

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3779 - L2 Version 5  
Chandra X-Ray Center

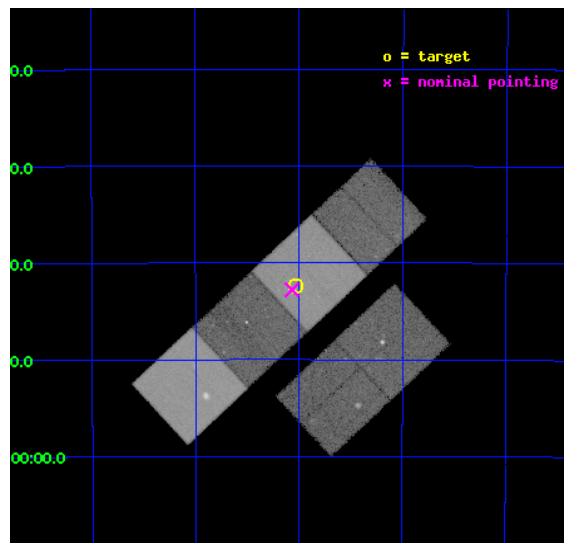
L2 Processing Date : Nov 1 2012

## 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

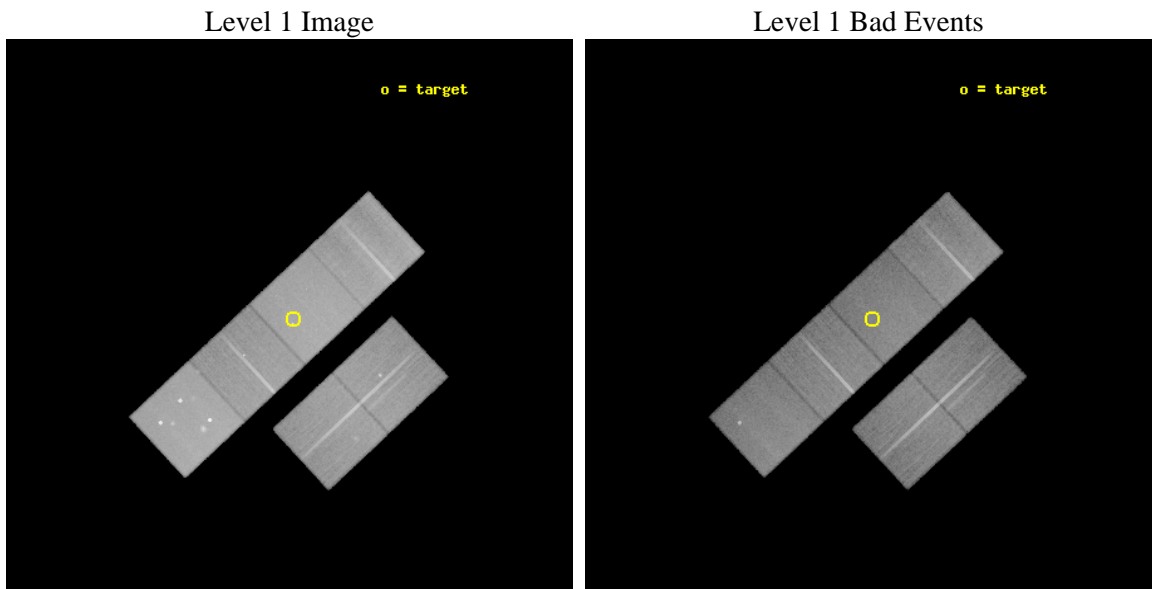
seq_num	300104	Sequence number
obs_id	3779	Observation id
title	A UNIFORM STUDY OF GLOBULAR CLUSTER X-RAY SOURCES: THE KEY TO CLUSTER DYNAMICAL EVOLUTION	Proposal title
observer	Prof. Walter Lewin	Principal investigator
object	NGC 6541	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	272.009167	Observer's specified target RA [deg]
dec_targ	-43.705472	Observer's specified target Dec [deg]
ra_nom	272.01721974349	Nominal RA [deg]
dec_nom	-43.713210603193	Nominal Dec [deg]
roll_nom	316.98092949125	Nominal Roll [deg]
revision	5	Processing version of data
ontime	45404.786806732	Sum of GTIs [s]
livetime	44829.844056705	Livetime [s]
ontime2	45404.799830854	Sum of GTIs [s]
ontime3	45401.422706425	Sum of GTIs [s]
ontime5	45404.745766729	Sum of GTIs [s]
ontime6	45401.463746458	Sum of GTIs [s]
ontime7	45404.786806732	Sum of GTIs [s]
ontime8	45404.622646749	Sum of GTIs [s]
l2events	471785	Number of level 2 events



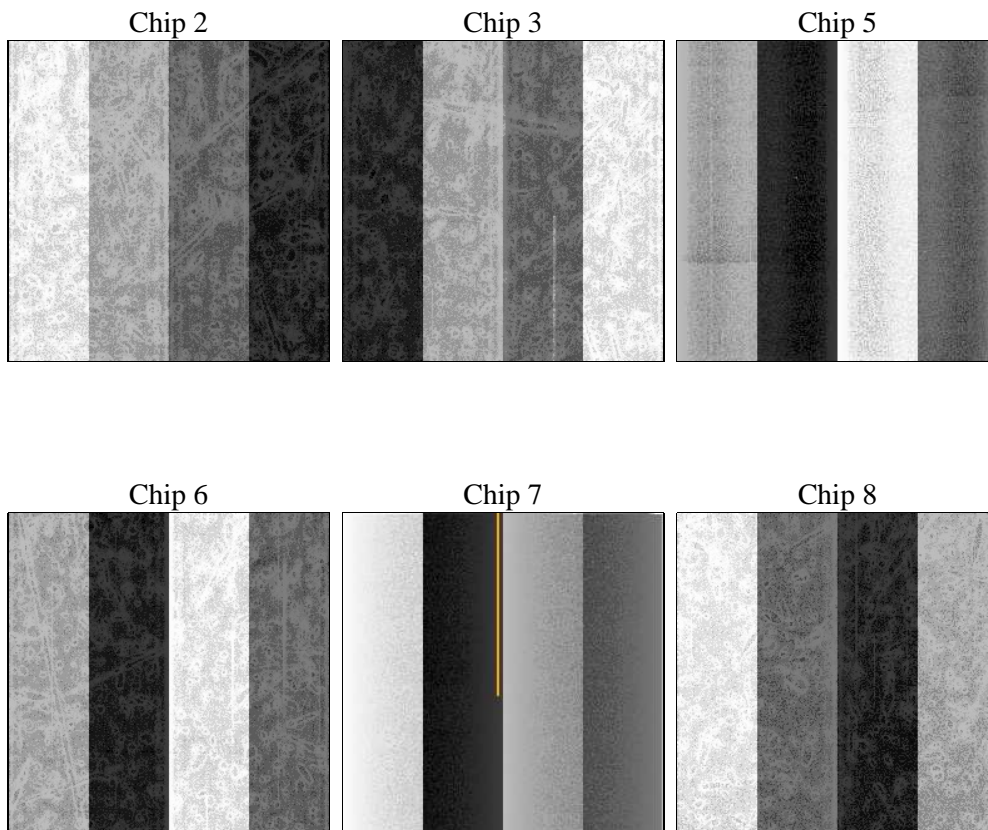
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	45489.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	45404.786806732	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	45404.799830854	Sum of GTIs [s]
date	2012-11-01T04:27:27	Date and time of file creation	ontime3	45401.422706425	Sum of GTIs [s]
revision	5	Processing version of data	ontime5	45404.745766729	Sum of GTIs [s]
			ontime6	45401.463746458	Sum of GTIs [s]
			ontime7	45404.786806732	Sum of GTIs [s]
			ontime8	45404.622646749	Sum of GTIs [s]
			l1events	1993253	Number of level 1 events

