

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2069 - L2 Version 3  
Chandra X-Ray Center

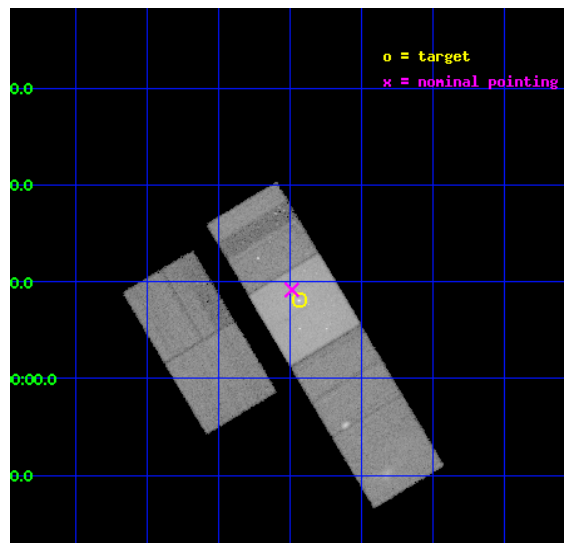
L2 Processing Date : Sep 3 2012

## 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

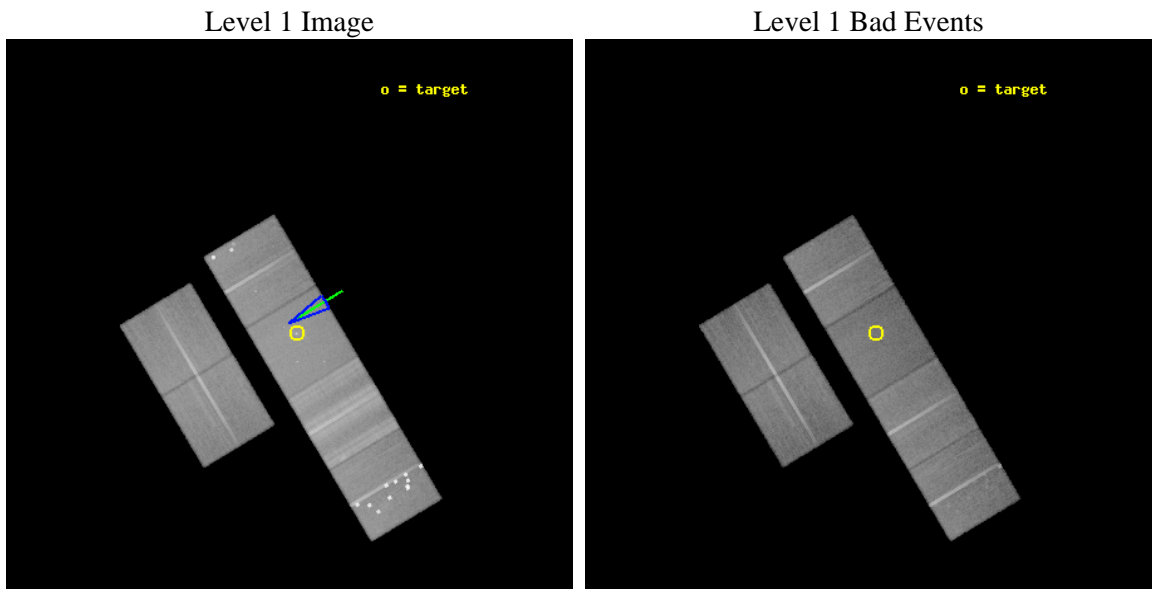
seq_num	600203	Sequence number
obs_id	2069	Observation id
title	YOUNG ELLIPTICAL GALAXIES AND THE EVOLUTION OF THE HOT INTERSTELLAR MEDIUM	Proposal title
observer	Prof. Thomas Statler	Principal investigator
object	NGC 1700	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	74.234583	Observer's specified target RA [deg]
dec_targ	-4.864444	Observer's specified target Dec [deg]
ra_nom	74.246887744874	Nominal RA [deg]
dec_nom	-4.8474666656243	Nominal Dec [deg]
roll_nom	59.115671626167	Nominal Roll [deg]
revision	3	Processing version of data
ontime	43353.283937797	Sum of GTIs [s]
livetime	42804.318552363	Livetime [s]
ontime2	43353.119777799	Sum of GTIs [s]
ontime3	43353.201857805	Sum of GTIs [s]
ontime6	43353.242897794	Sum of GTIs [s]
ontime7	43353.283937797	Sum of GTIs [s]
ontime8	43353.160817802	Sum of GTIs [s]
ontime9	43353.3249778	Sum of GTIs [s]
l2events	450979	Number of level 2 events



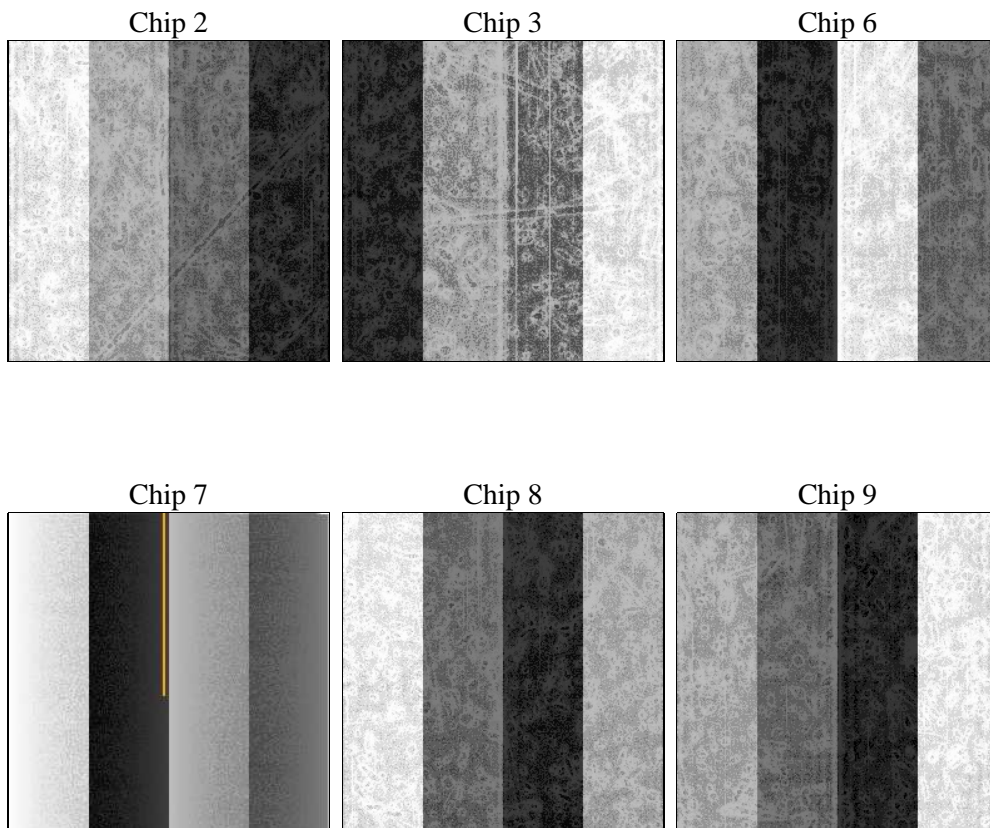
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	43400.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	43353.283937797	Sum of GTIs [s]
caldbver	4.5.1.1	&#160	ontime2	43353.119777799	Sum of GTIs [s]
date	2012-09-03T04:16:57	Date and time of file creation	ontime3	43353.201857805	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	43353.242897794	Sum of GTIs [s]
			ontime7	43353.283937797	Sum of GTIs [s]
			ontime8	43353.160817802	Sum of GTIs [s]
			ontime9	43353.3249778	Sum of GTIs [s]
			l1events	2355315	Number of level 1 events

