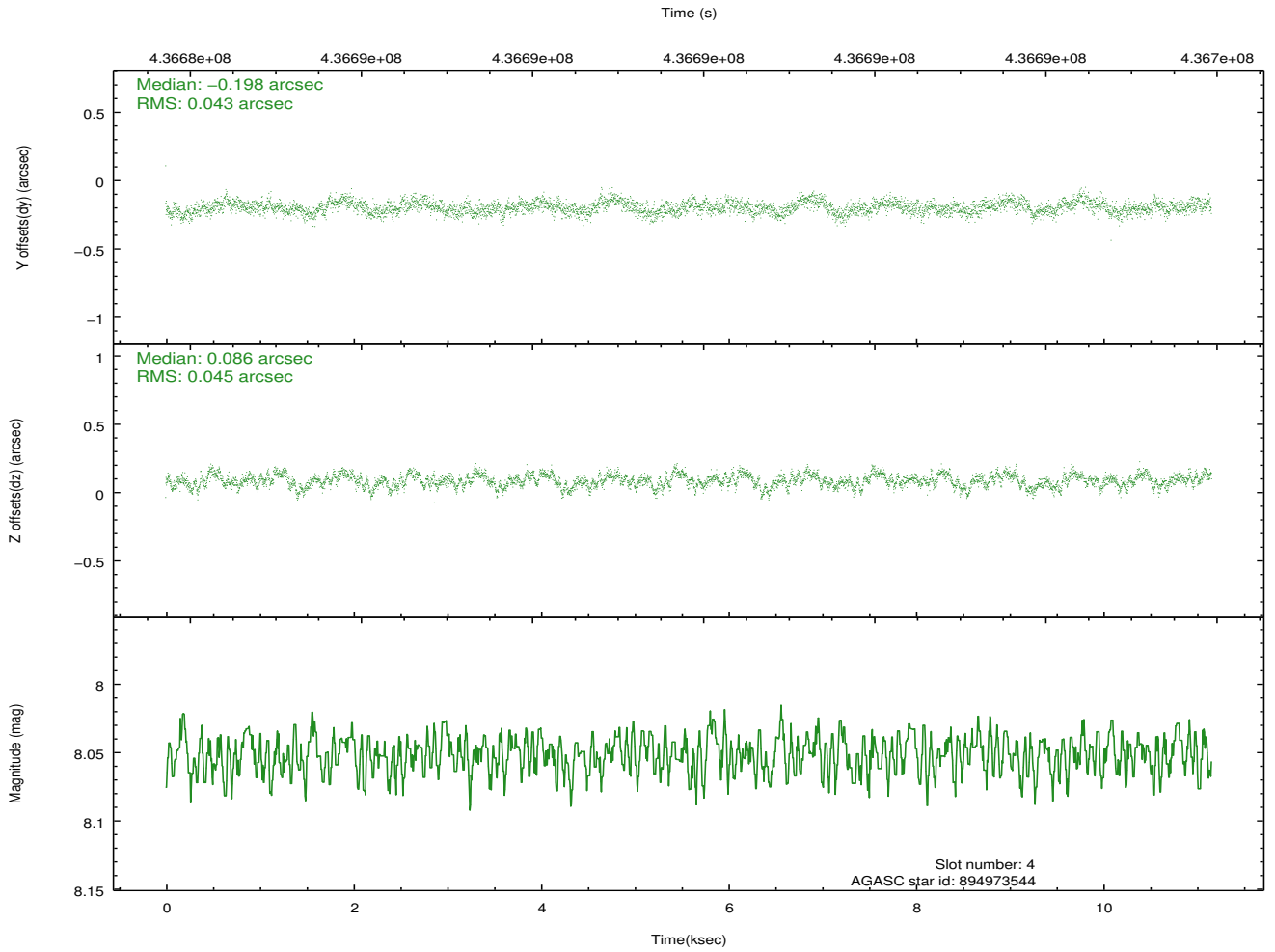
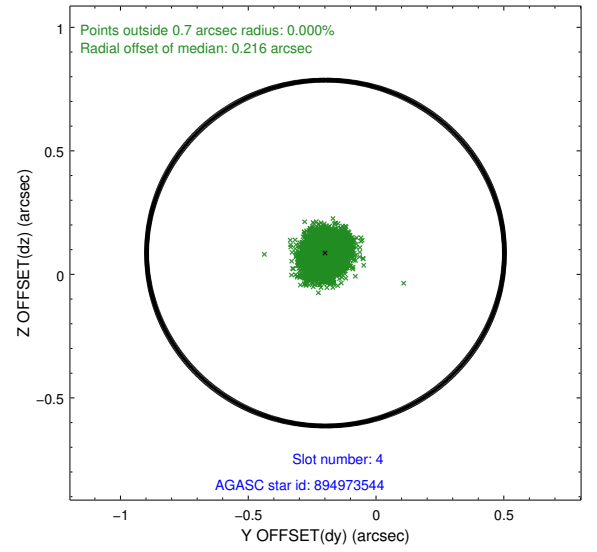
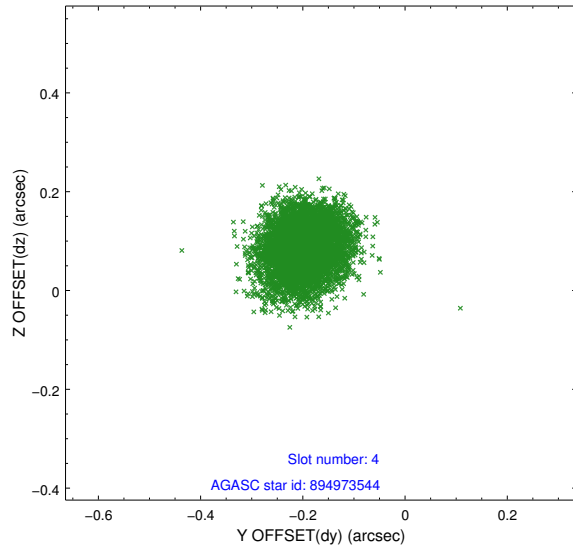
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.97	2722	0.091	-0.054	0.010	0.017	