

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 5853 - L2 Version 3  
Chandra X-Ray Center

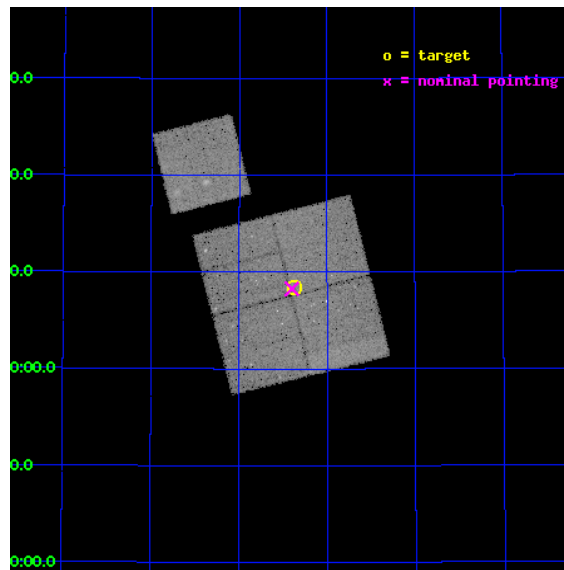
L2 Processing Date : Dec 30 2012

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# 1 Front

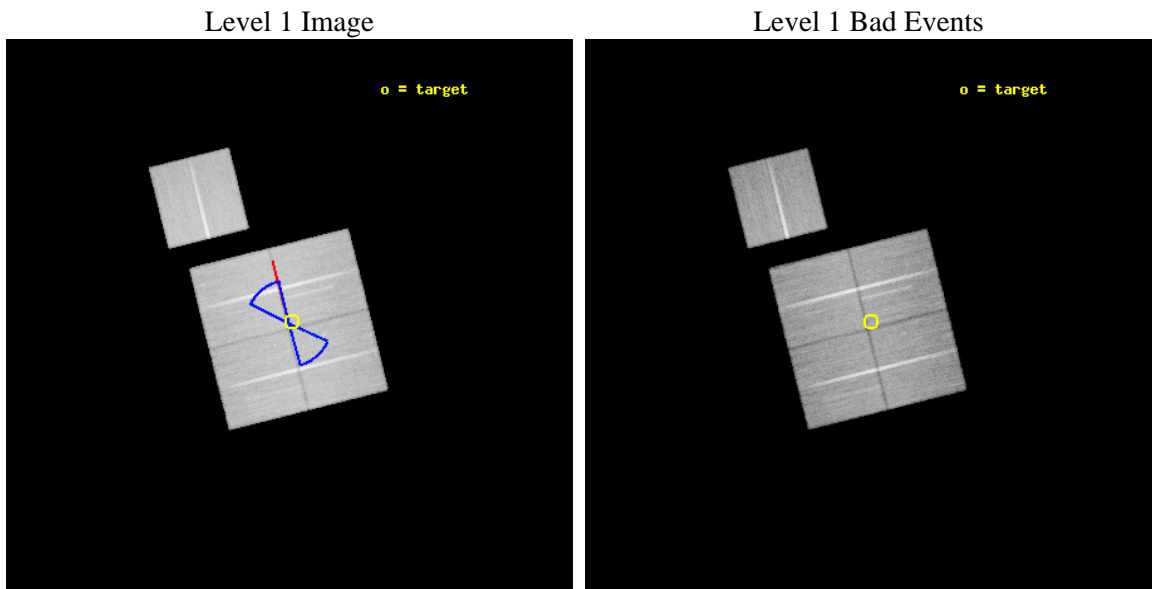
seq_num	900354	Sequence number
obs_id	5853	Observation id
title	Deep Chandra Imaging of the Extended Groth Strip: The Co-evolution of Black Holes and Galaxies	Proposal title
observer	Prof Kirpal Nandra	Principal investigator
object	EGS-7	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	213.843735	Observer's specified target RA [deg]
dec_targ	52.140667	Observer's specified target Dec [deg]
ra_nom	213.84979050884	Nominal RA [deg]
dec_nom	52.137870320085	Nominal Dec [deg]
roll_nom	345.95990351145	Nominal Roll [deg]
revision	3	Processing version of data
ontime	43133.318106025	Sum of GTIs [s]
livetime	42569.749550683	Livetime [s]
ontime0	43133.318056226	Sum of GTIs [s]
ontime1	43136.458926857	Sum of GTIs [s]
ontime2	43139.599917024	Sum of GTIs [s]
ontime3	43133.318106025	Sum of GTIs [s]
ontime6	43133.317926705	Sum of GTIs [s]
l2events	120212	Number of level 2 events



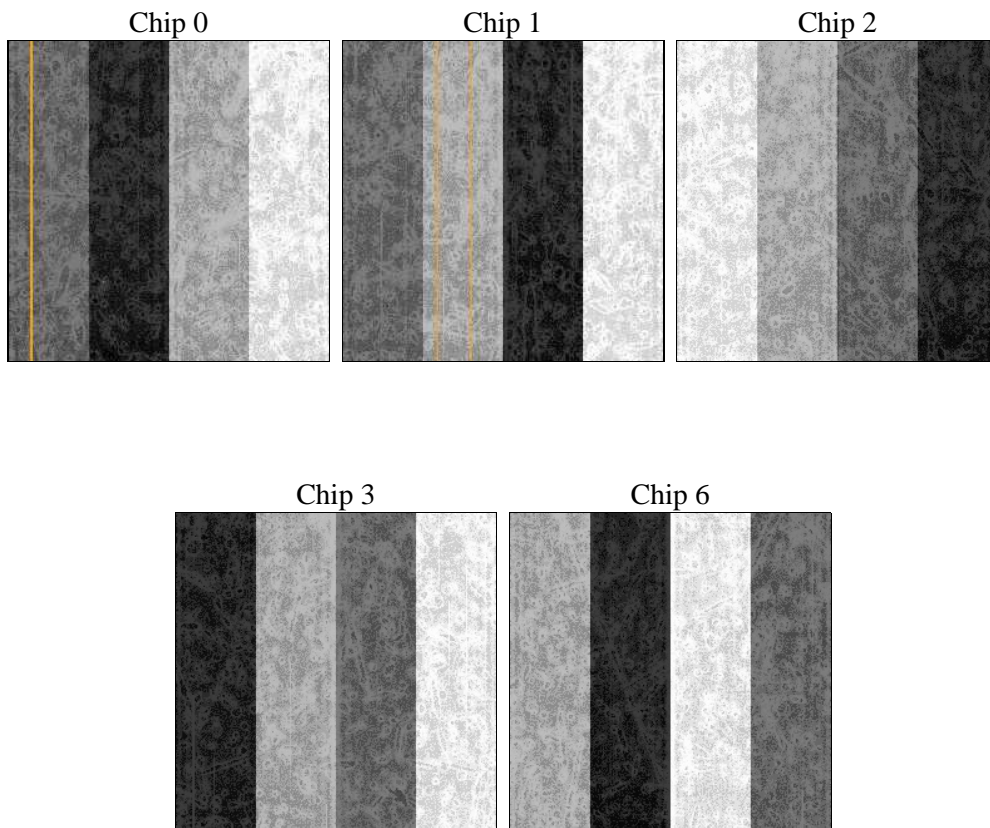
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	43000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	43133.318106025	Sum of GTIs [s]
caldbver	4.5.5	&#160	ontime0	43133.318056226	Sum of GTIs [s]
date	2012-12-30T21:01:37	Date and time of file creation	ontime1	43136.458926857	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	43139.599917024	Sum of GTIs [s]
			ontime3	43133.318106025	Sum of GTIs [s]
			ontime6	43133.317926705	Sum of GTIs [s]
			l1events	1431632	Number of level 1 events