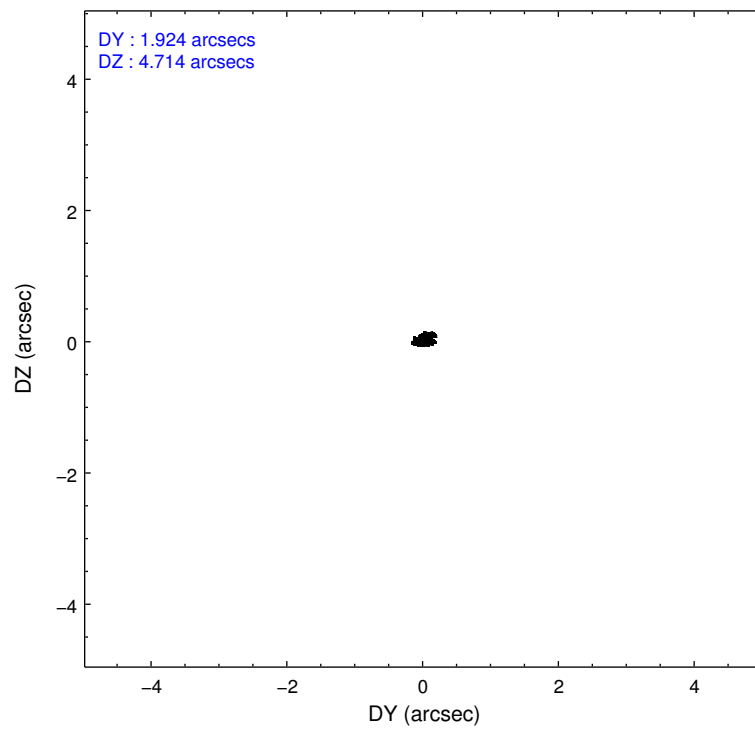
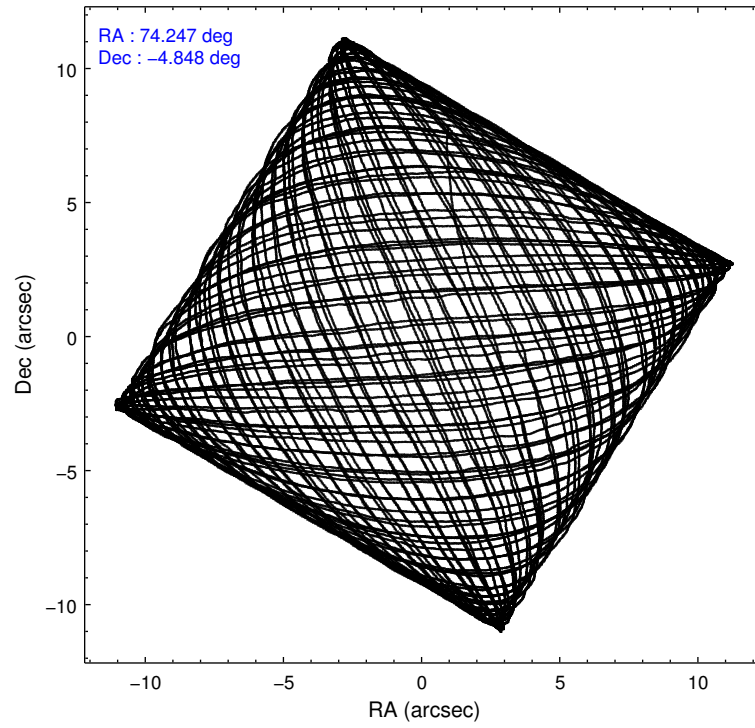
### 2.1.4 Events

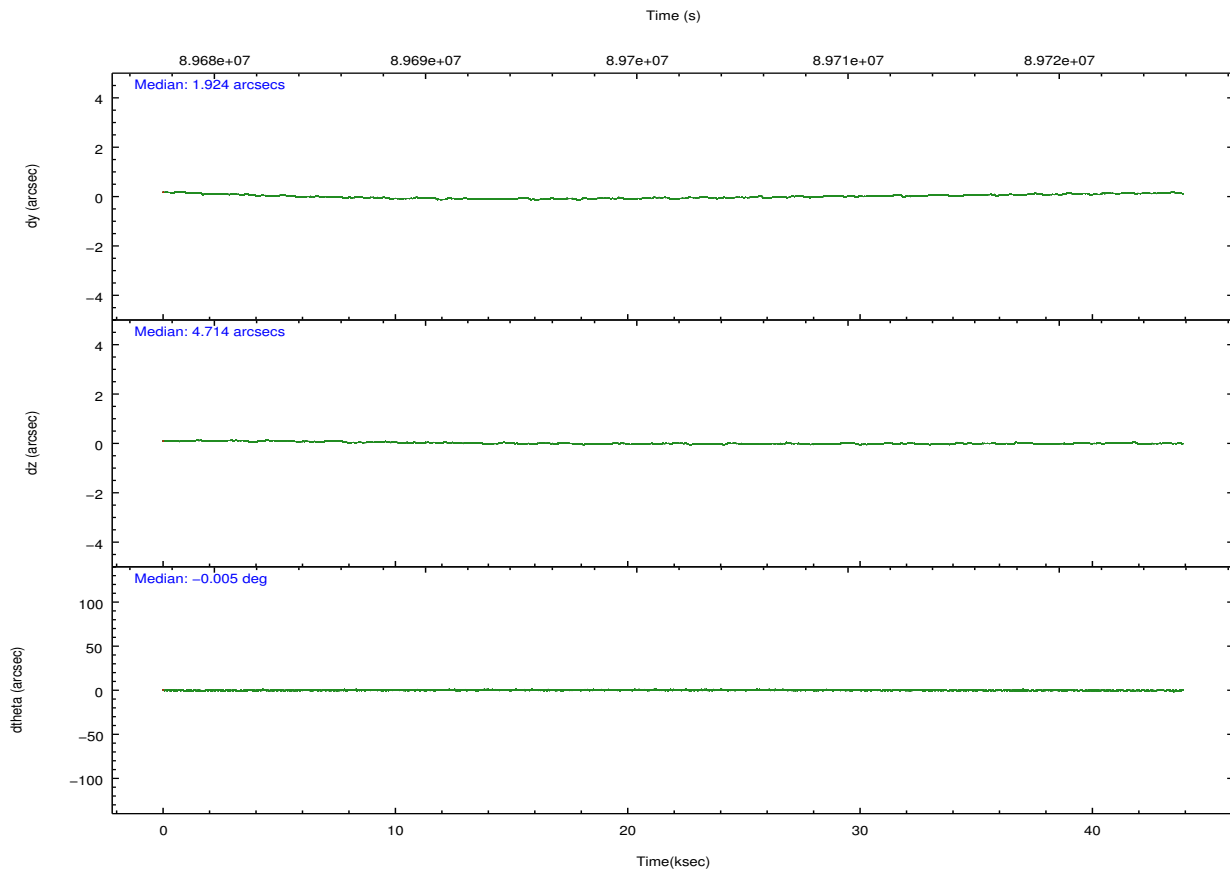
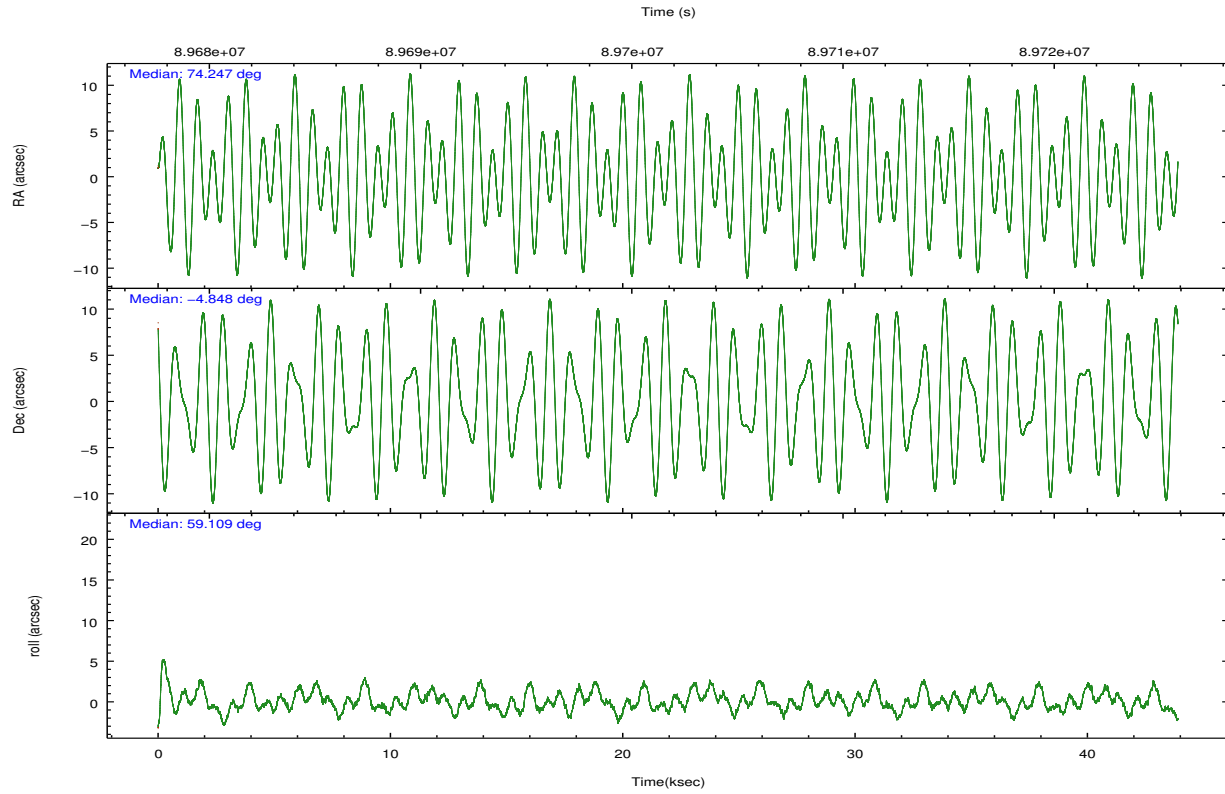
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8	ccd 9		ccd 2	ccd 3	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	313655	308942	346116	369863	551894	464845	grade 0 events	26071	23639	47942	19254	101990	153300
rejected events	256277	251236	263958	192758	291331	260968		8%	7%	13%	5%	18%	32%
rejected %	81%	81%	76%	52%	52%	56%	grade 1 events	166	163	326	428	794	797
								0%	0%	0%	0%	0%	0%
							grade 2 events	13998	16681	16498	35172	35434	19736
								4%	5%	4%	9%	6%	4%
							grade 3 events	2938	3161	3427	15663	44573	3836
								0%	1%	0%	4%	8%	0%
							grade 4 events	3795	3455	3568	15633	39809	3657
								1%	1%	1%	4%	7%	0%
							grade 5 events	8595	9659	10917	32138	14759	12174
								2%	3%	3%	8%	2%	2%
							grade 6 events	10581	10775	10734	91397	38764	23362
								3%	3%	3%	24%	7%	5%
							grade 7 events	247511	241409	252704	160178	275771	247983
								78%	78%	73%	43%	49%	53%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-236789	ACIS-236789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
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	74.246676	74.24688774487434	Subarray requested	NONE	NONE
[deg] Pointing Dec	-4.874811	-4.847466665624268	Alternating exposures requested	N	N
[deg] Pointing Roll	58.959027	59.11567162616691	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	60.000000	60.000000			
[deg] Roll tolerance	10.000000	10.000000			
Roll constraint allows 180D rotation	N	N			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.145094680475			
[mm] SIM translation stage offset	0	0.01257209746719923			
[s] Observation start time (MET)	89680265.184000	89679159.072375			
Observation start date	2000-11-03T23:10:01	2000-11-03T22:52:39			
[s] Observation end time (MET)	89723665.184000	89724419.48658399			
Observation end date	2000-11-04T11:13:21	2000-11-04T11:26:59			
Read mode	TIMED	TIMED			

