

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7447 - L2 Version 2  
Chandra X-Ray Center

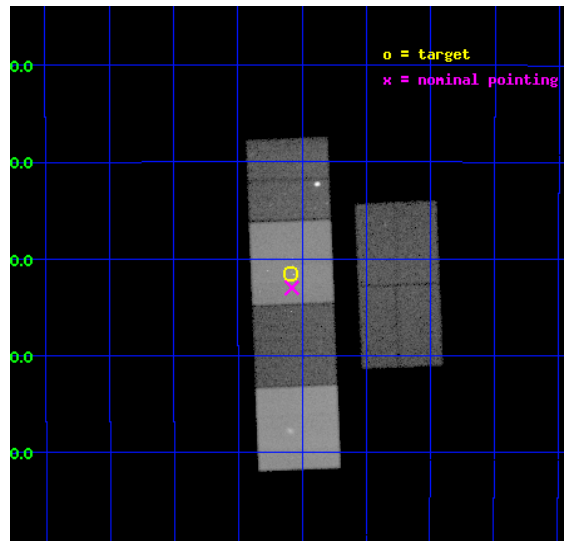
L2 Processing Date : Apr 27 2012

## 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

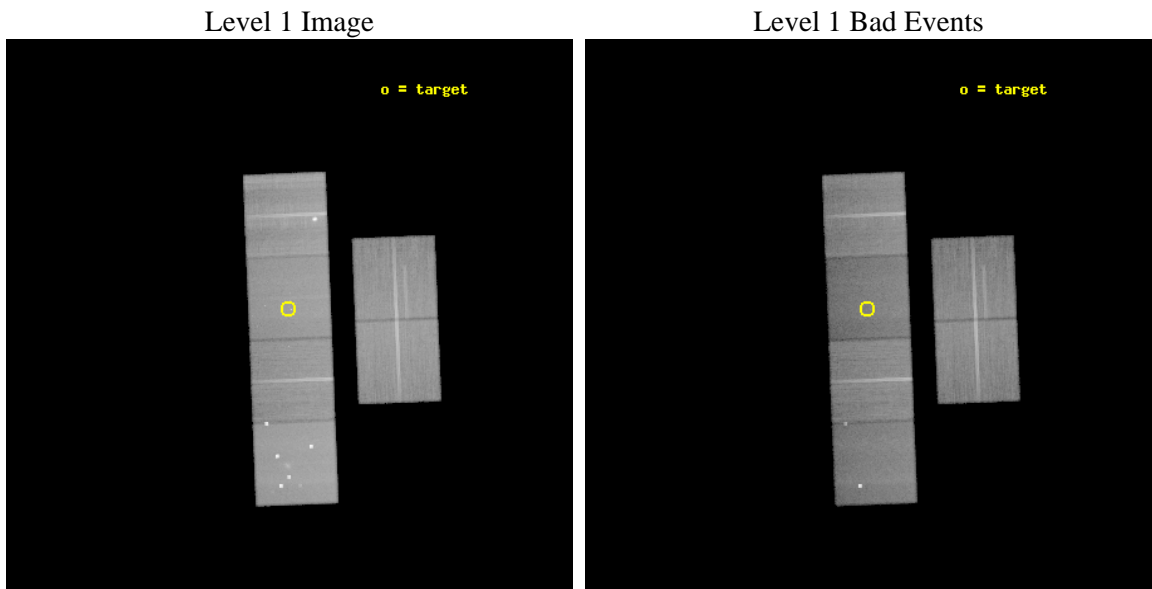
seq_num	200457	Sequence number
obs_id	7447	Observation id
title	Deep Chandra Observations of The Nearest Globular Cluster: Obtaining a Complete Sample of Primordial Binaries	Proposal title
observer	Prof. David Pooley	Principal investigator
object	M4	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	245.897917	Observer's specified target RA [deg]
dec_targ	-26.525278	Observer's specified target Dec [deg]
ra_nom	245.8949197548	Nominal RA [deg]
dec_nom	-26.550202745753	Nominal Dec [deg]
roll_nom	267.70644572109	Nominal Roll [deg]
revision	2	Processing version of data
ontime	46040.933904529	Sum of GTIs [s]
livetime	45457.935876907	Livetime [s]
ontime2	46040.974944532	Sum of GTIs [s]
ontime3	46040.810784519	Sum of GTIs [s]
ontime5	46040.892864525	Sum of GTIs [s]
ontime6	46034.369803846	Sum of GTIs [s]
ontime7	46040.933904529	Sum of GTIs [s]
ontime8	46040.769744515	Sum of GTIs [s]
l2events	571788	Number of level 2 events



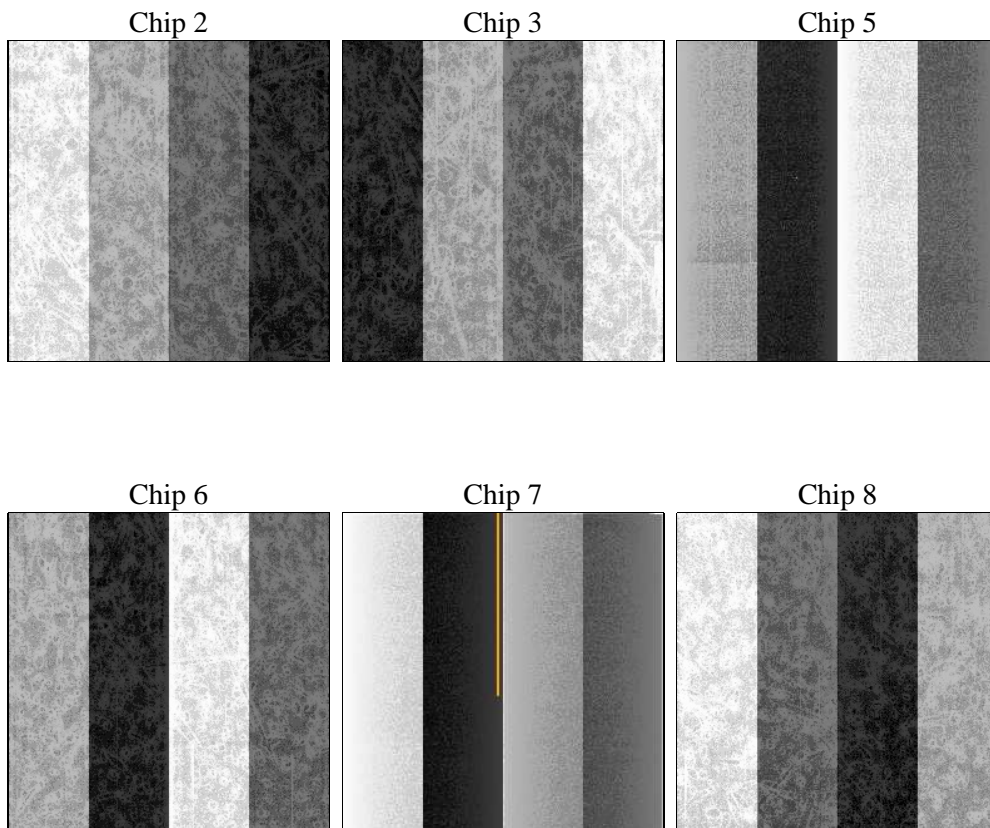
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	46000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	46040.933904529	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	46040.974944532	Sum of GTIs [s]
date	2012-04-27T14:58:21	Date and time of file creation	ontime3	46040.810784519	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	46040.892864525	Sum of GTIs [s]
			ontime6	46034.369803846	Sum of GTIs [s]
			ontime7	46040.933904529	Sum of GTIs [s]
			ontime8	46040.769744515	Sum of GTIs [s]
			l1events	2613413	Number of level 1 events