### 2.1.4 Events

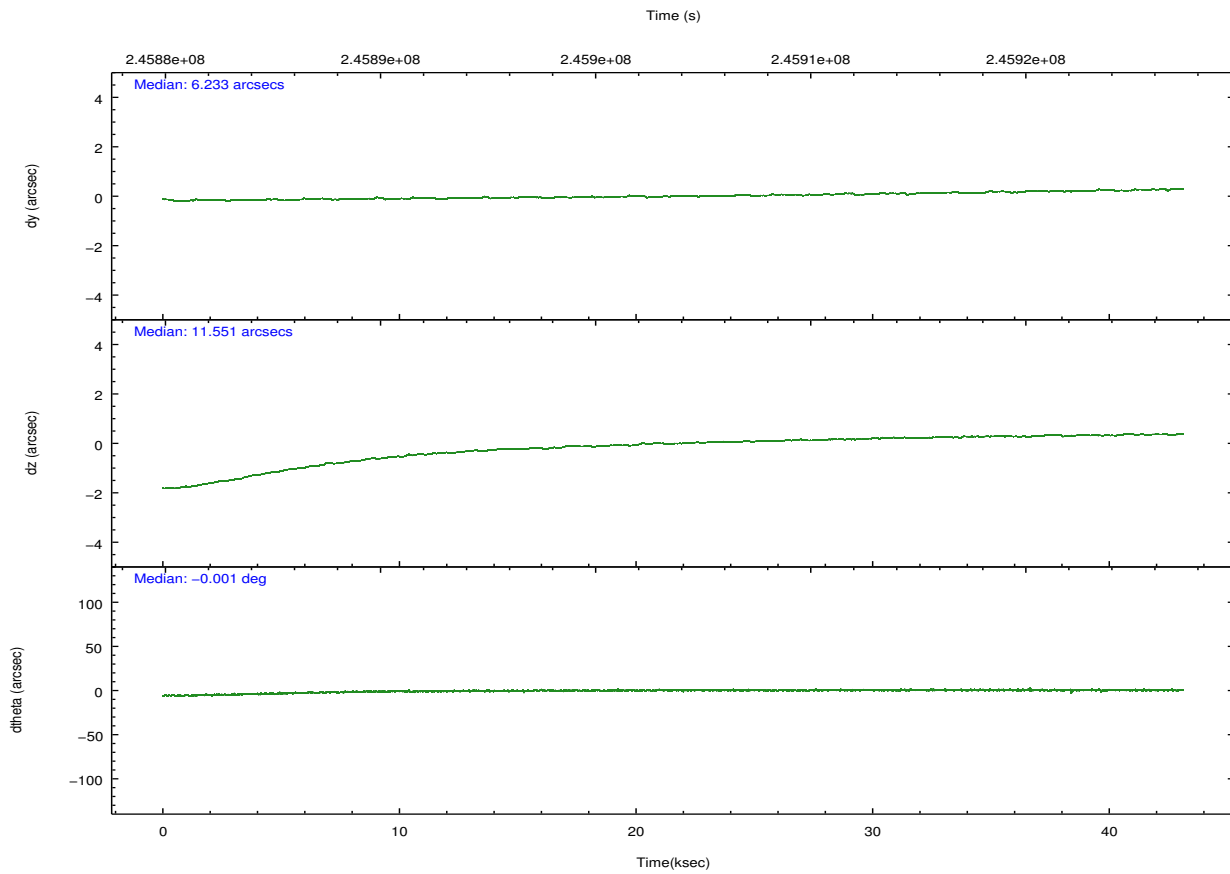
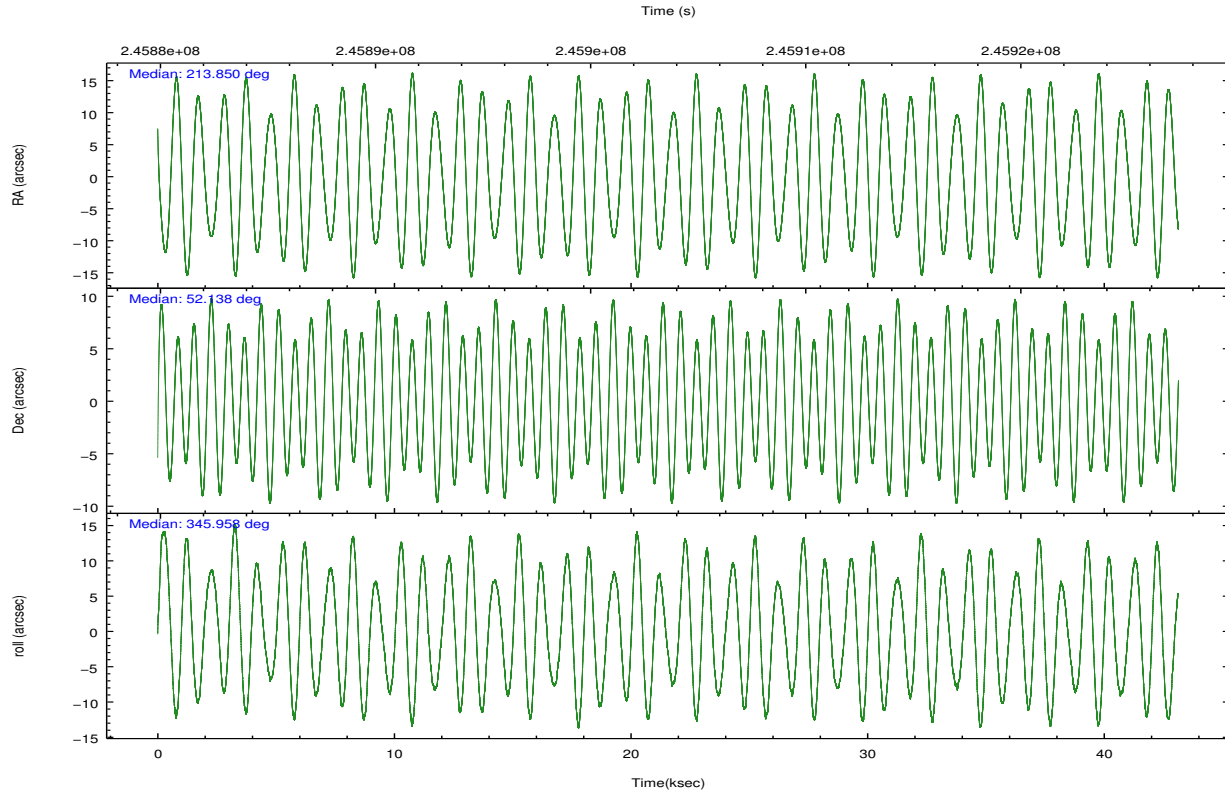
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	276645	268380	310001	285374	291232
rejected events	248034	235838	282200	258833	261757
rejected %	89%	87%	91%	90%	89%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	10134	12144	10081	9401	10614
	3%	4%	3%	3%	3%
grade 1 events	132	136	134	130	123
	0%	0%	0%	0%	0%
grade 2 events	7077	7241	6638	5915	6408
	2%	2%	2%	2%	2%
grade 3 events	3298	3591	3050	3090	3316
	1%	1%	0%	1%	1%
grade 4 events	2955	3561	3116	3058	3284
	1%	1%	1%	1%	1%
grade 5 events	9920	11304	9245	11475	11601
	3%	4%	2%	4%	3%
grade 6 events	5509	6383	5264	5438	6253
	1%	2%	1%	1%	2%
grade 7 events	237620	224020	272473	246867	249633
	85%	83%	87%	86%	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	213.806935	213.8497905088387	Subarray requested	NONE	NONE
[deg] Pointing Dec	52.130227	52.13787032008452	Alternating exposures requested	N	N
[deg] Pointing Roll	345.785047	345.959903511452	[s] Primary exposure time	0.000000	3.1
[deg] Roll angle	50.756000	50.756000			
[deg] Roll tolerance	25.000000	25.000000			
Roll constraint allows 180D rotation	Y	Y			
[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)	245882169.184000	245880984.12451			
Observation start date	2005-10-16T20:35:05	2005-10-16T20:16:24			
[s] Observation end time (MET)	245925169.184000	245926116.41409			
Observation end date	2005-10-17T08:31:45	2005-10-17T08:48:36			
Read mode	TIMED	TIMED			

