

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3259 - L2 Version 3  
Chandra X-Ray Center

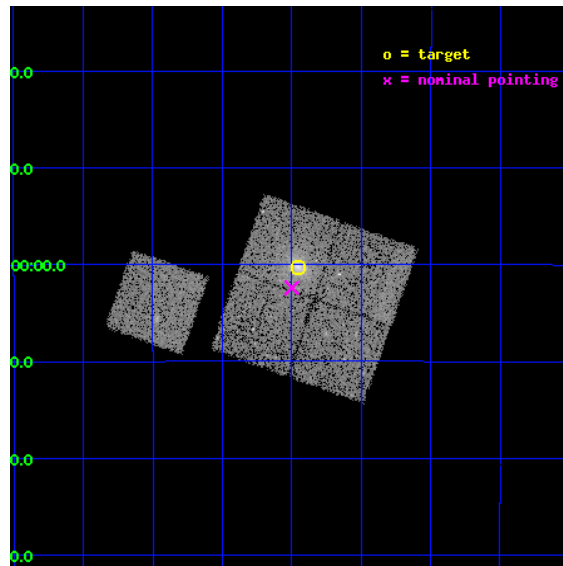
L2 Processing Date : Oct 19 2012

## 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

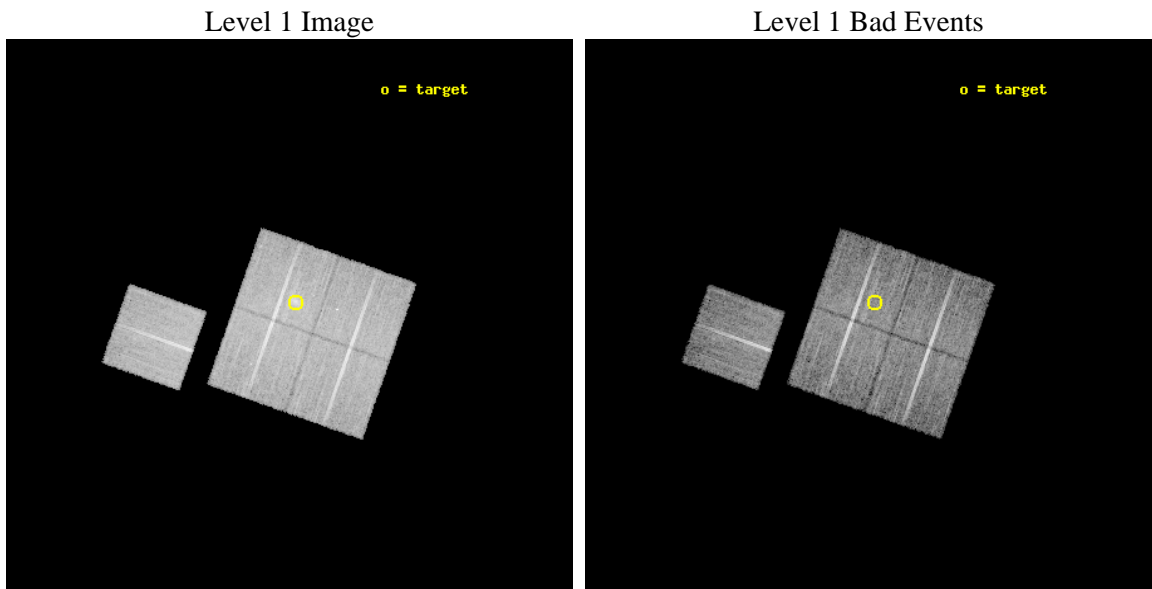
seq_num	800259	Sequence number
obs_id	3259	Observation id
title	OBSERVATION OF MACS CLUSTERS, 0.45	Proposal title
observer	DR. LEON VANSPEYBROECK	Principal investigator
object	MACS-J2214.9-1359	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	333.73875	Observer's specified target RA [deg]
dec_targ	-14.003889	Observer's specified target Dec [deg]
ra_nom	333.74979913549	Nominal RA [deg]
dec_nom	-14.039977480375	Nominal Dec [deg]
roll_nom	289.49488348948	Nominal Roll [deg]
revision	3	Processing version of data
ontime	19728.358971894	Sum of GTIs [s]
livetime	19470.593438119	Livetime [s]
ontime0	19725.218001664	Sum of GTIs [s]
ontime1	19731.499962032	Sum of GTIs [s]
ontime2	19731.499962032	Sum of GTIs [s]
ontime3	19728.358971894	Sum of GTIs [s]
ontime6	19731.499962032	Sum of GTIs [s]
l2events	49850	Number of level 2 events



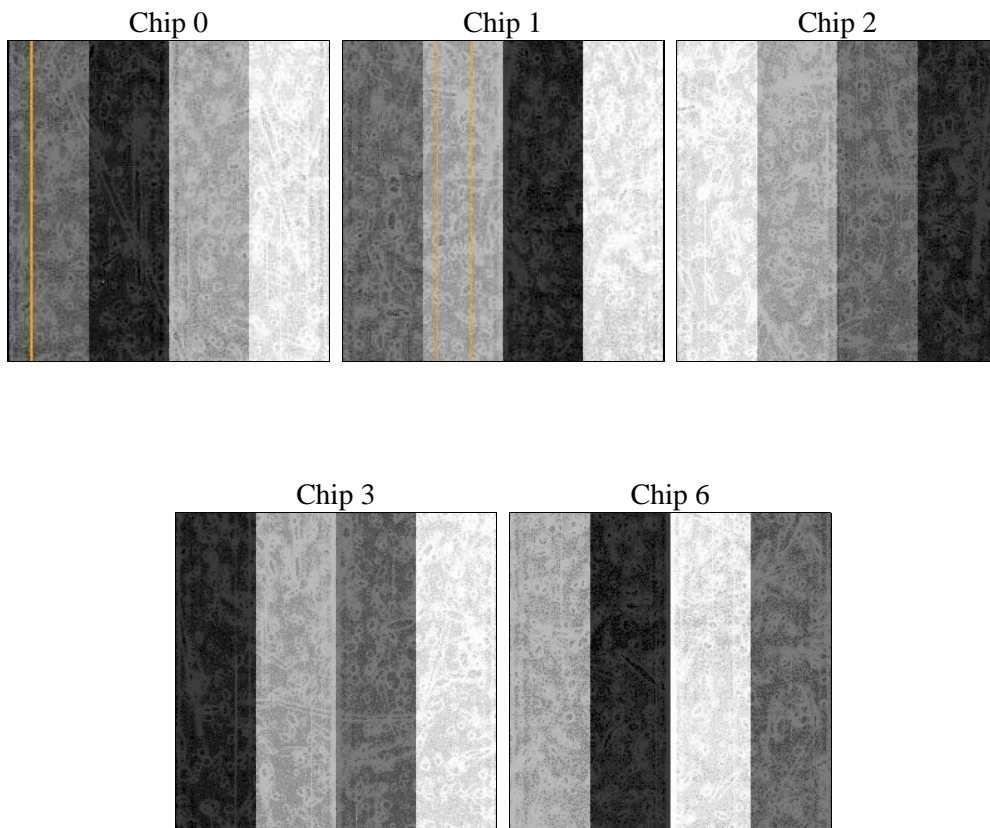
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	19708.751000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	19728.358971894	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime0	19725.218001664	Sum of GTIs [s]
date	2012-10-19T06:45:22	Date and time of file creation	ontime1	19731.499962032	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	19731.499962032	Sum of GTIs [s]
			ontime3	19728.358971894	Sum of GTIs [s]
			ontime6	19731.499962032	Sum of GTIs [s]
			l1events	505848	Number of level 1 events

