

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2206 - L2 Version 3  
Chandra X-Ray Center

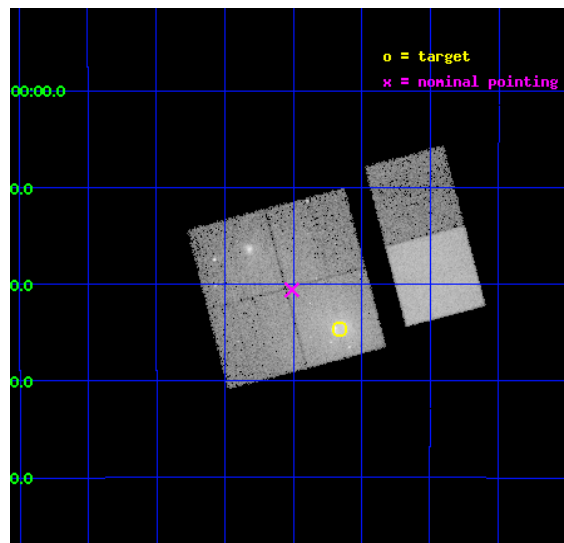
L2 Processing Date : Sep 6 2012

## 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

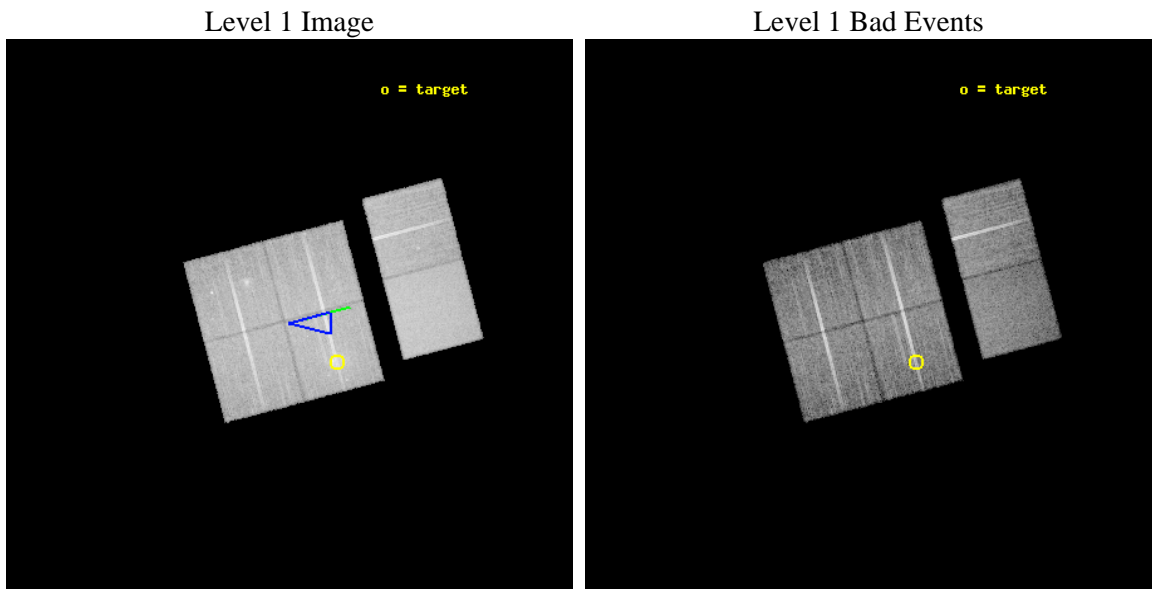
seq_num	800145	Sequence number
obs_id	2206	Observation id
title	INTRACLUSTER MEDIUM DEPLETION AND COOLING FLOW SURVIVAL DURING A CLUSTER MERGER IN ABELL 1644	Proposal title
observer	Dr Joseph Mohr	Principal investigator
object	ABELL 1644	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	194.29	Observer's specified target RA [deg]
dec_targ	-17.41	Observer's specified target Dec [deg]
ra_nom	194.37747178354	Nominal RA [deg]
dec_nom	-17.343356579076	Nominal Dec [deg]
roll_nom	75.23484991242	Nominal Roll [deg]
revision	3	Processing version of data
ontime	18953.538895637	Sum of GTIs [s]
livetime	18713.537773689	Livetime [s]
ontime0	18953.415775642	Sum of GTIs [s]
ontime1	18953.456815645	Sum of GTIs [s]
ontime2	18953.497855648	Sum of GTIs [s]
ontime3	18953.538895637	Sum of GTIs [s]
ontime6	18953.600017637	Sum of GTIs [s]
ontime7	18953.57993564	Sum of GTIs [s]
l2events	196834	Number of level 2 events



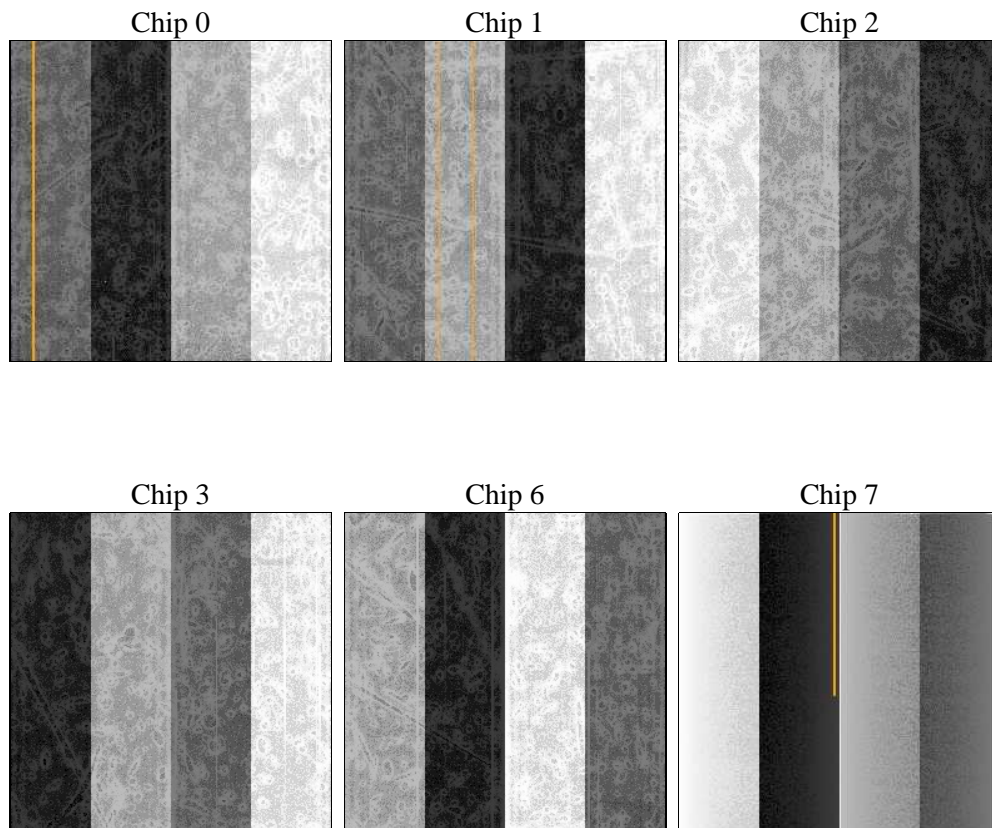
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	18953.538895637	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime0	18953.415775642	Sum of GTIs [s]
date	2012-09-06T09:33:51	Date and time of file creation	ontime1	18953.456815645	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	18953.497855648	Sum of GTIs [s]
			ontime3	18953.538895637	Sum of GTIs [s]
			ontime6	18953.600017637	Sum of GTIs [s]
			ontime7	18953.57993564	Sum of GTIs [s]
			l1events	779390	Number of level 1 events