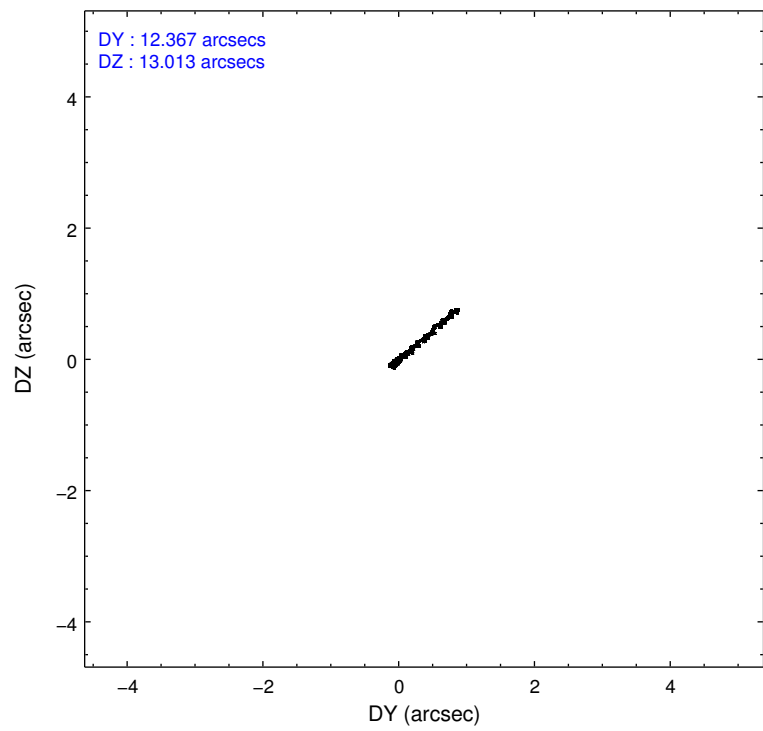
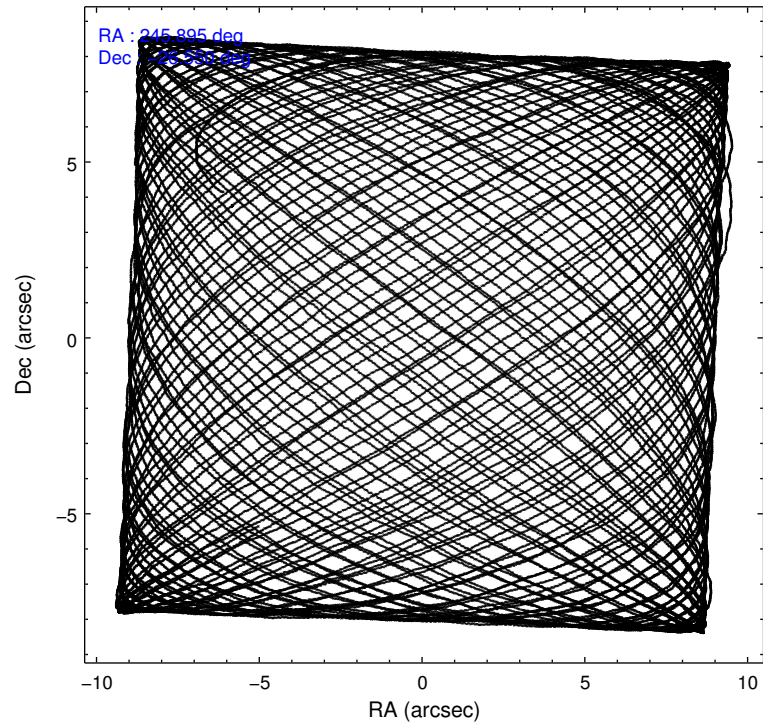
### 2.1.4 Events

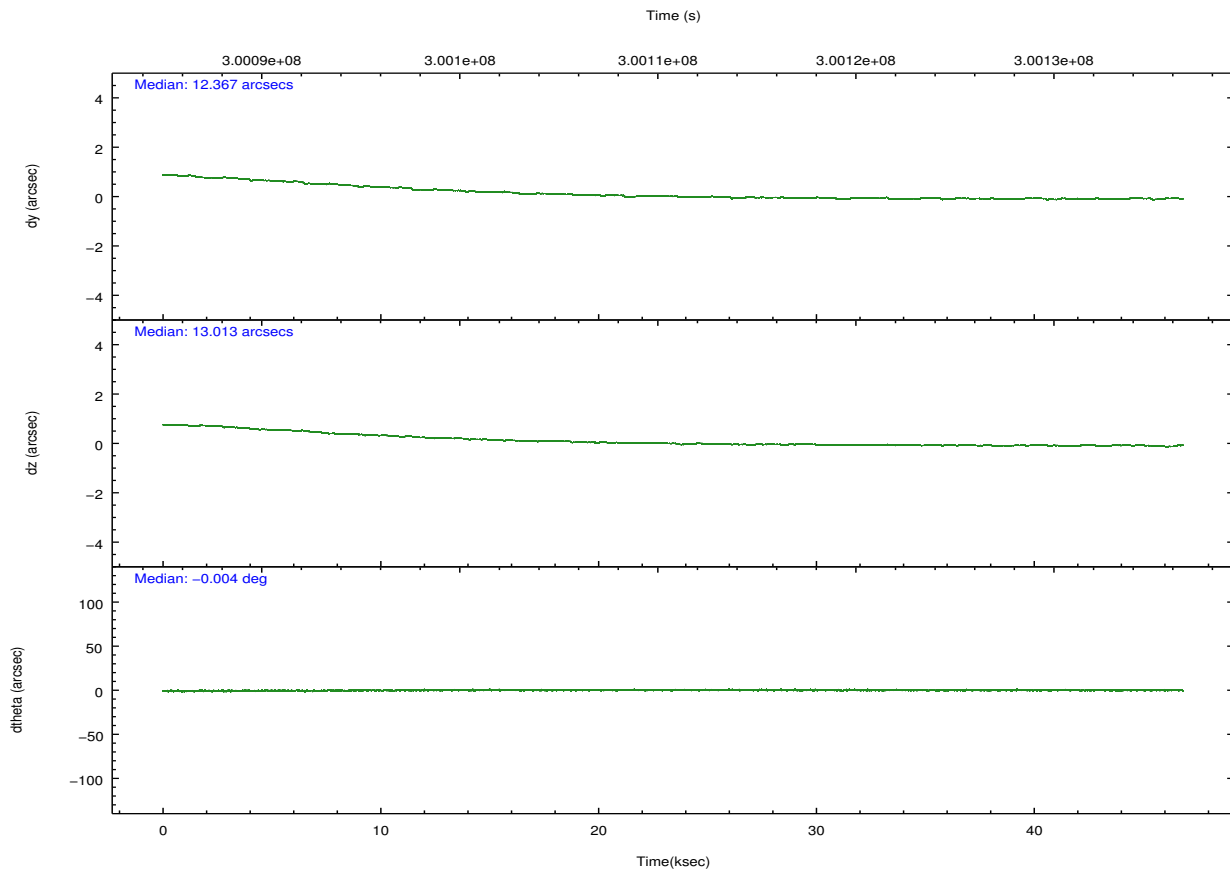
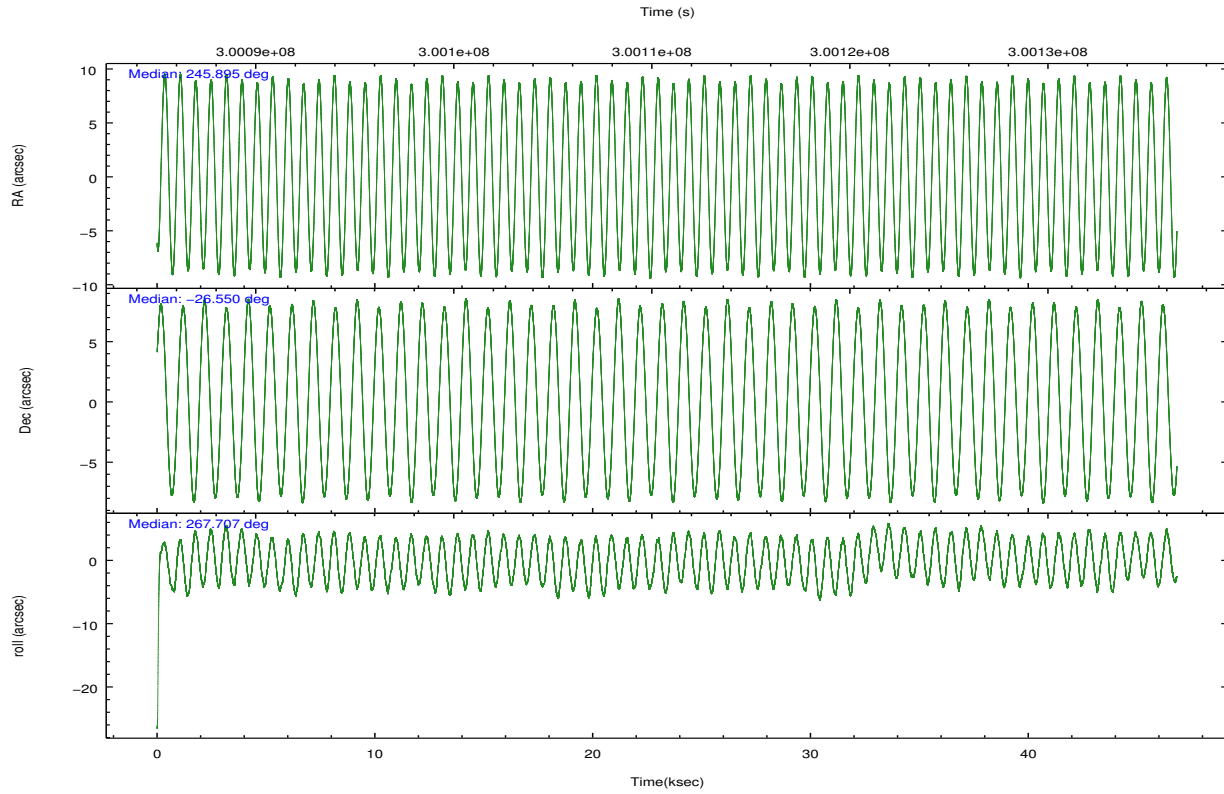
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	403945	366208	562827	378429	416100	485904	grade 0 events	13076	12403	54813	14016	18627	46961
rejected events	367800	331929	270085	339738	224832	356304		3%	3%	9%	3%	4%	9%
rejected %	91%	90%	47%	89%	54%	73%	grade 1 events	224	227	1270	193	512	481
								0%	0%	0%	0%	0%	0%
							grade 2 events	8648	7373	78855	8259	38744	27357
								2%	2%	14%	2%	9%	5%
							grade 3 events	3908	3919	13611	4236	17789	12830
								0%	1%	2%	1%	4%	2%
							grade 4 events	3918	3842	11003	4110	17557	11837
								0%	1%	1%	1%	4%	2%
							grade 5 events	12200	14316	41039	14761	43700	21708
								3%	3%	7%	3%	10%	4%
							grade 6 events	6595	6744	134481	8071	98565	30619
								1%	1%	23%	2%	23%	6%
							grade 7 events	355376	317384	227755	324783	180606	334111
								87%	86%	40%	85%	43%	68%