### 2.1.4 Events

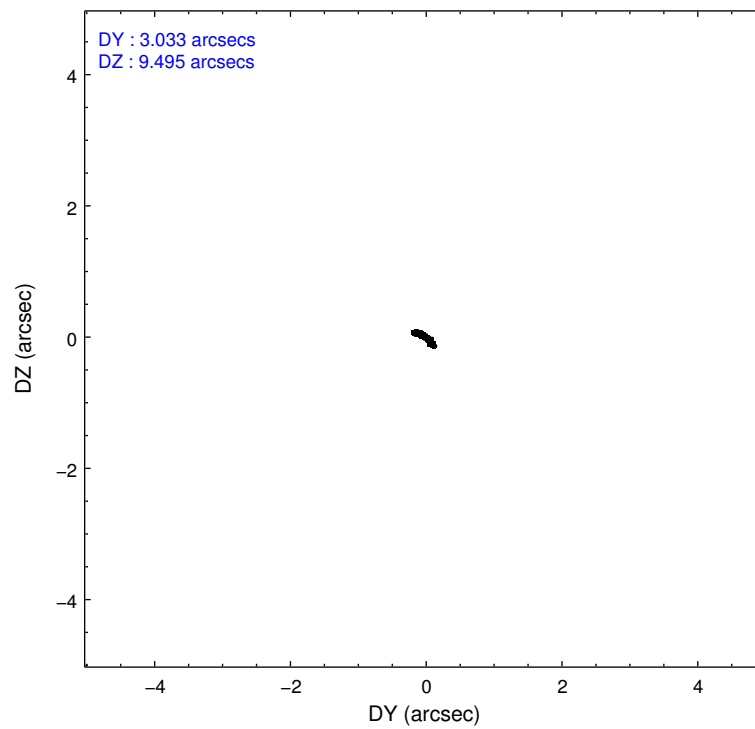
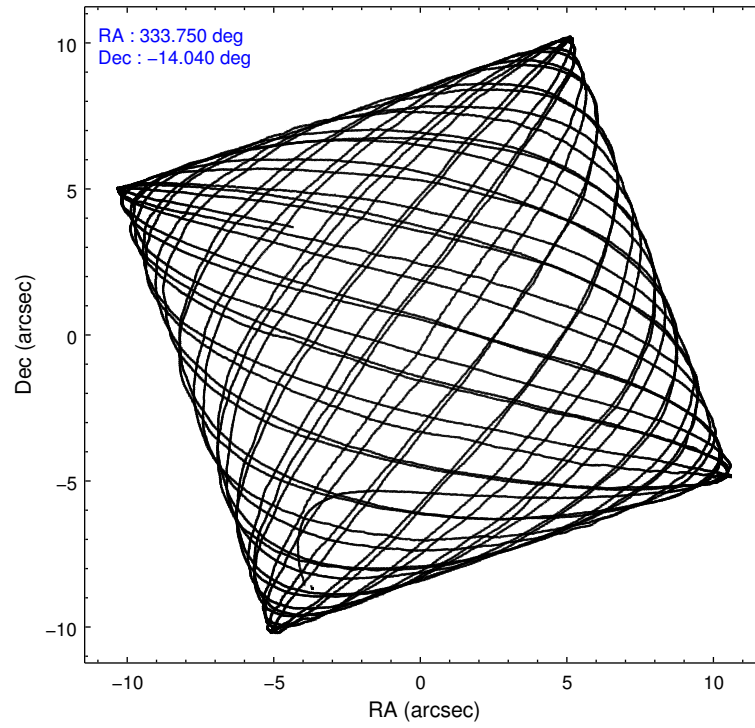
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	95096	96680	104959	107813	101300
rejected events	84557	84637	94579	92658	90430
rejected %	88%	87%	90%	85%	89%

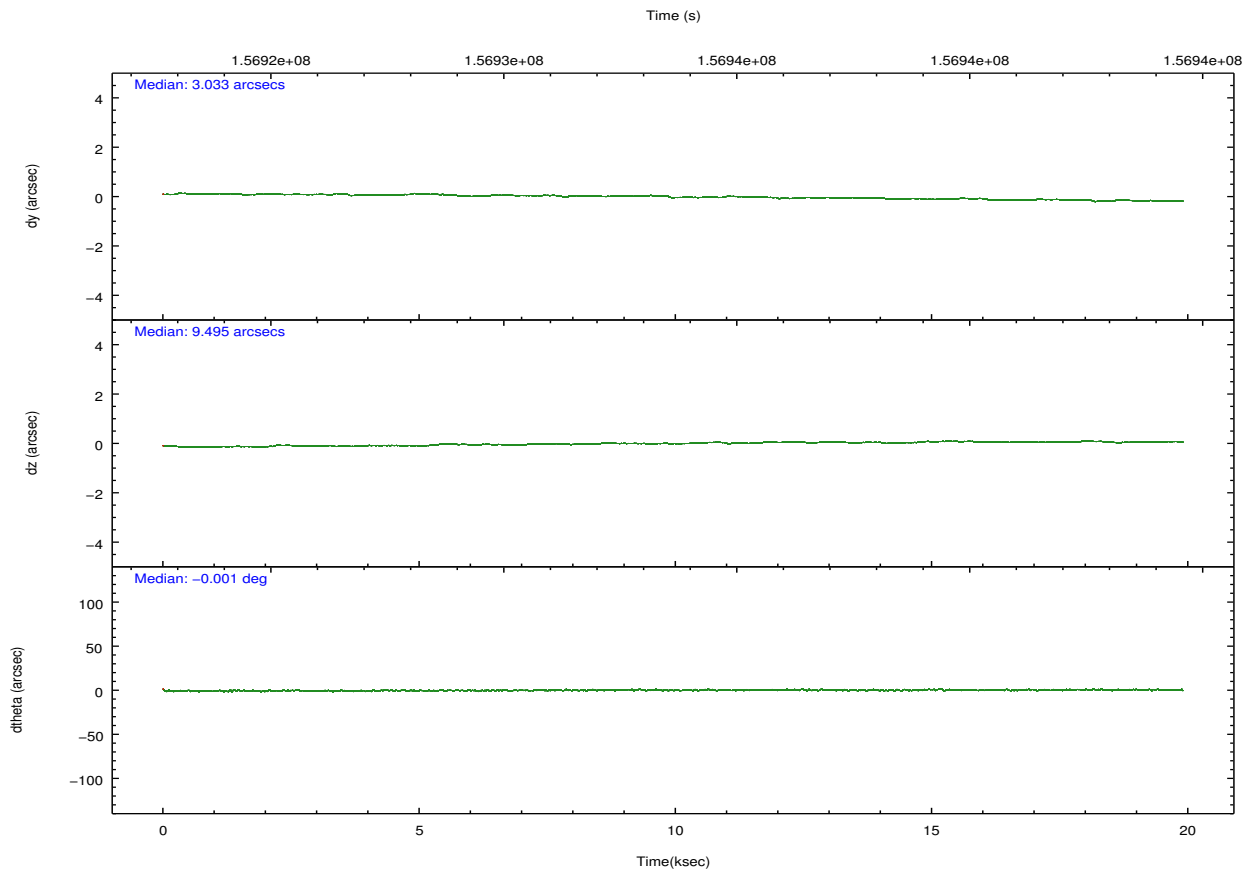
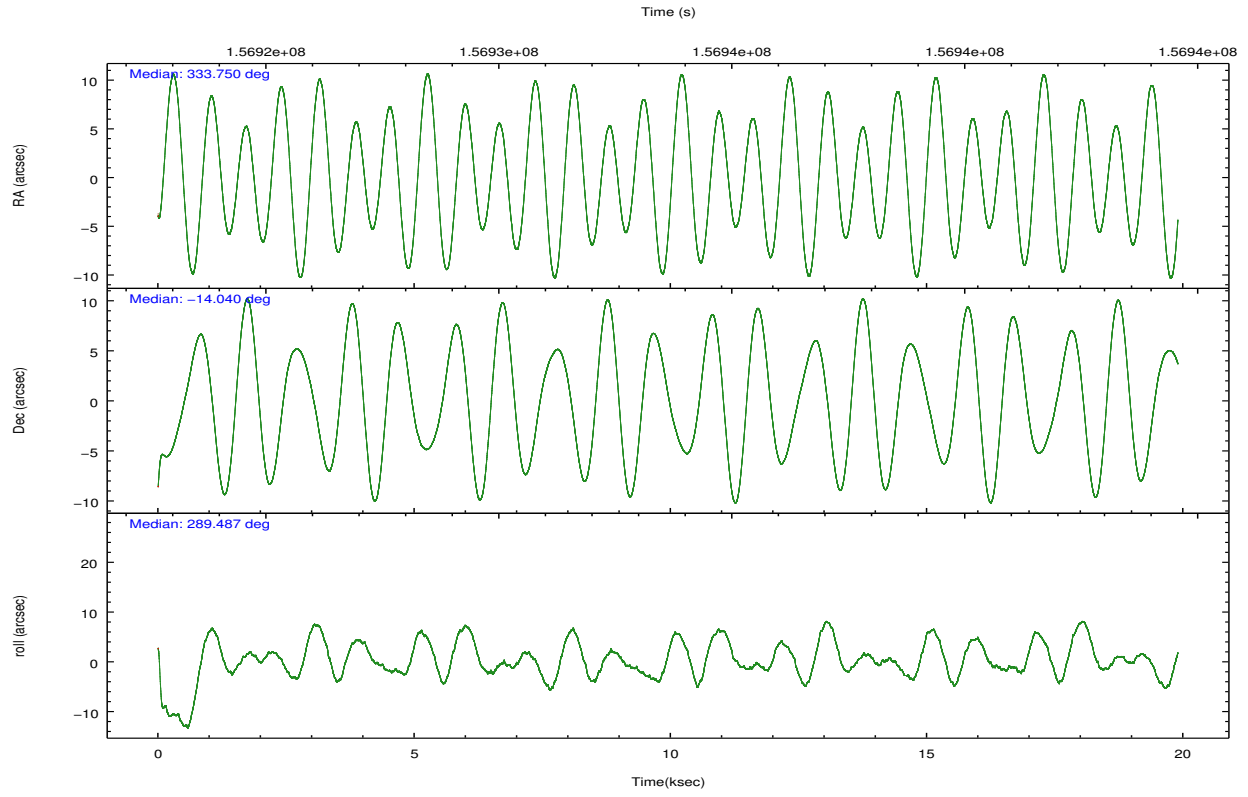
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3964	4851	4102	8145	4130
	4%	5%	3%	7%	4%
grade 1 events	35	42	53	65	45
	0%	0%	0%	0%	0%
grade 2 events	2439	2435	2292	2461	2137
	2%	2%	2%	2%	2%
grade 3 events	1210	1315	1078	1287	1191
	1%	1%	1%	1%	1%
grade 4 events	1109	1212	1142	1300	1214
	1%	1%	1%	1%	1%
grade 5 events	3364	3663	3205	3865	3842
	3%	3%	3%	3%	3%
grade 6 events	1819	2232	1769	1971	2202
	1%	2%	1%	1%	2%
grade 7 events	81156	80930	91318	88719	86539
	85%	83%	87%	82%	85%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	333.728274	333.7497991354913	Subarray requested	NONE	NONE
[deg] Pointing Dec	-14.022281	-14.03997748037529	Alternating exposures requested	N	N
[deg] Pointing Roll	289.280974	289.494883489477	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-227.742463	-227.734108438797			
[mm] SIM translation stage offset	-5.85	-5.858344564132665			
[s] Observation start time (MET)	156923876.184000	156922831.25704			
Observation start date	2002-12-22T05:56:52	2002-12-22T05:40:31			
[s] Observation end time (MET)	156943585.184000	156943899.62042			
Observation end date	2002-12-22T11:25:21	2002-12-22T11:31:39			
Read mode	TIMED	TIMED			