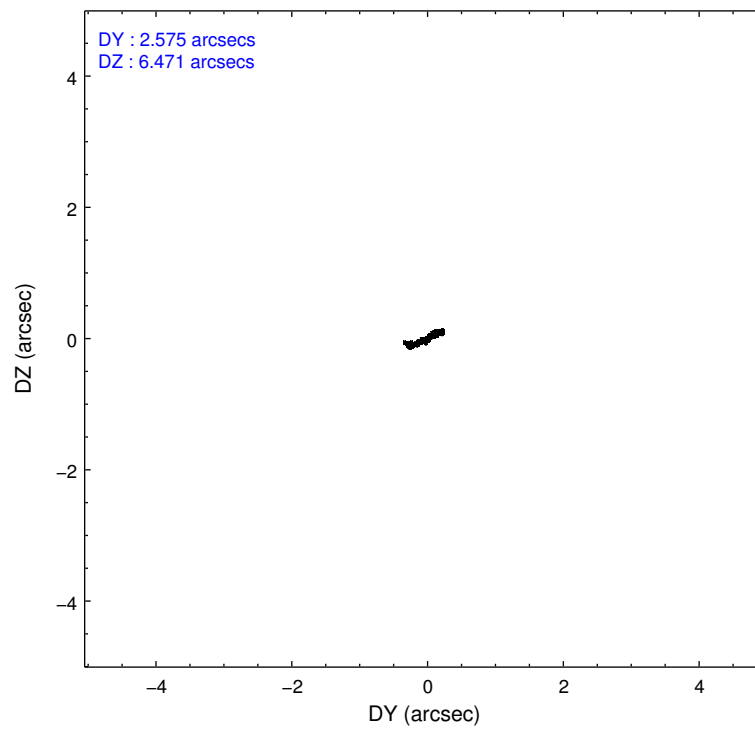
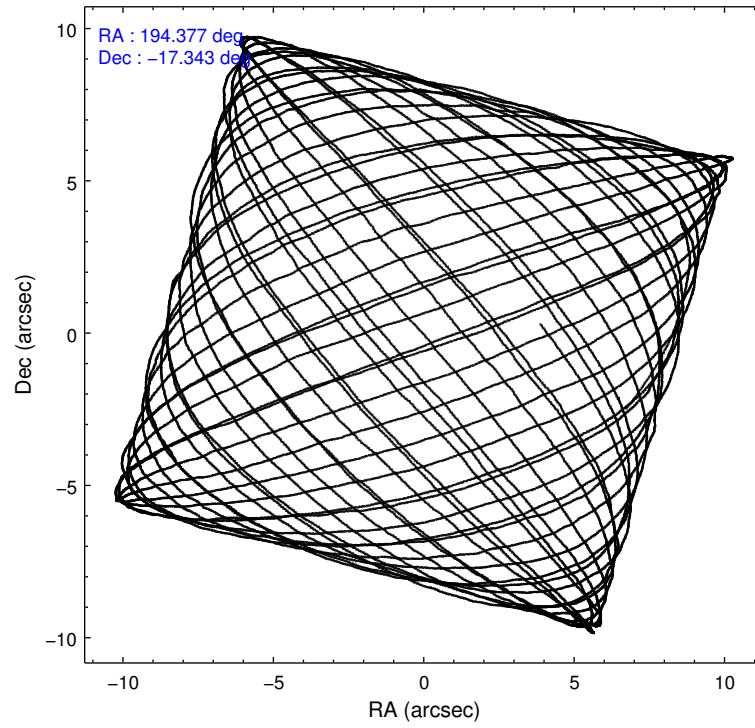
### 2.1.4 Events

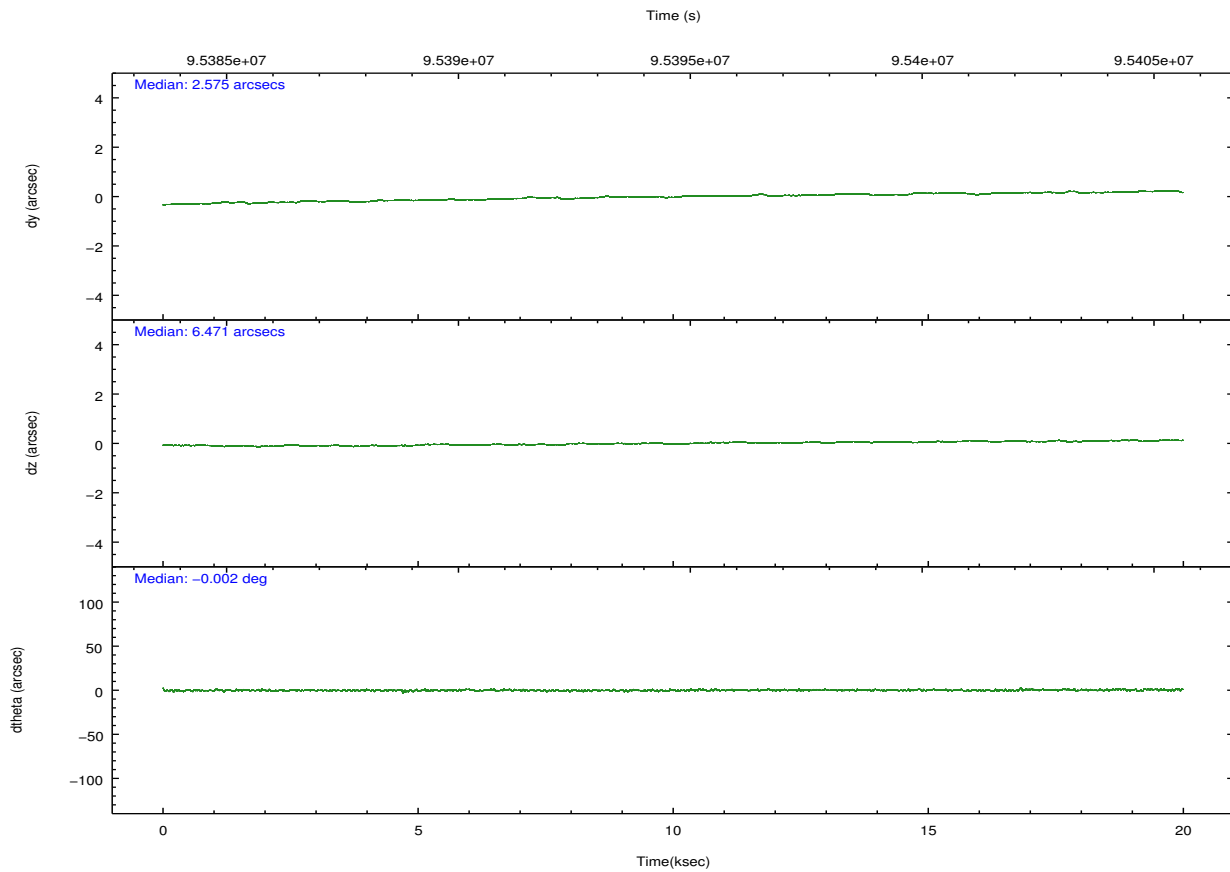
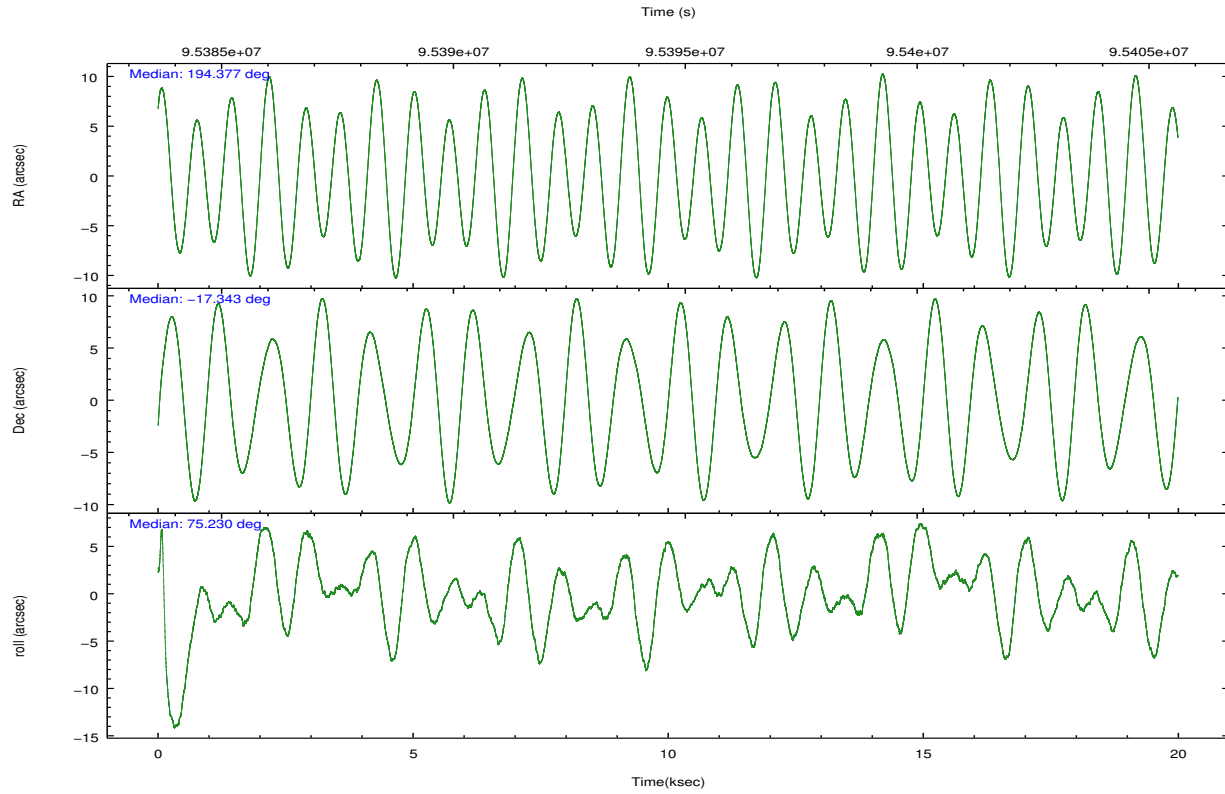
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	114620	116197	124119	145632	119963	158859	grade 0 events	15675	14616	13224	36061	6671	8860
rejected events	89330	91622	101993	95900	105374	83681		13%	12%	10%	24%	5%	5%
rejected %	77%	78%	82%	65%	87%	52%	grade 1 events	104	64	74	178	59	141
								0%	0%	0%	0%	0%	0%
							grade 2 events	3892	3776	3558	6069	2740	14926
								3%	3%	2%	4%	2%	9%
							grade 3 events	1665	1727	1502	2240	1350	6861
								1%	1%	1%	1%	1%	4%
							grade 4 events	1519	1655	1462	2322	1301	6739
								1%	1%	1%	1%	1%	4%
							grade 5 events	4014	4210	3802	4271	4812	13732
								3%	3%	3%	2%	4%	8%
							grade 6 events	2553	2811	2388	3052	2532	37832
								2%	2%	1%	2%	2%	23%
							grade 7 events	85198	87338	98109	91439	100498	69768
								74%	75%	79%	62%	83%	43%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	194.384959	194.3774717835389	Subarray requested	NONE	NONE
[deg] Pointing Dec	-17.369893	-17.34335657907613	Alternating exposures requested	N	N
[deg] Pointing Roll	75.028406	75.23484991242043	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	90.000000	90.000000			
[deg] Roll tolerance	15.000000	15.000000			
Roll constraint allows 180D rotation	N	N			
[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)	95385624.184000	95384265.72771899			
Observation start date	2001-01-08T23:59:20	2001-01-08T23:37:45			
[s] Observation end time (MET)	95404624.184000	95405201.353522			
Observation end date	2001-01-09T05:16:00	2001-01-09T05:26:41			
Read mode	TIMED	TIMED			