## 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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	245.880355	245.8949197547966	Subarray requested	NONE	NONE
[deg] Pointing Dec	-26.526177	-26.55020274575325	Alternating exposures requested	N	N
[deg] Pointing Roll	267.543316	267.7064457210881	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	300088186.184000	300086860.14644			
Observation start date	2007-07-06T05:48:41	2007-07-06T05:27:40			
[s] Observation end time (MET)	300134186.184000	300134336.61121			
Observation end date	2007-07-06T18:35:21	2007-07-06T18:38:56			
Read mode	TIMED	TIMED			

## 2.3 Aspect





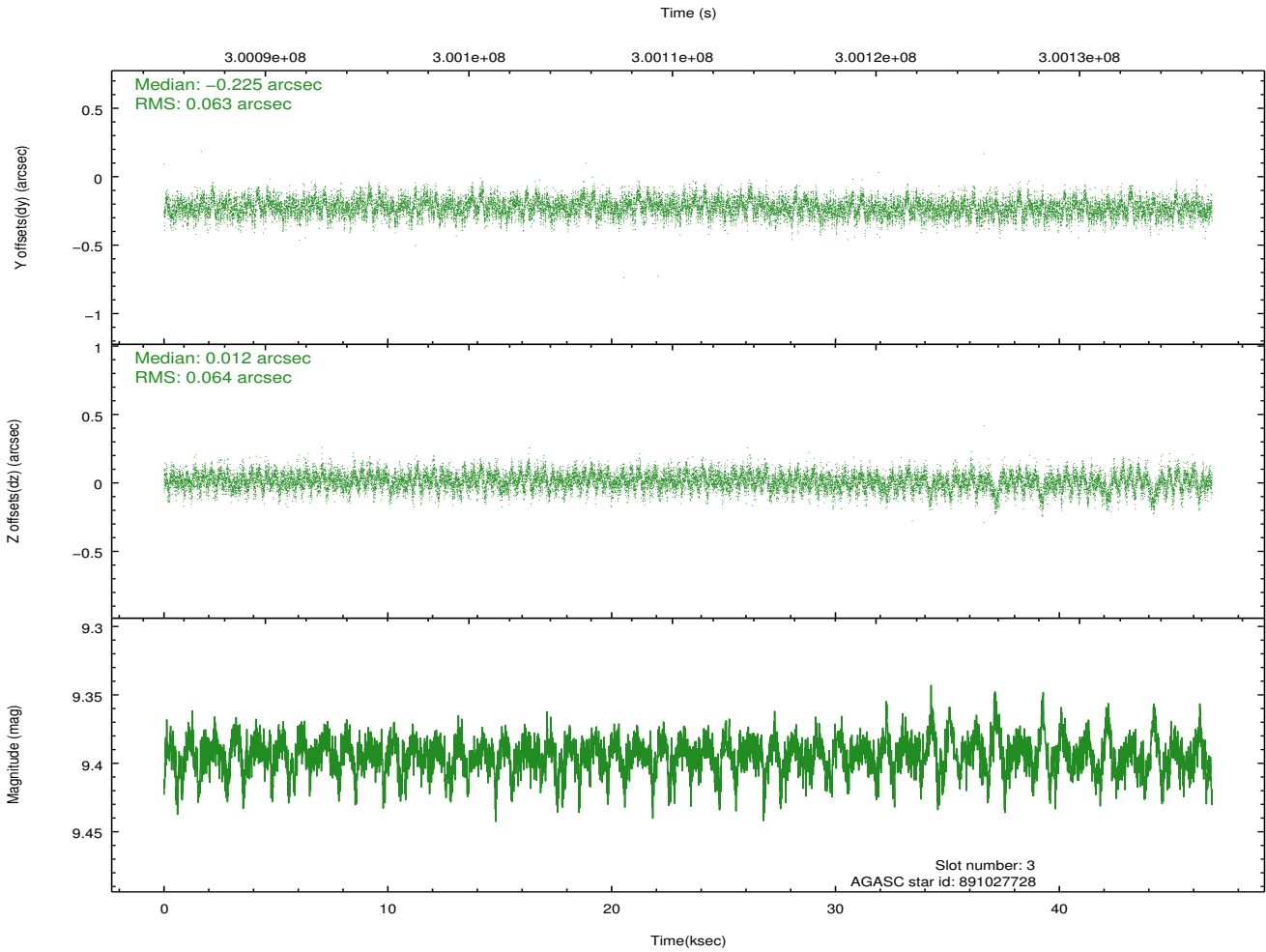
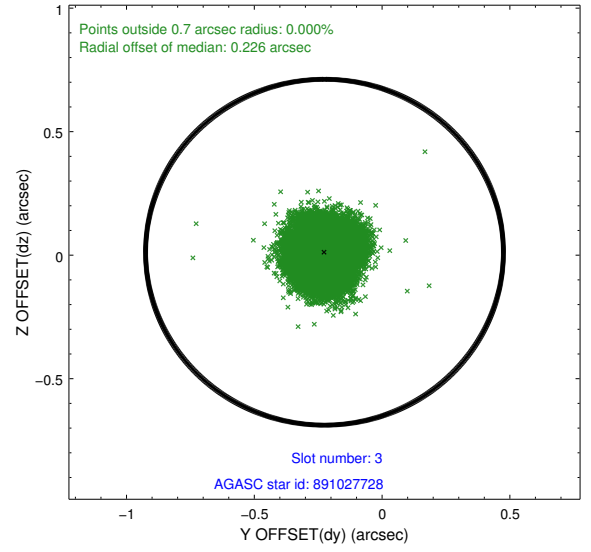
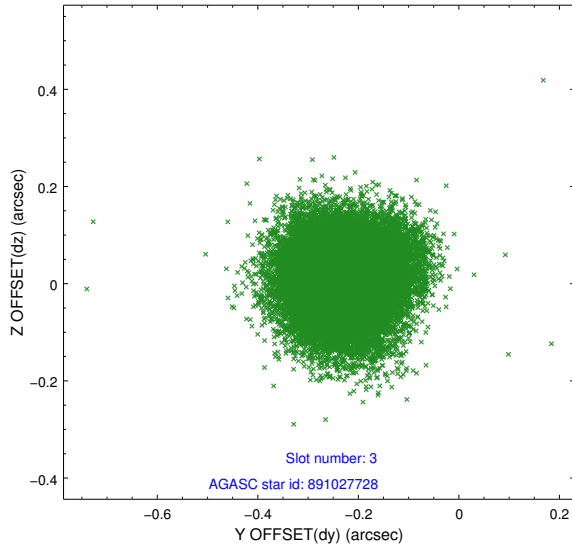
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	11420	-0.024	-0.061	0.010	0.017	0.000000	0.000000	-765.45	-1734.47
1	FID	ACIS-S-4	7.19	11420	0.145	0.028	0.013	0.031	0.000000	0.000000	2148.02	174.10
2	FID	ACIS-S-5	7.23	11420	-0.153	0.041	0.010	0.021	0.000000	0.000000	-1818.42	167.79
3	GUIDE	891027728	9.39	22817	-0.225	0.012	0.095	0.153	245.449689	-25.946465	-2022.73	-1482.04
4	GUIDE	891552712	9.13	22822	0.004	-0.076	0.100	0.158	245.946545	-26.271054	-926.30	174.16
5	GUIDE	891561680	7.81	22838	-0.028	0.057	0.088	0.139	246.126760	-27.151147	2215.26	885.22
6	GUIDE	891561936	9.41	22829	0.265	0.015	0.082	0.133	245.755070	-26.391852	-464.85	-424.18
7	GUIDE	891027520	9.70	22797	-0.021	-0.006	0.138	0.209	246.024674	-26.131311	-1439.73	405.45