## 2.3 Aspect



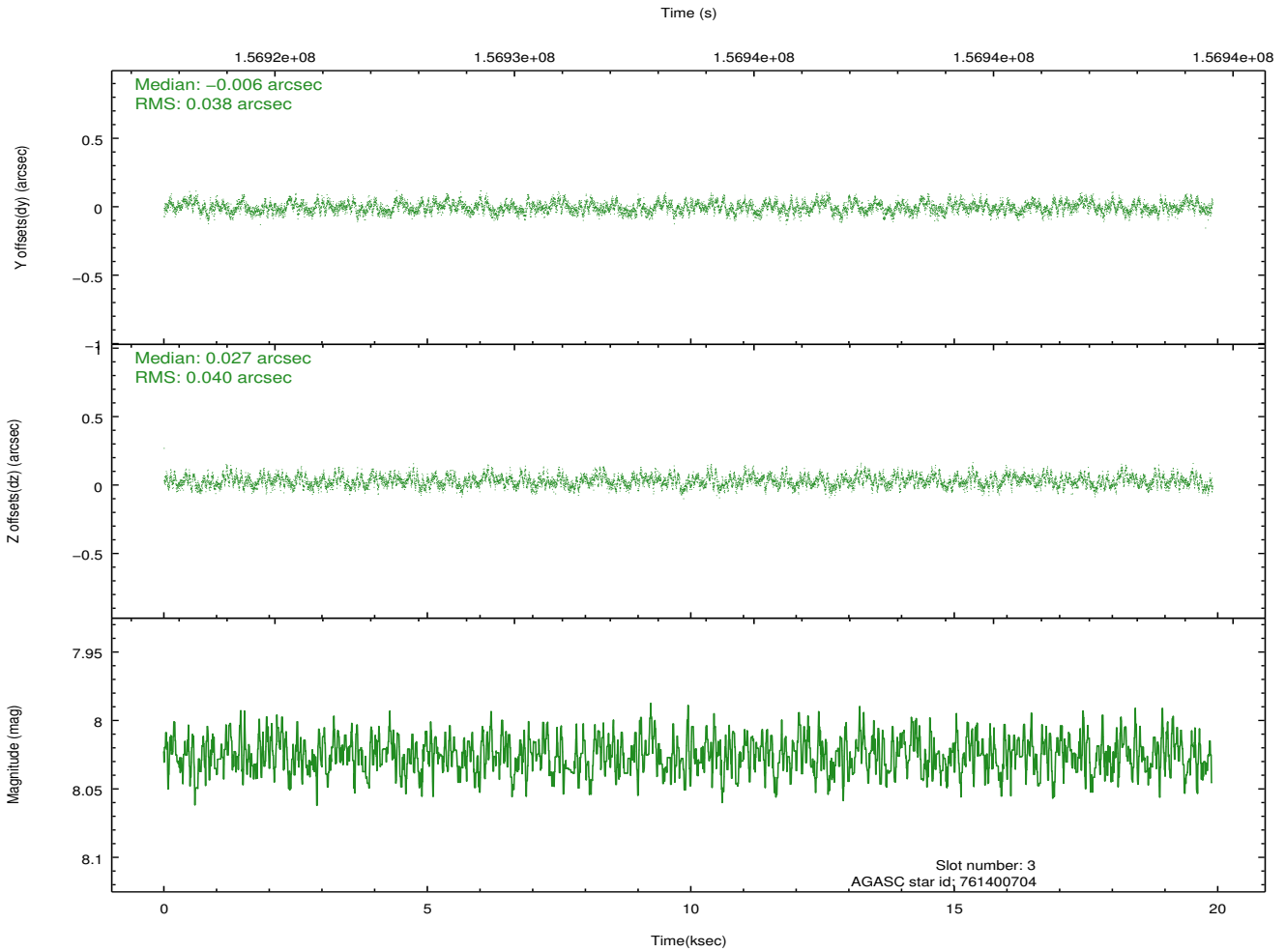
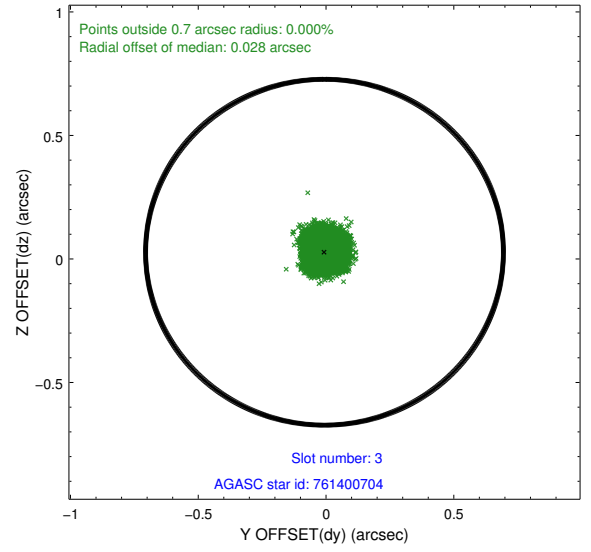
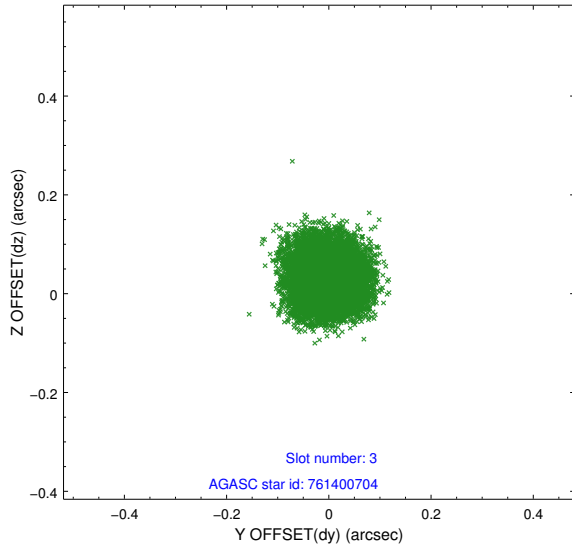