## 2.3 Aspect

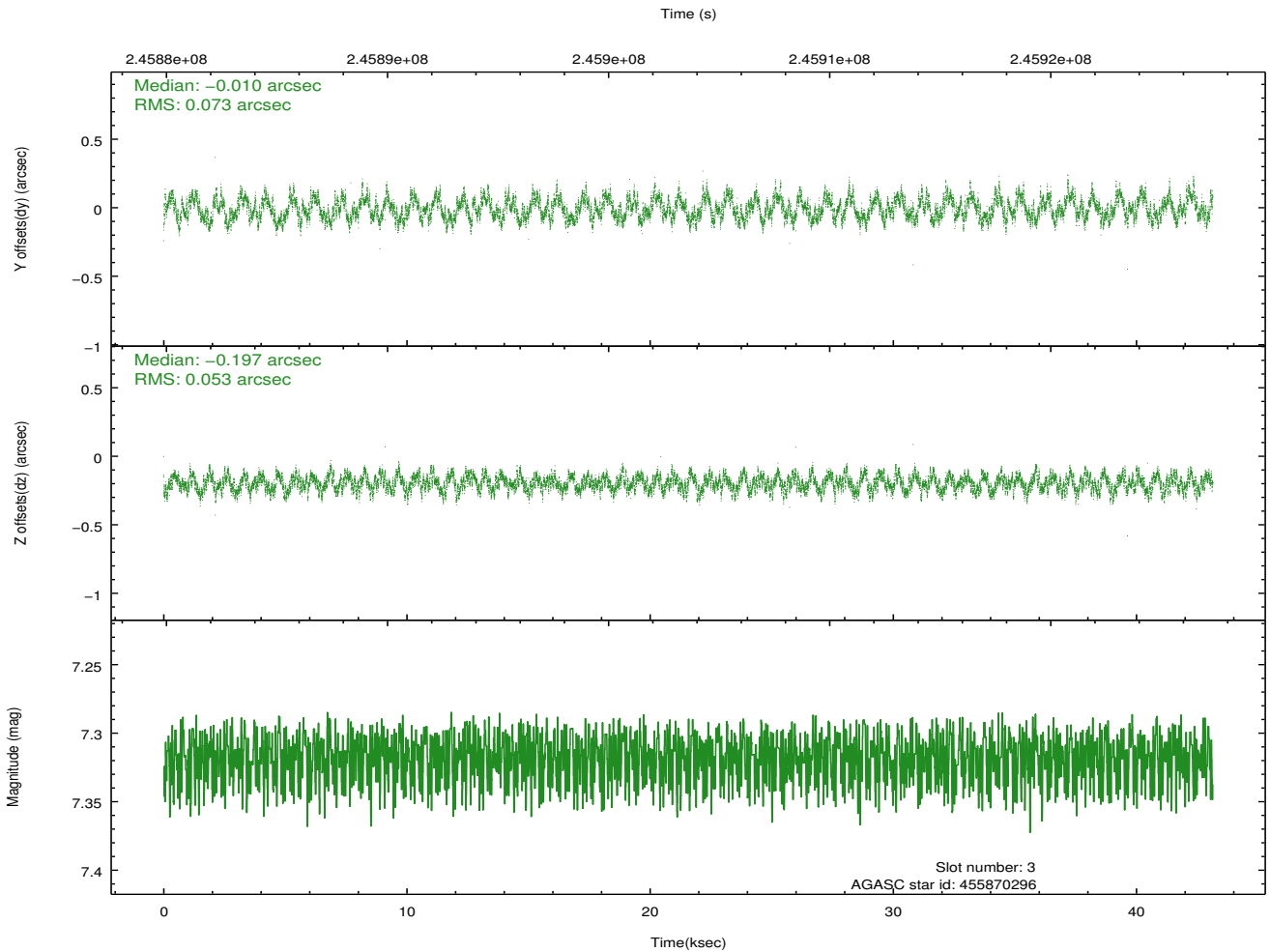
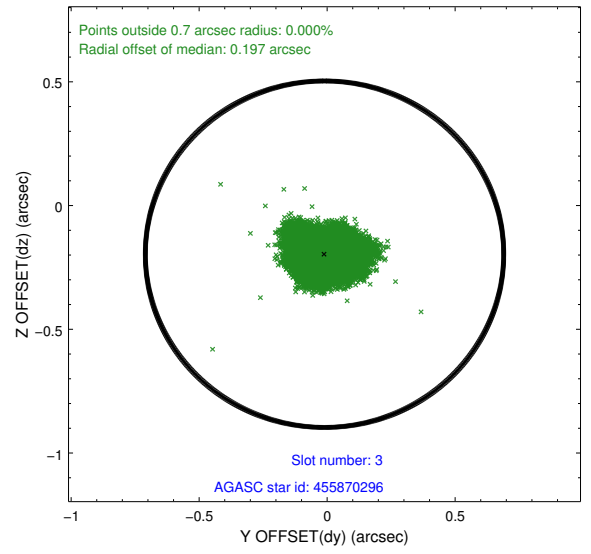
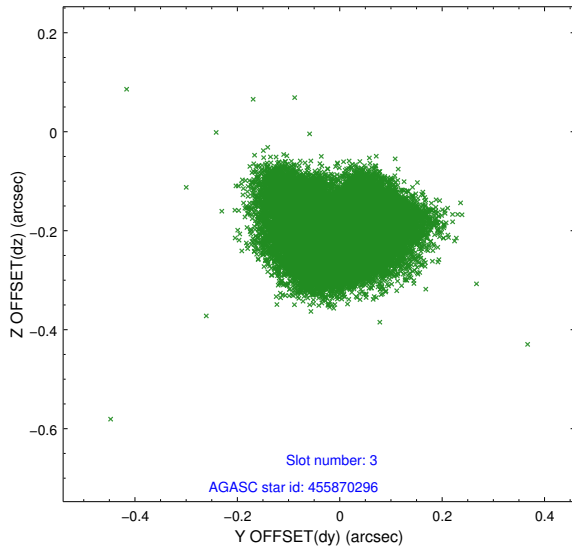