0.000000	0.000000	932.41	-1732.44
1	FID	ACIS-S-2	6.89	2722	-0.102	-0.023	0.006	0.010	0.000000	0.000000	-763.43	-1737.39
2	FID	ACIS-S-6	7.10	2722	-0.009	0.082	0.008	0.013	0.000000	0.000000	397.83	808.57
3	GUIDE	894972104	6.88	5444	-0.309	0.105	0.054	0.090	267.489380	-24.207054	-2040.46	1493.50
4	GUIDE	894973544	8.05	5442	-0.198	0.086	0.067	0.105	266.605572	-24.141151	-2157.09	-1416.00
5	GUIDE	895485920	8.65	5443	0.210	0.126	0.087	0.140	266.932426	-25.188840	1564.47	-183.31
6	GUIDE	895489248	8.84	5440	0.009	-0.044	0.083	0.137	266.526793	-24.872603	485.78	-1555.16
7	GUIDE	895489704	8.79	5442	0.289	-0.272	0.094	0.159	266.328076	-25.361339	2274.29	-2121.24

## 2.4 Star Slots

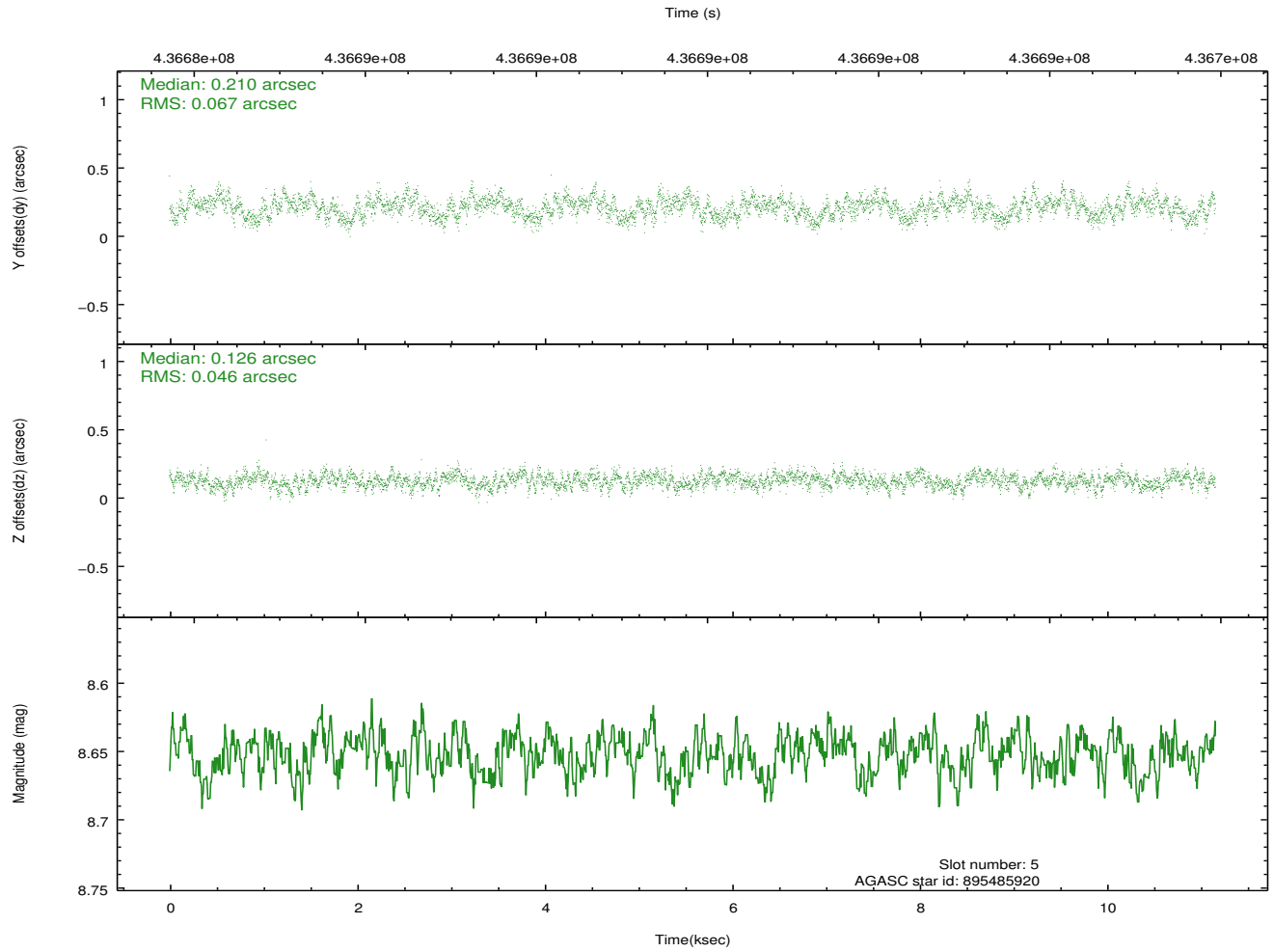
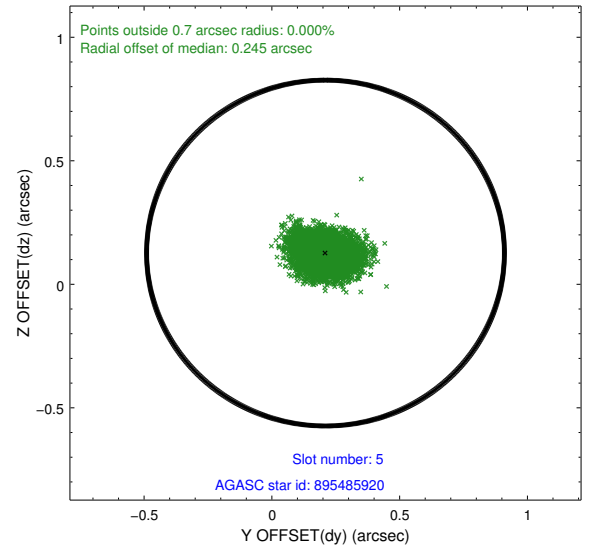
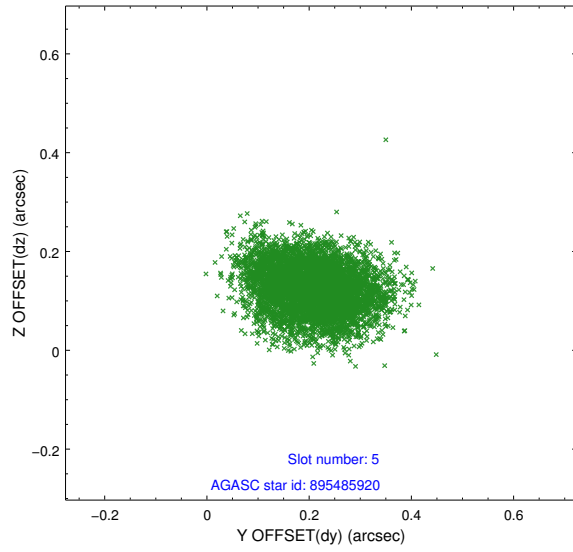
### 2.4.1 Slot 3



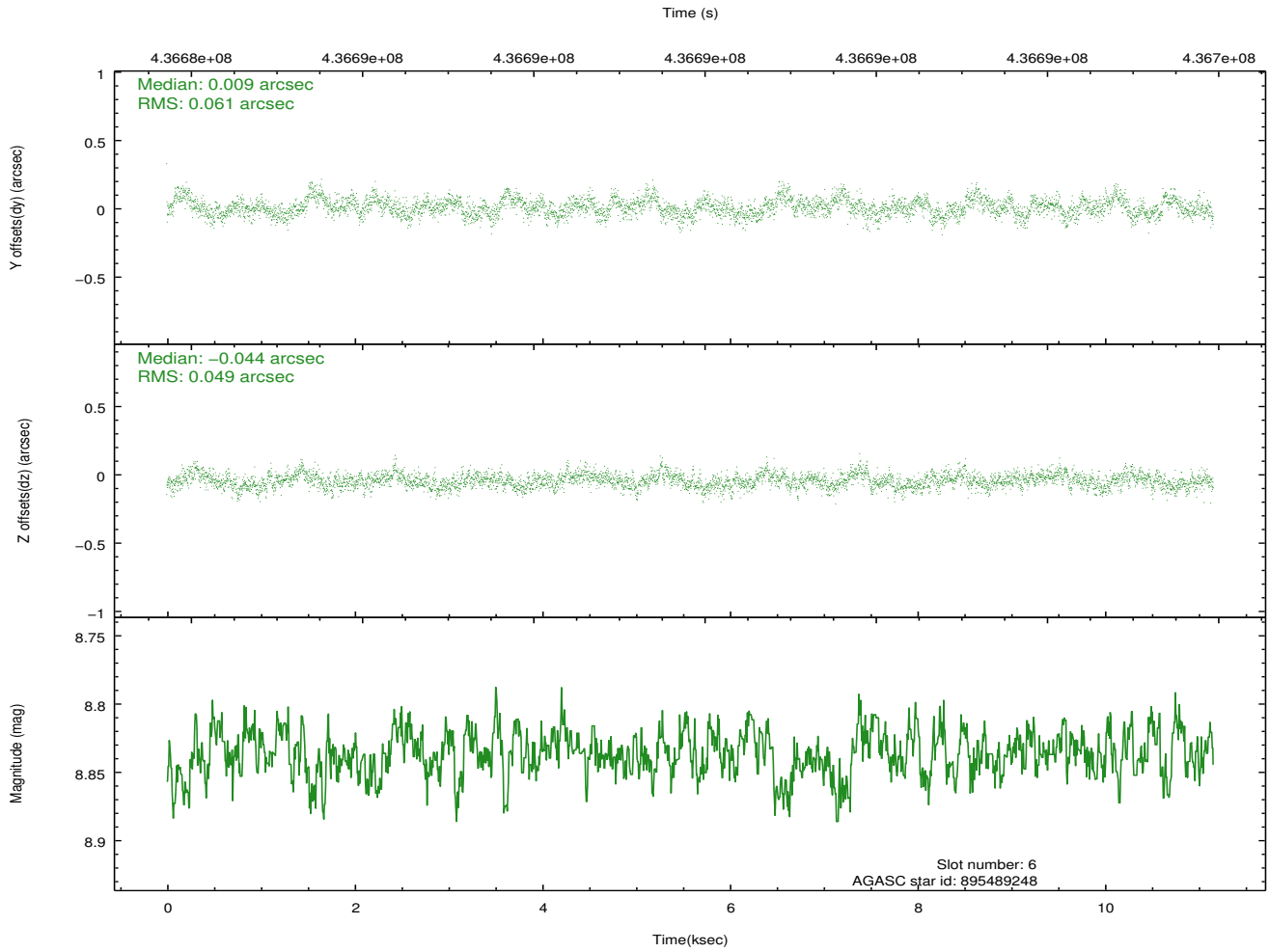