### Slot Statistics

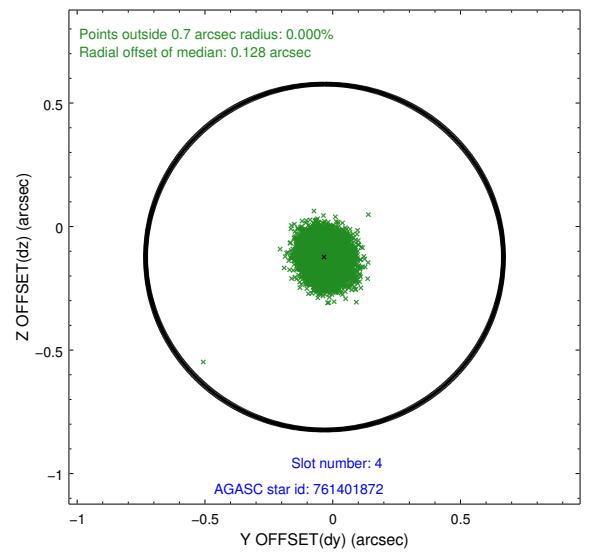
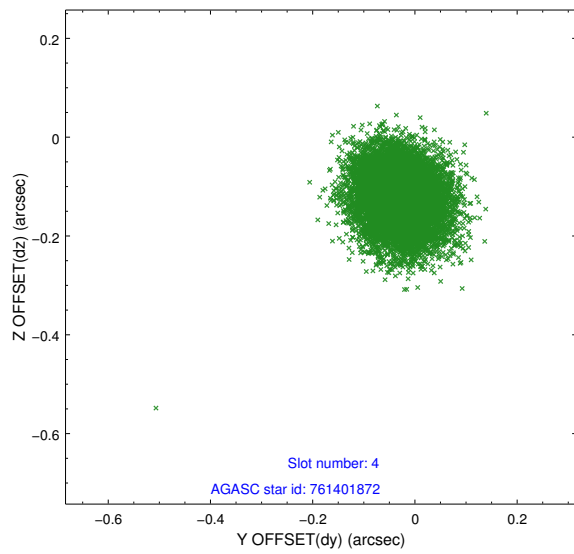
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	4854	0.043	-0.021	0.007	0.012	0.000000	0.000000	936.69	-953.21
1	FID	ACIS-I-5	7.23	4853	-0.134	0.068	0.007	0.013	0.000000	0.000000	-1811.46	944.28
2	FID	ACIS-I-6	7.25	4853	-0.001	0.024	0.008	0.013	0.000000	0.000000	402.02	1588.93
3	GUIDE	761400704	8.03	9705	-0.006	0.027	0.059	0.093	334.287647	-14.192394	1225.00	1639.98
4	GUIDE	761401872	9.13	9706	-0.032	-0.123	0.073	0.118	333.203729	-13.899520	-1019.88	-1585.24
5	GUIDE	761405288	9.60	9697	0.125	-0.053	0.108	0.177	334.101900	-14.554599	2240.02	595.86
6	GUIDE	761405472	9.86	9706	-0.063	0.058	0.106	0.171	333.339775	-14.227255	250.61	-1523.56
7	GUIDE	761400872	8.91	9699	-0.027	0.089	0.073	0.117	334.309730	-14.157994	1133.84	1753.70