## 2.3 Aspect



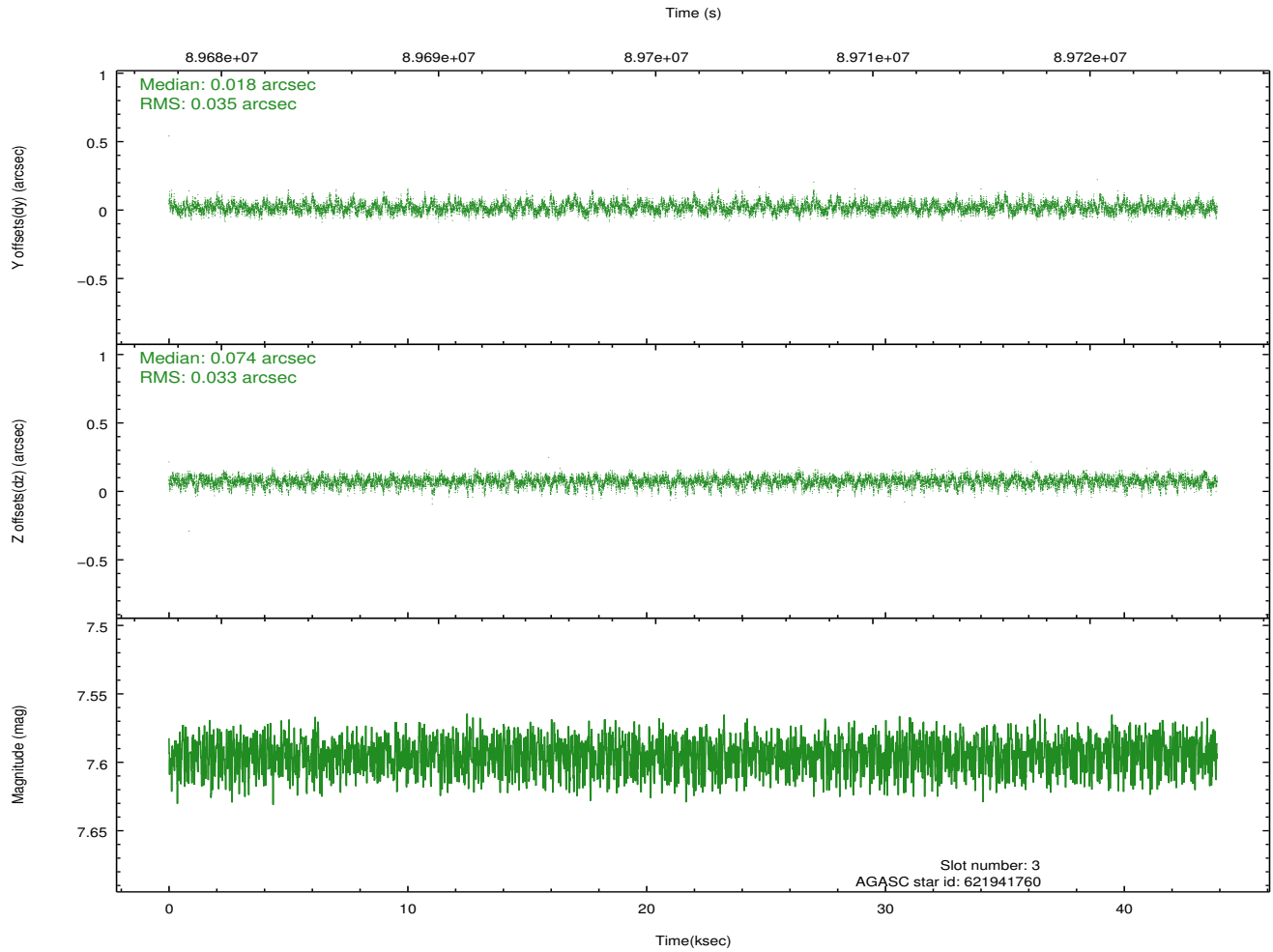
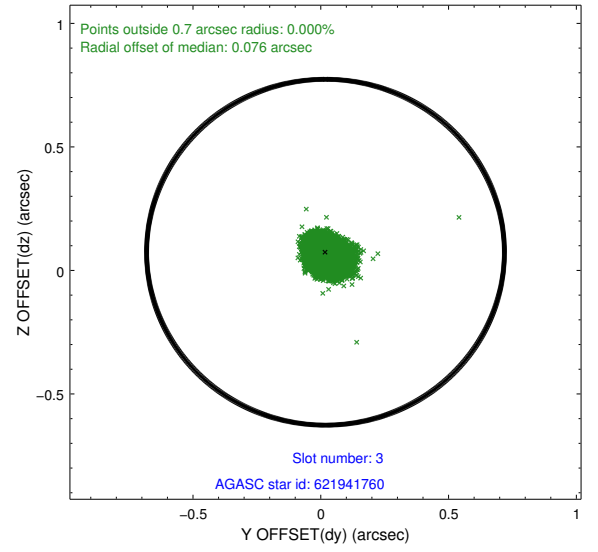
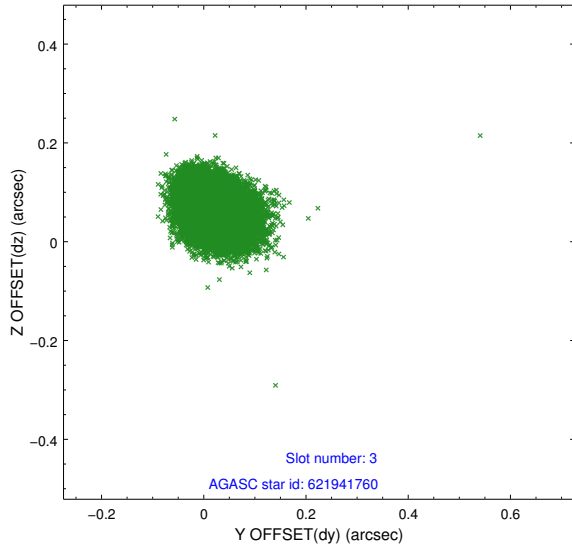