## 2.3 Aspect



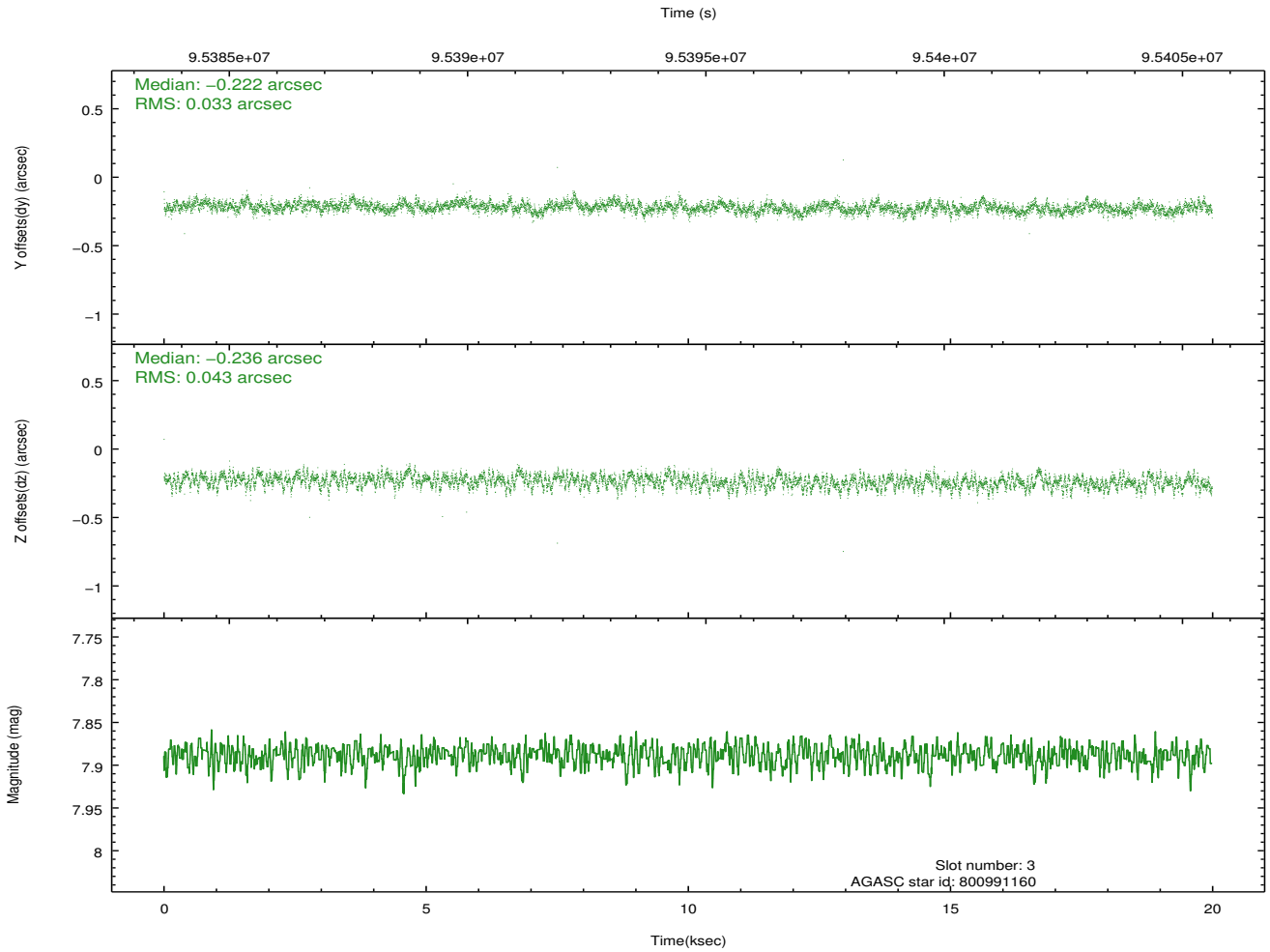
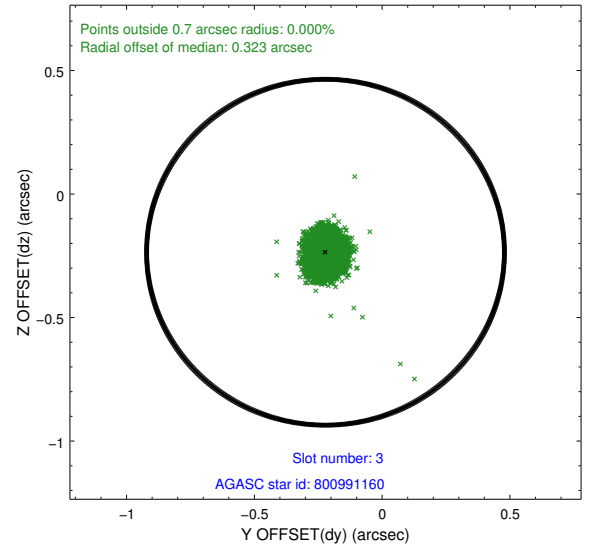
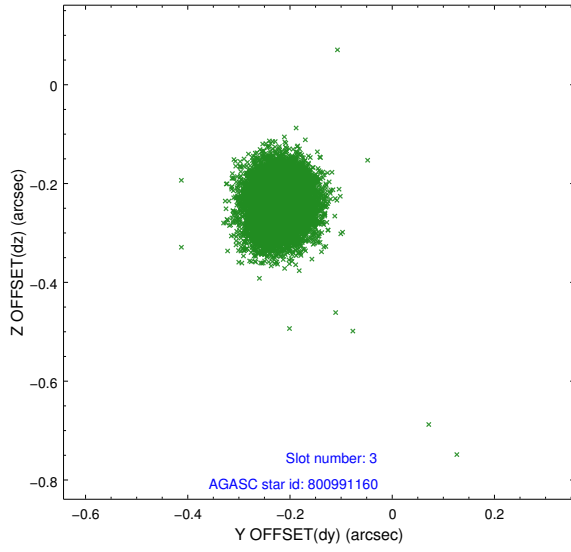