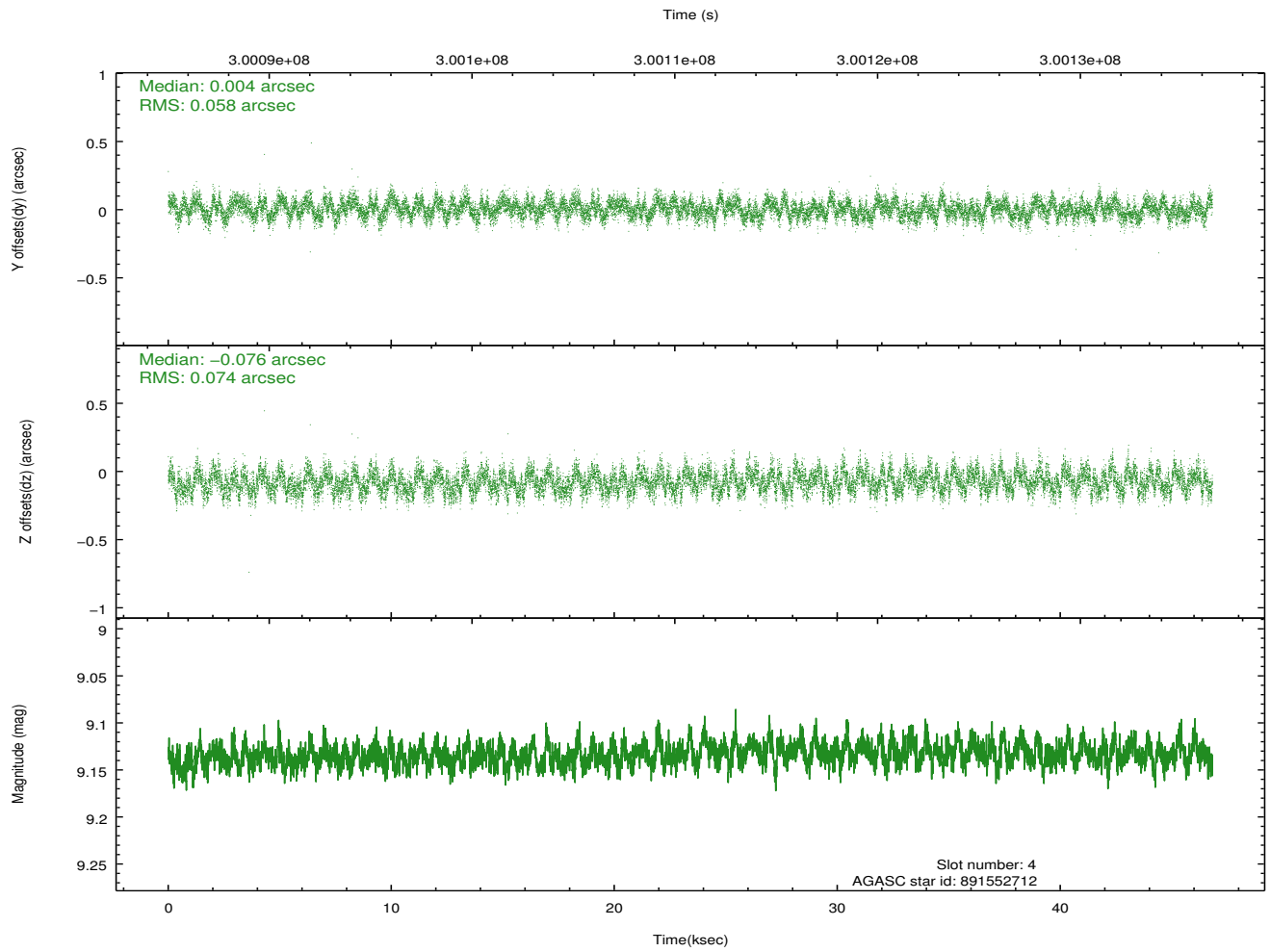
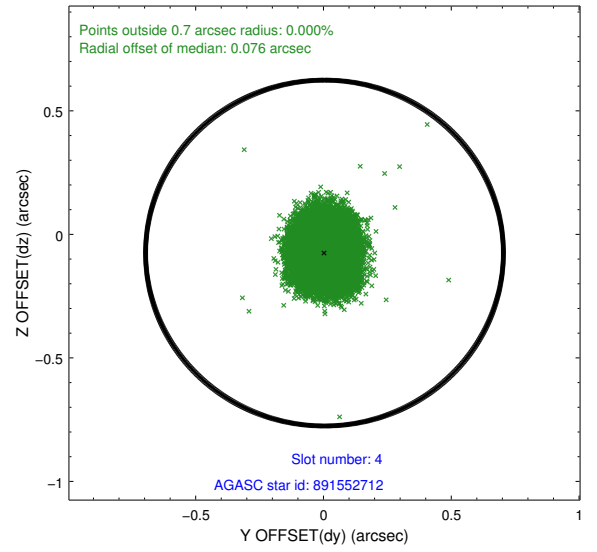
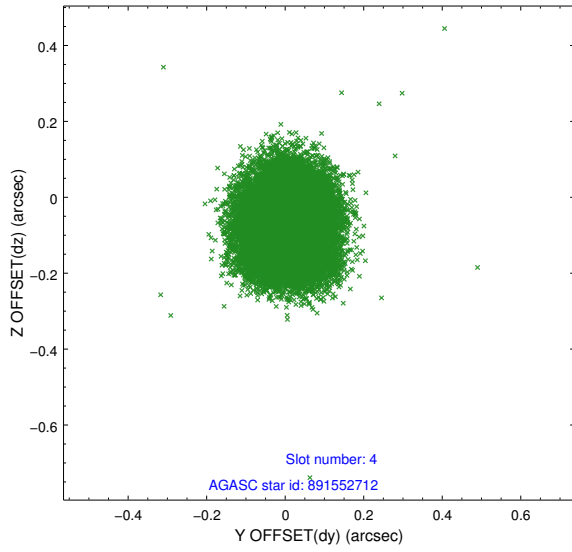
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## 2.4 Star Slots