### Slot Statistics

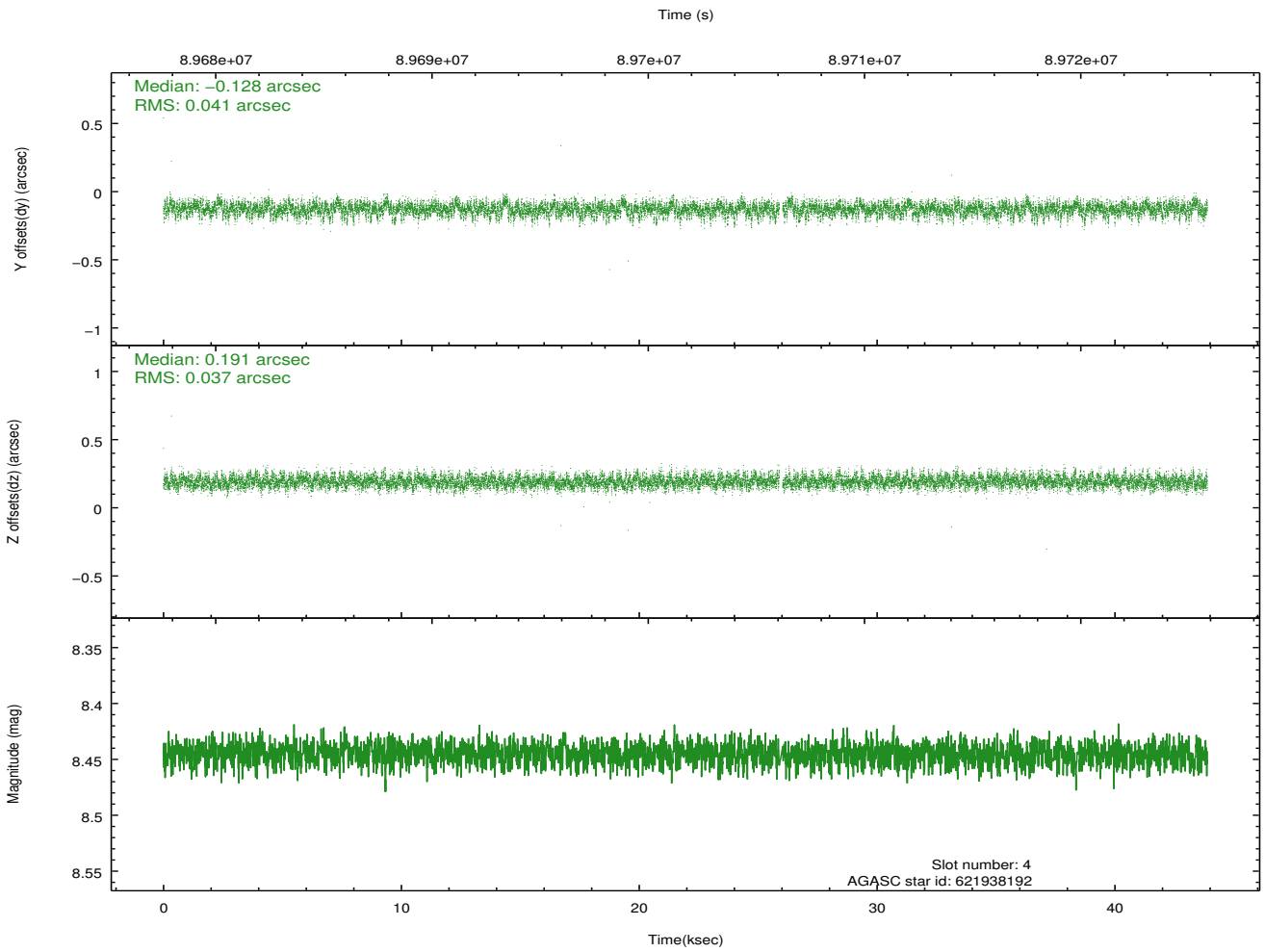
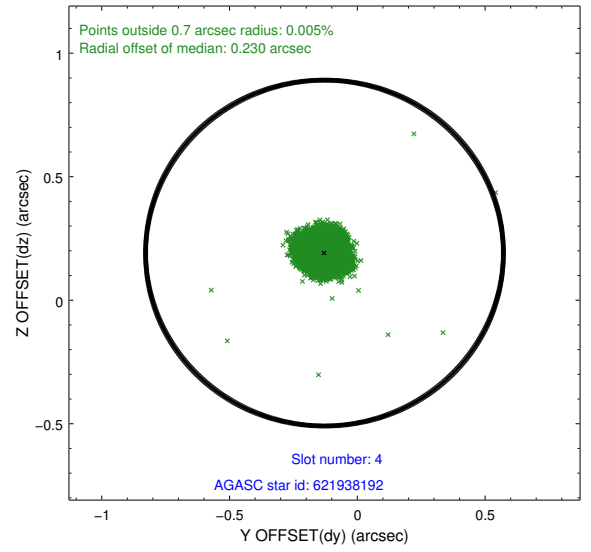
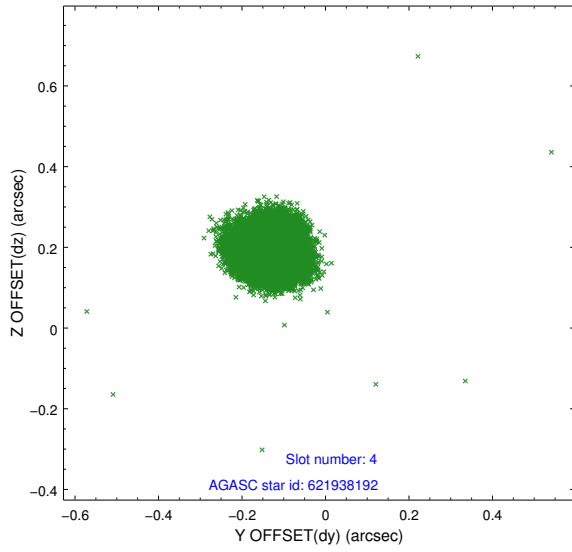
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	10705	-0.037	-0.012	0.006	0.011	0.000000	0.000000	-754.56	-1725.75
1	FID	ACIS-S-4	7.21	10704	-0.008	0.021	0.006	0.010	0.000000	0.000000	2158.72	182.80
2	FID	ACIS-S-5	7.24	10704	0.014	-0.001	0.007	0.011	0.000000	0.000000	-1807.37	176.41
3	GUIDE	621941760	7.59	21410	0.018	0.074	0.051	0.086	74.451594	-4.654954	1057.19	-221.49
4	GUIDE	621938192	8.45	21340	-0.128	0.191	0.058	0.093	74.954040	-4.702023	1840.68	-1853.83
5	GUIDE	621941872	8.41	21412	0.064	-0.097	0.067	0.110	74.186374	-4.781099	177.56	359.40
6	GUIDE	621943896	8.32	21407	0.103	0.060	0.060	0.100	74.020348	-5.322840	-1800.30	-136.54
7	GUIDE	621942448	9.51	21404	-0.058	-0.226	0.110	0.169	73.817145	-4.339431	855.48	2314.85