### Slot Statistics

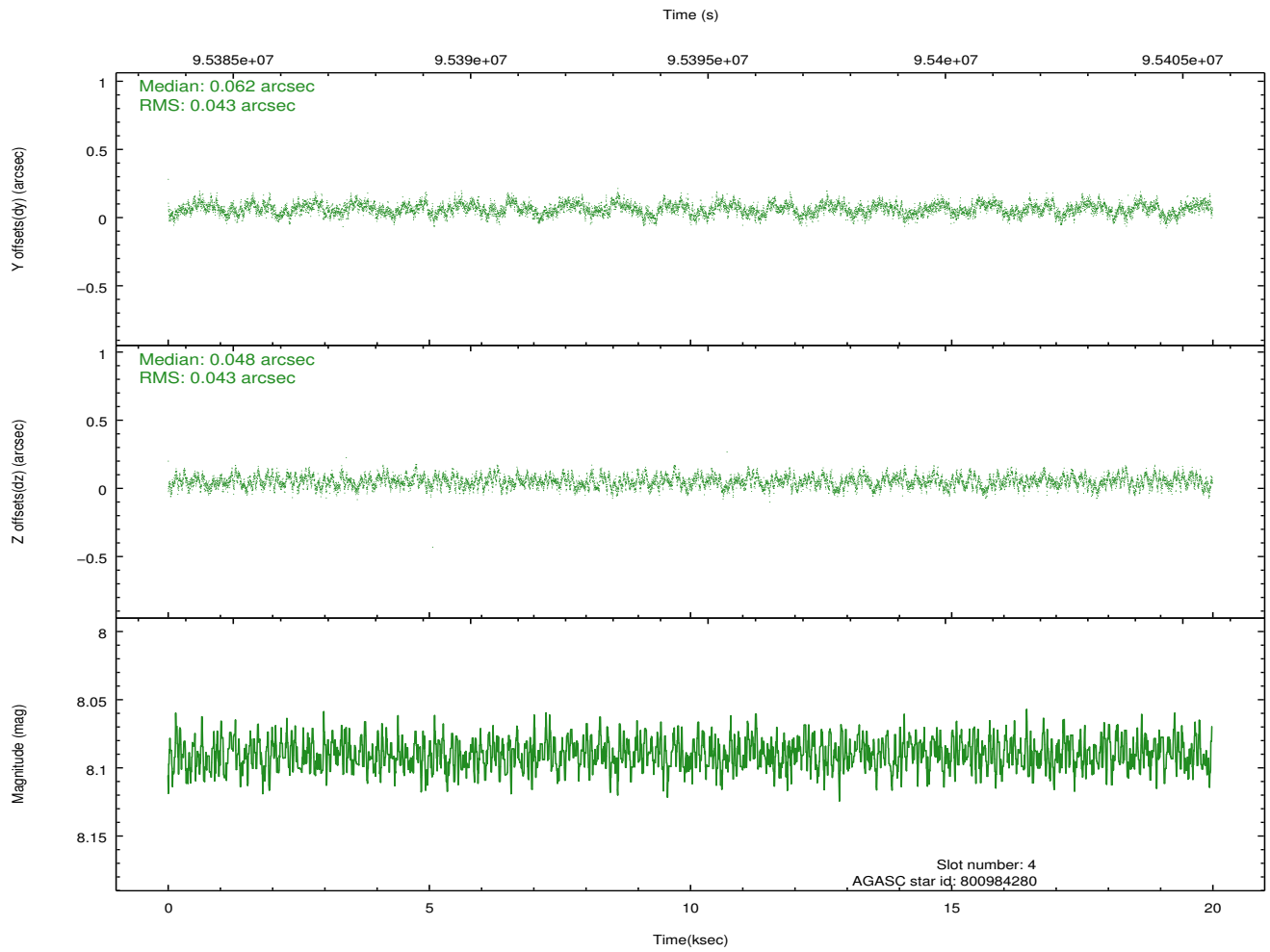
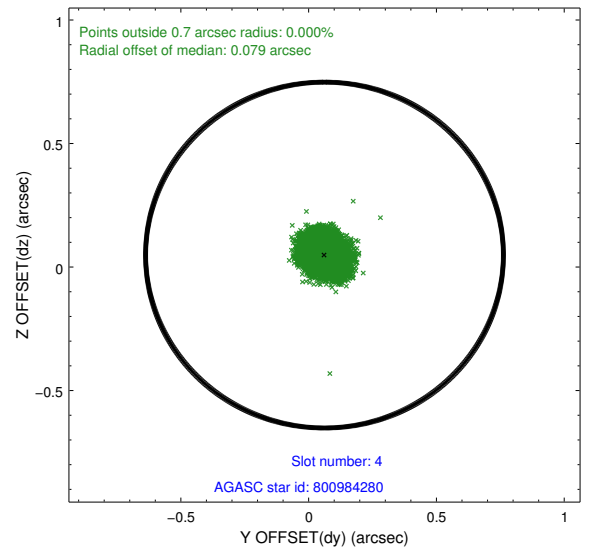
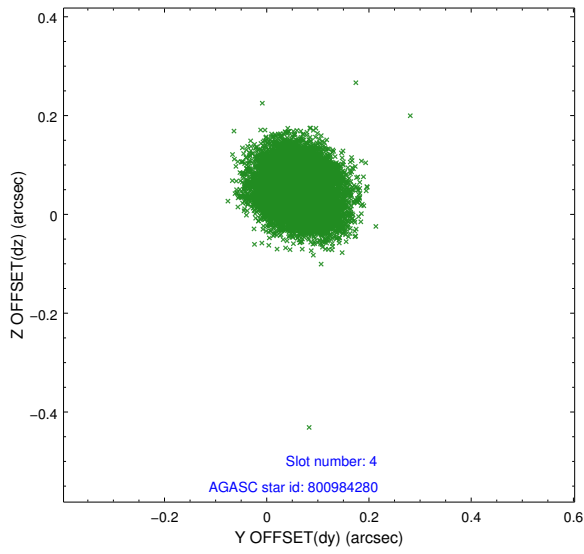
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.16	4875	-0.040	-0.060	0.012	0.019	0.000000	0.000000	-756.96	-836.27
1	FID	ACIS-I-4	7.18	4876	-0.010	0.047	0.012	0.019	0.000000	0.000000	2157.04	1069.91
2	FID	ACIS-I-5	7.23	4876	-0.051	0.082	0.011	0.018	0.000000	0.000000	-1810.56	1068.01
3	GUIDE	800991160	7.89	9751	-0.222	-0.236	0.057	0.092	194.030445	-16.892494	1343.41	1623.19
4	GUIDE	800984280	8.09	9751	0.062	0.048	0.065	0.101	194.396865	-17.394812	-75.94	-62.47
5	GUIDE	801376832	9.45	9749	0.128	0.084	0.084	0.136	194.503099	-17.681116	-977.59	-681.11
6	GUIDE	801374512	9.77	9744	0.093	-0.039	0.108	0.174	194.049661	-17.677987	-1369.63	823.86
7	GUIDE	801120136	9.68	9742	-0.064	0.144	0.099	0.167	194.777860	-17.348491	421.84	-1284.62