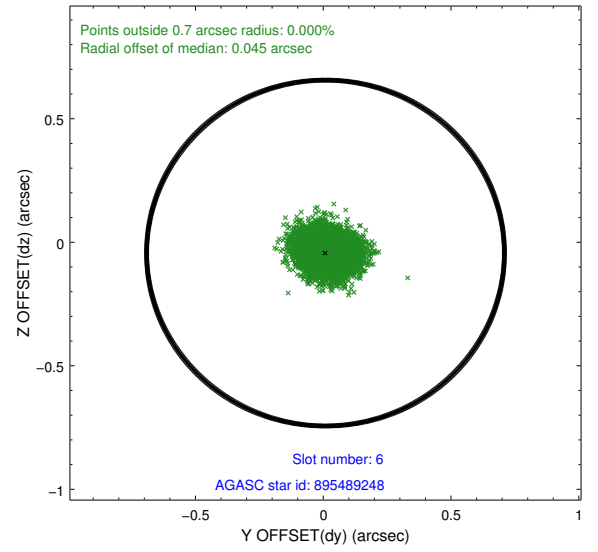
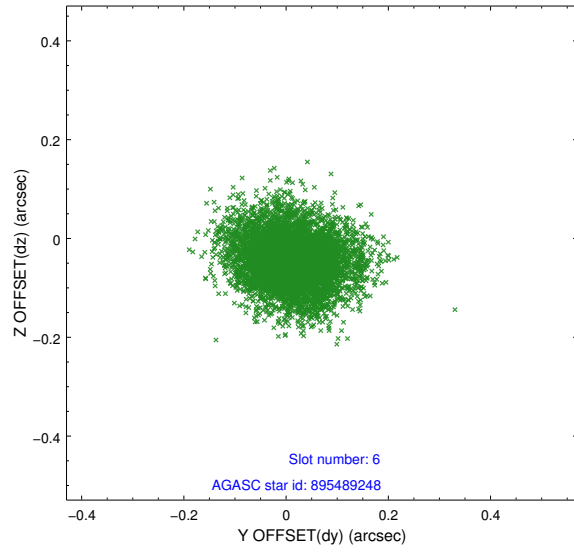
## 2.4.2 Slot 4



### 2.4.3 Slot 5

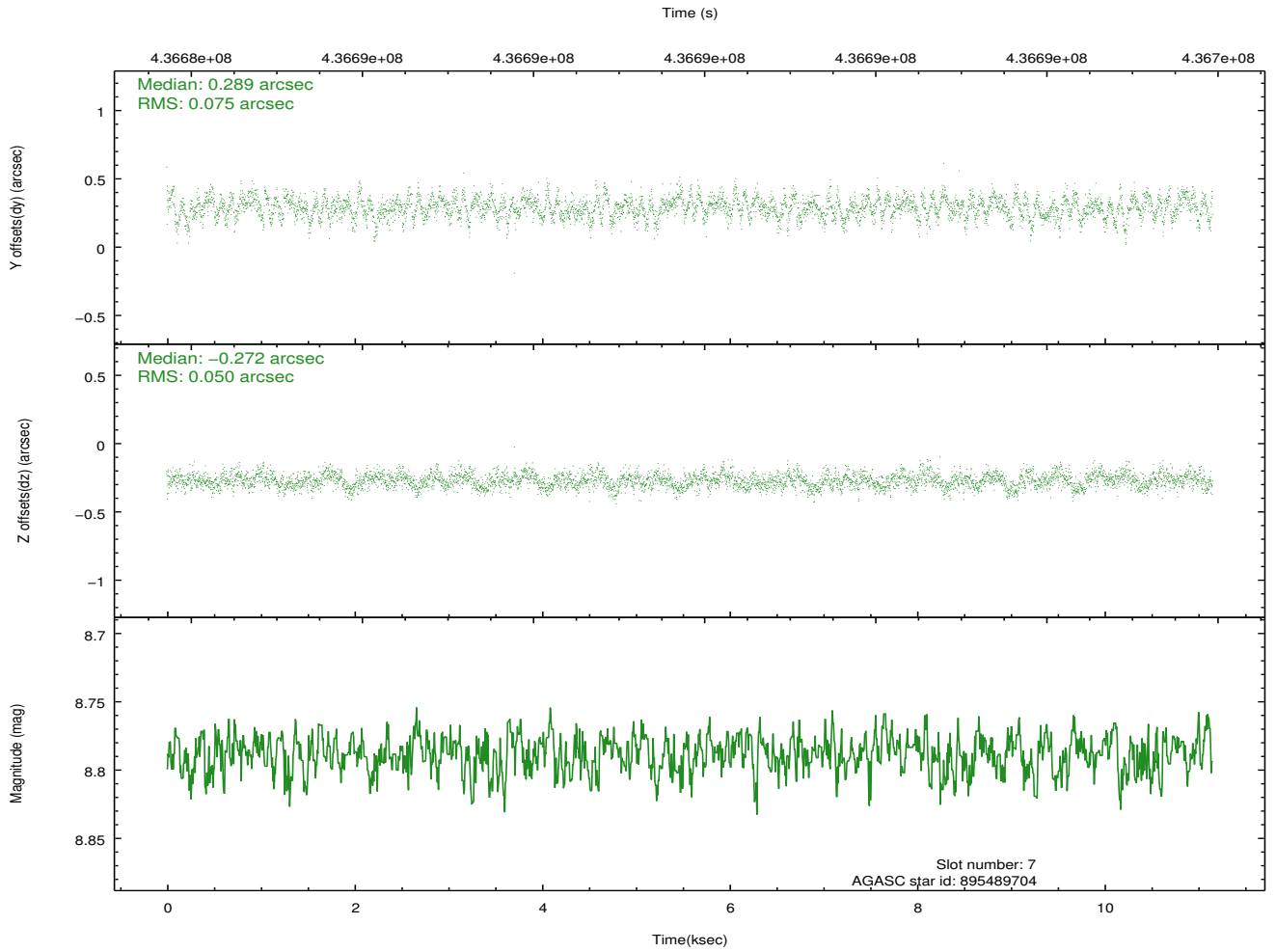