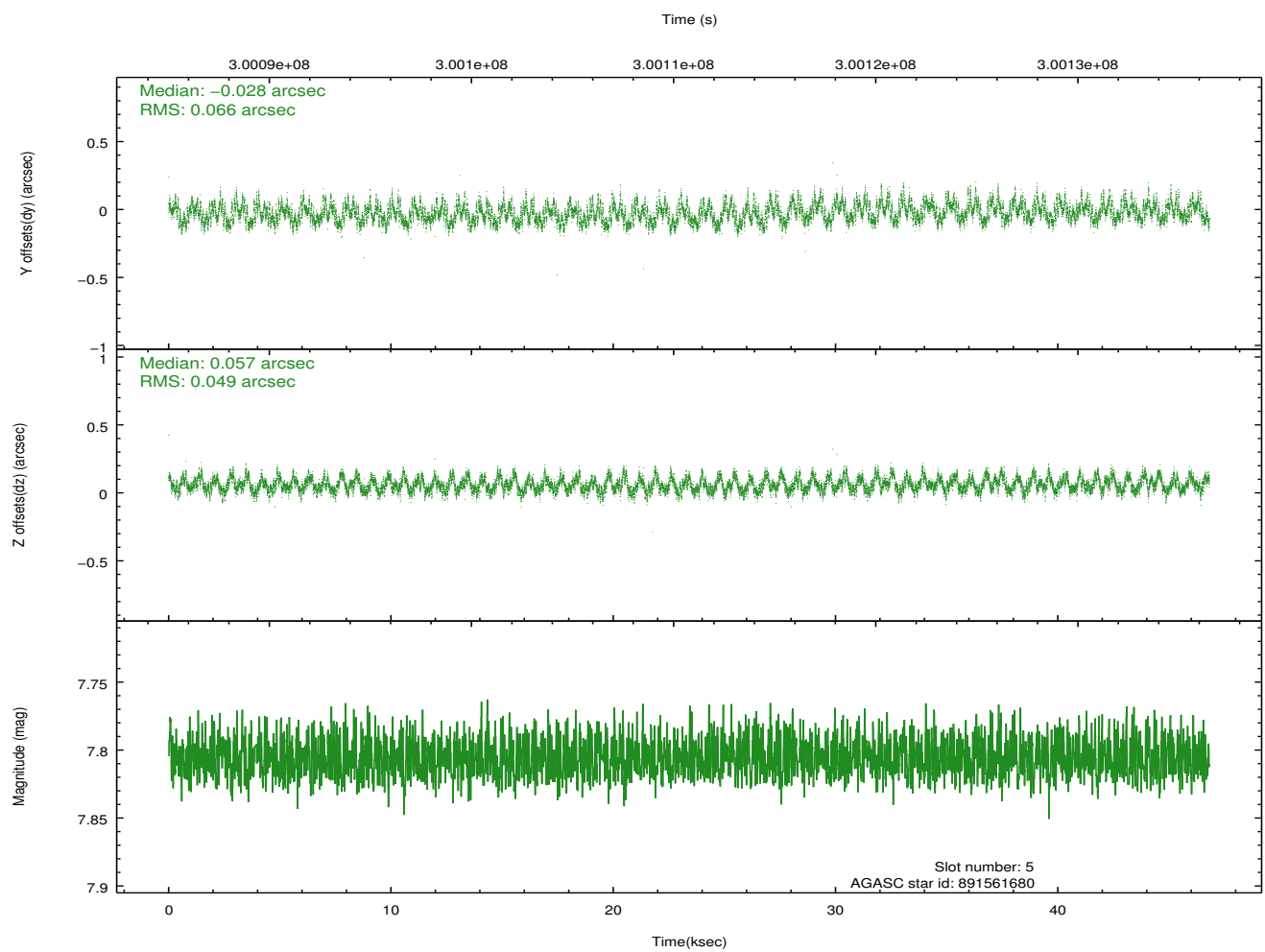
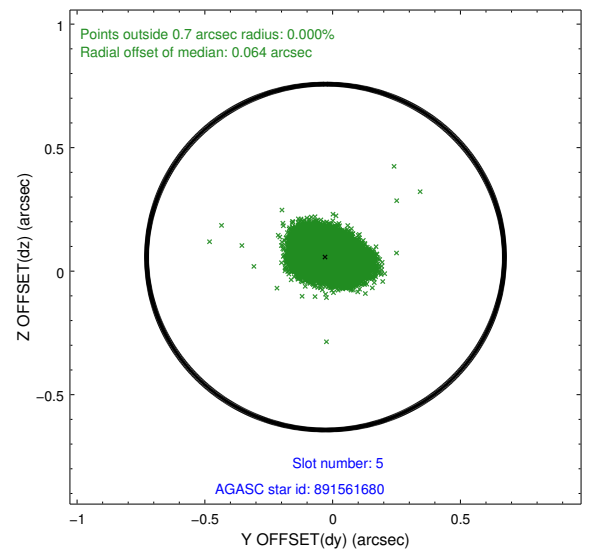
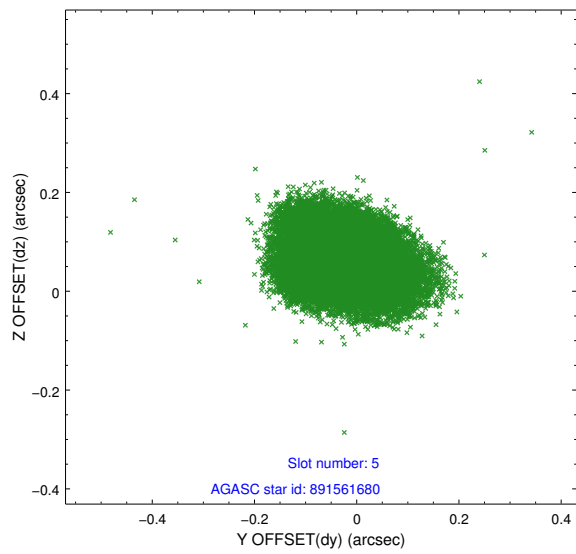
### 2.4.1 Slot 3



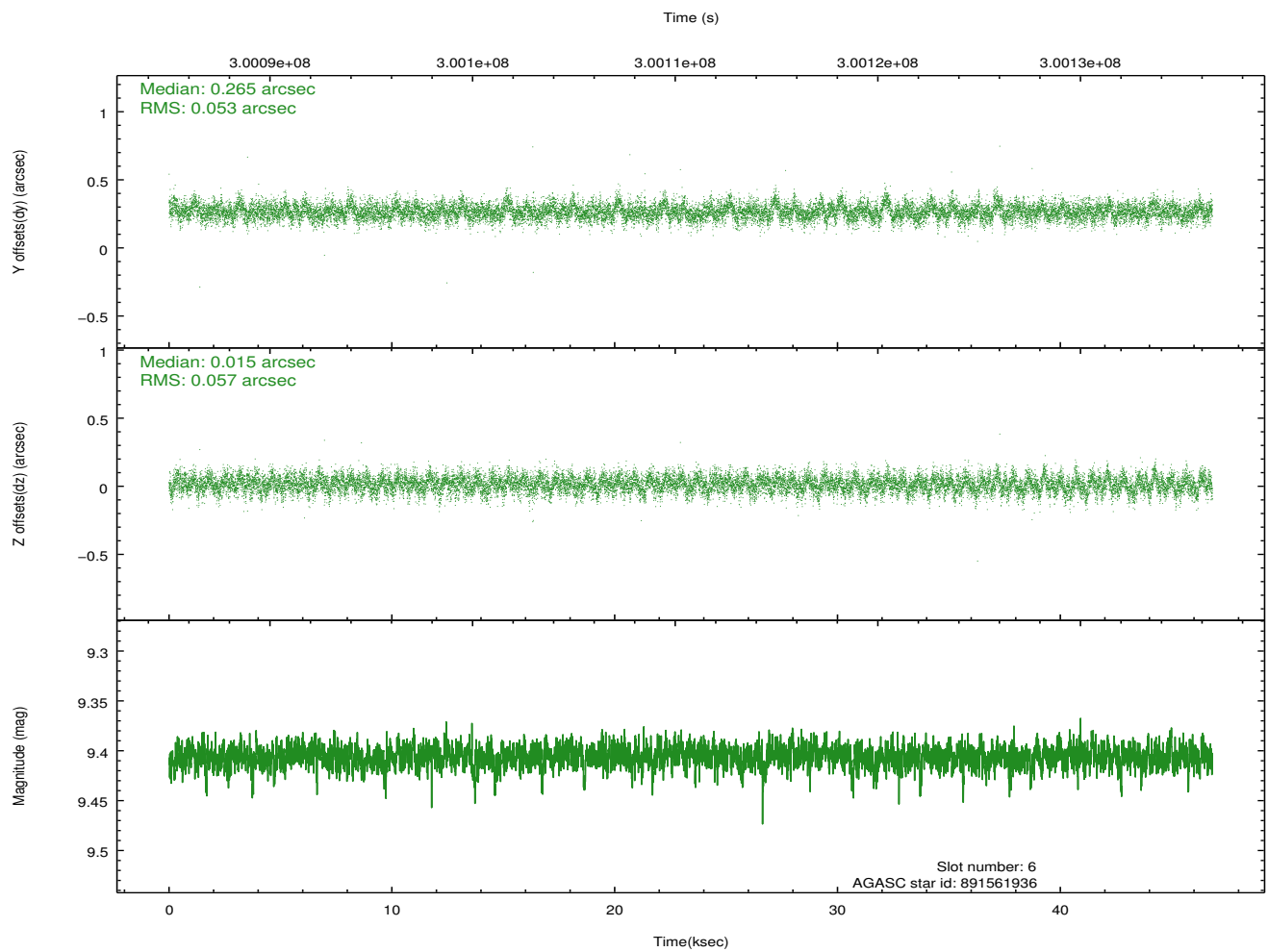
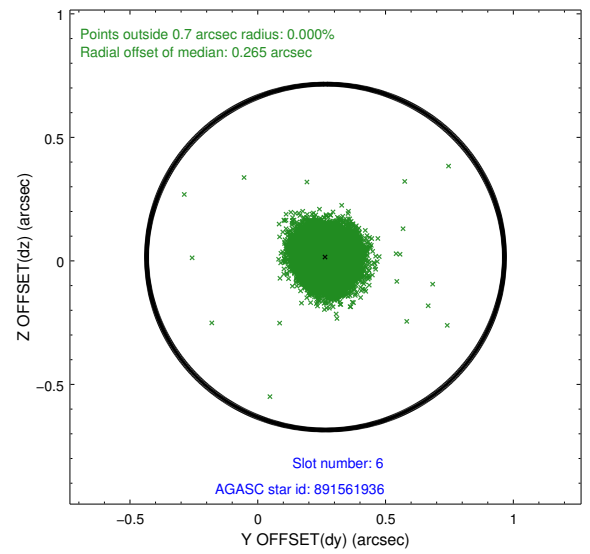
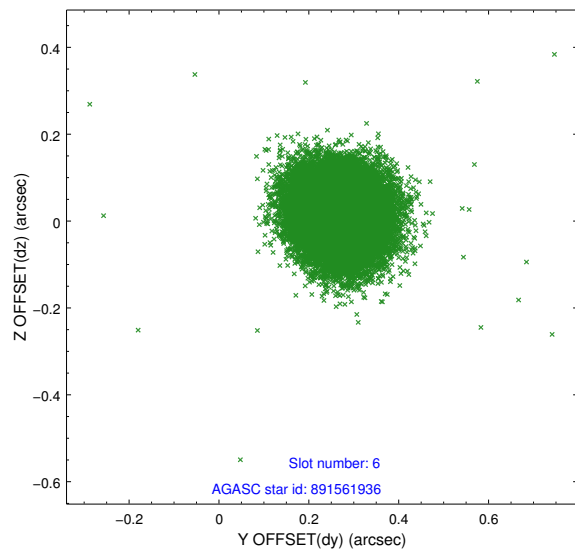
## 2.4.2 Slot 4