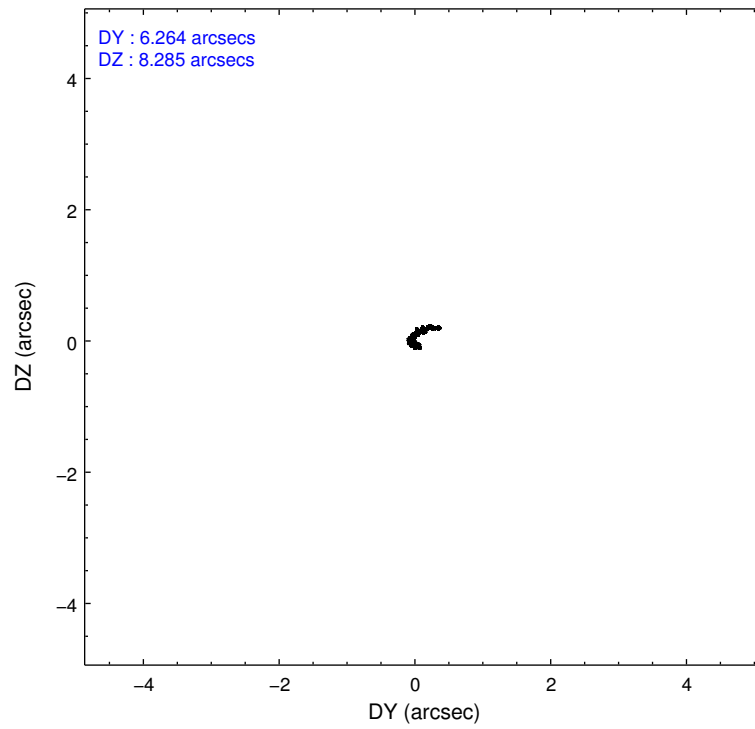
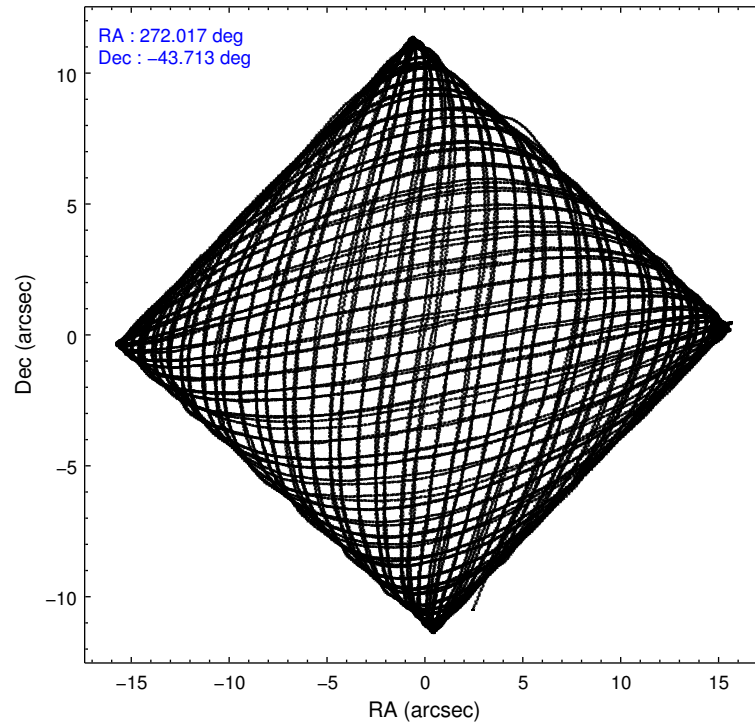
### 2.1.4 Events

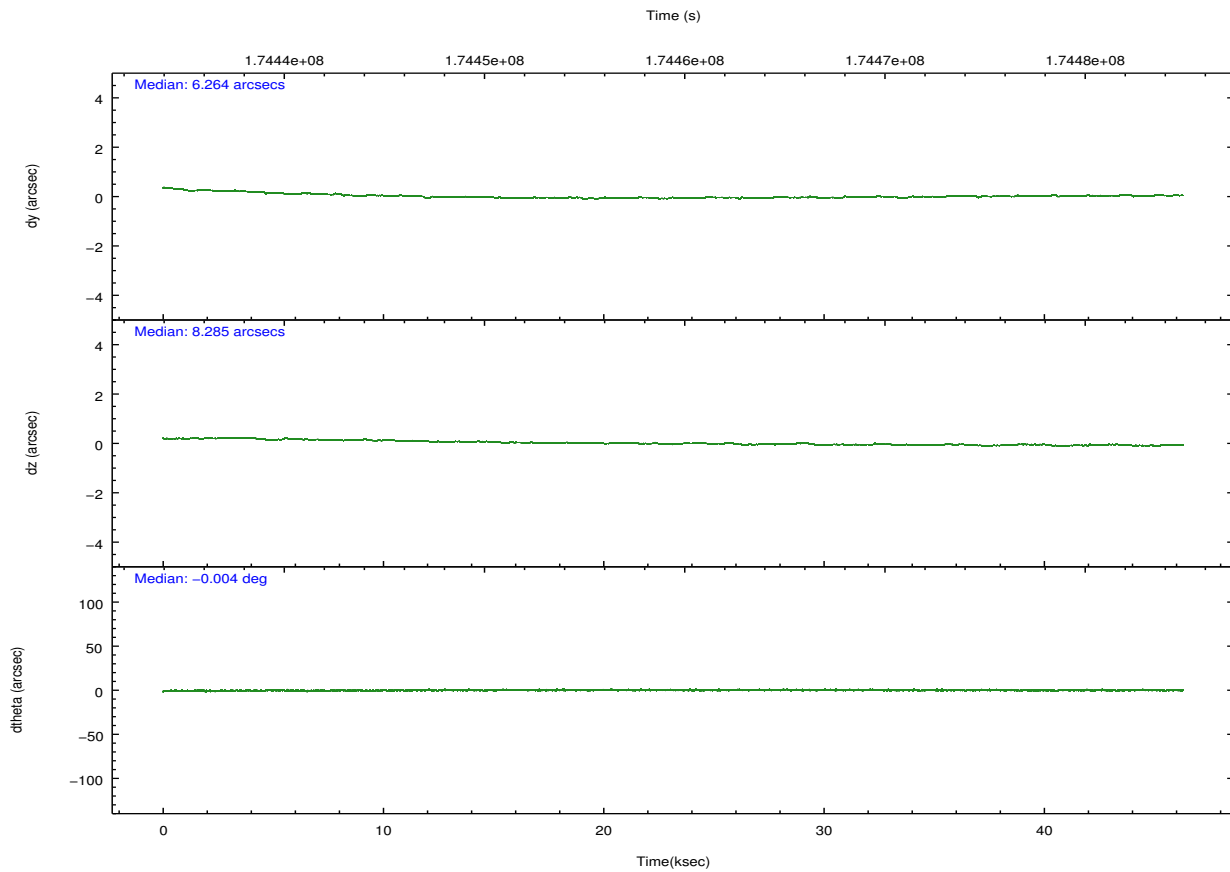
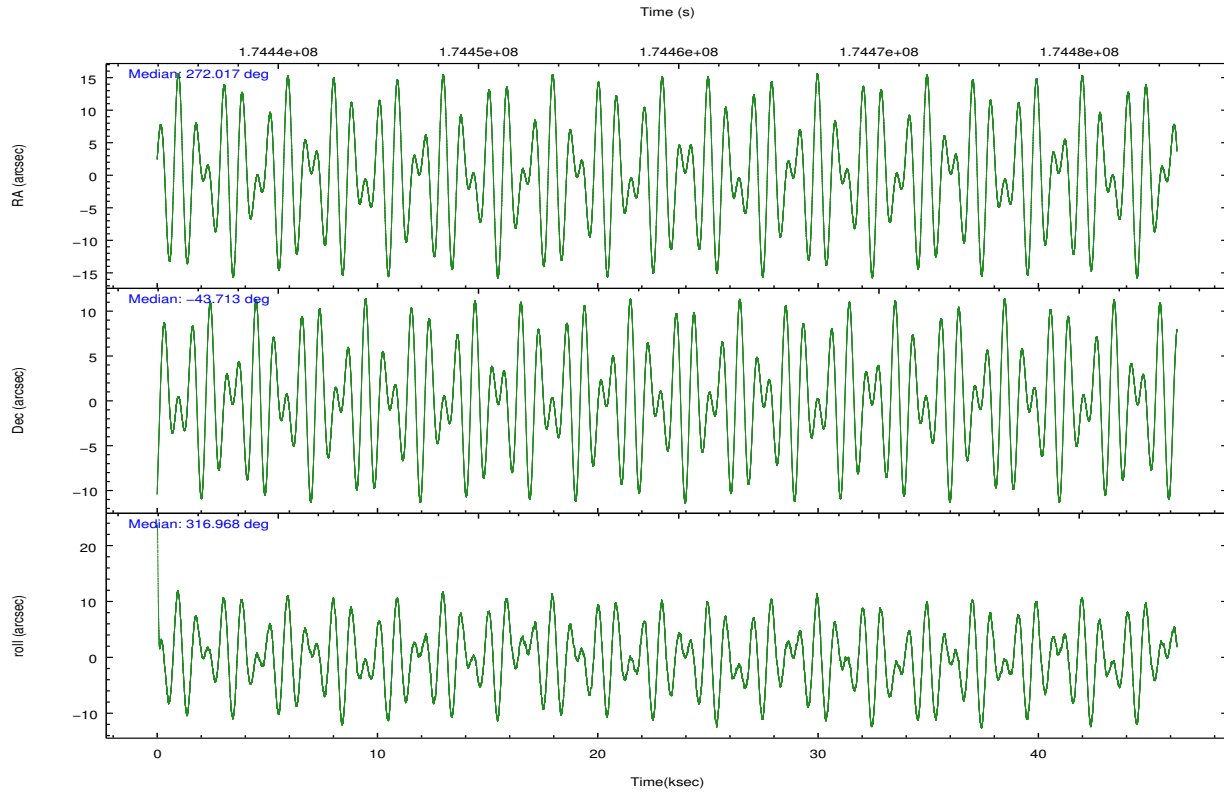
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	283249	270310	429076	282879	379041	348698	grade 0 events	16875	17781	34642	16854	17946	25325
rejected events	247958	234210	221289	246032	215993	274730		5%	6%	8%	5%	4%	7%
rejected %	87%	86%	51%	86%	56%	78%	grade 1 events	173	160	526	127	372	214
								0%	0%	0%	0%	0%	0%
							grade 2 events	6775	6288	58714	6916	32801	15640
								2%	2%	13%	2%	8%	4%
							grade 3 events	3280	3280	8620	3298	14732	7549
								1%	1%	2%	1%	3%	2%
							grade 4 events	3062	3261	8197	3235	14935	7122
								1%	1%	1%	1%	3%	2%
							grade 5 events	10934	11956	30239	12722	35042	16282
								3%	4%	7%	4%	9%	4%
							grade 6 events	5340	5519	97822	6584	82827	18426
								1%	2%	22%	2%	21%	5%
							grade 7 events	236810	222065	190316	233143	180386	258140
								83%	82%	44%	82%	47%	74%