## 2.4 Star Slots

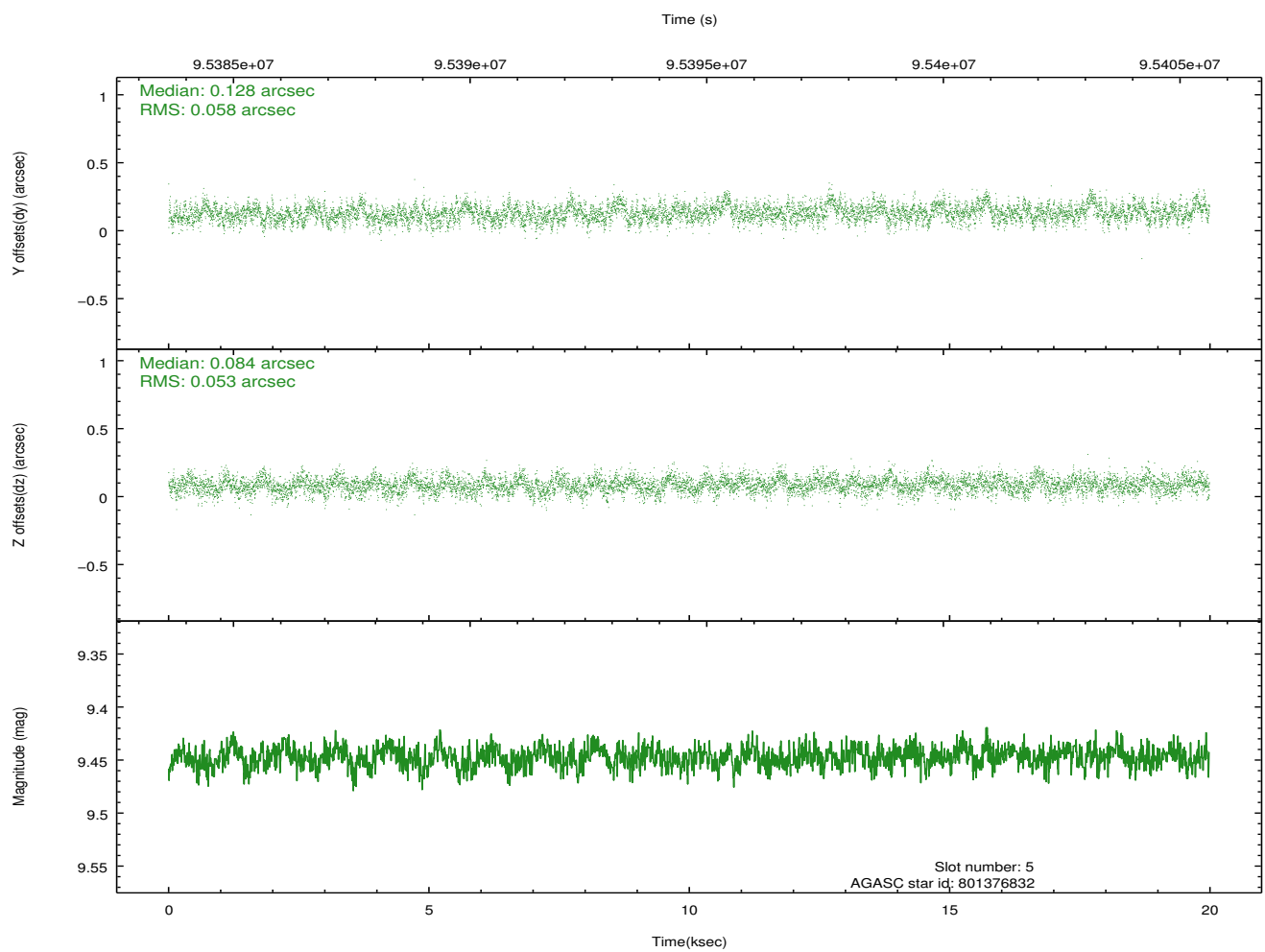
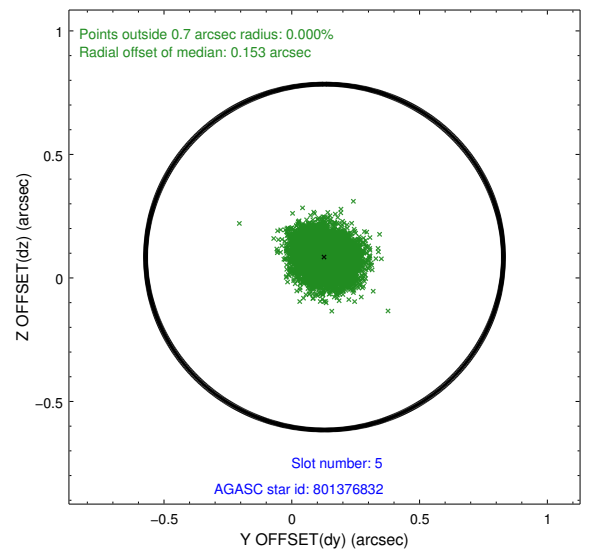
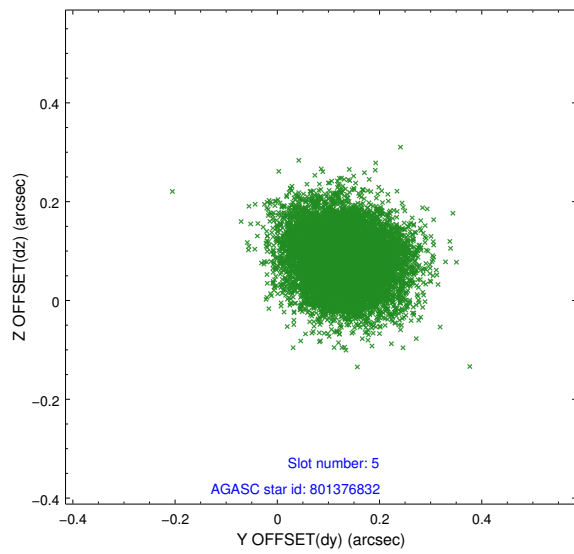
### 2.4.1 Slot 3



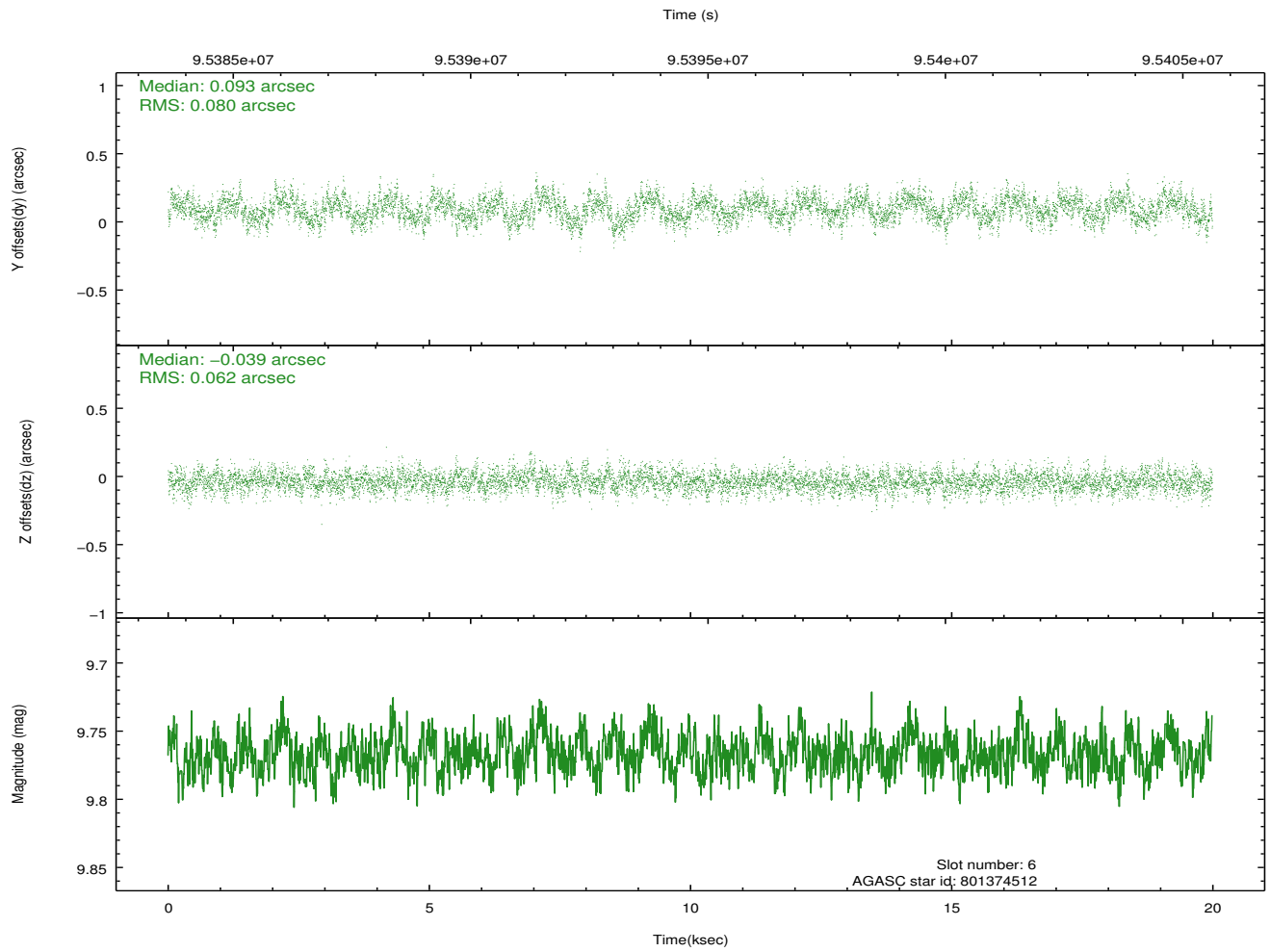
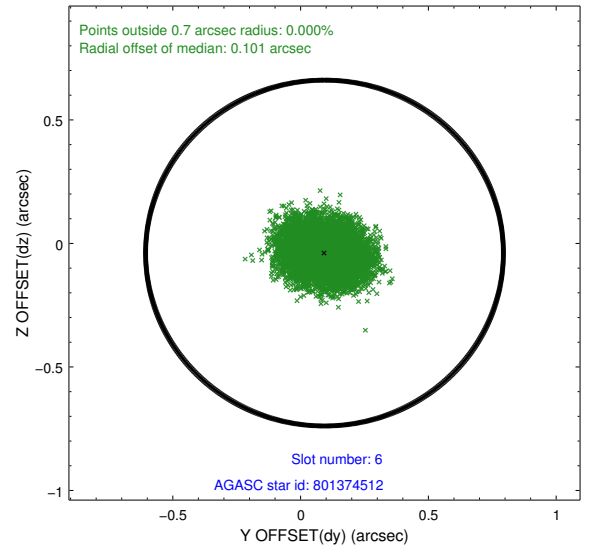
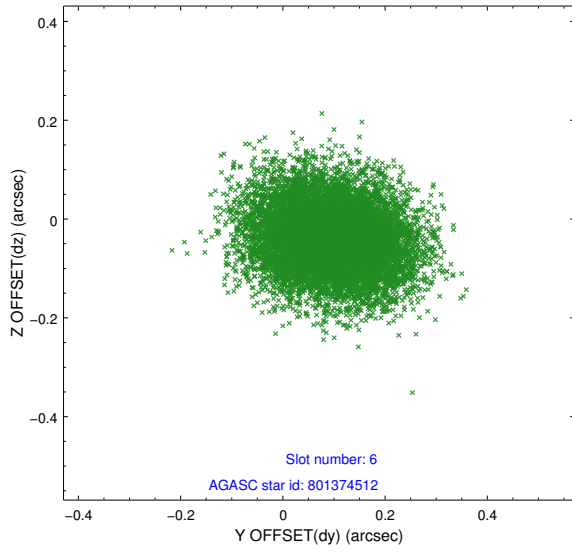
### 2.4.2 Slot 4