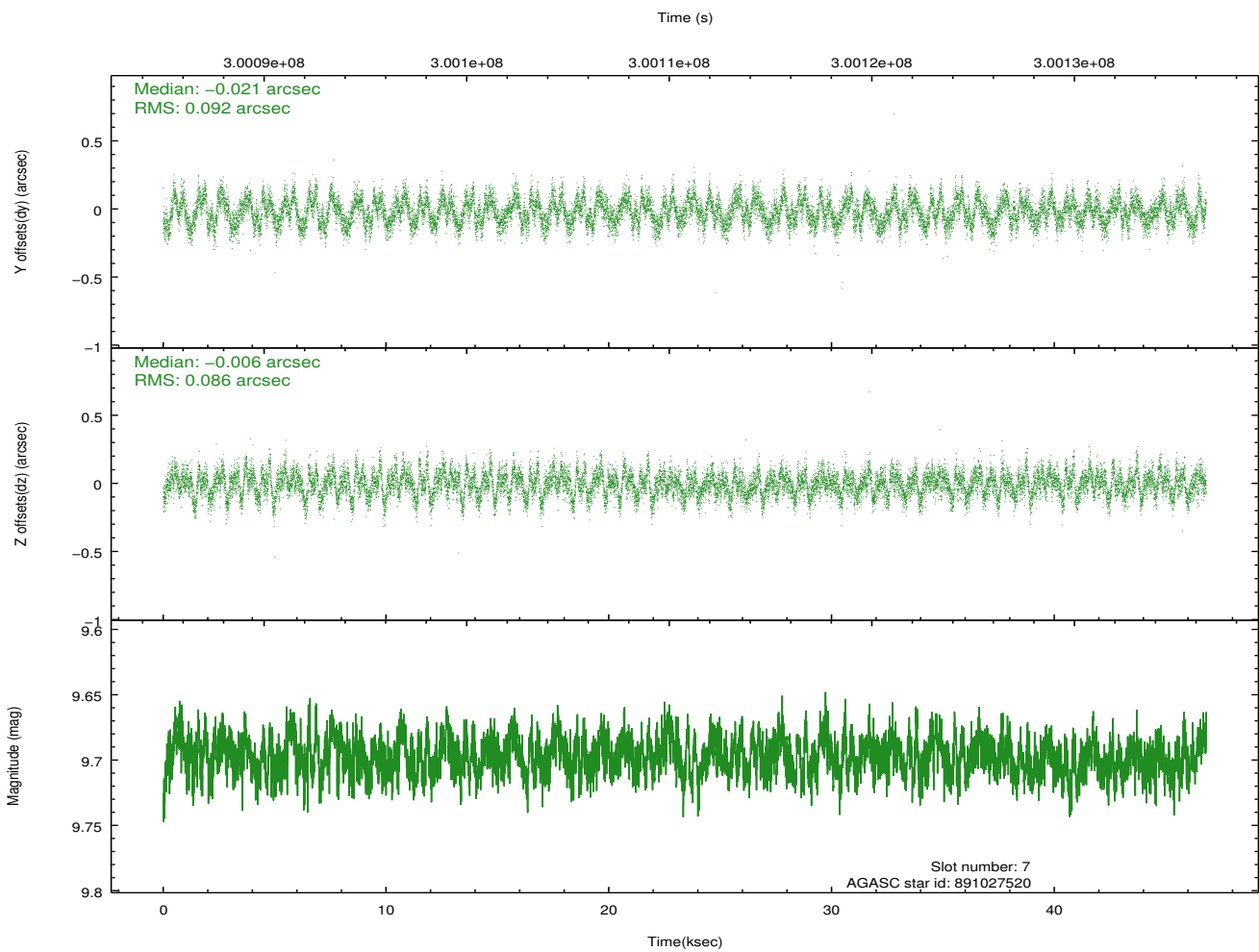
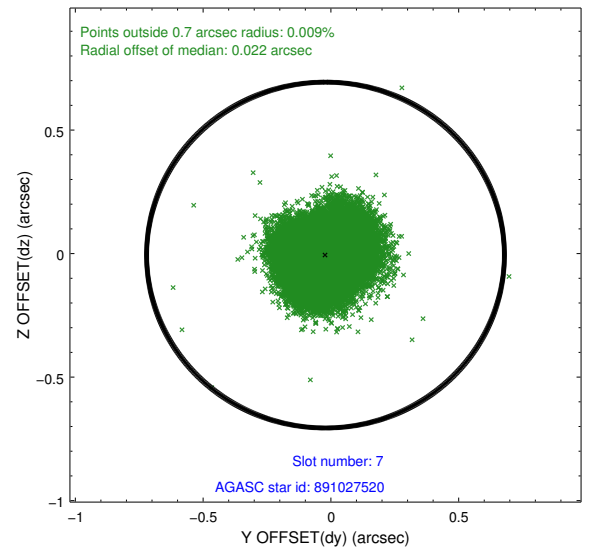
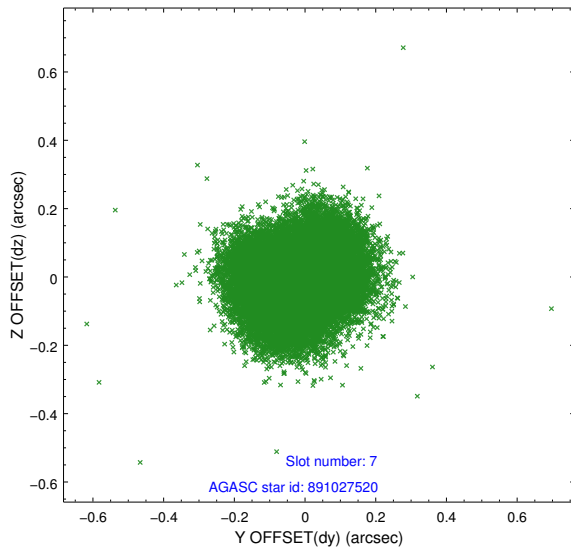
### 2.4.3 Slot 5