## 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	OVERRIDE	OVERRIDE
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	272.017191684444	272.0172197434878	Subarray requested	NONE	NONE
[deg] Pointing Dec	-43.71319155815989	-43.71321060319265	Alternating exposures requested	N	N
[deg] Pointing Roll	316.9809100996829	316.9809294912465	[s] Primary exposure time	3.2	3.2
[mm] SIM focus pos	-0.68282252473119	-0.68282252473119			
[mm] SIM defocus	0.001444942264670734	0.001444942264670734			
[mm] SIM translation stage pos	-190.1425803652	-190.1425803652			
[mm] SIM translation stage offset	0.01005726123278805	0.01005726123278805			
[s] Observation start time (MET)	174436270.0205	174436270.0205			
Observation start date	2003-07-12T22:43:27	2003-07-12T22:31:10			
[s] Observation end time (MET)	174482562.09751	174482562.09751			
Observation end date	2003-07-13T11:21:36	2003-07-13T11:22:42			
Read mode	TIMED	TIMED			

## 2.3 Aspect





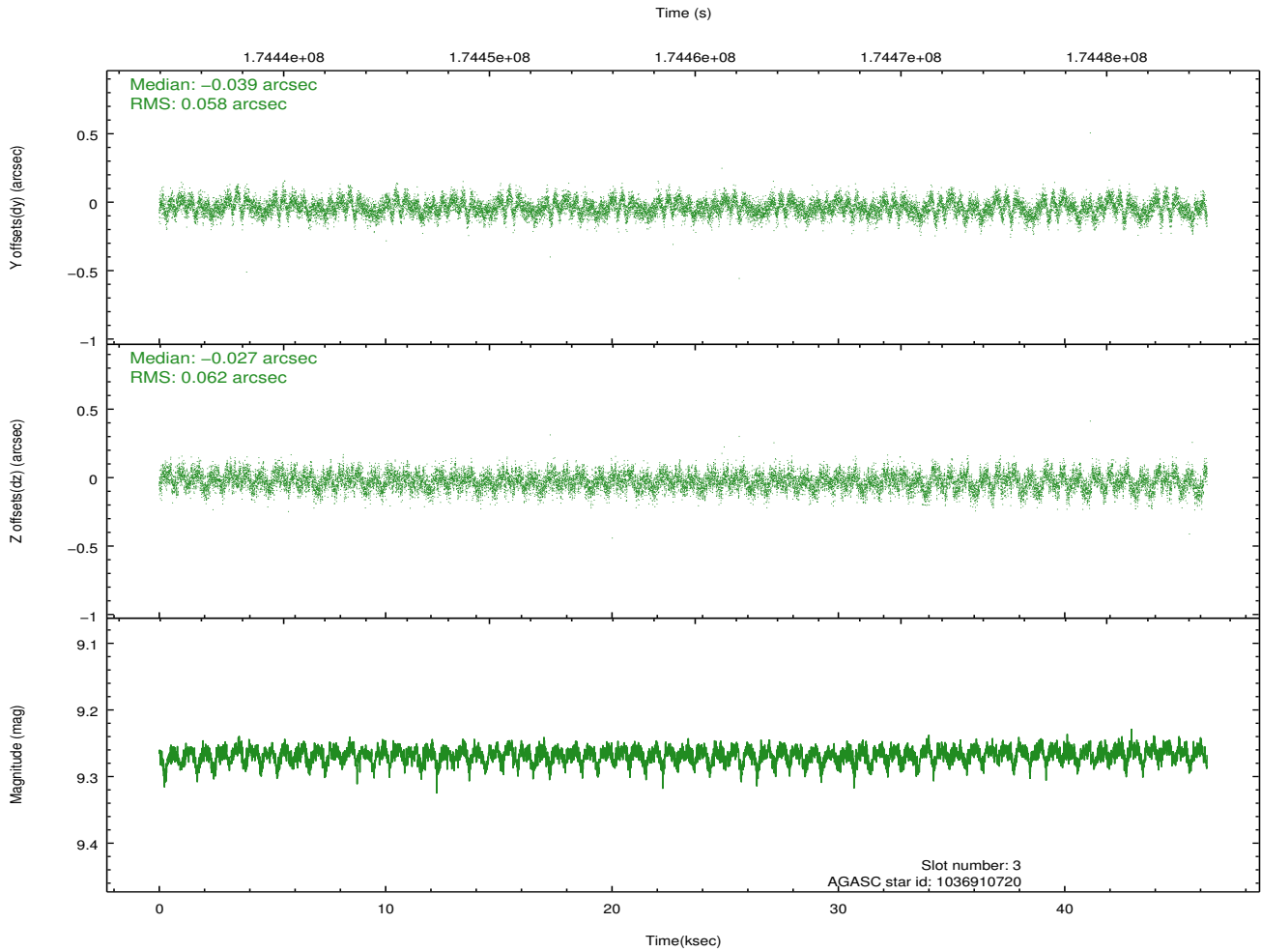
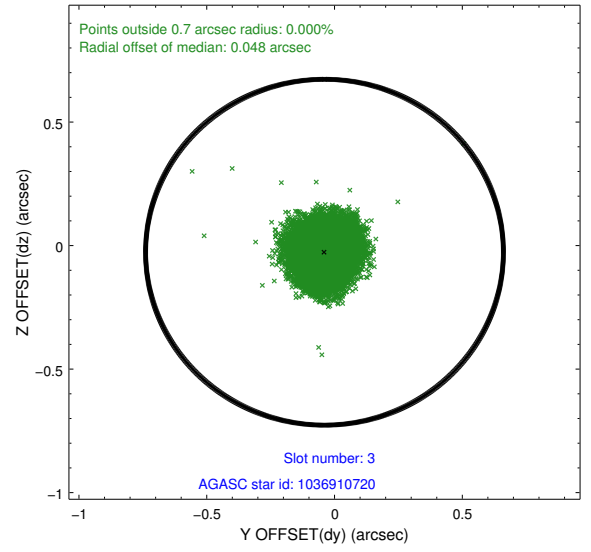
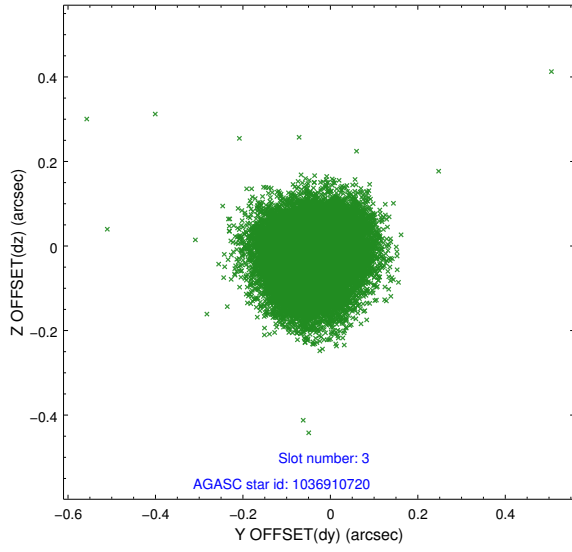
### Slot Statistics