### Slot Statistics

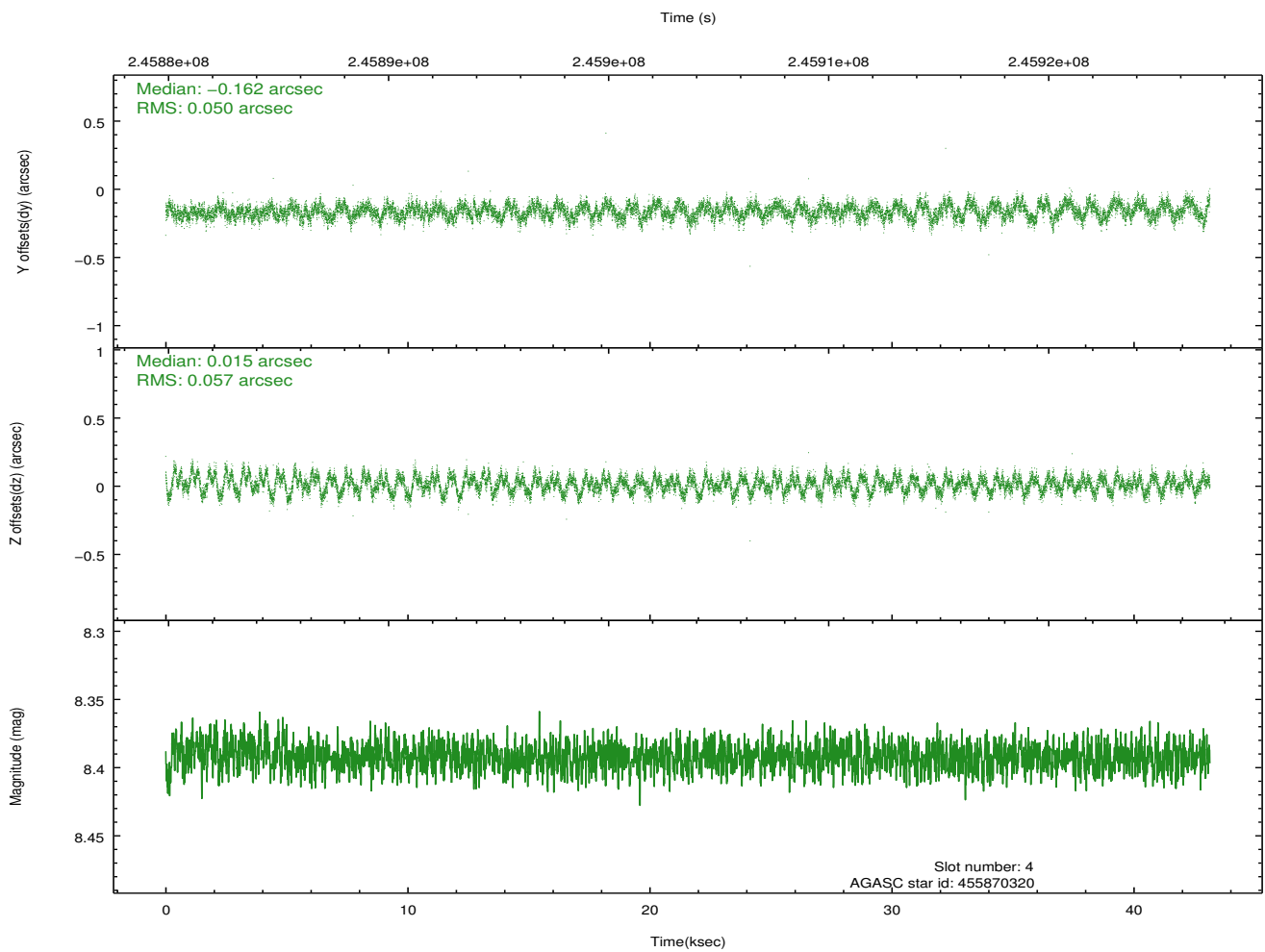
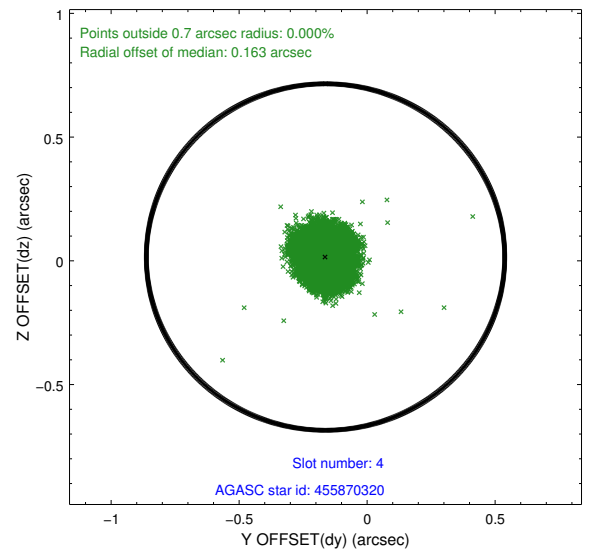
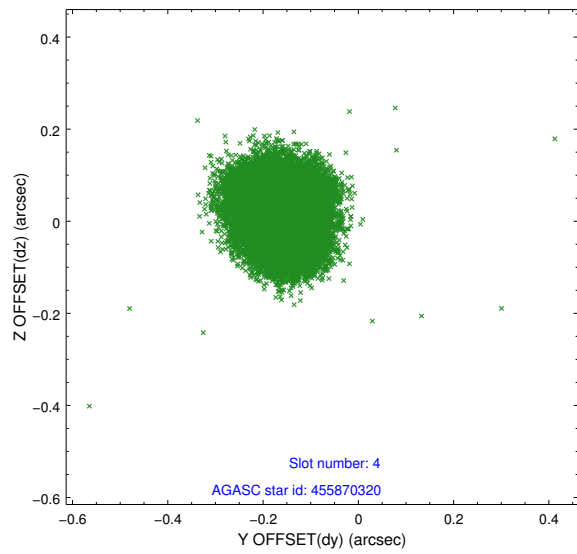
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	10521	0.047	-0.023	0.010	0.050	0.000000	0.000000	933.47	-834.88
1	FID	ACIS-I-5	7.23	10522	-0.162	0.063	0.011	0.034	0.000000	0.000000	-1814.80	1062.75
2	FID	ACIS-I-6	7.25	10522	0.025	0.031	0.014	0.031	0.000000	0.000000	399.05	1707.18
3	GUIDE	455870296	7.32	21045	-0.010	-0.197	0.099	0.149	214.629779	52.033323	1849.79	119.25
4	GUIDE	455870320	8.39	21045	-0.162	0.015	0.082	0.125	214.874440	52.401638	2028.79	1539.77
5	GUIDE	455871720	9.86	20971	0.118	0.286	0.331	0.444	214.017360	52.072997	502.11	-84.25
6	GUIDE	504894728	8.82	21036	0.125	-0.012	0.120	0.187	213.220892	52.722550	-1763.43	1758.31
7	GUIDE	505806936	7.00	21046	-0.067	-0.091	0.104	0.159	213.820815	52.535927	-329.25	1423.30