## 2.4 Star Slots

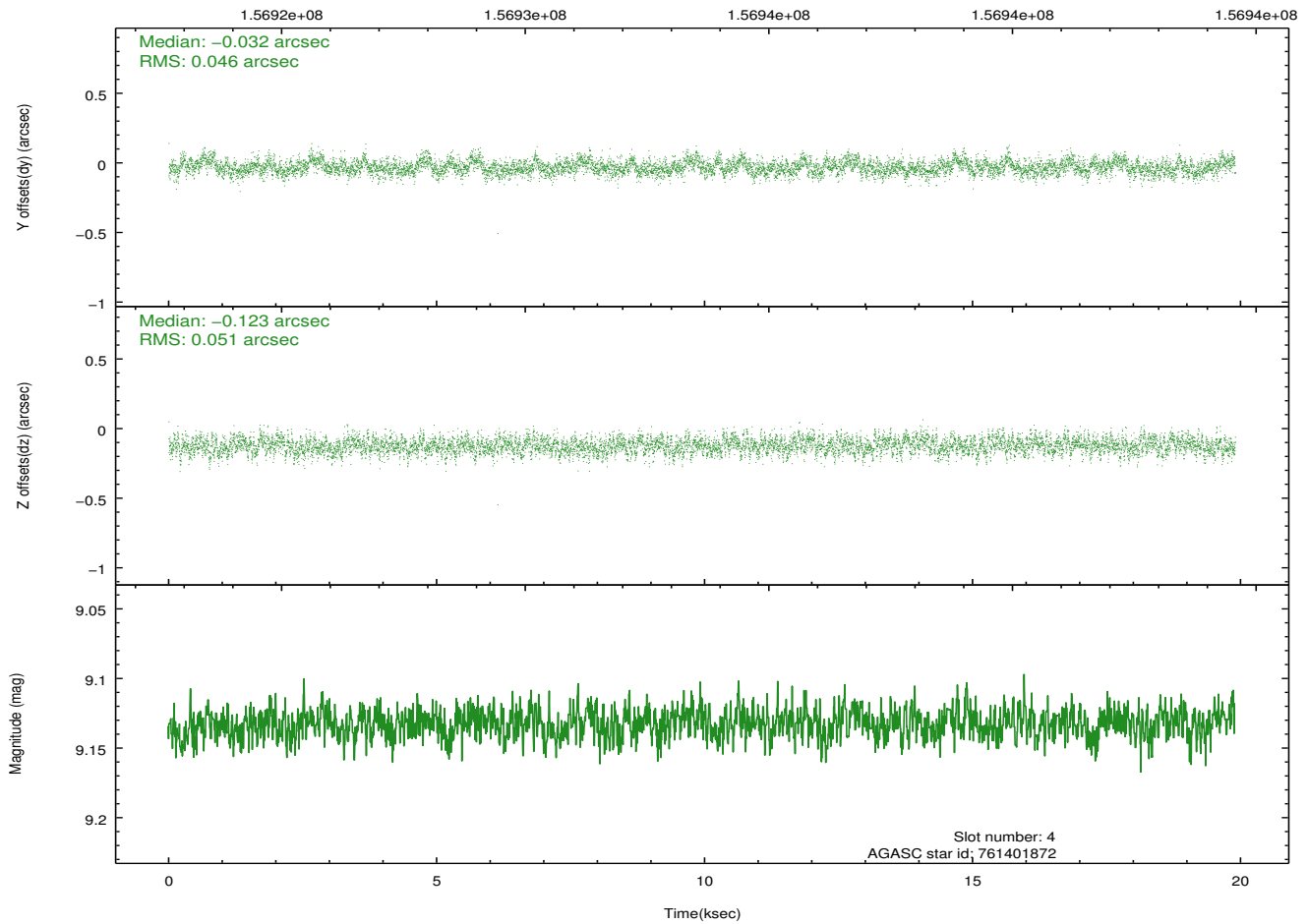
### 2.4.1 Slot 3



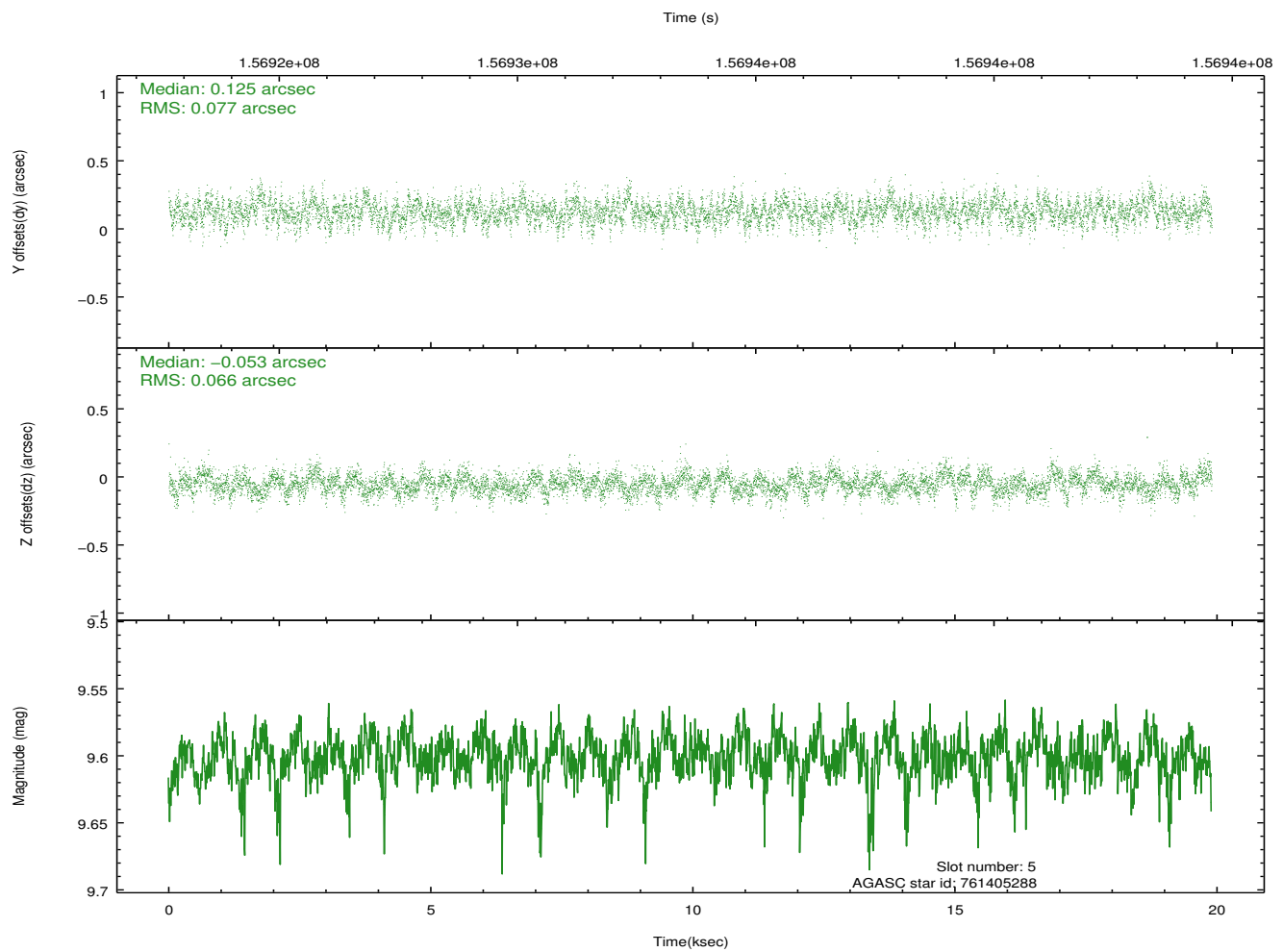
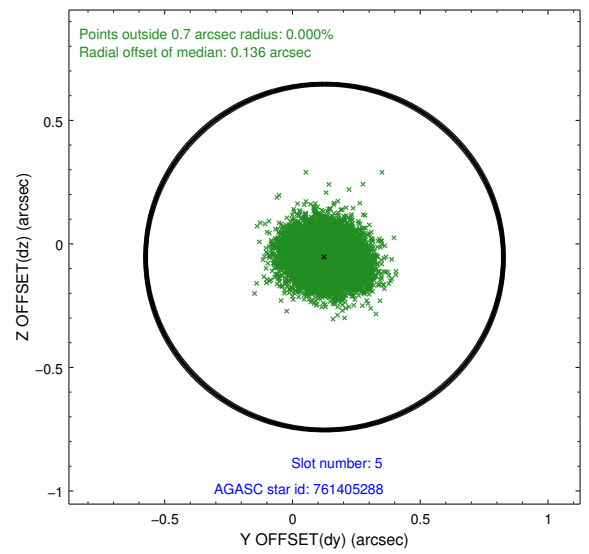
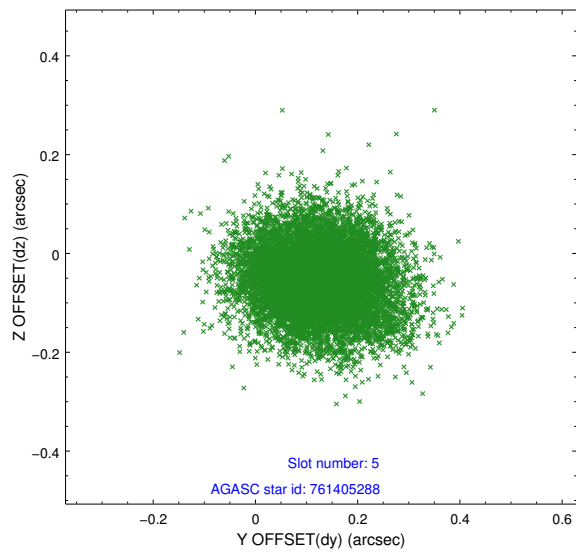
## 2.4.2 Slot 4