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	11291	0.033	-0.051	0.009	0.023	0.000000	0.000000	937.00	-1725.16
1	FID	ACIS-S-4	7.20	11290	0.037	0.023	0.008	0.023	0.000000	0.000000	2154.45	179.04
2	FID	ACIS-S-5	7.22	11291	-0.098	0.040	0.007	0.023	0.000000	0.000000	-1811.96	172.75
3	GUIDE	1036910720	9.27	22570	-0.039	-0.027	0.091	0.144	271.364419	-43.598283	-1435.17	-817.23
4	GUIDE	1036921120	8.65	22580	-0.091	0.090	0.065	0.106	271.843906	-44.157071	851.74	-1420.87
5	GUIDE	1036945328	9.09	22576	0.026	-0.064	0.102	0.159	271.207896	-43.840237	-1127.78	-1728.48
6	GUIDE	1036396304	9.49	22541	0.038	-0.052	0.094	0.148	272.027995	-42.957947	-1755.92	2052.55
7	GUIDE	1036916488	9.52	22571	0.066	0.058	0.100	0.161	272.265545	-43.429439	-140.80	1239.38

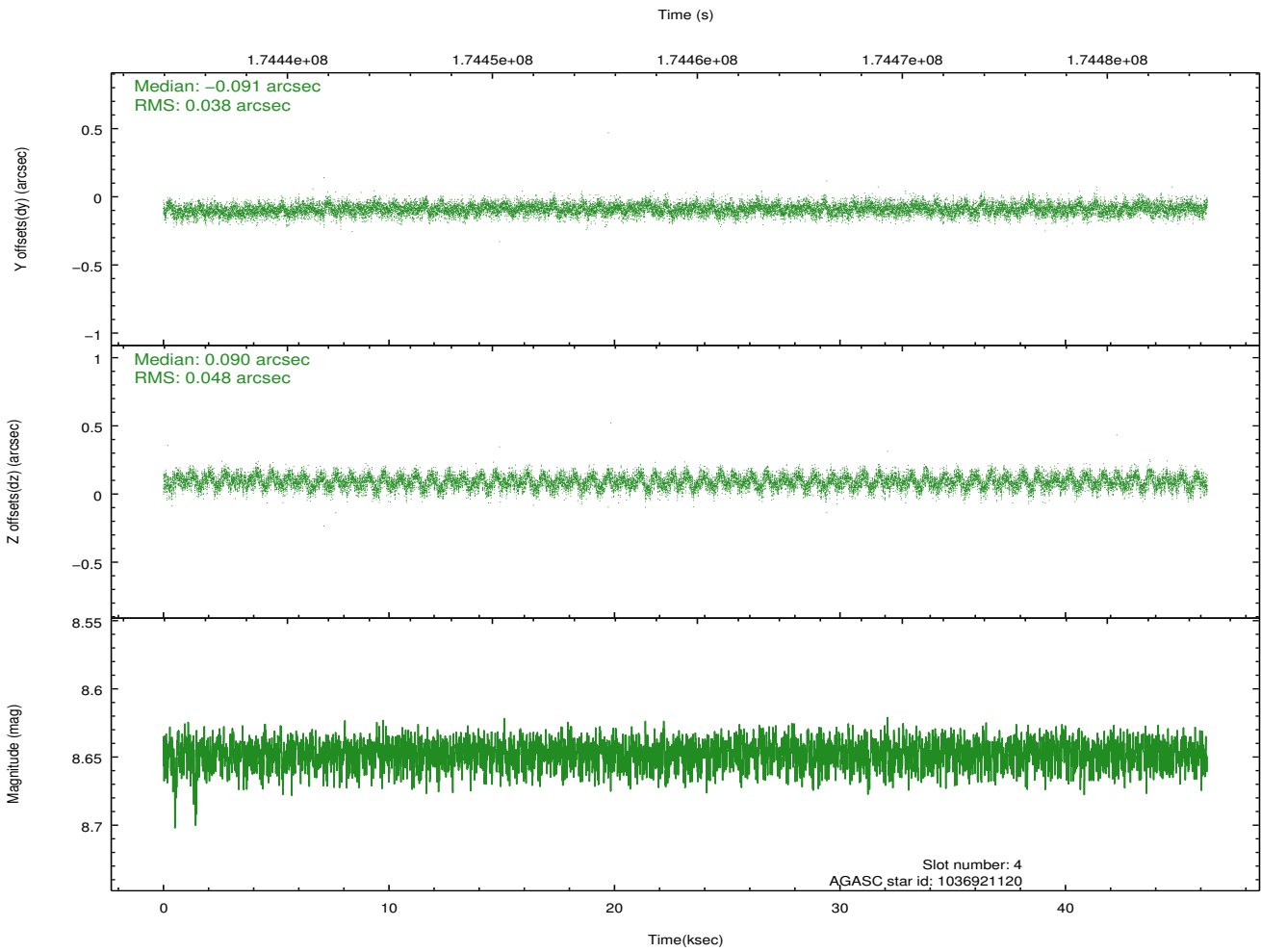
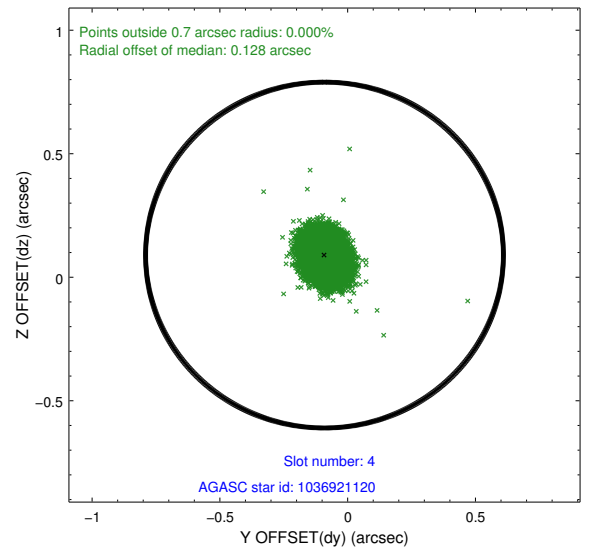
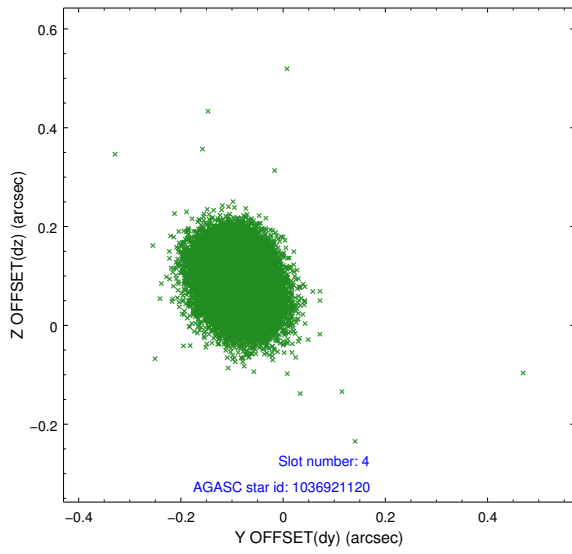
∞