## 2.4 Star Slots

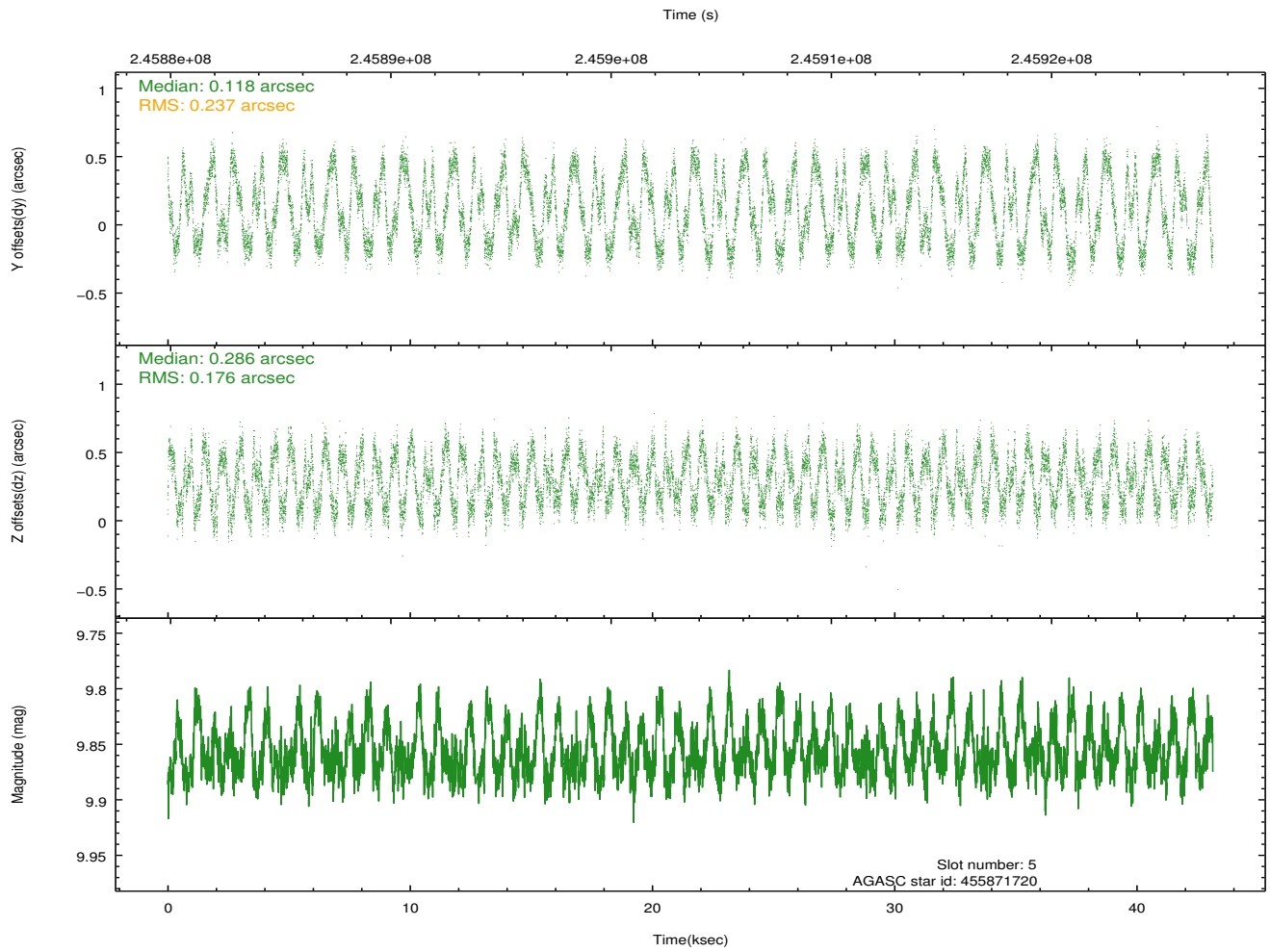
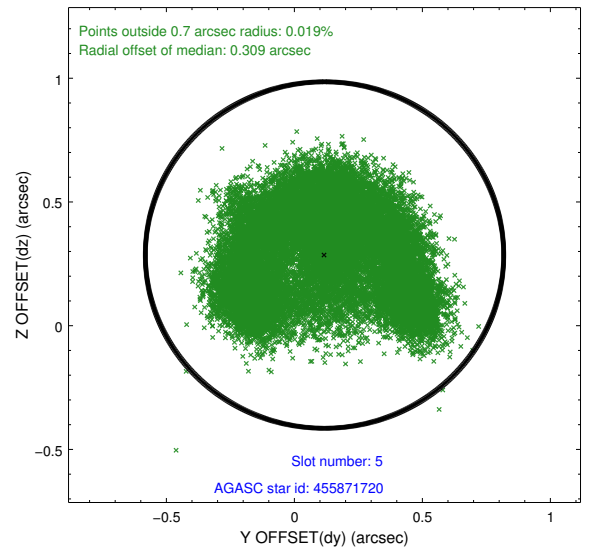
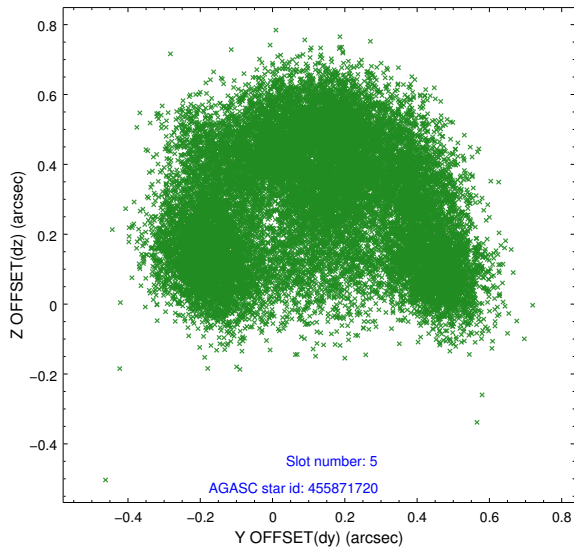
### 2.4.1 Slot 3



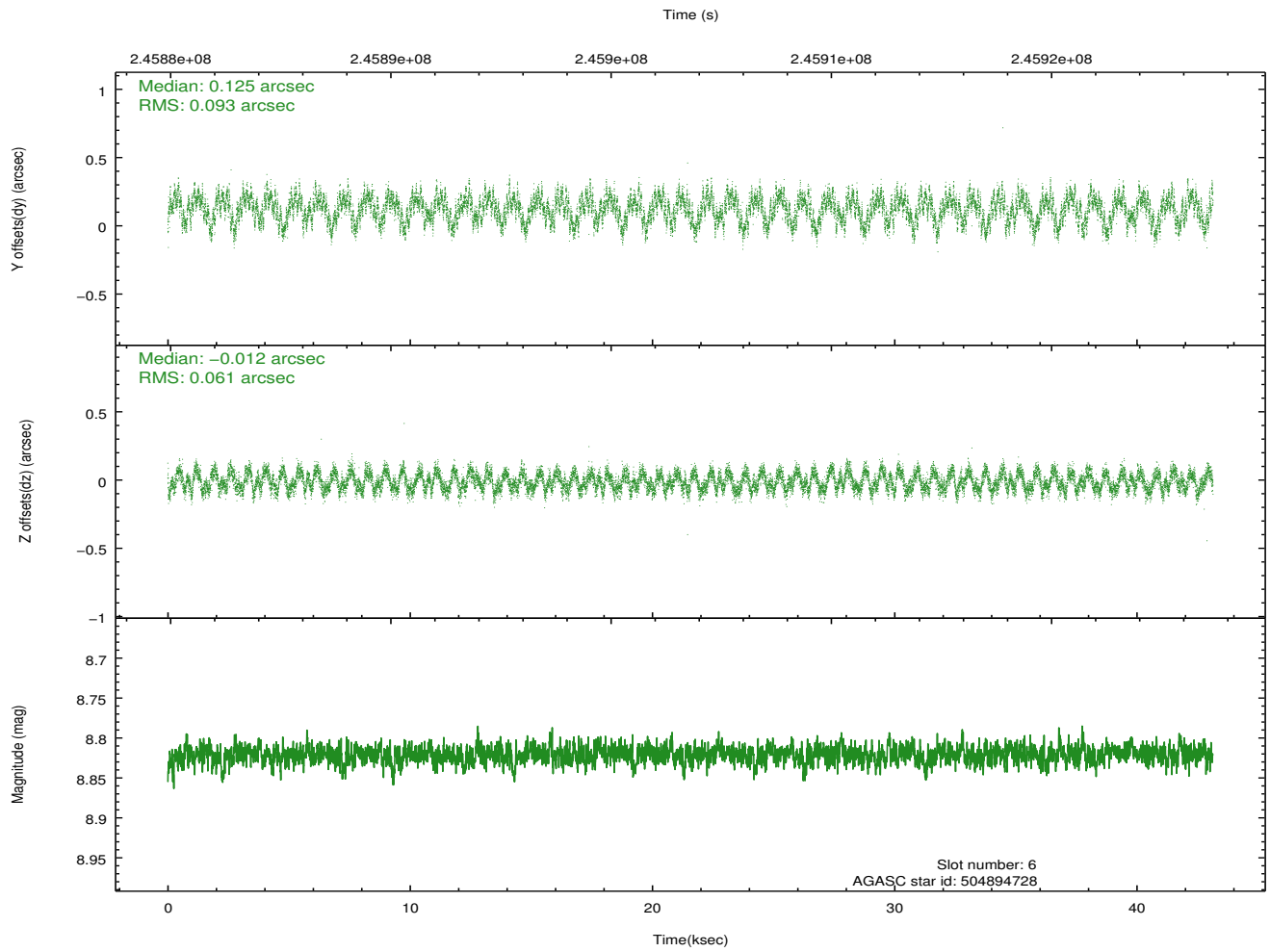
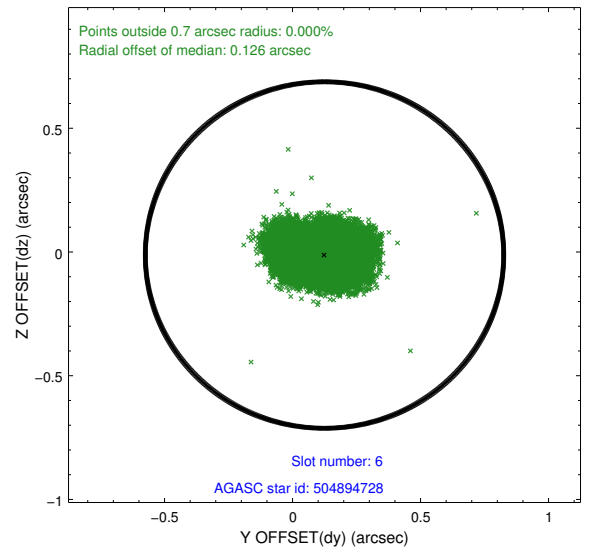
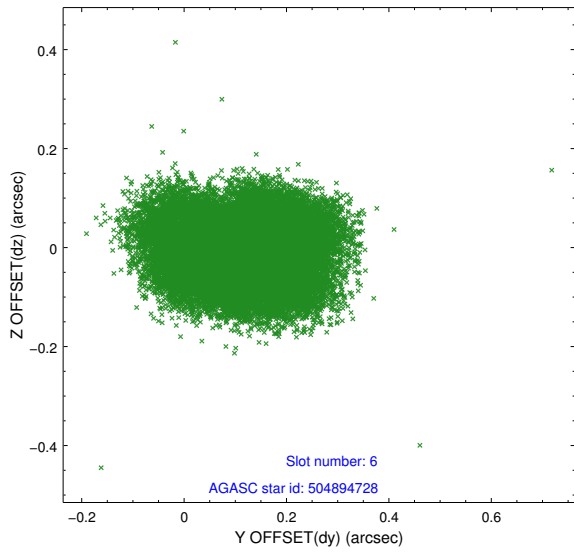
## 2.4.2 Slot 4