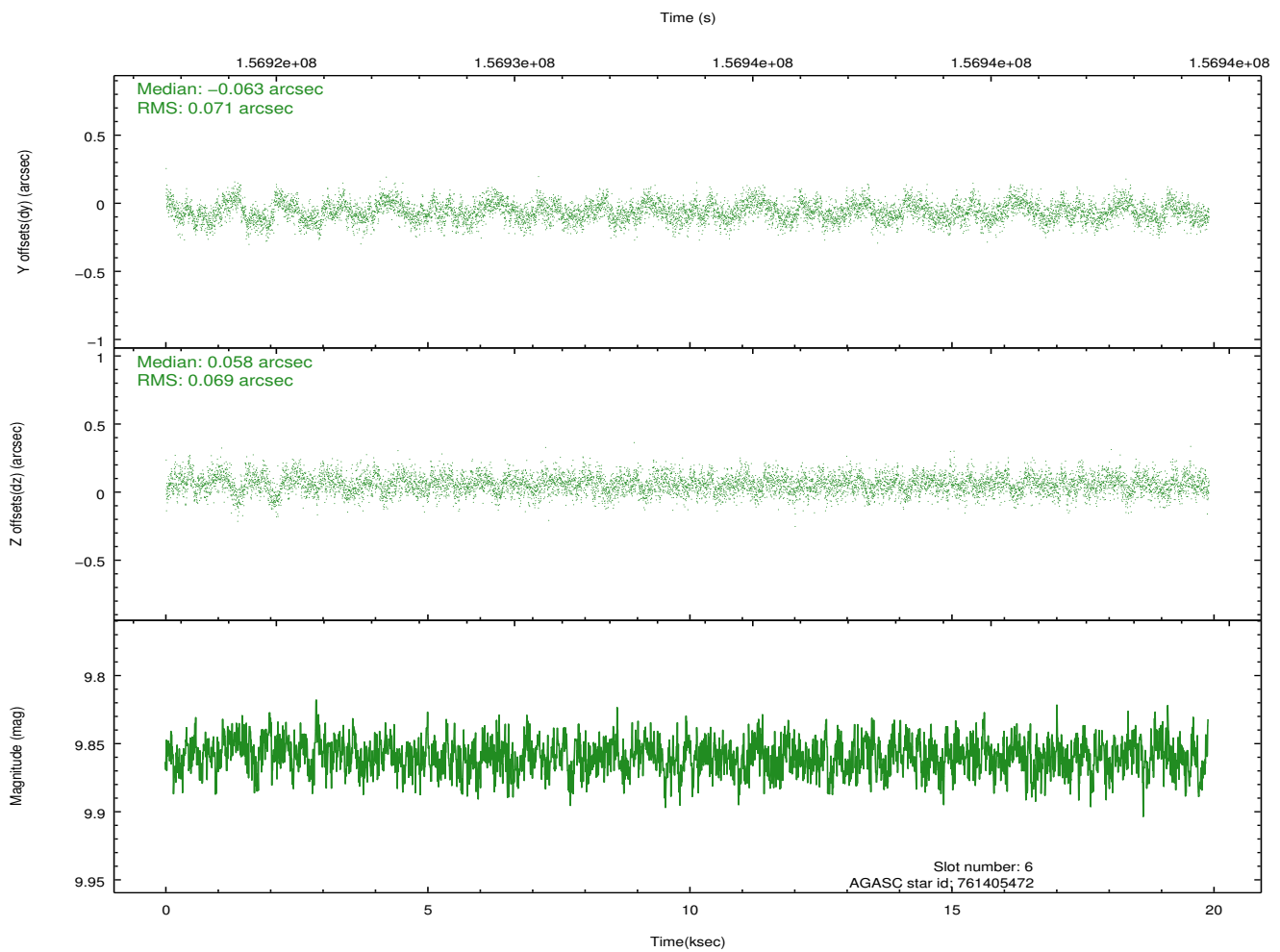
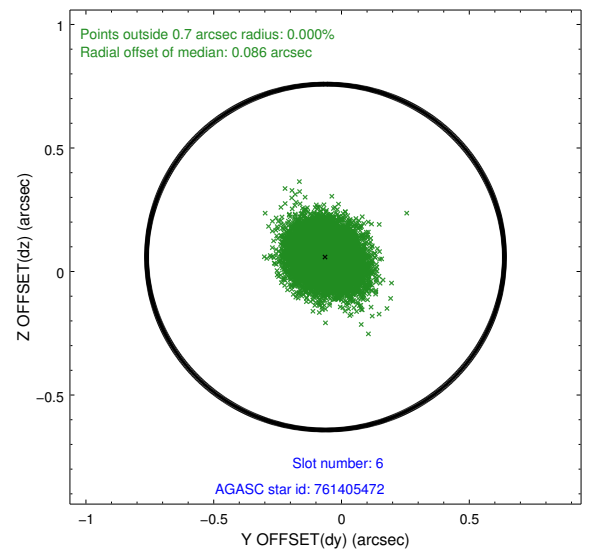
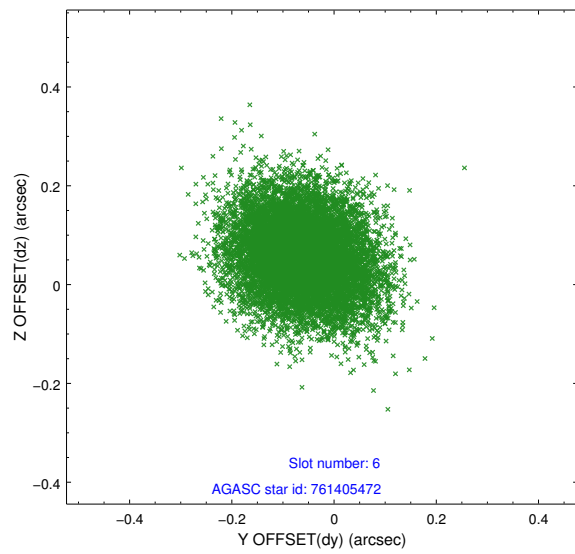
Time (s)



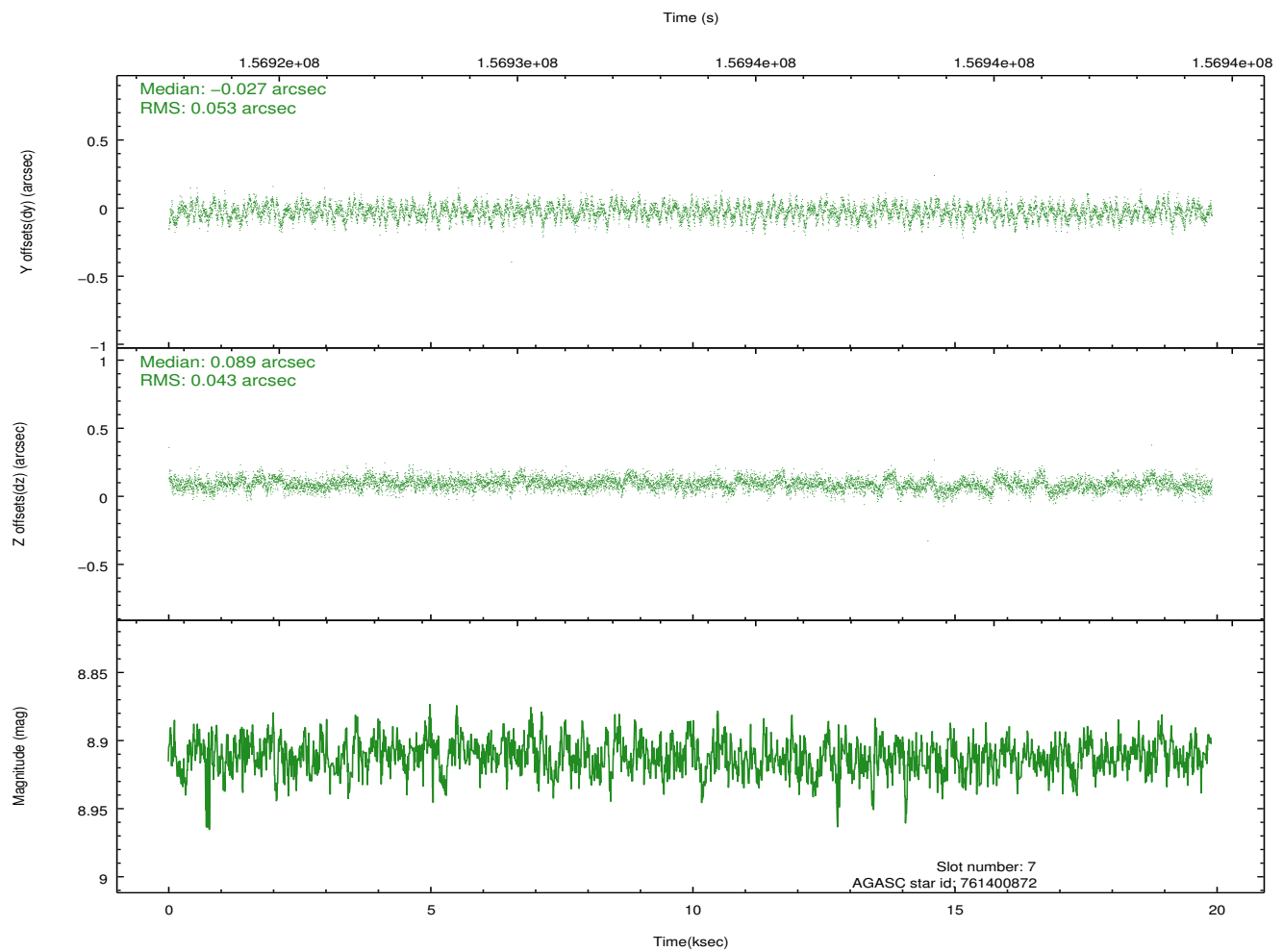
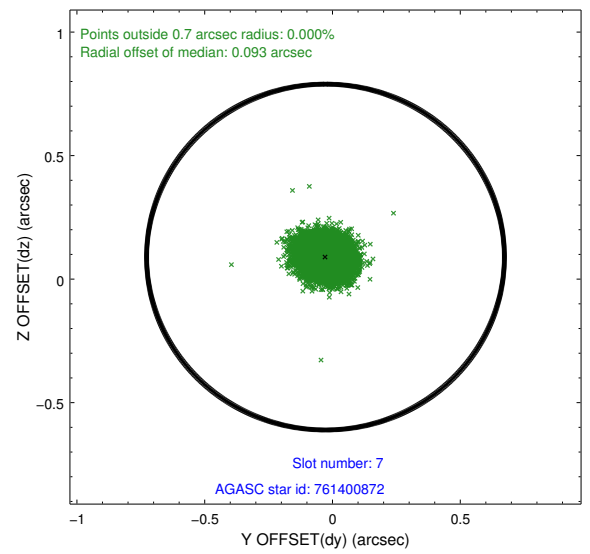
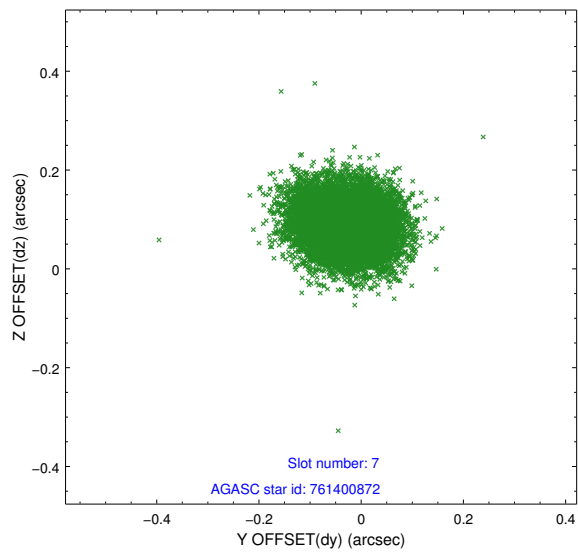
### 2.4.3 Slot 5