## 2.4.4 Slot 6

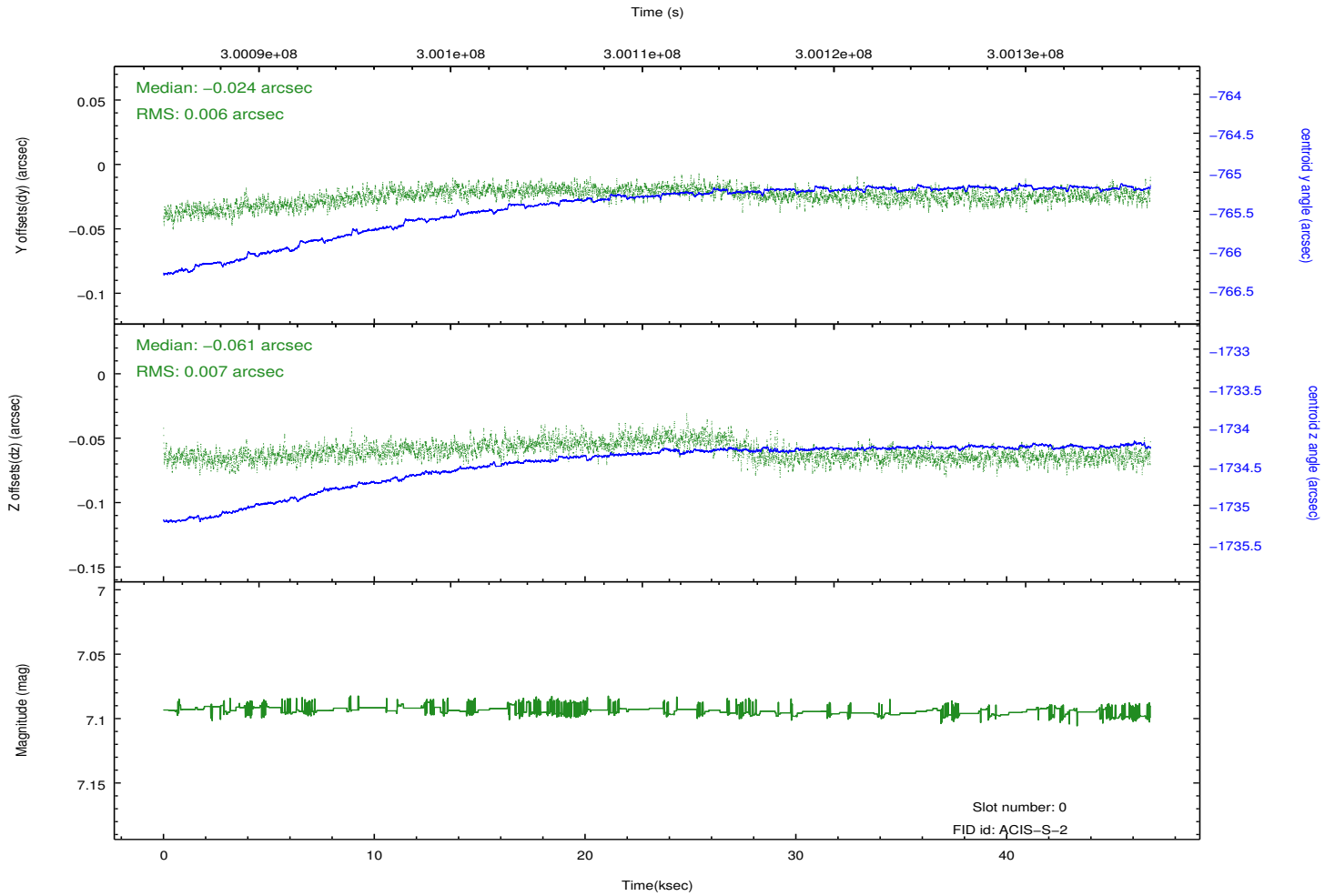
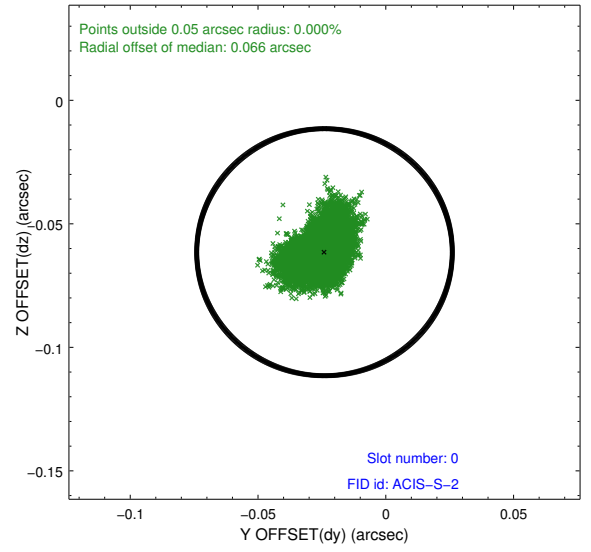
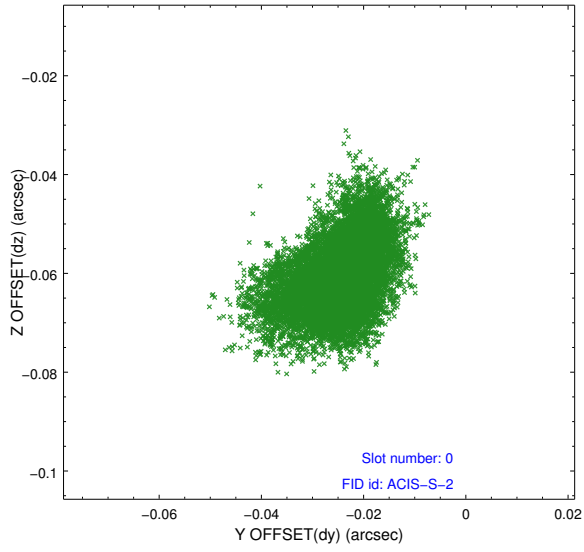


## 2.4.5 Slot 7

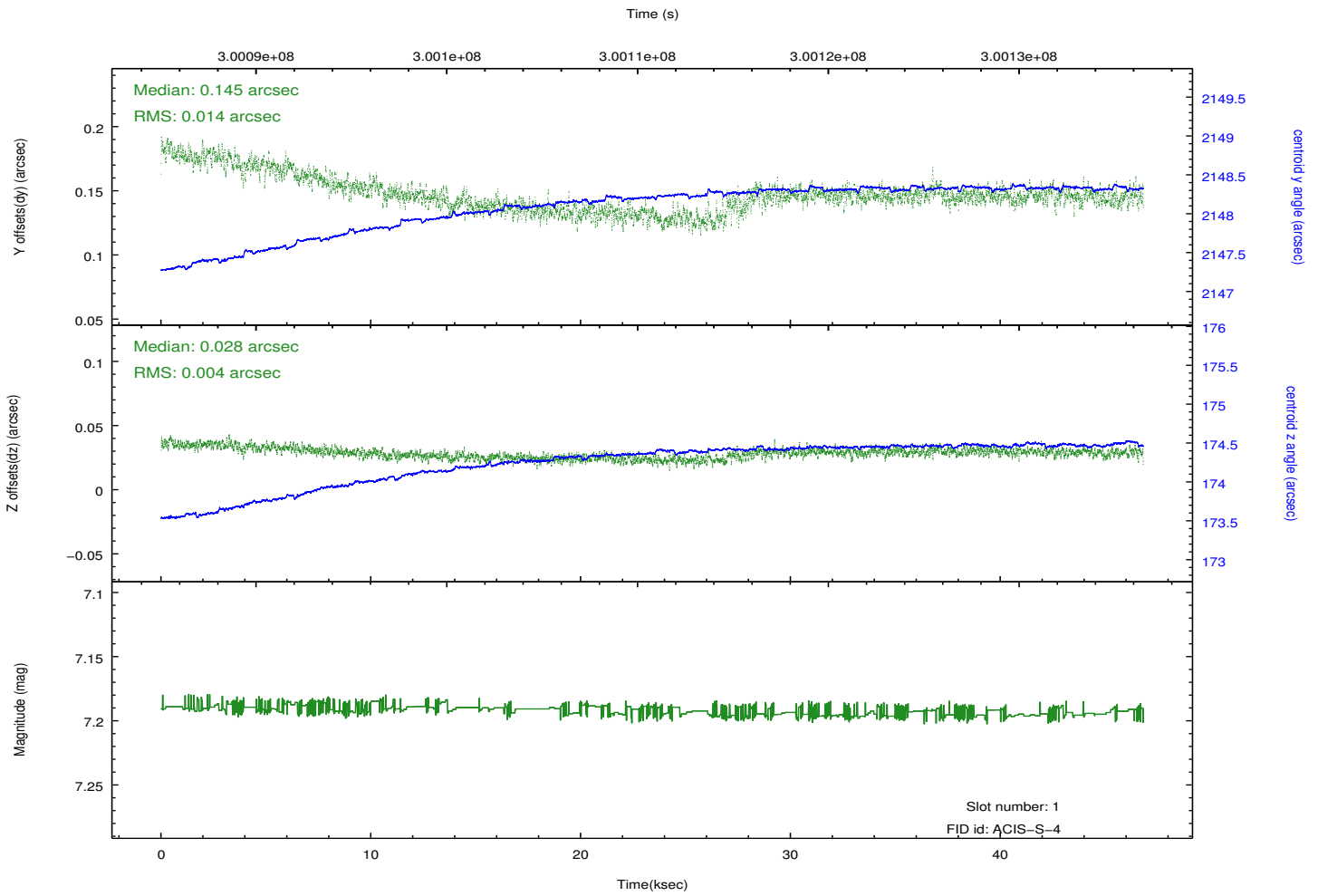
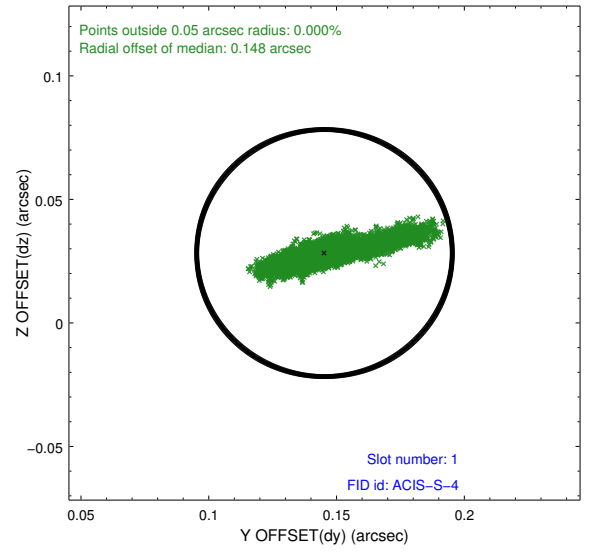
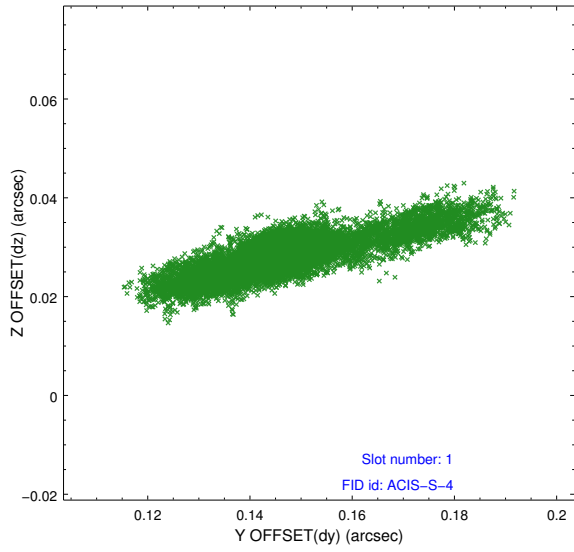