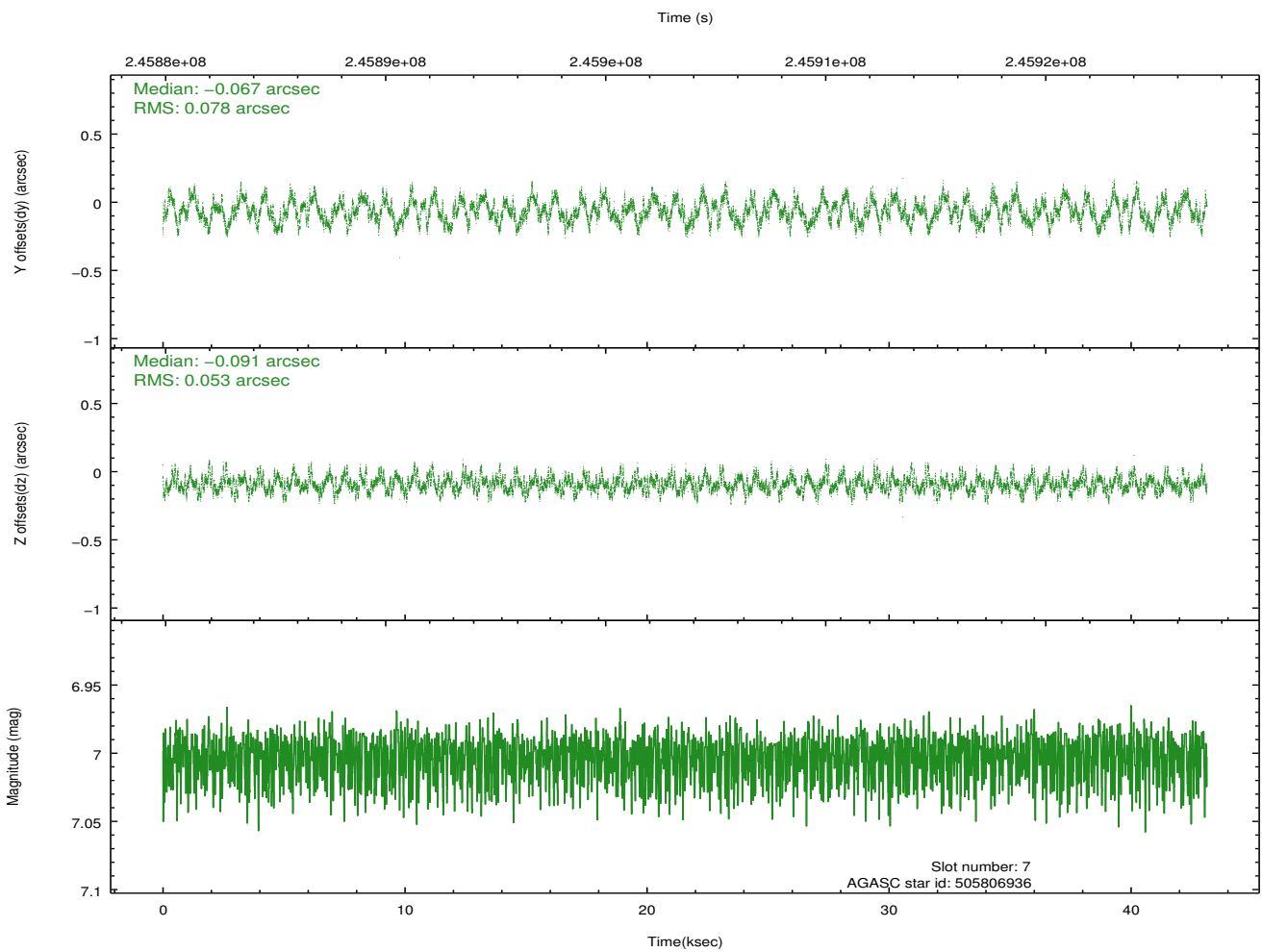
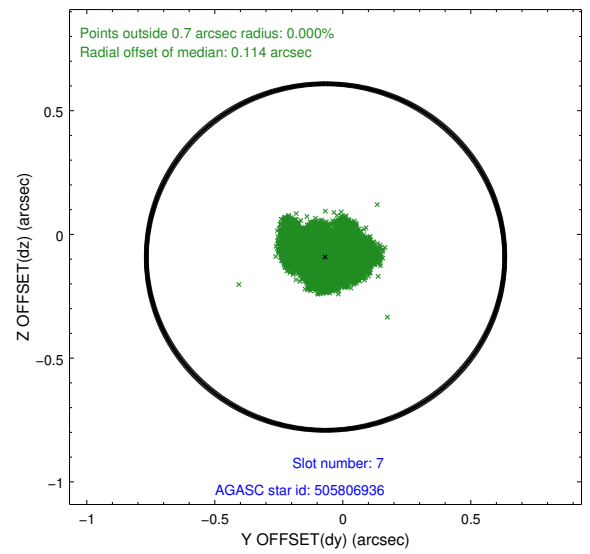
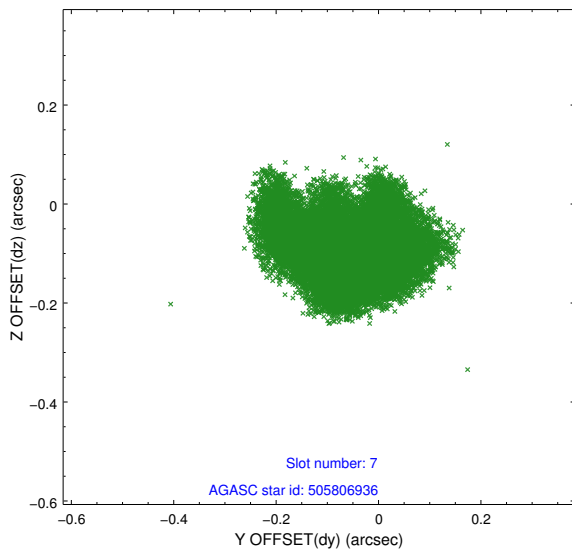
### 2.4.3 Slot 5