## 2.4.4 Slot 6

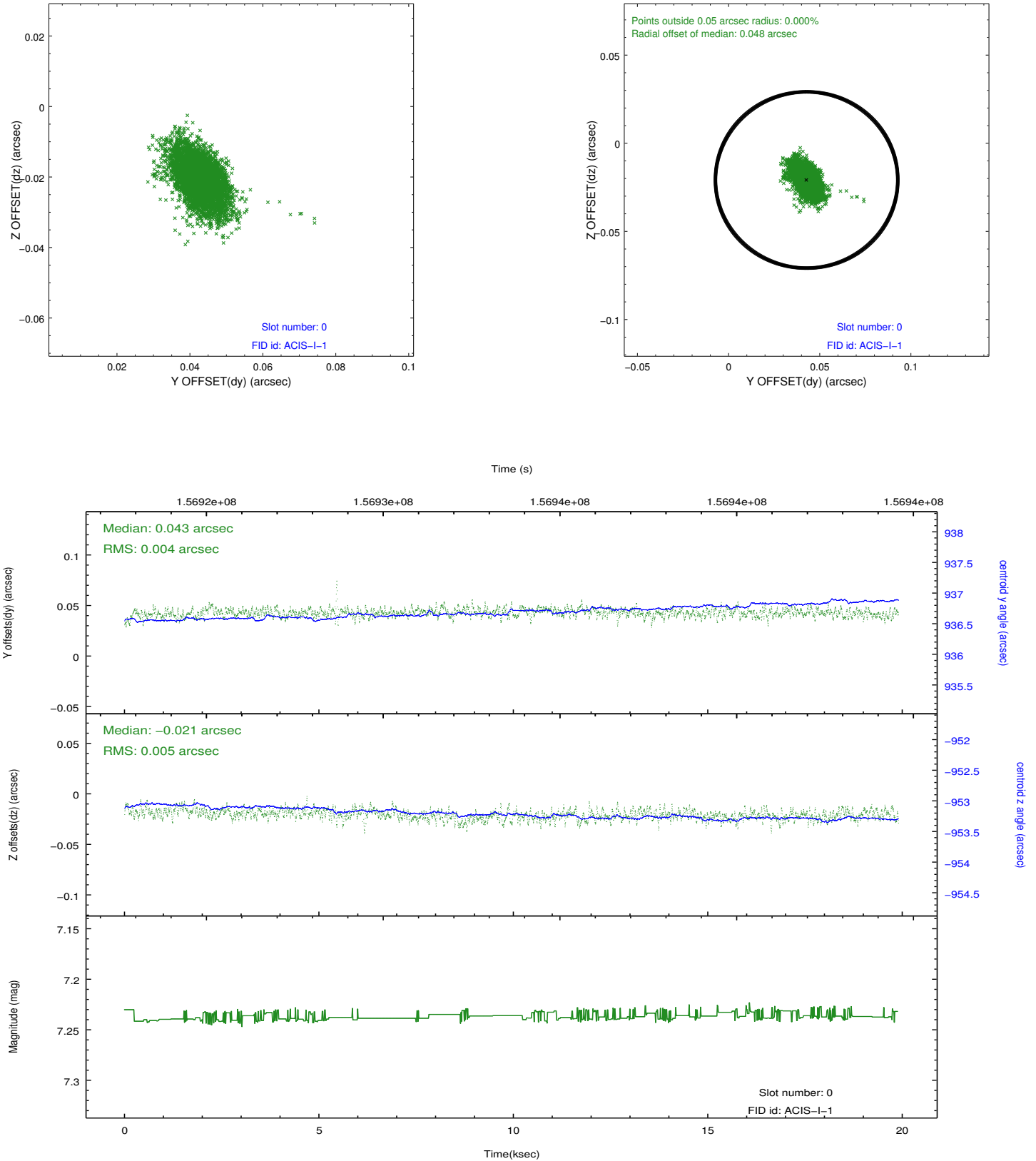


## 2.4.5 Slot 7

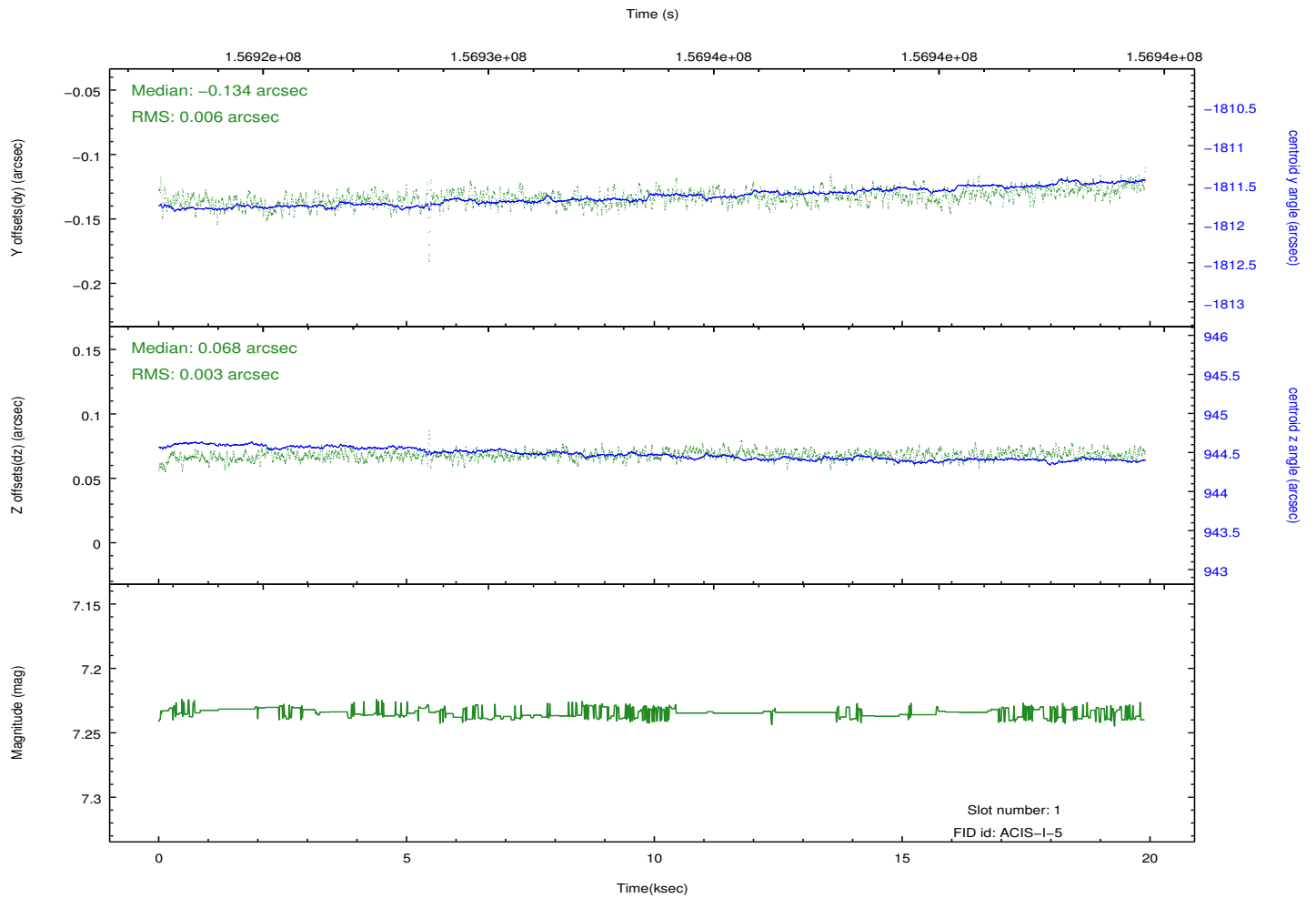
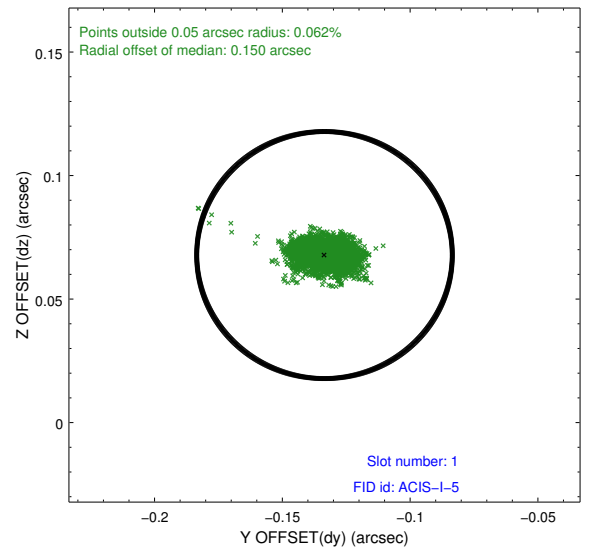
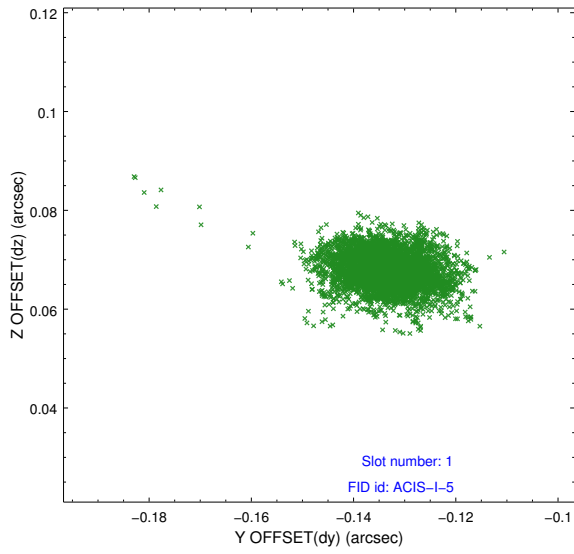