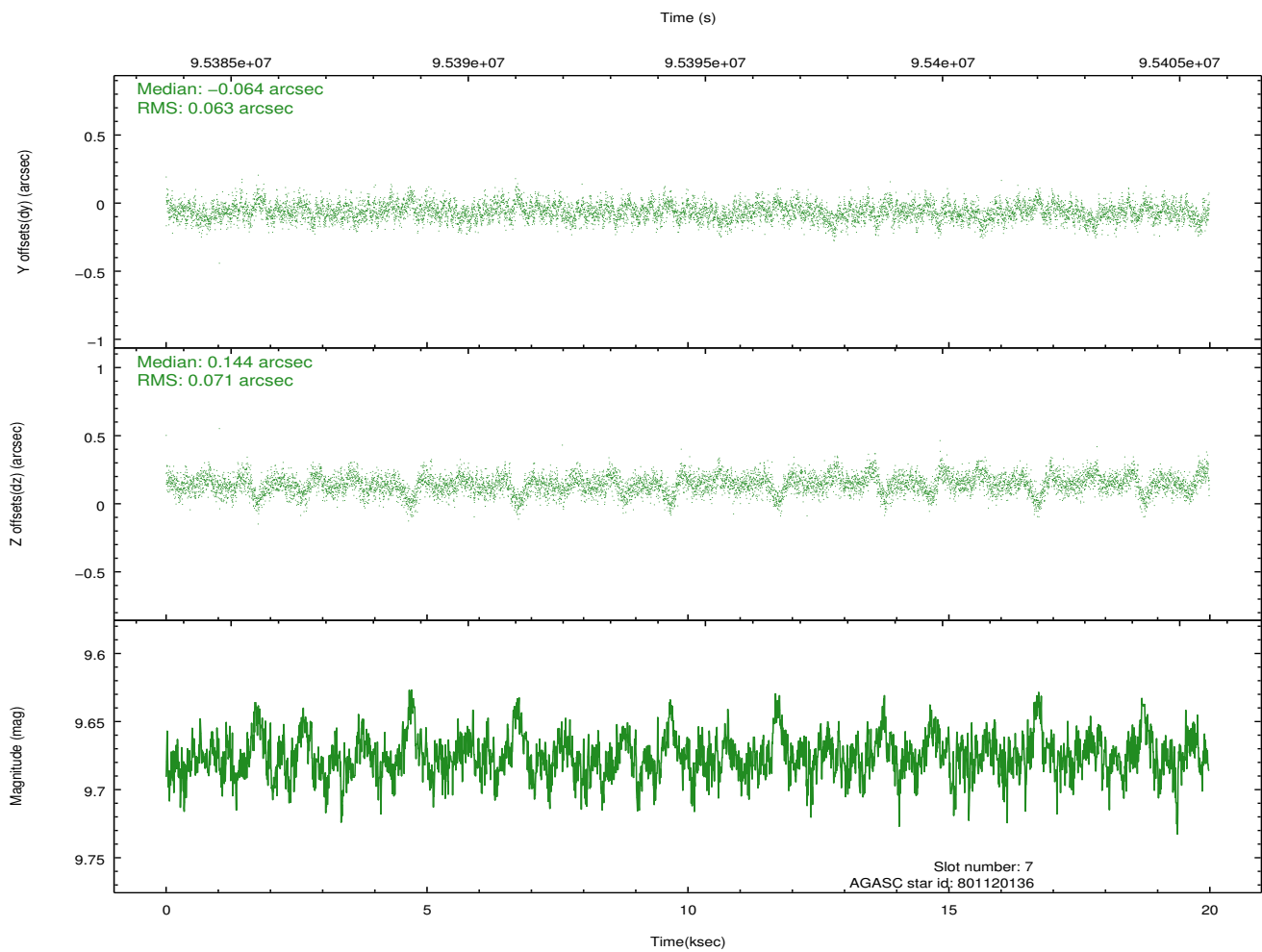
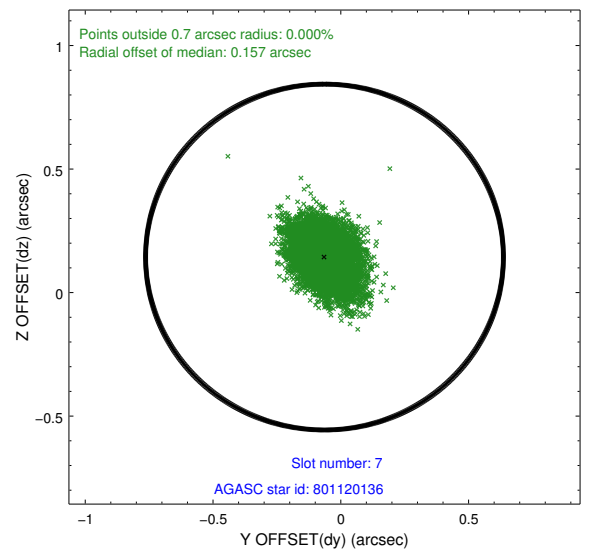
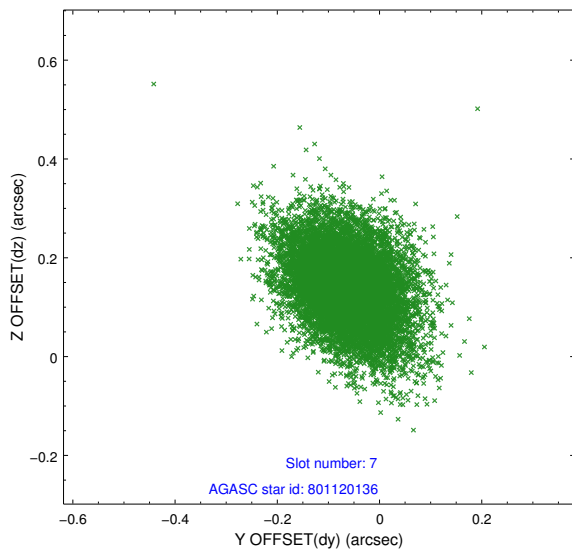
### 2.4.3 Slot 5