## 2.4 Star Slots

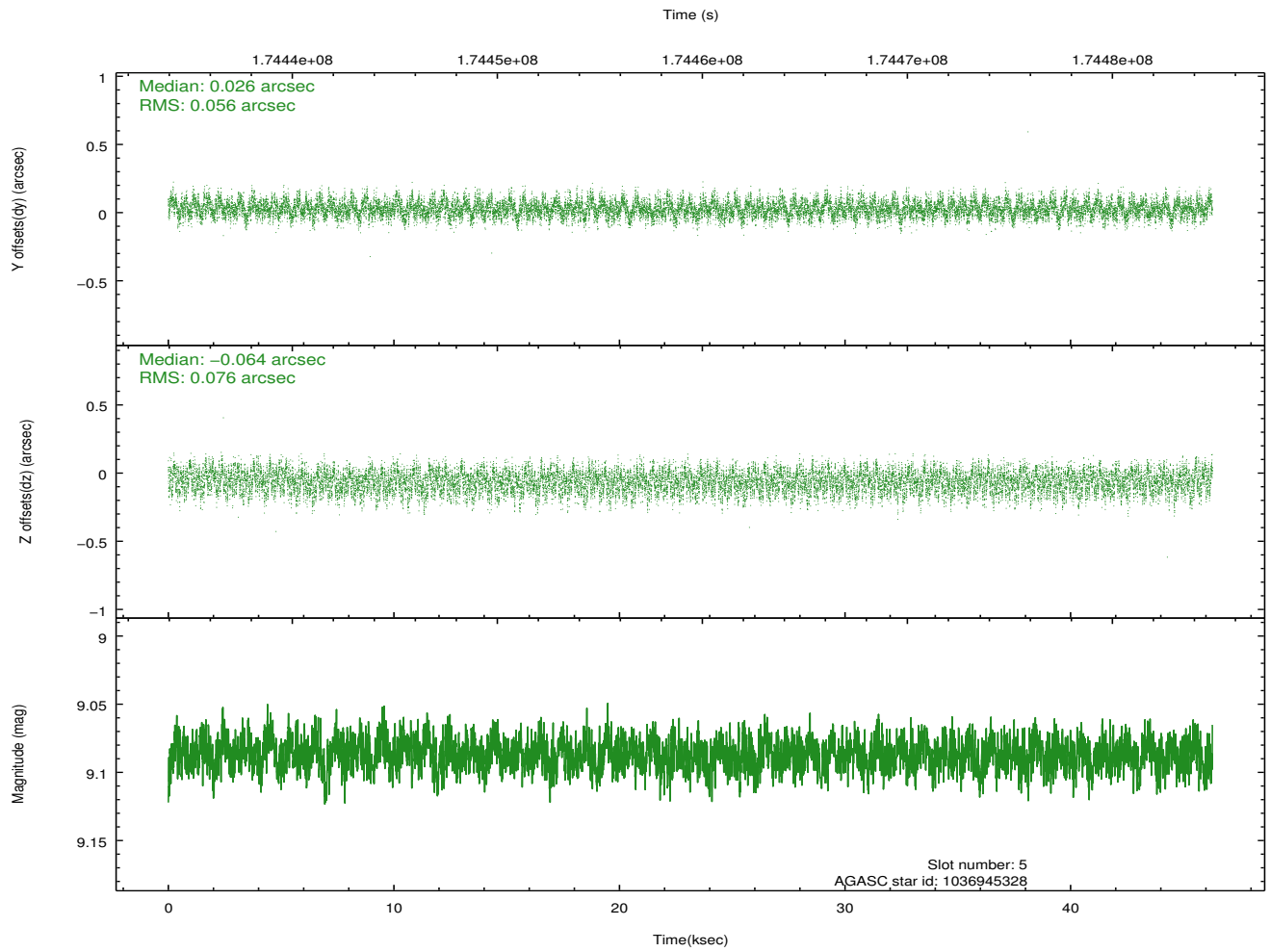
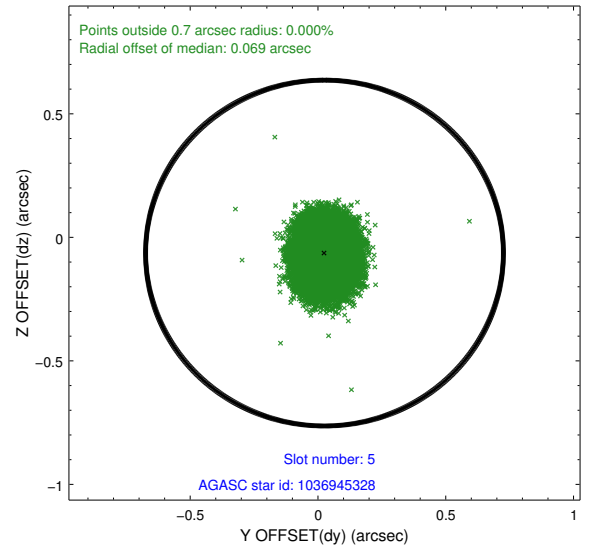
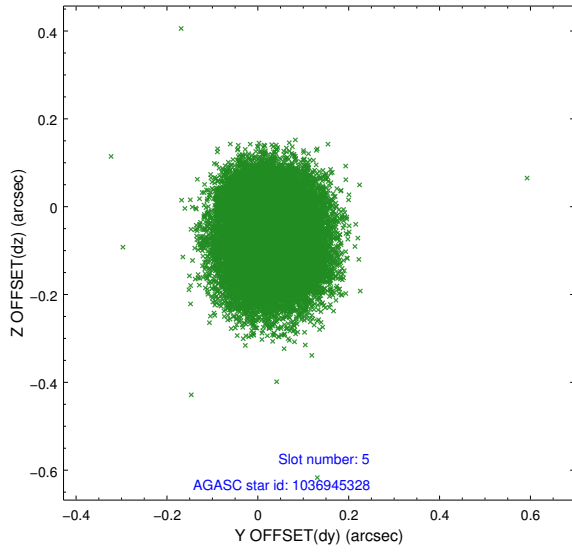
### 2.4.1 Slot 3