### 2.4.4 Slot 6

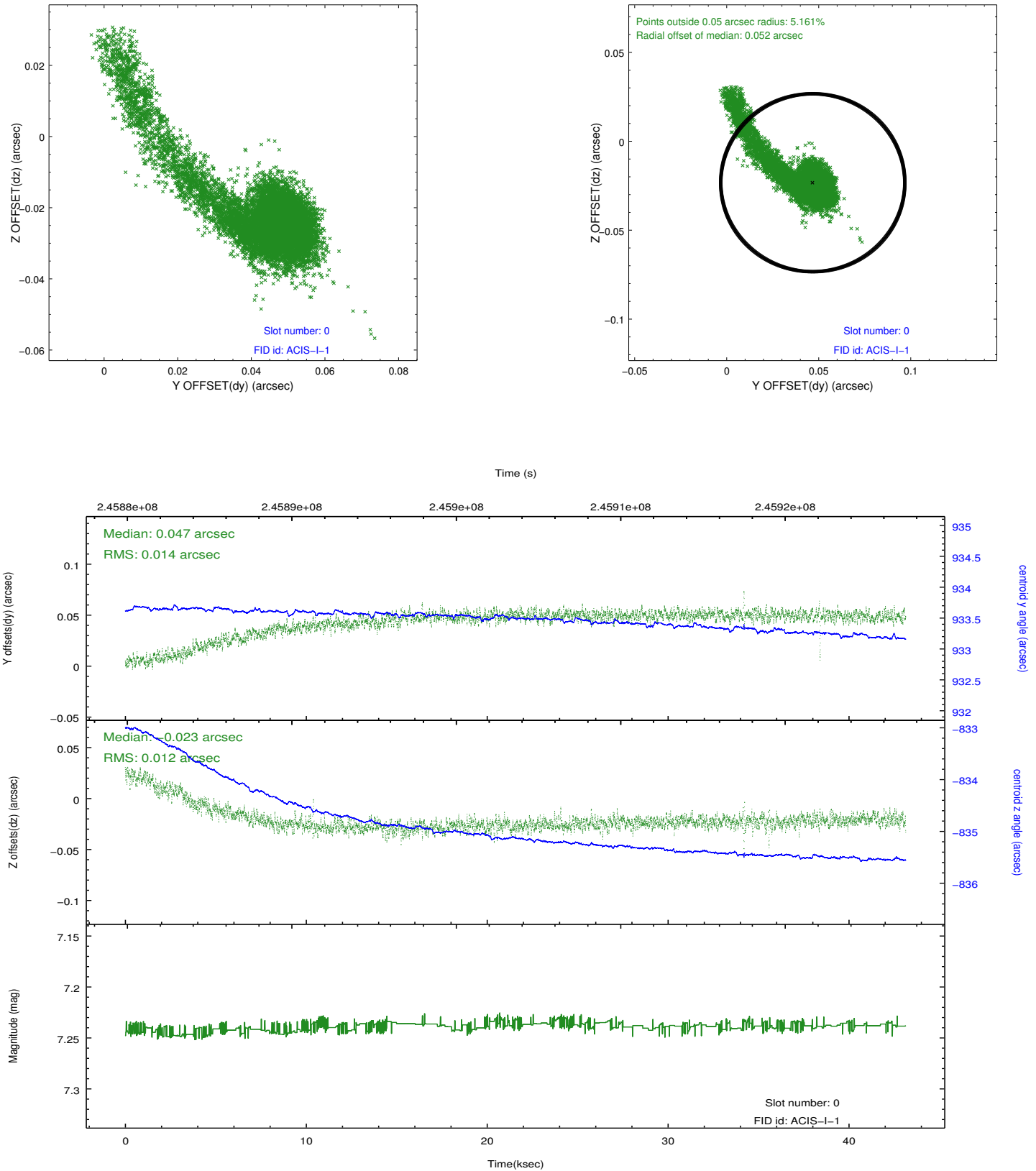


## 2.4.5 Slot 7

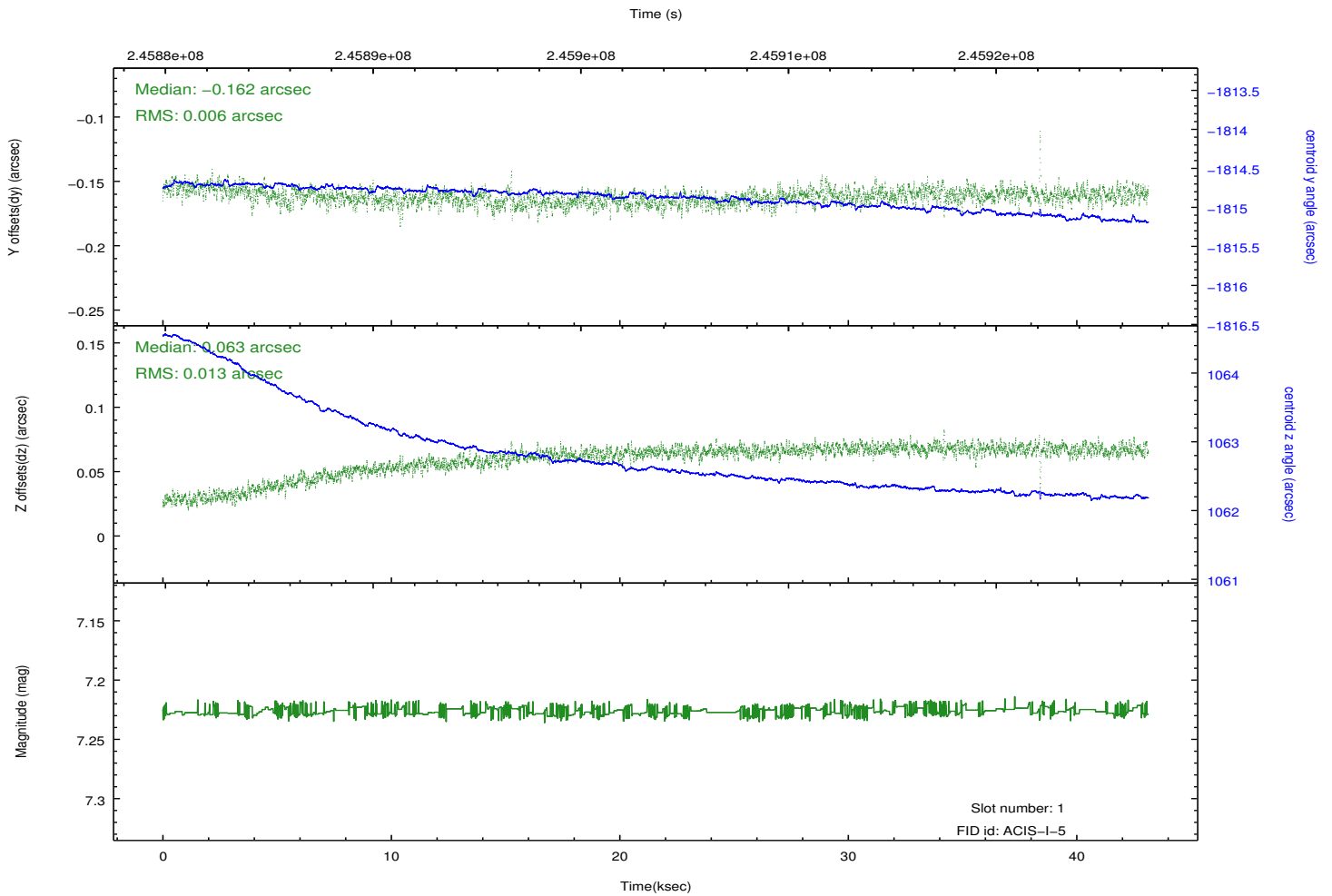
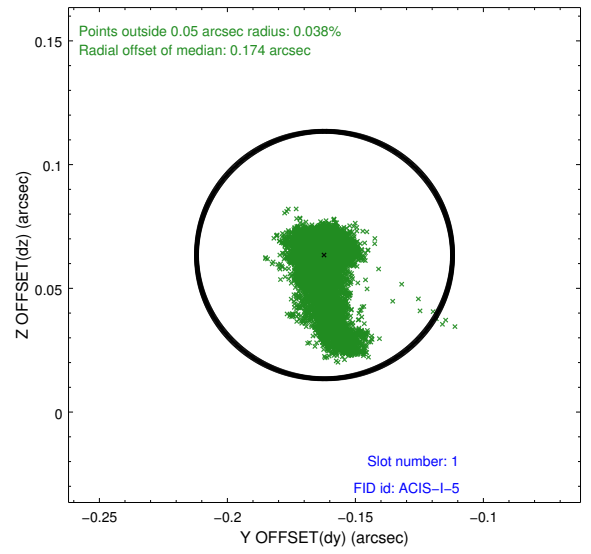
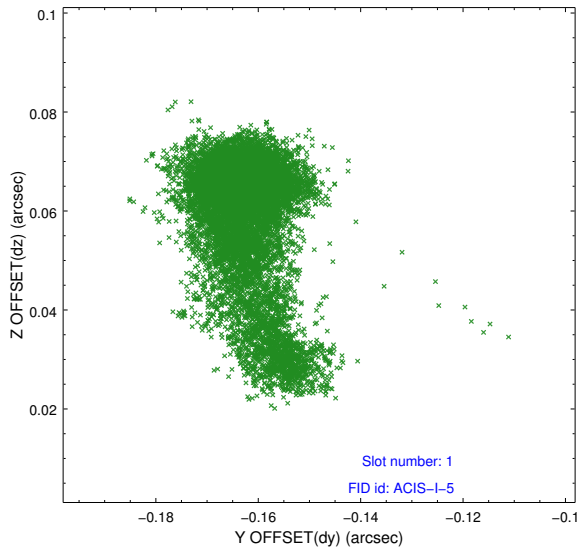