## 2.4 Star Slots

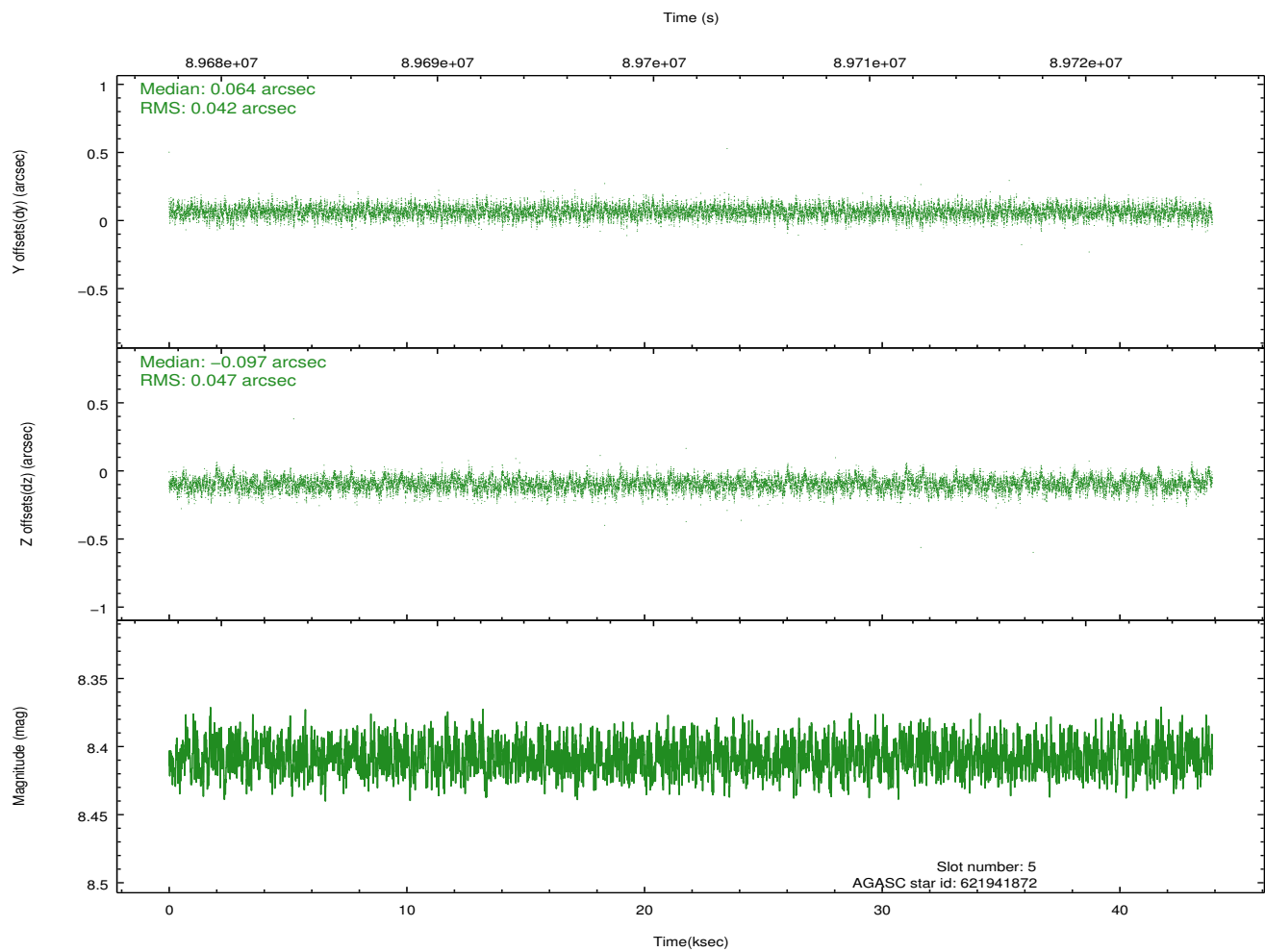
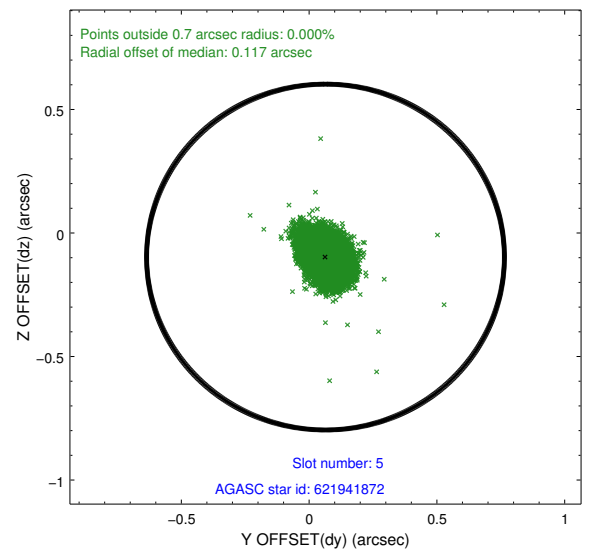
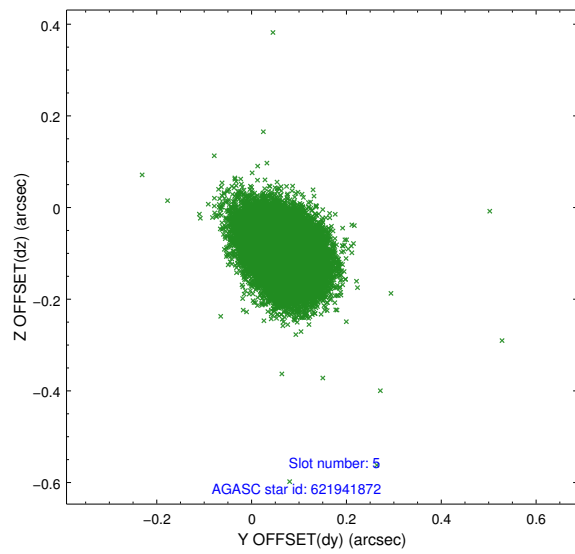
### 2.4.1 Slot 3



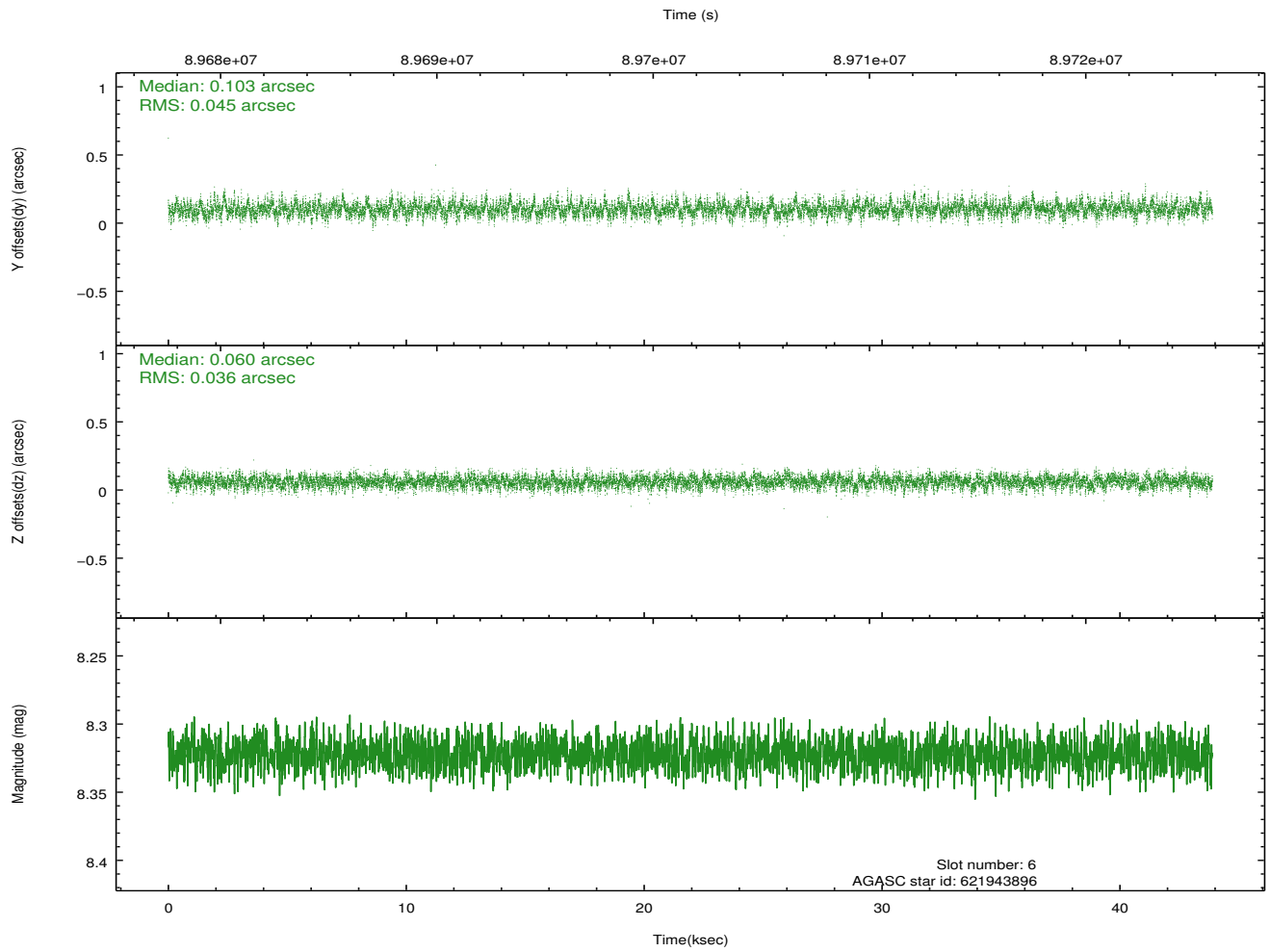
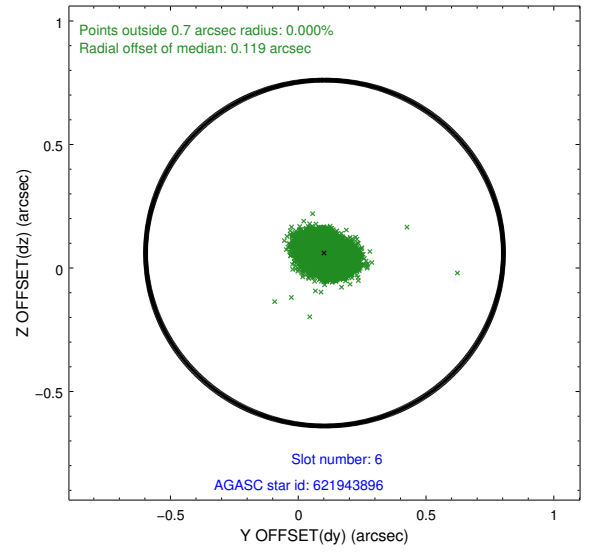
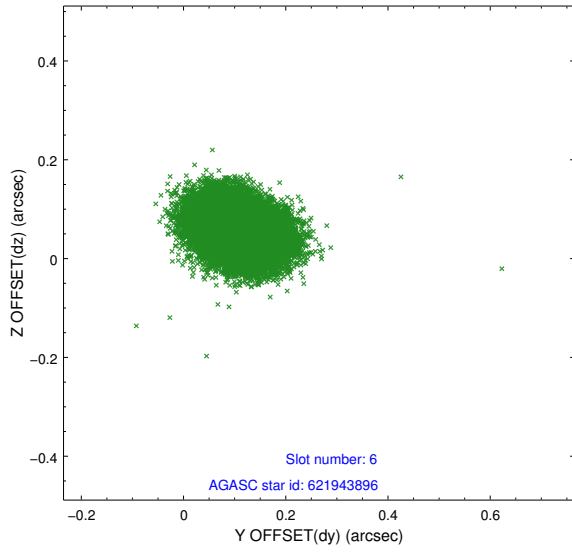
### 2.4.2 Slot 4