## 2.5 FID Slots

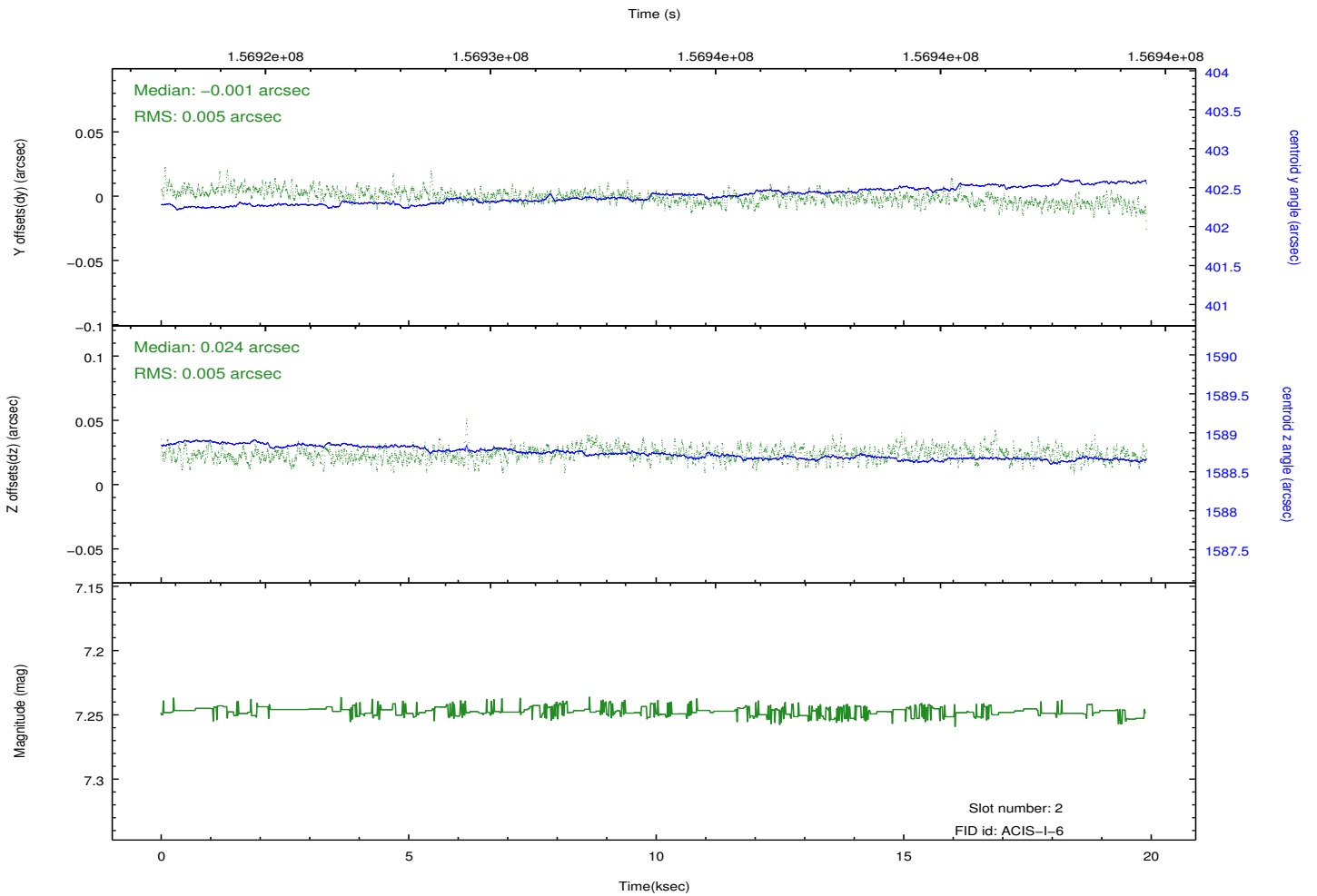
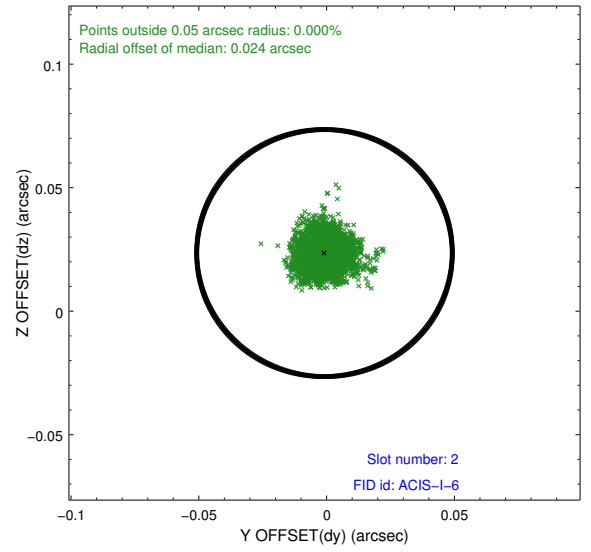
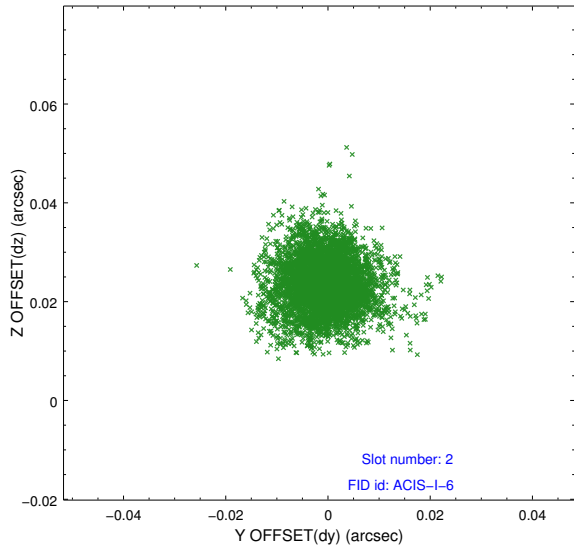
### 2.5.1 Slot 0



## 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)	2012.10.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.731

## A.2 Comments