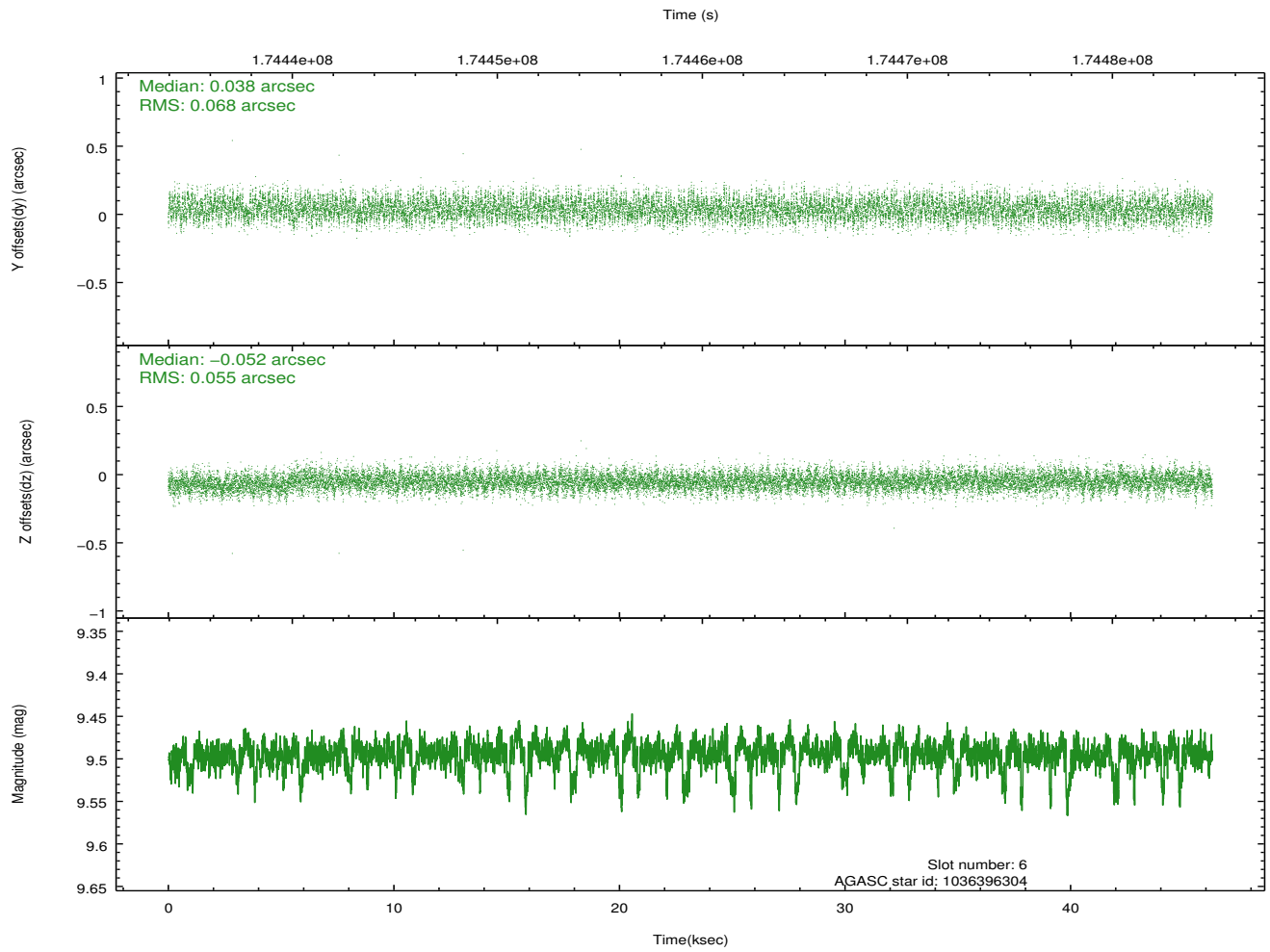
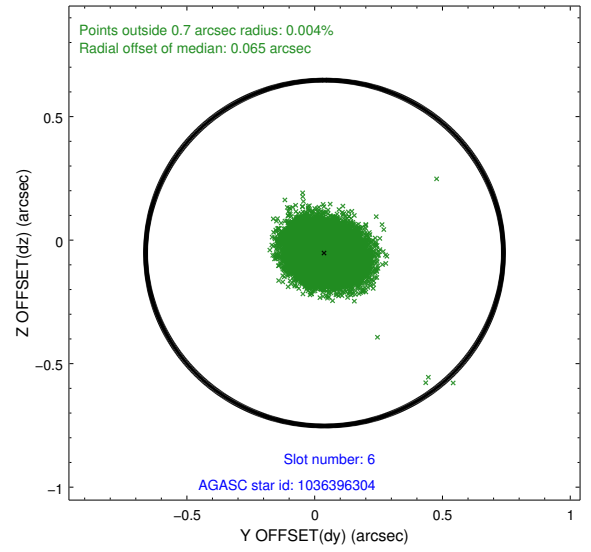
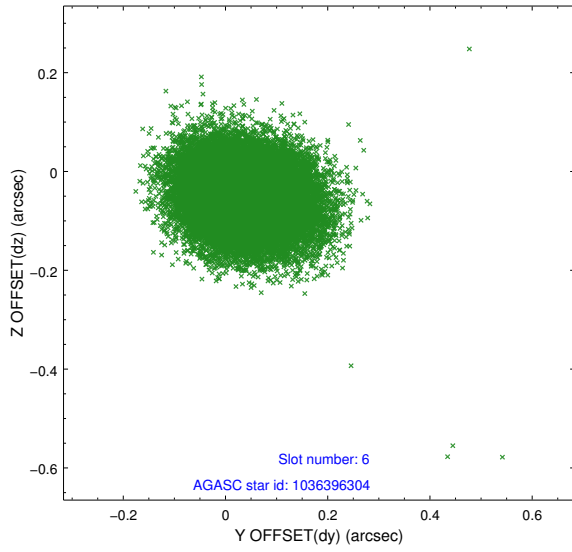
## 2.4.2 Slot 4



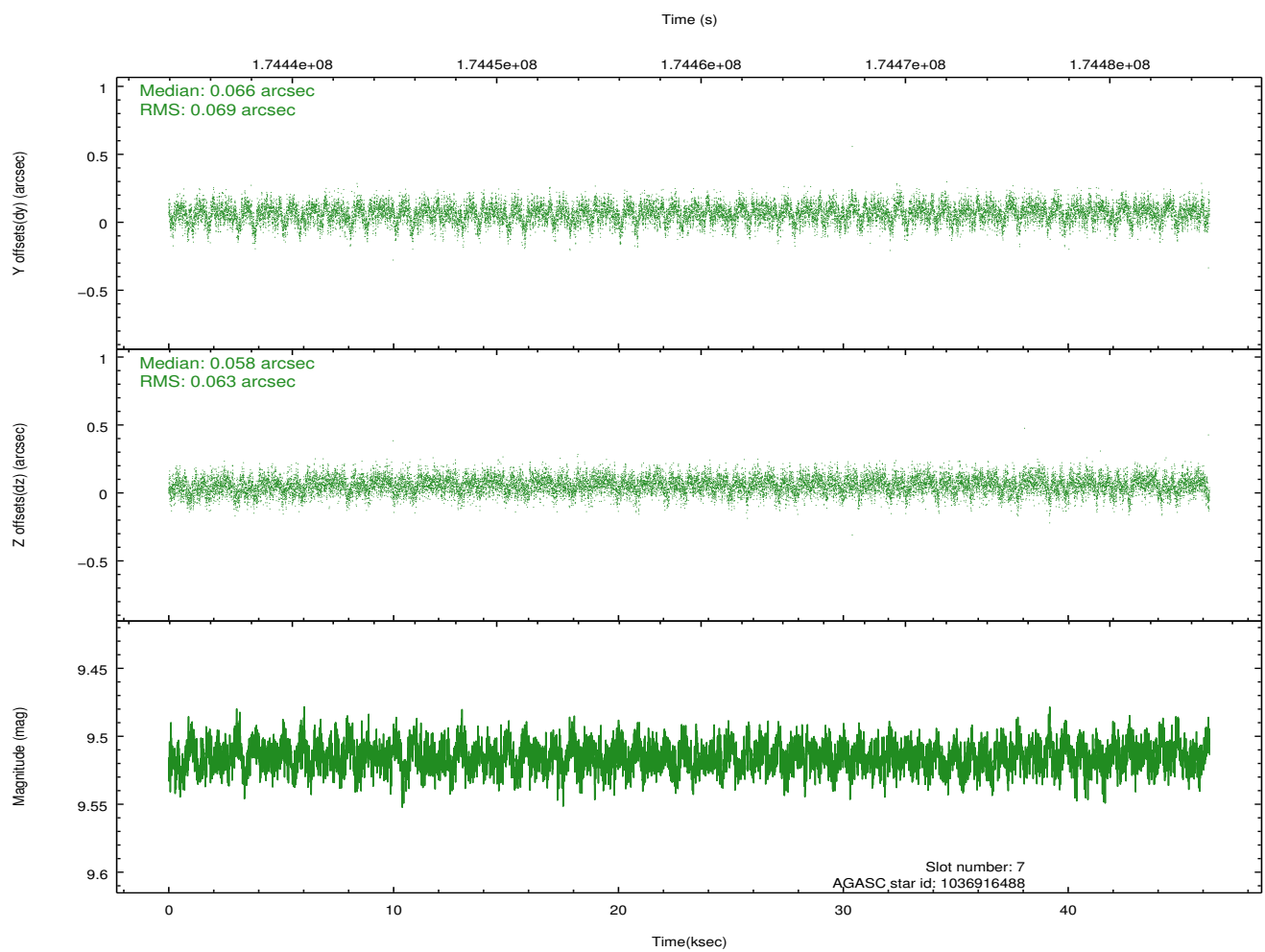
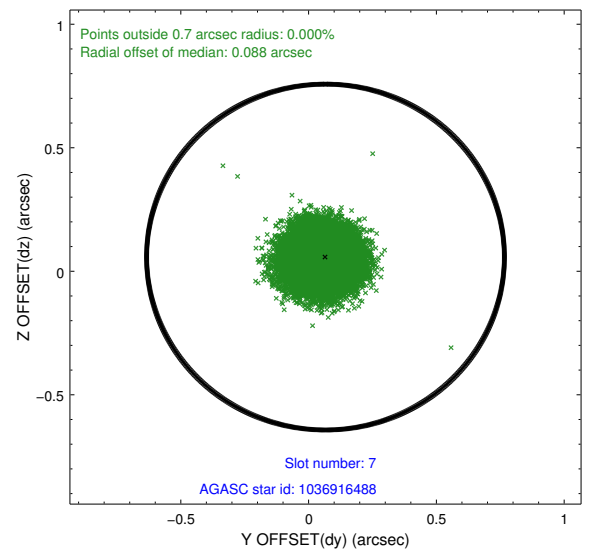
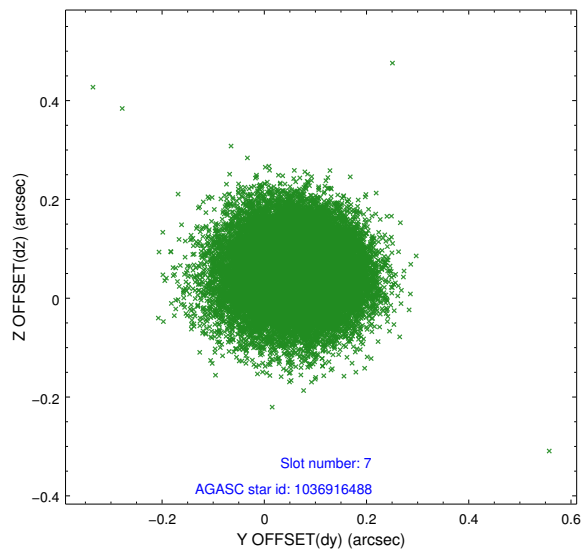
### 2.4.3 Slot 5