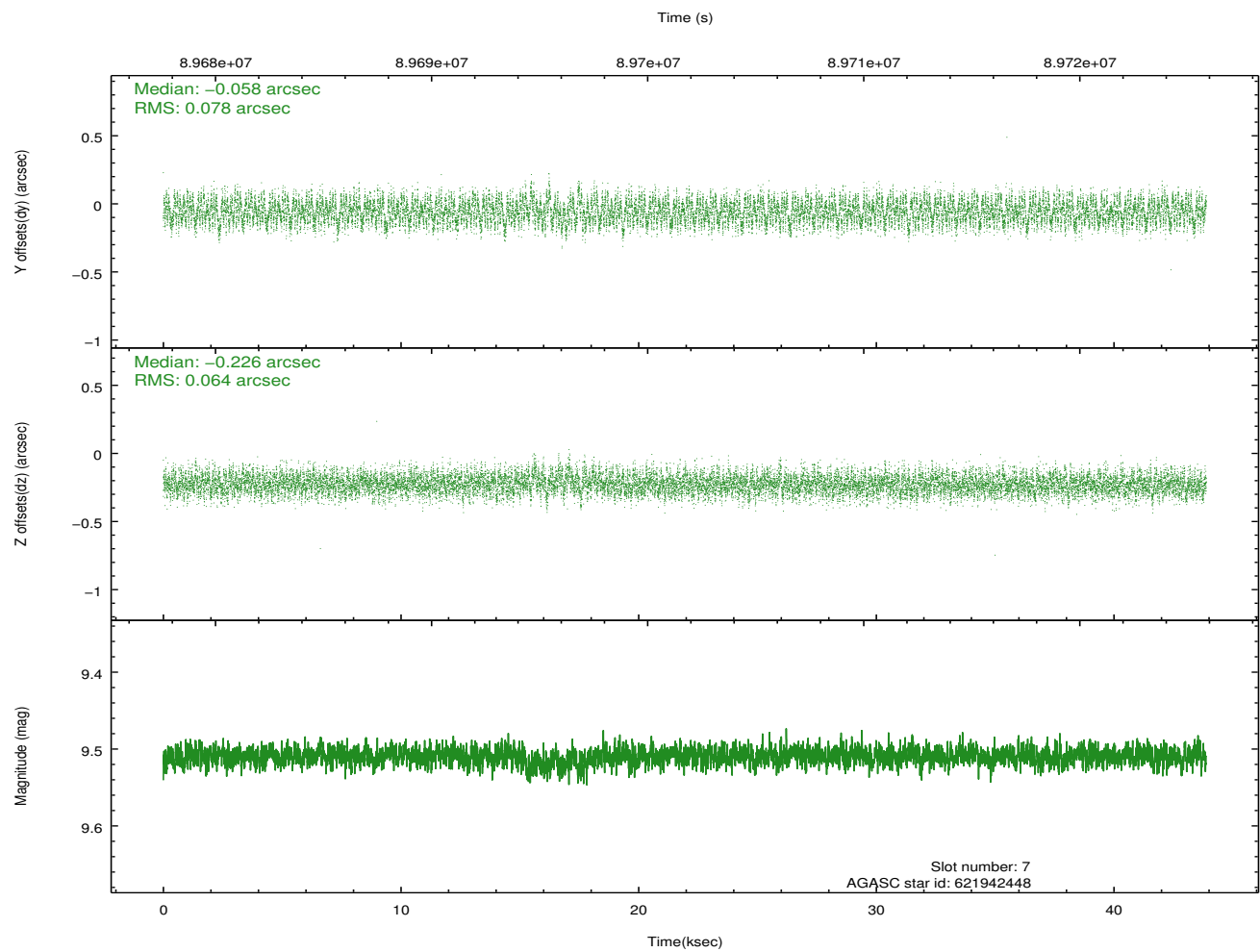
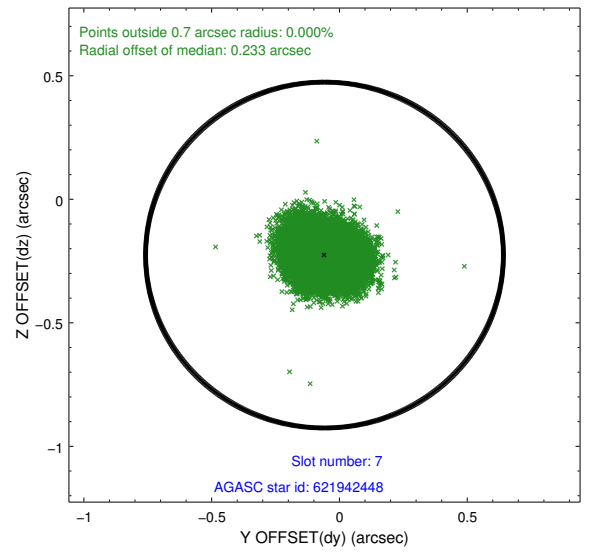
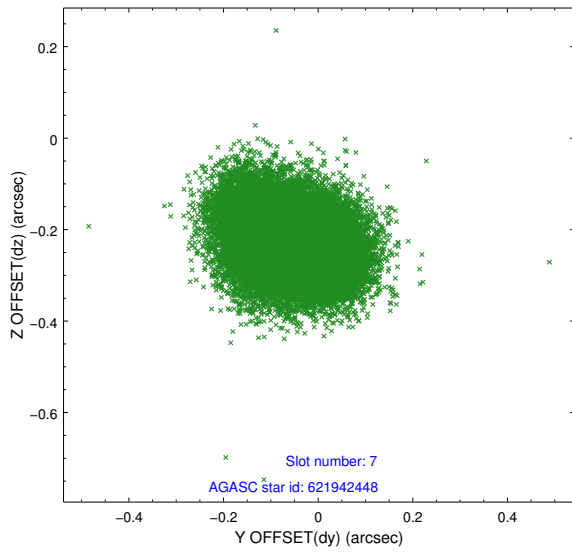
### 2.4.3 Slot 5