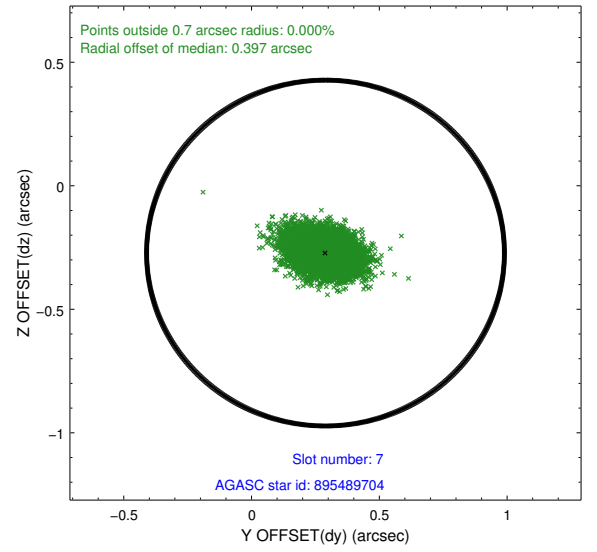
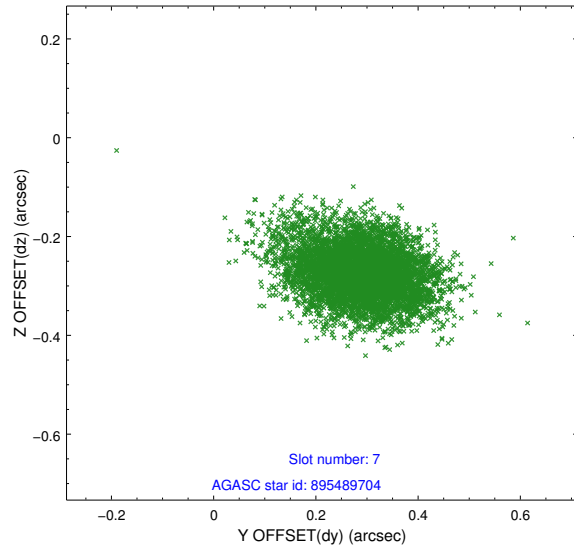


## 2.4.4 Slot 6



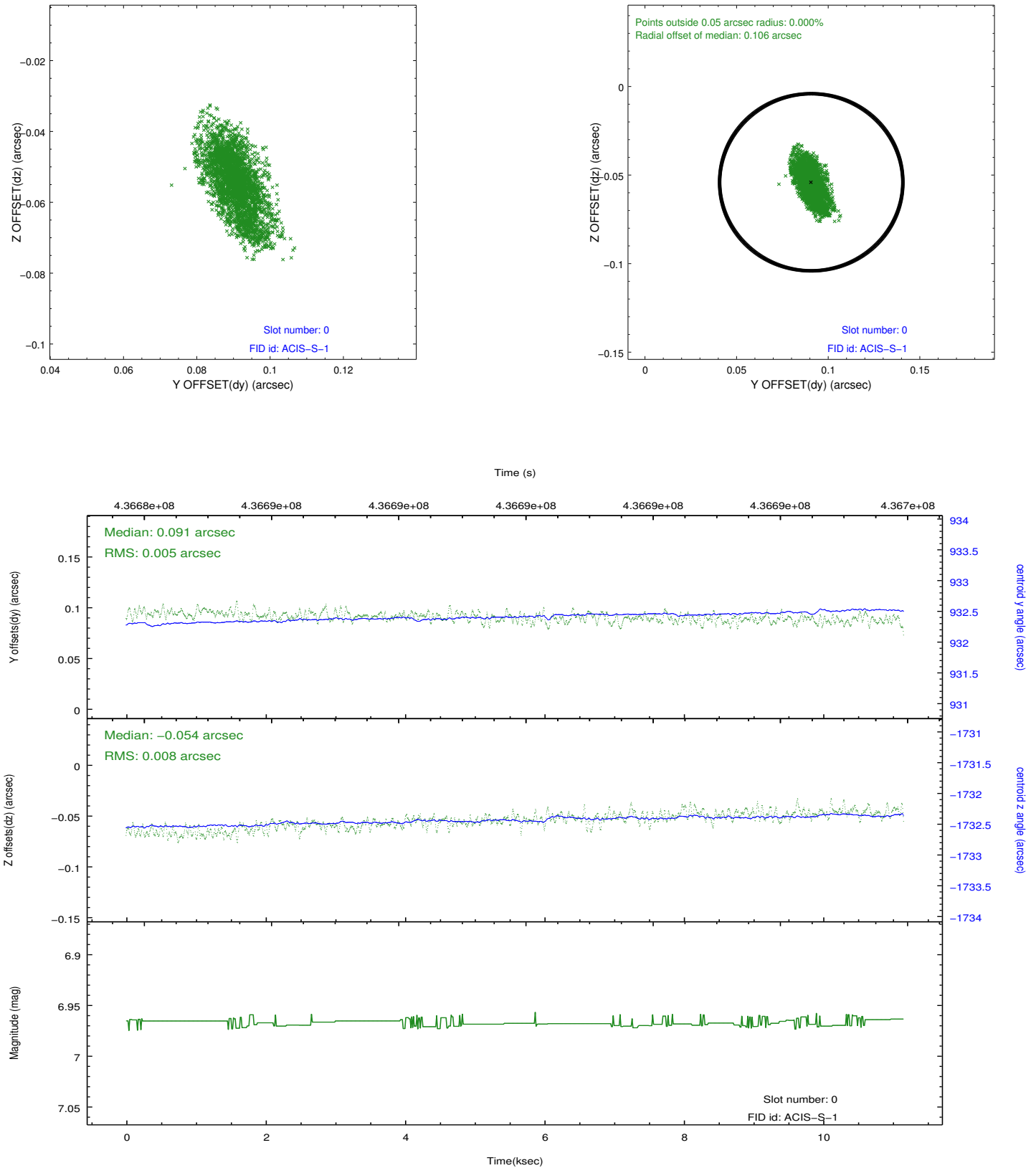


## 2.4.5 Slot 7

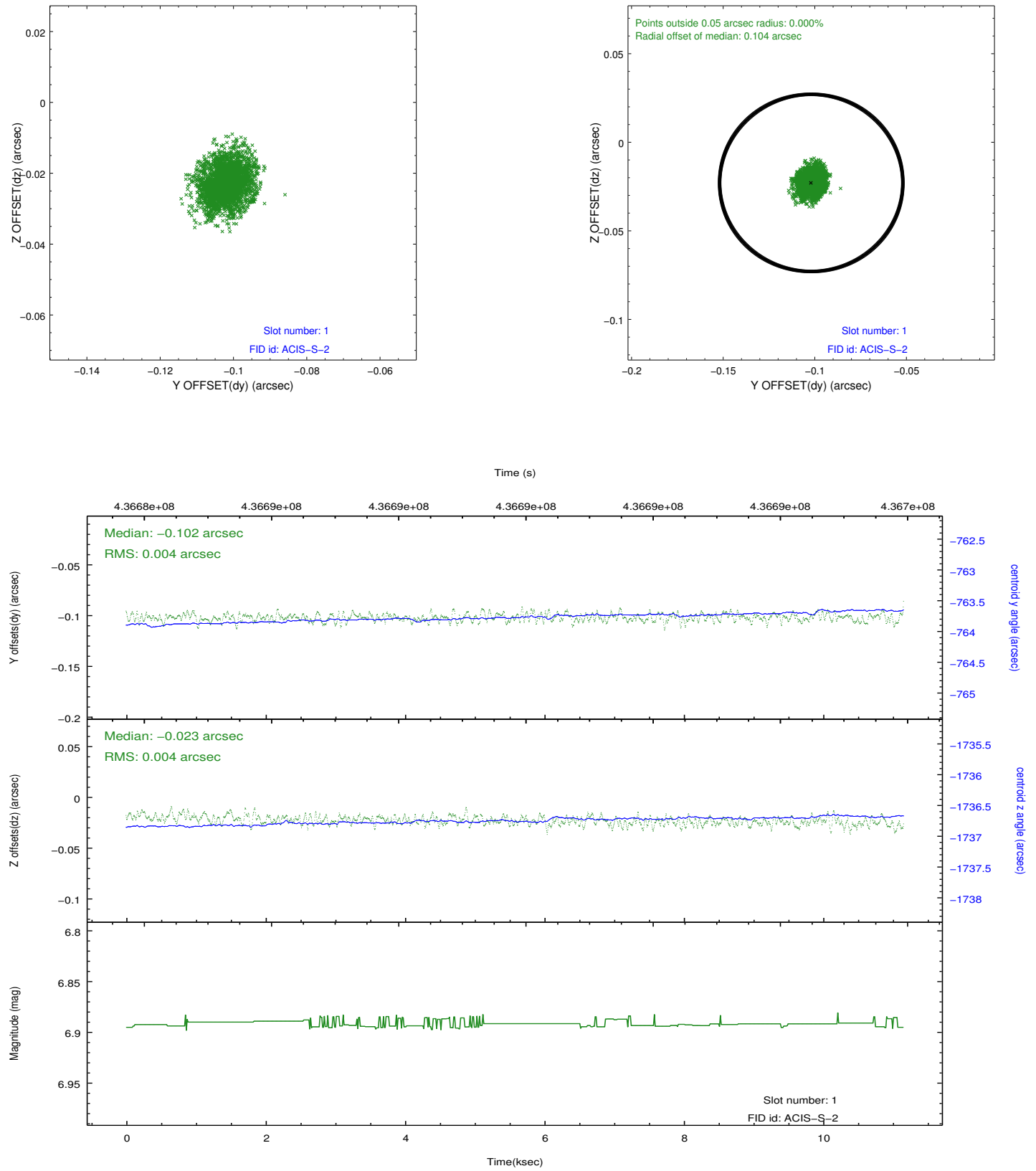