### 2.4.4 Slot 6

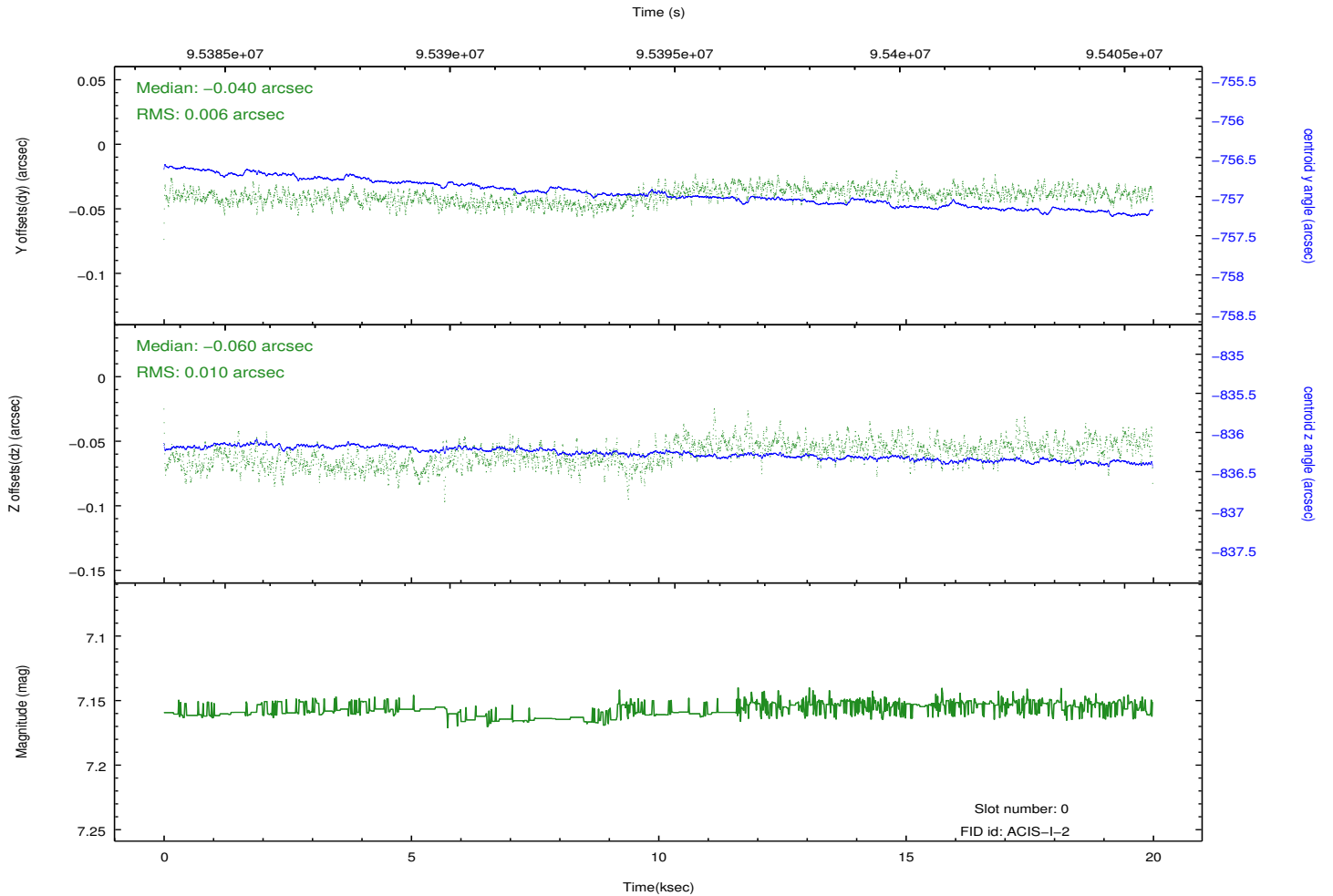
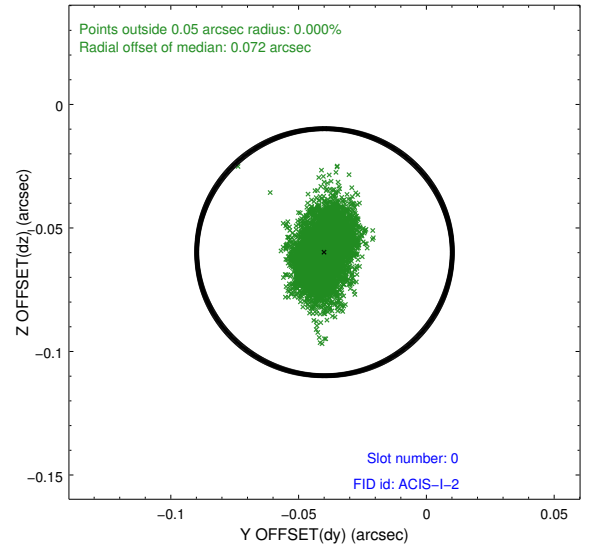
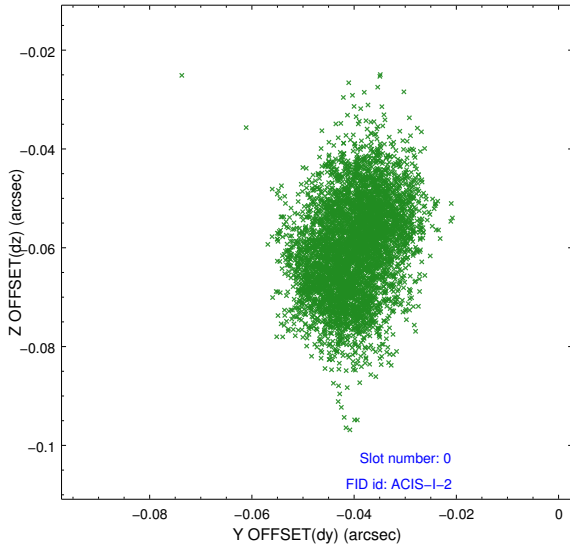


## 2.4.5 Slot 7

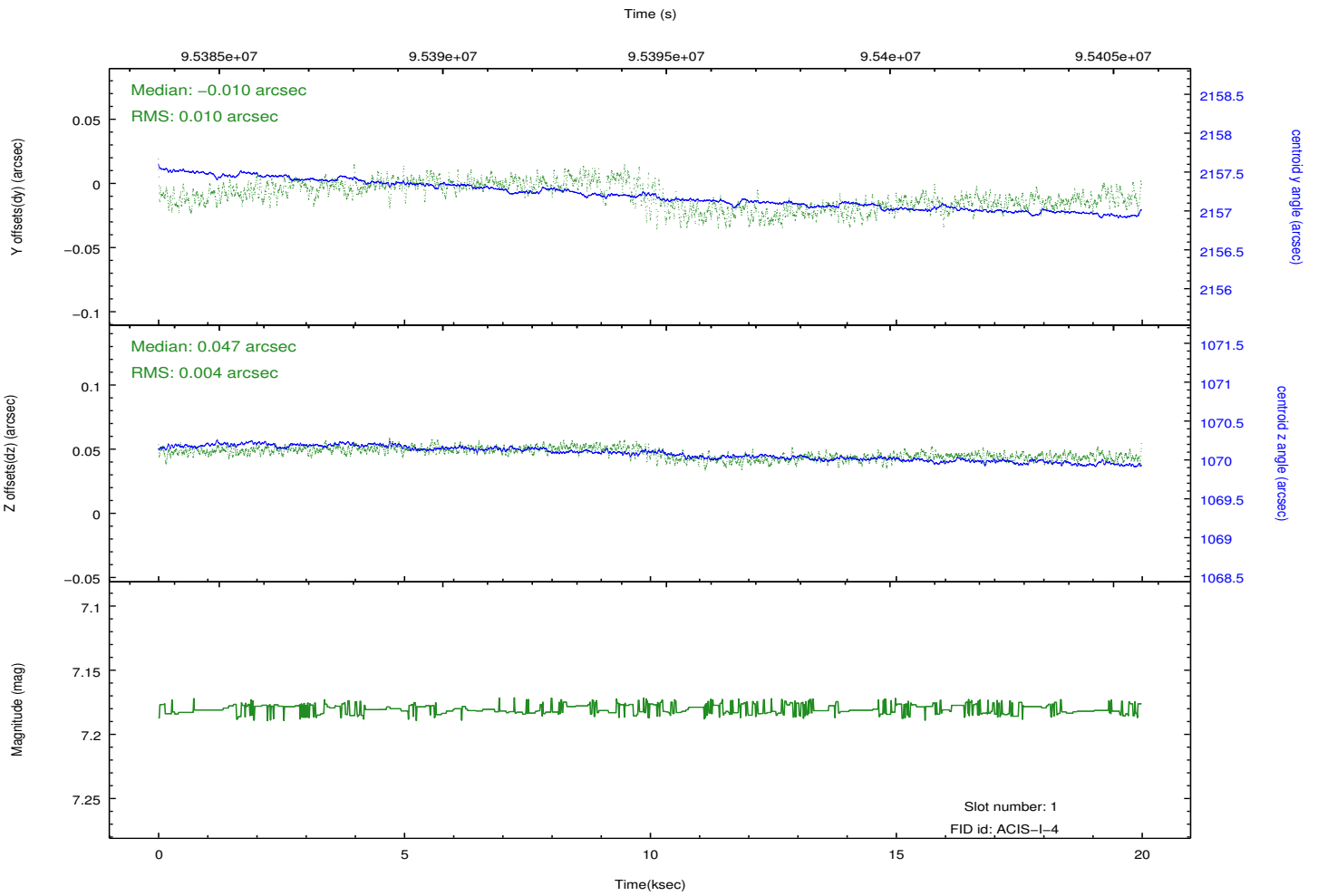
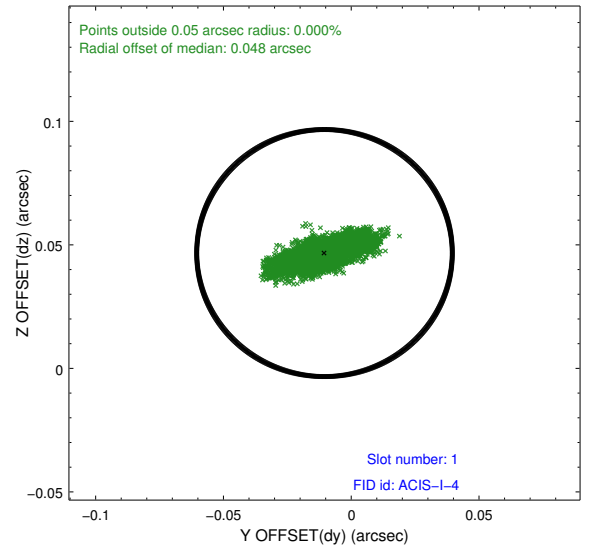
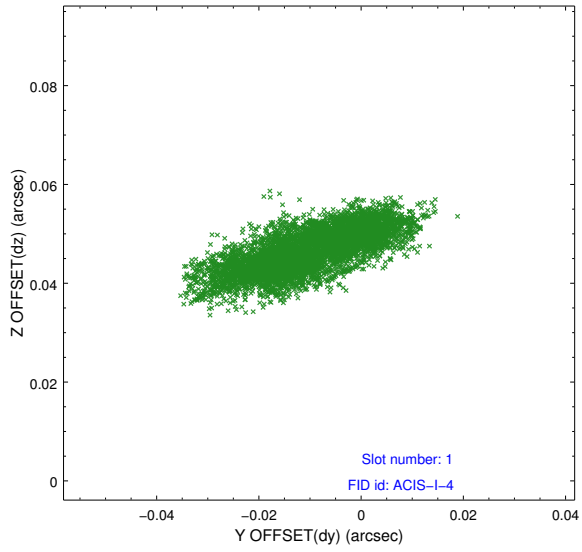