### 2.4.4 Slot 6

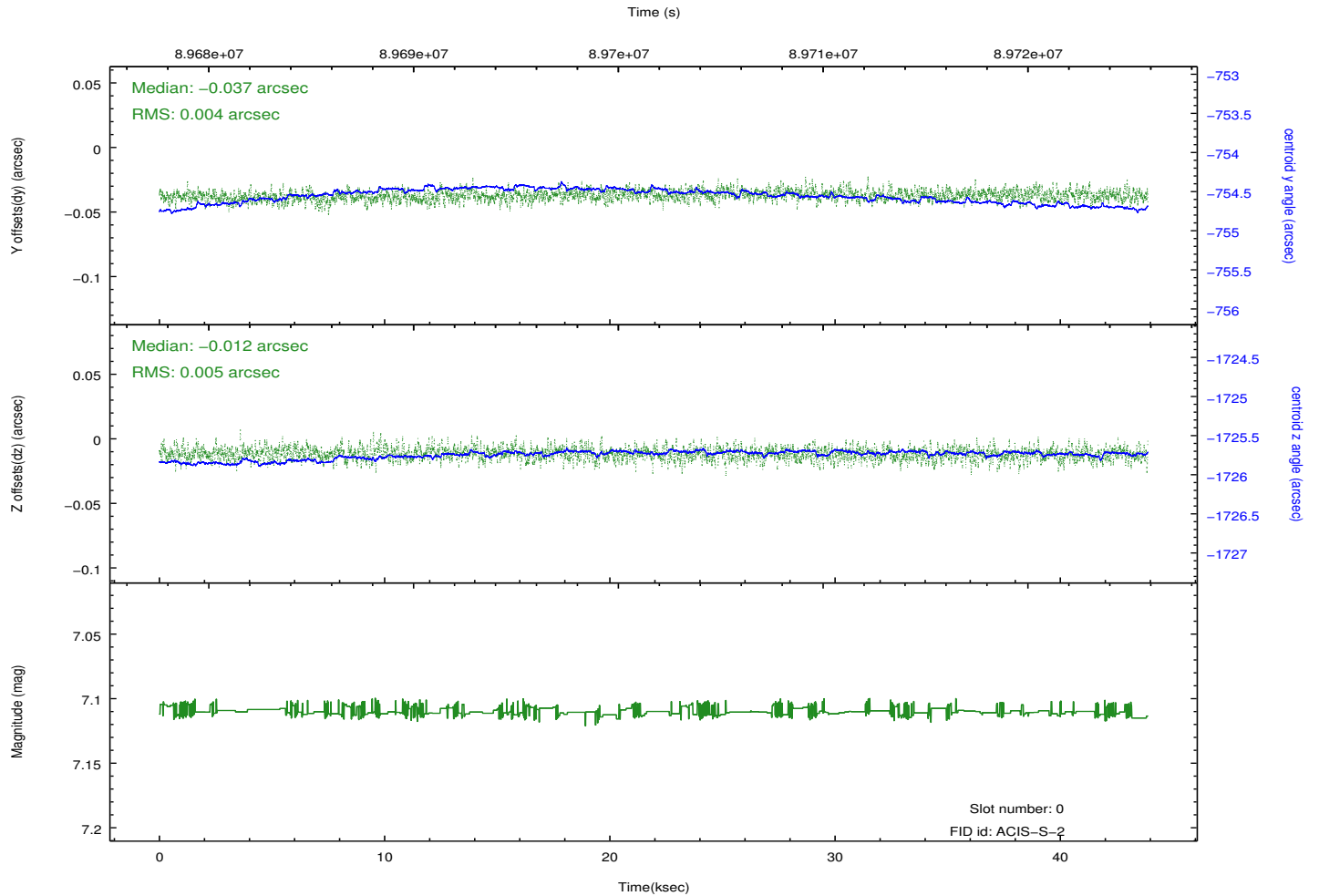
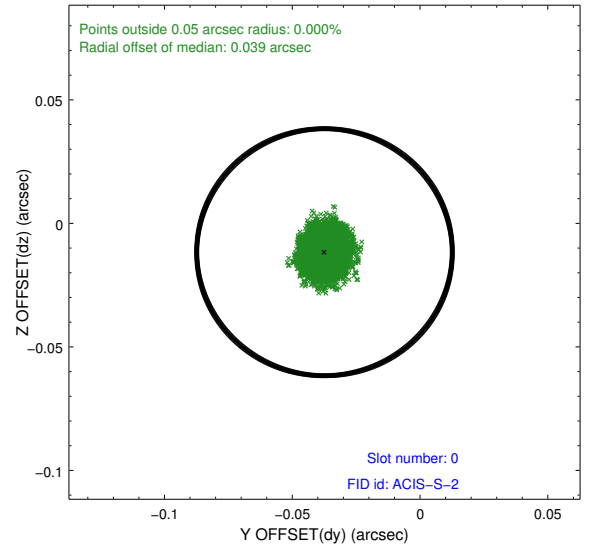
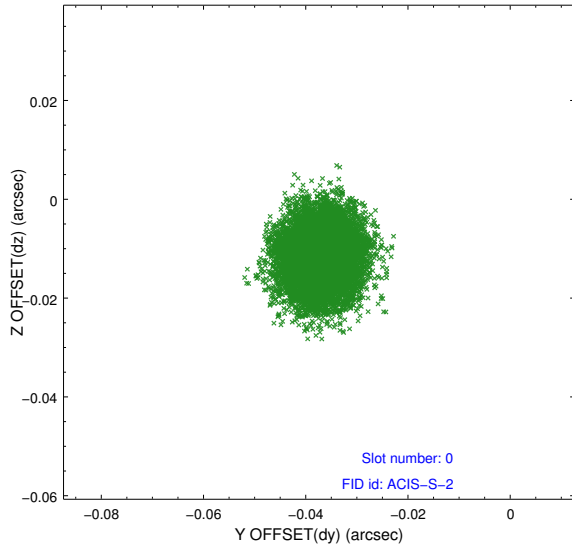


### 2.4.5 Slot 7

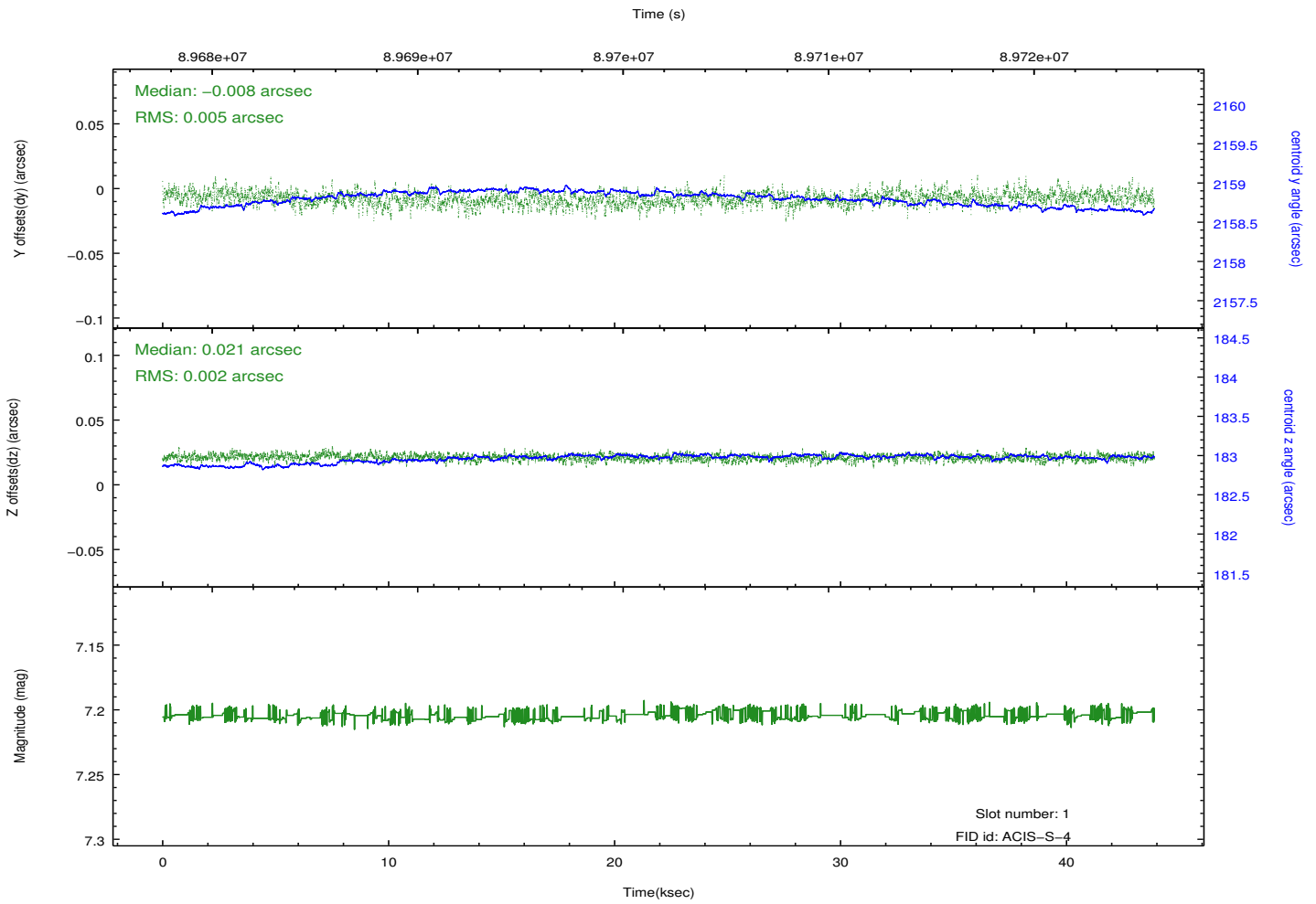
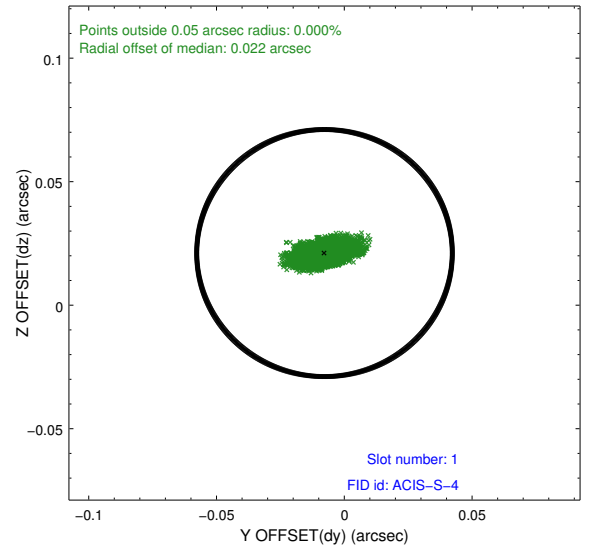
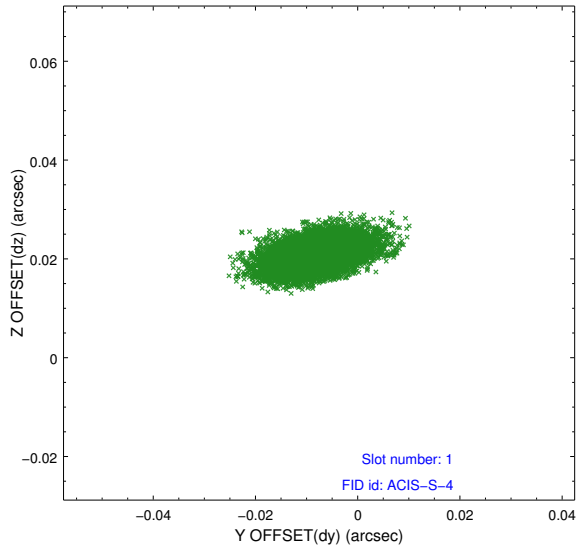