## 2.5 FID Slots

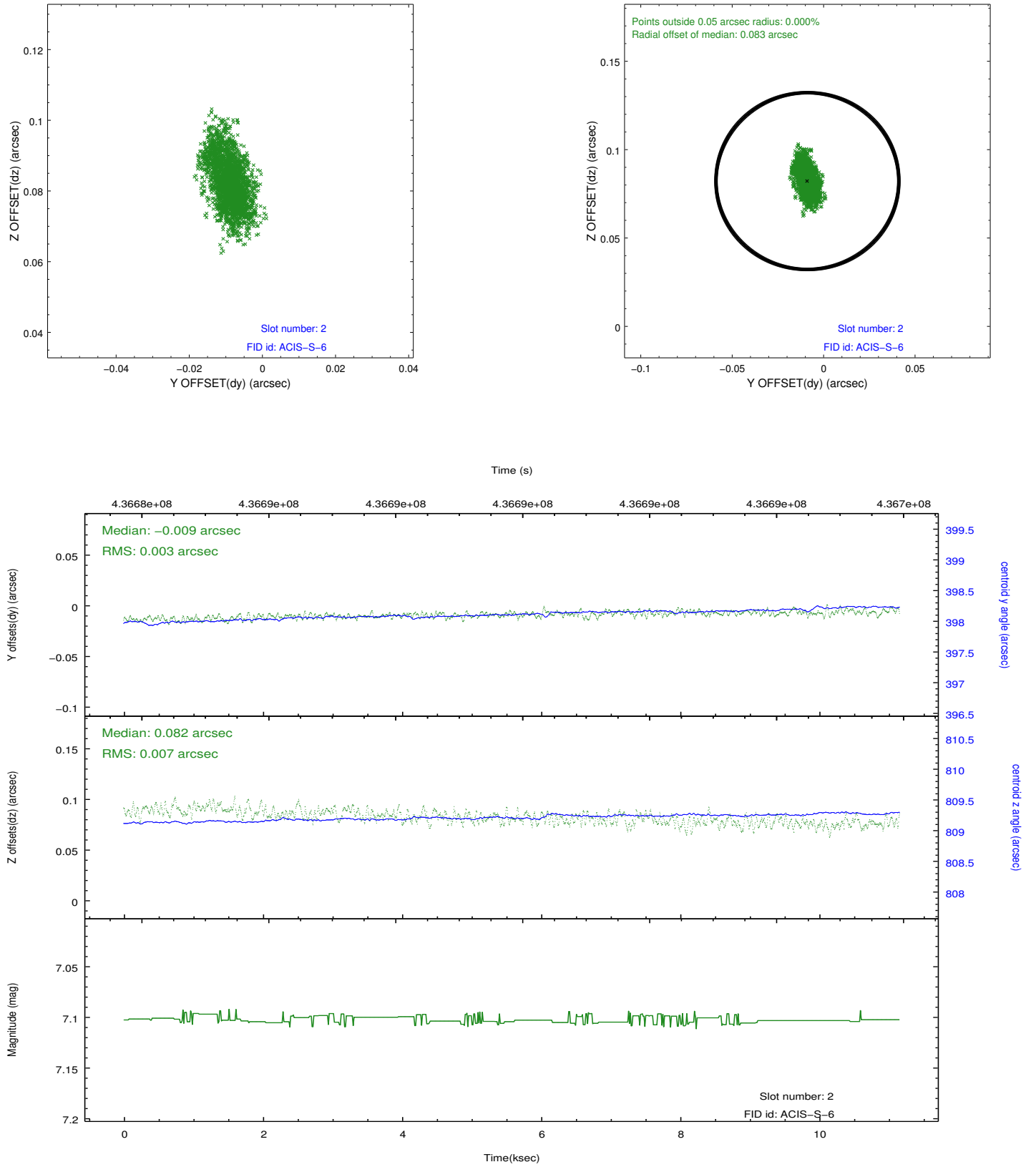
### 2.5.1 Slot 0



## 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)	2012.02.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.9647999629378

### A.2 Comments