## 2.4.4 Slot 6

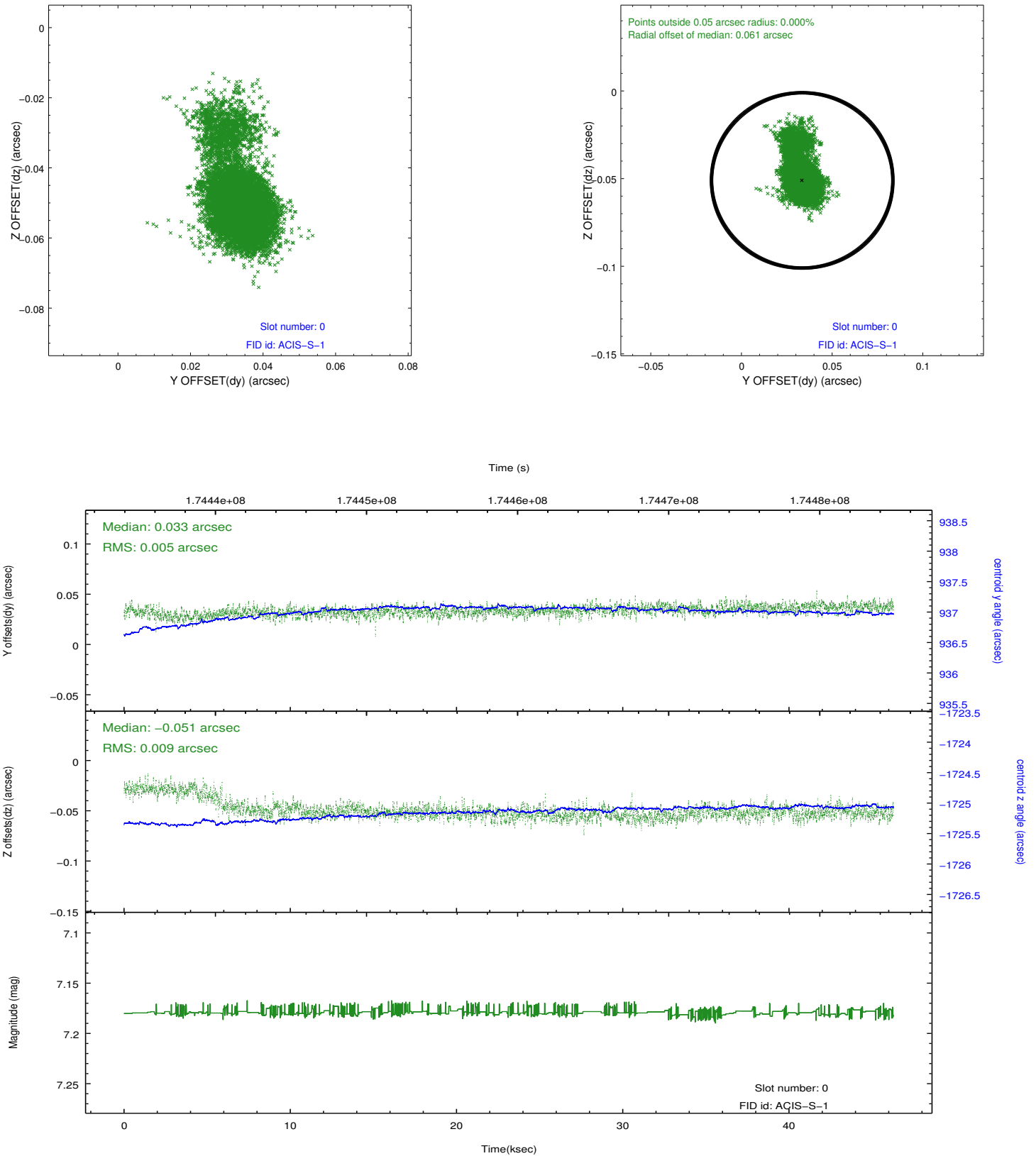


## 2.4.5 Slot 7

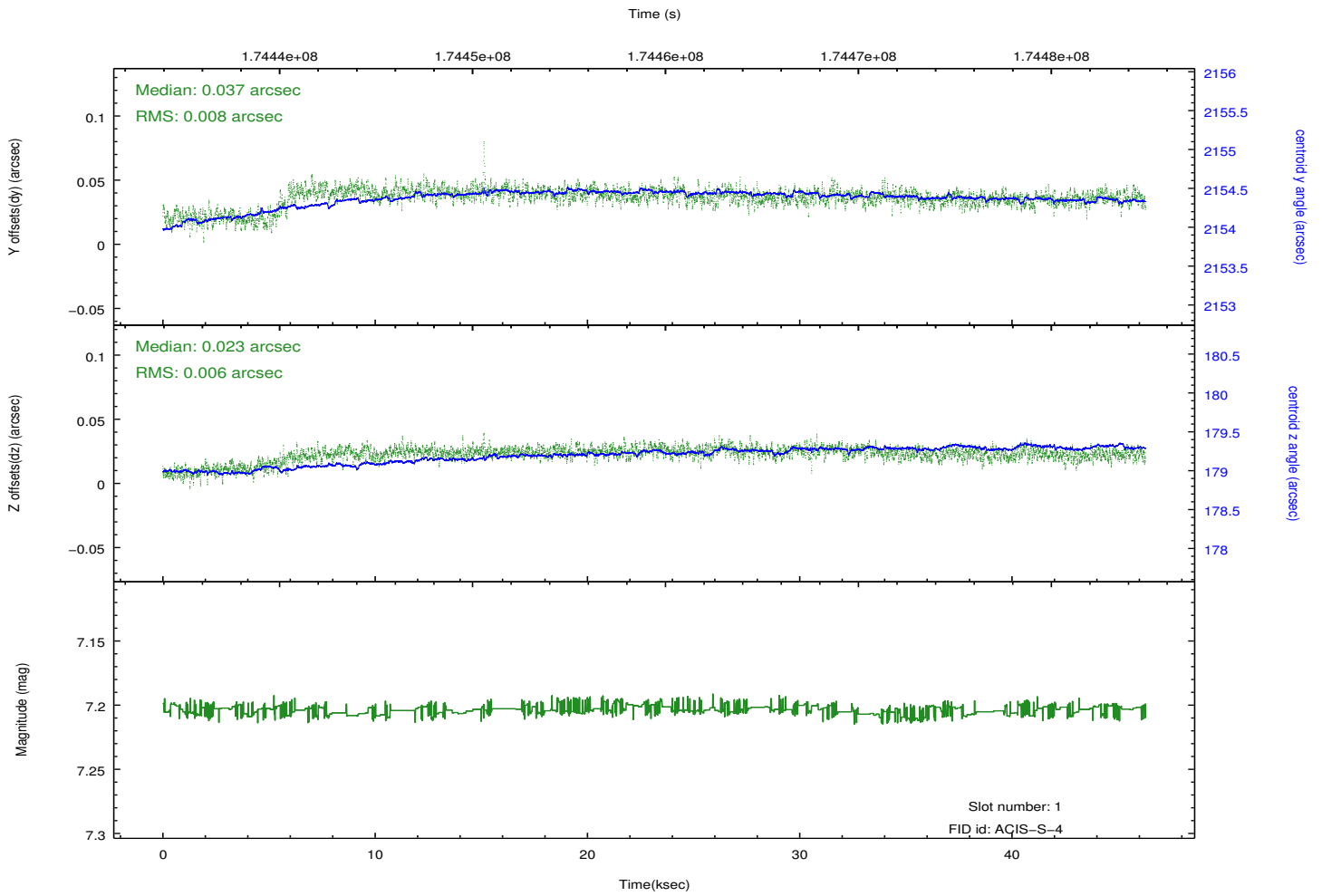
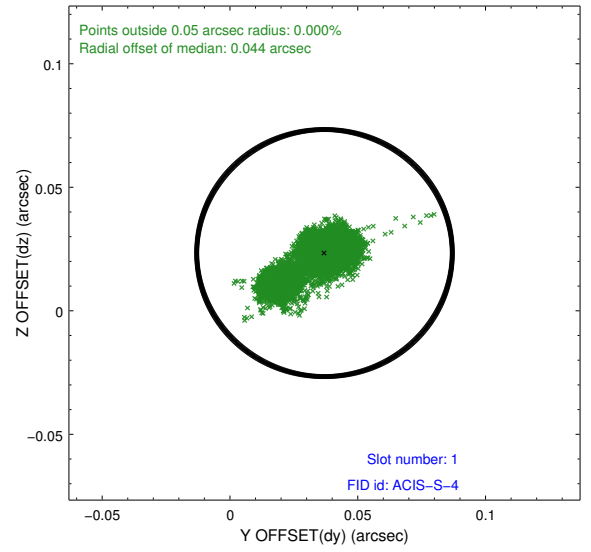
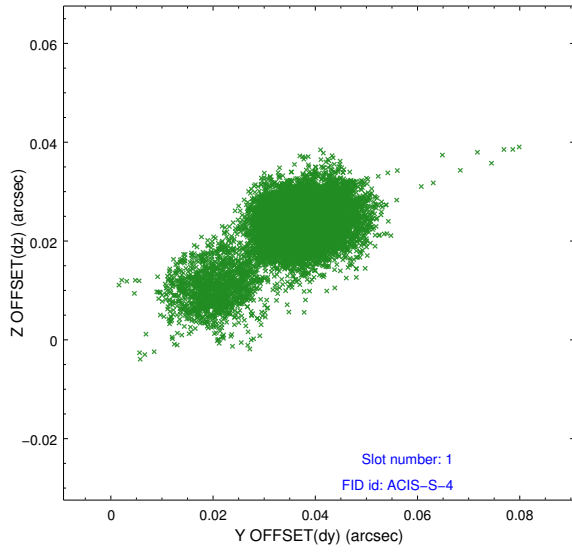