## 2.5 FID Slots

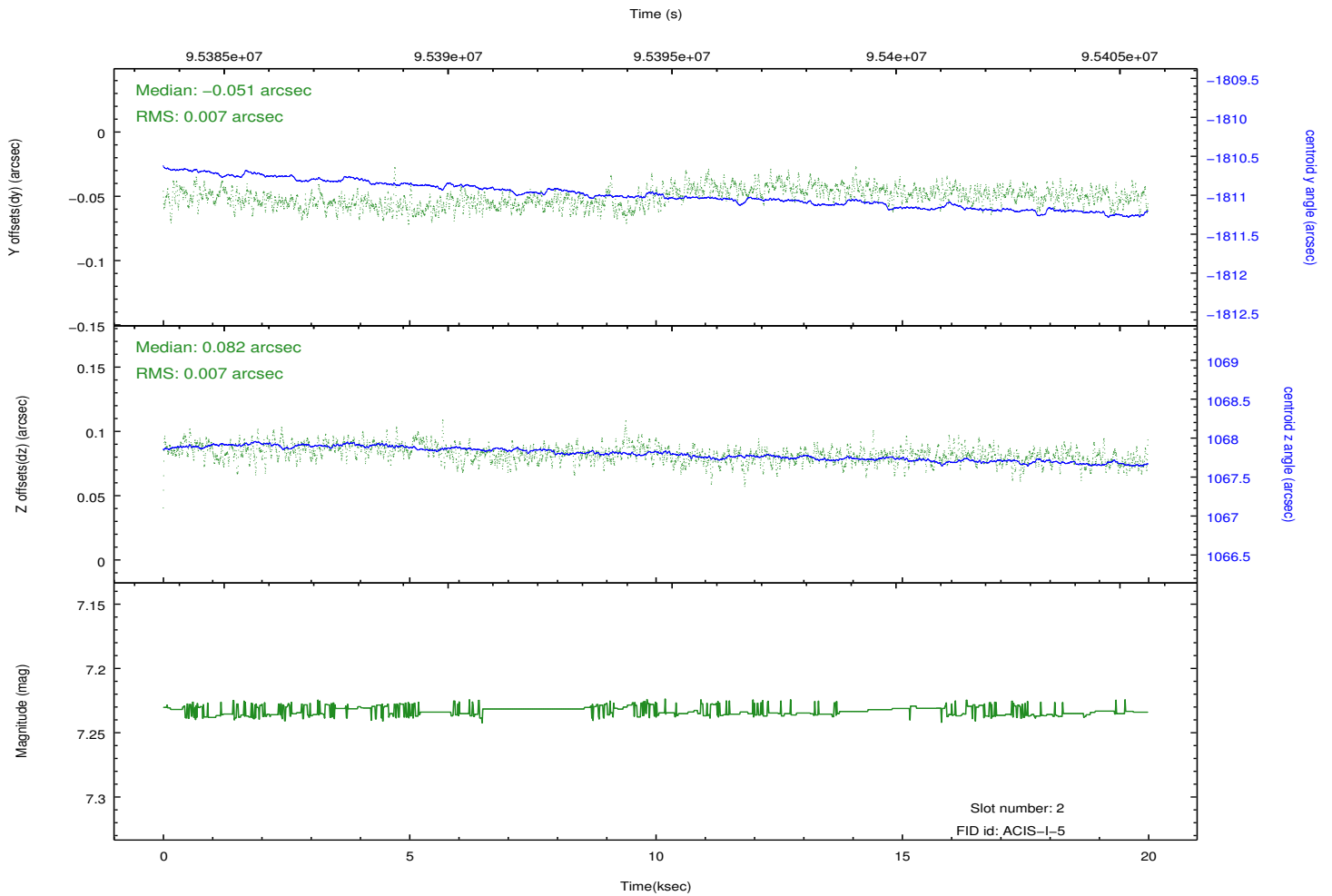
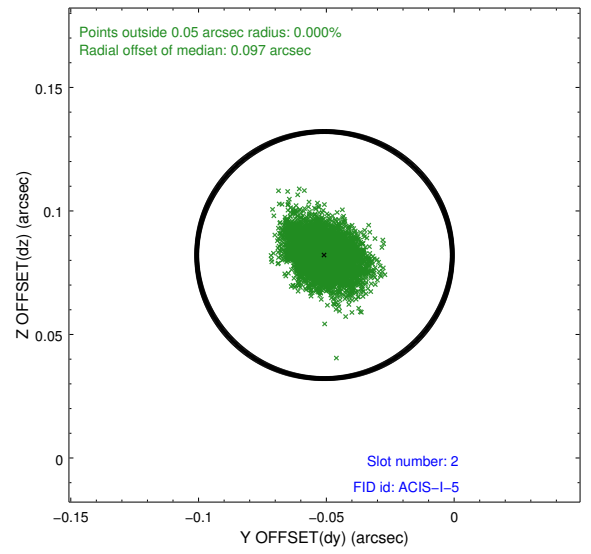
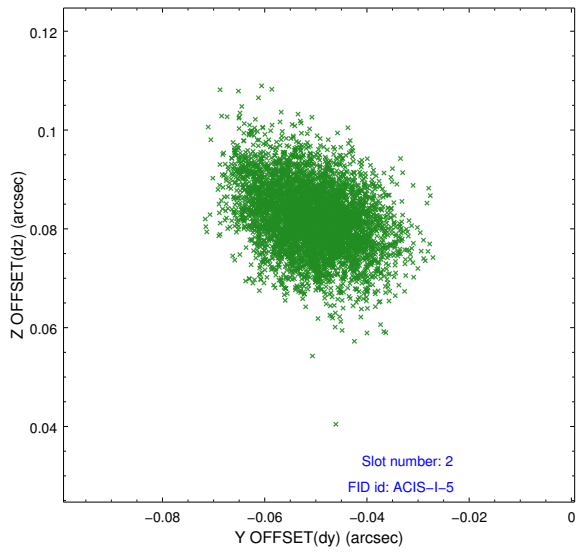
### 2.5.1 Slot 0



## 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)	2012.09.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.956

## A.2 Comments

Roll constraint met.