## 2.5 FID Slots

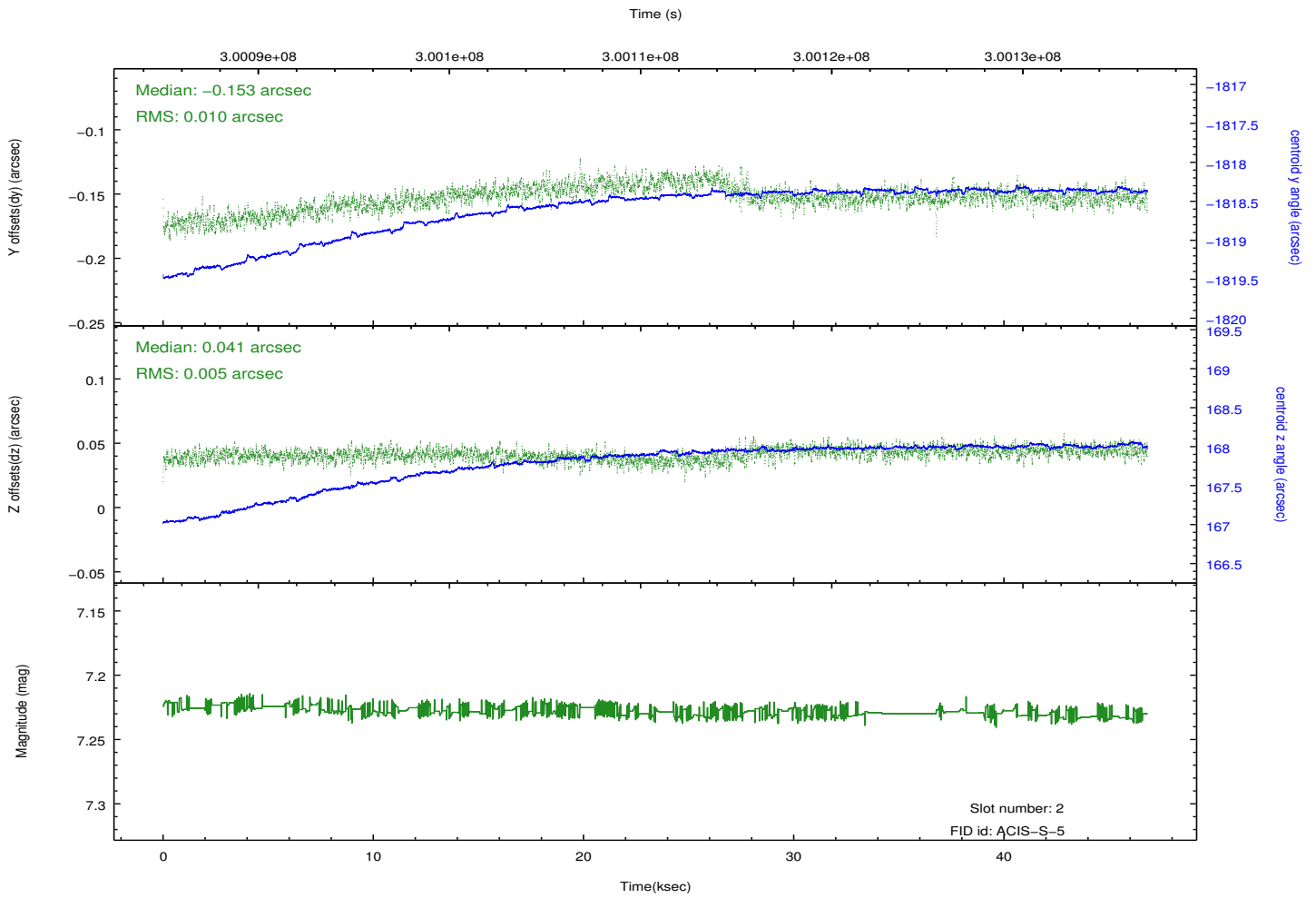
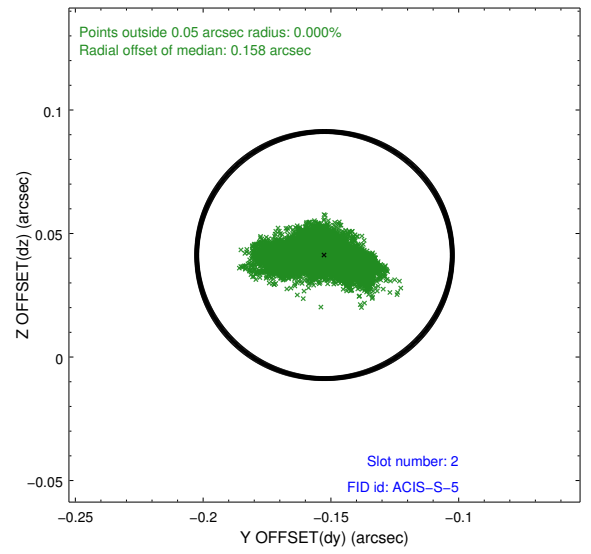
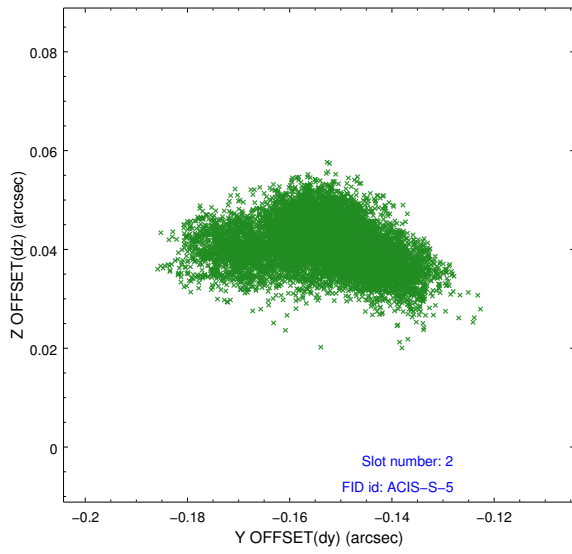
### 2.5.1 Slot 0



## 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)	2012.04.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	46.0415998

## A.2 Comments