## 2.5 FID Slots

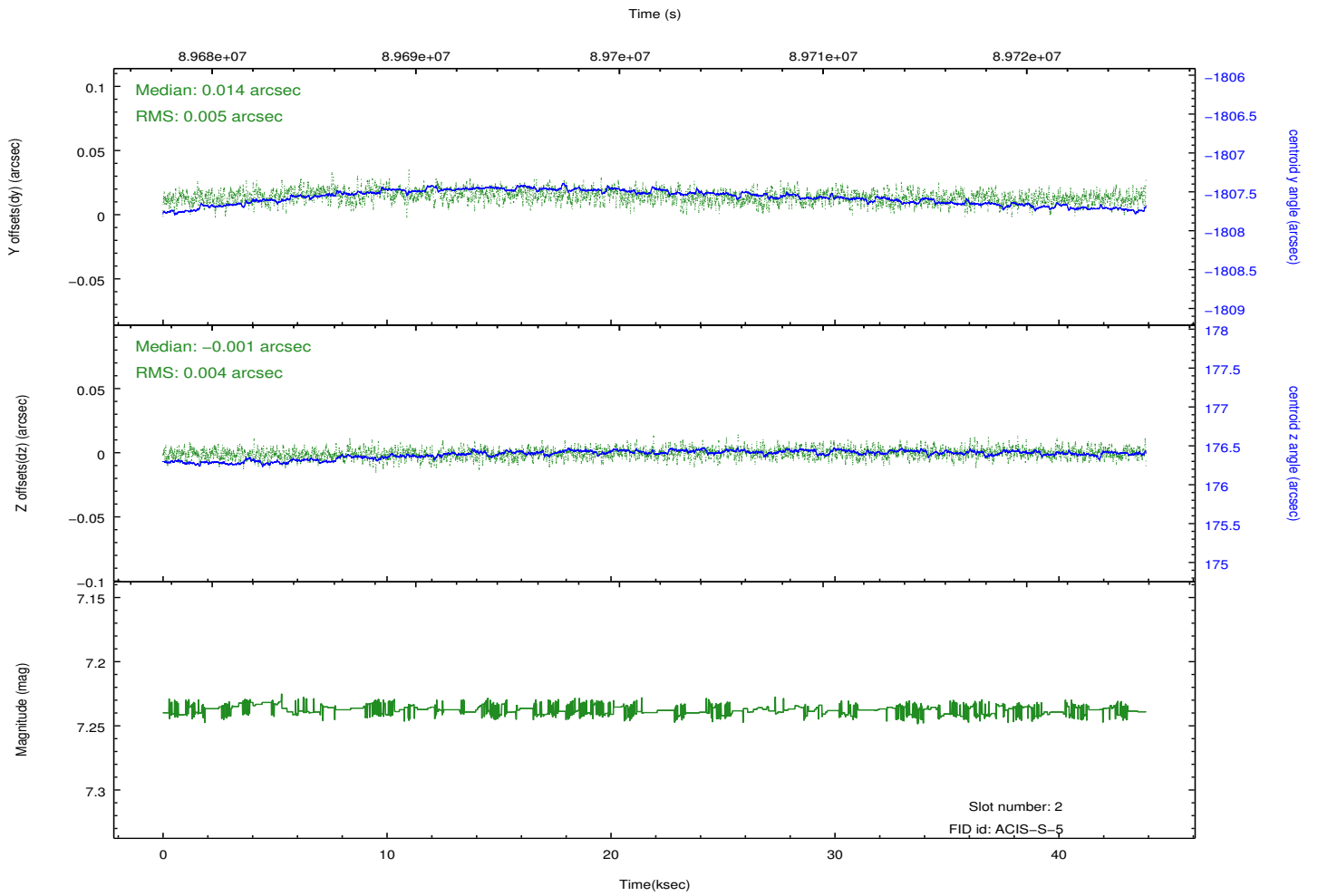
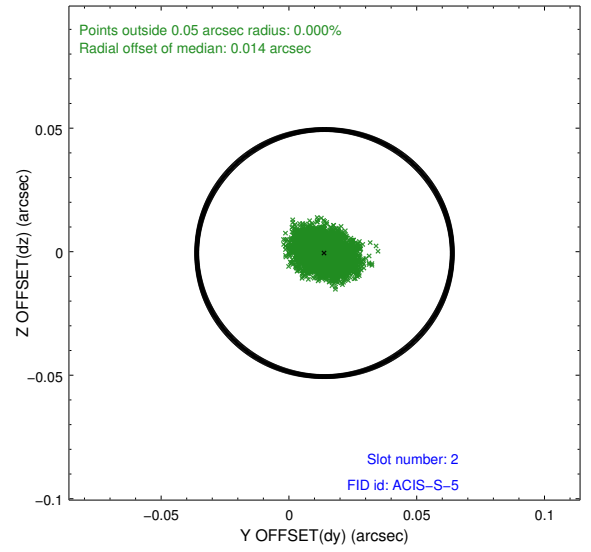
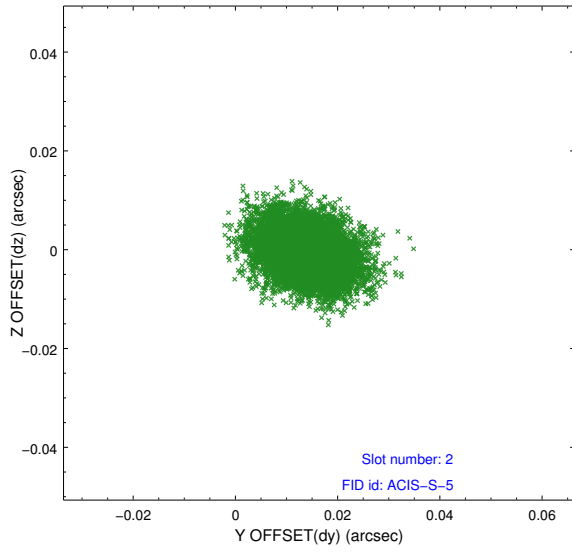
### 2.5.1 Slot 0



## 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)	2012.09.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	43.347

## A.2 Comments

Roll constraint met.