## 2.5 FID Slots

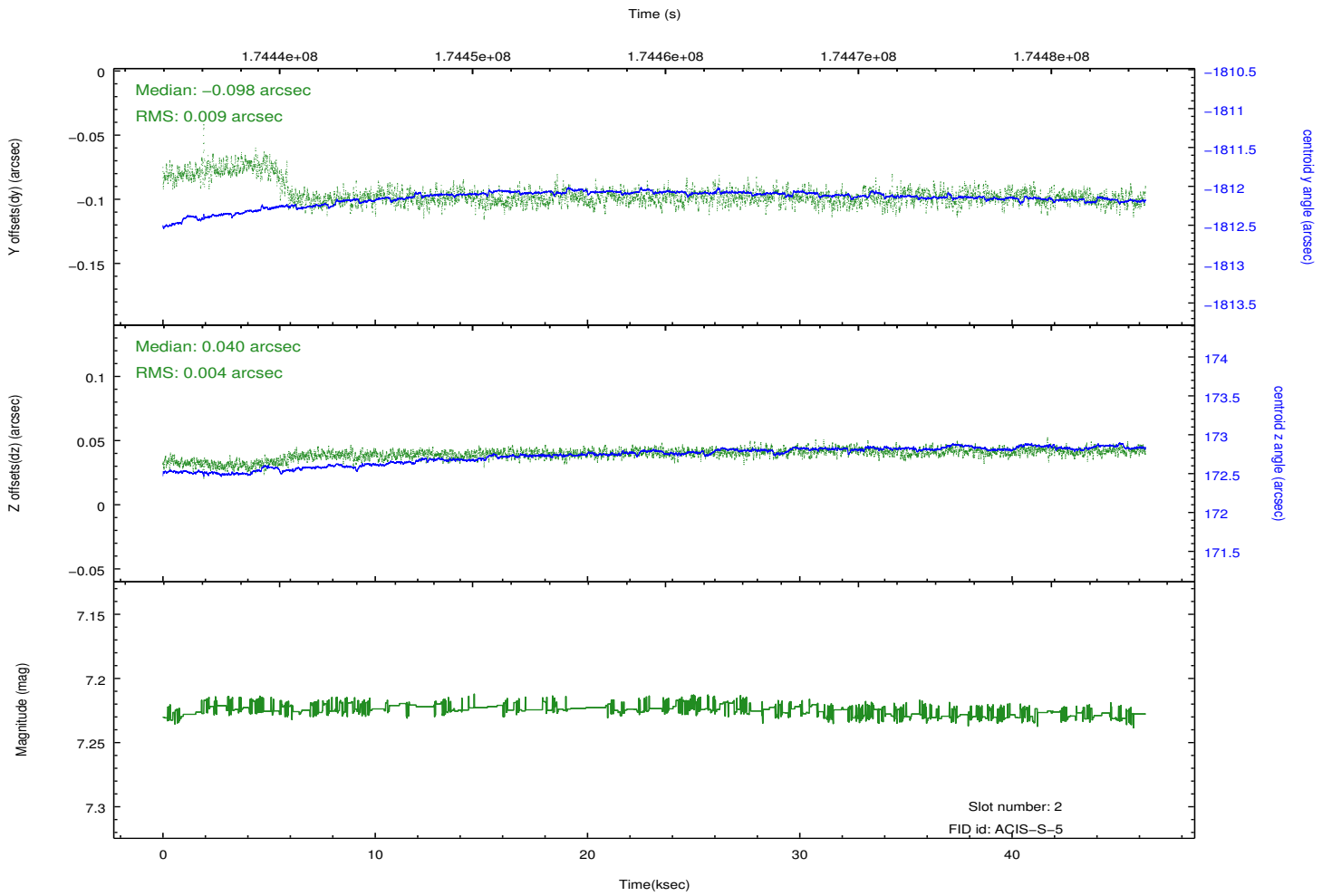
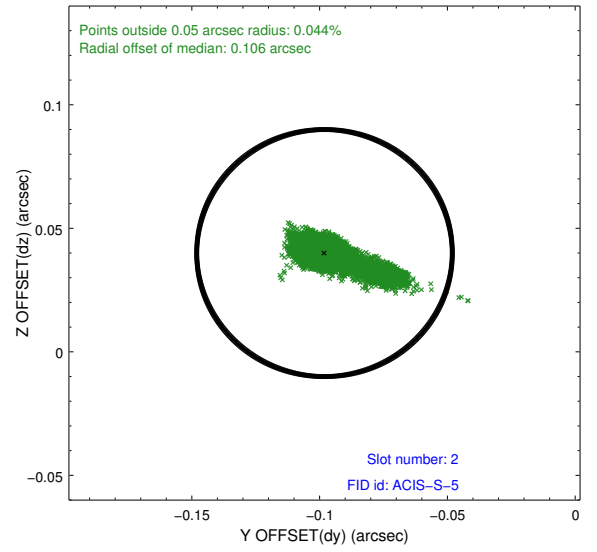
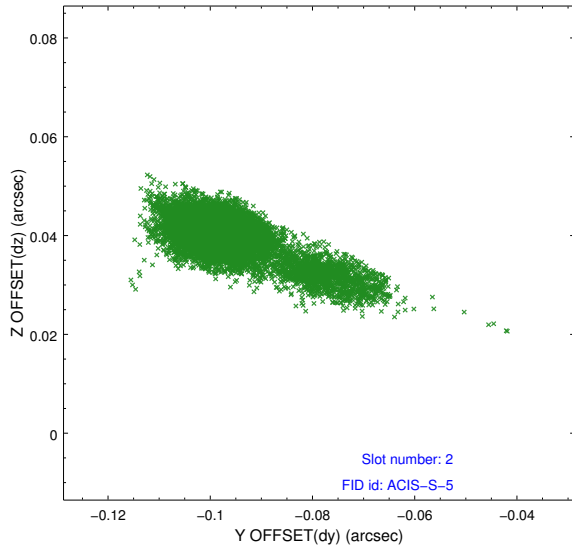
### 2.5.1 Slot 0



## 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)	2012.11.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	45.404

### A.2 Comments