## 2.5 FID Slots

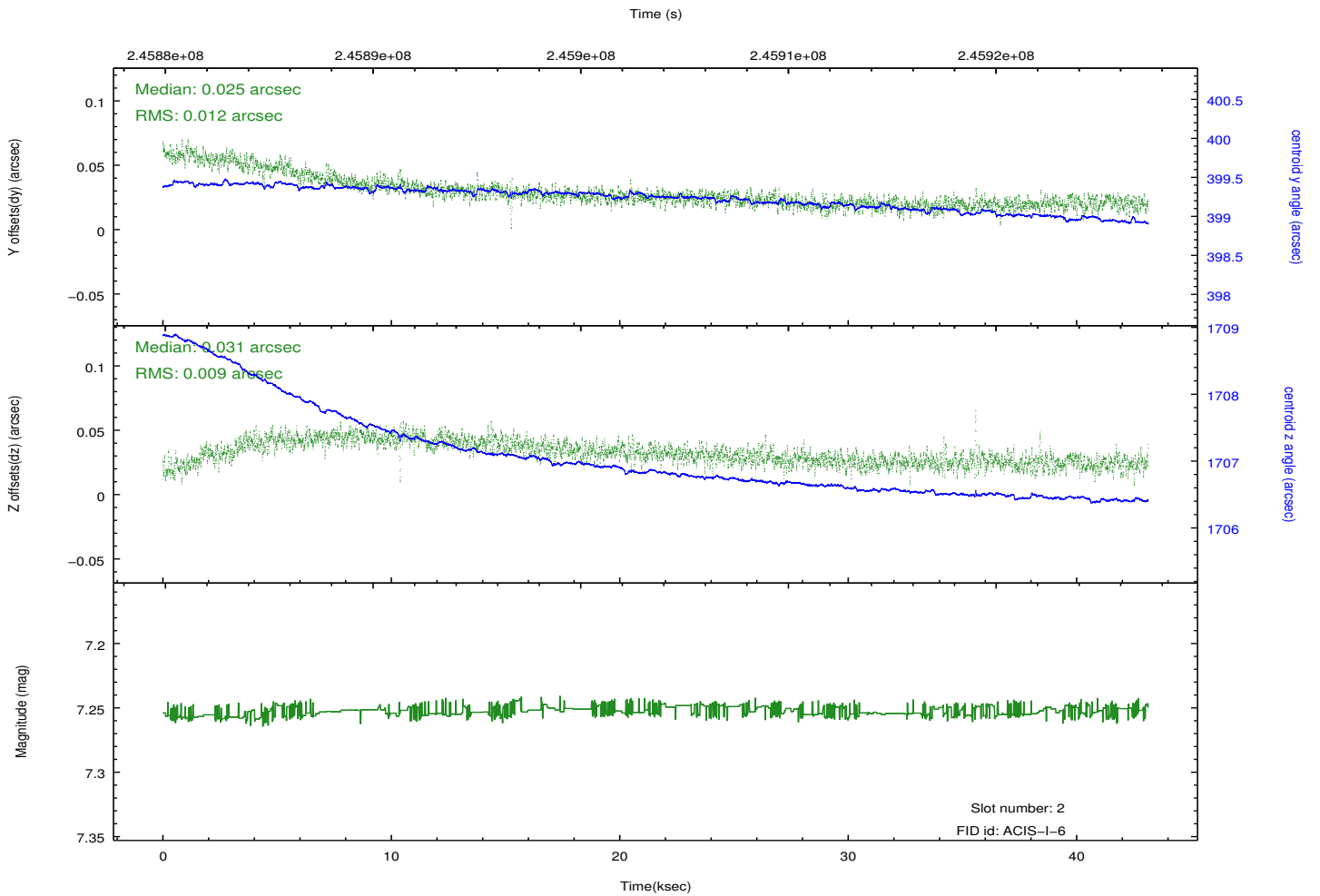
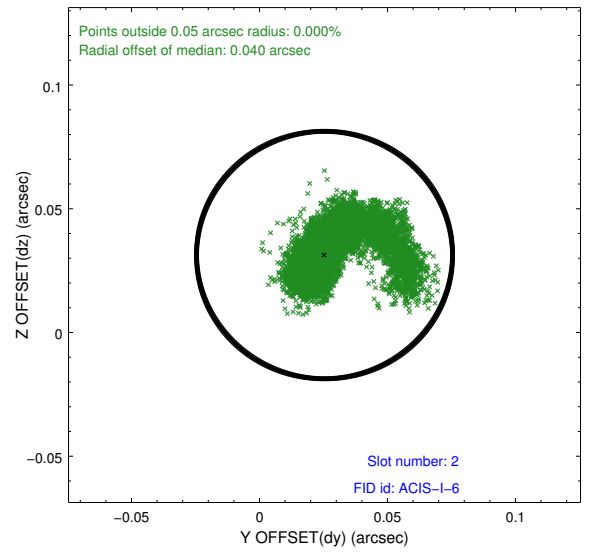
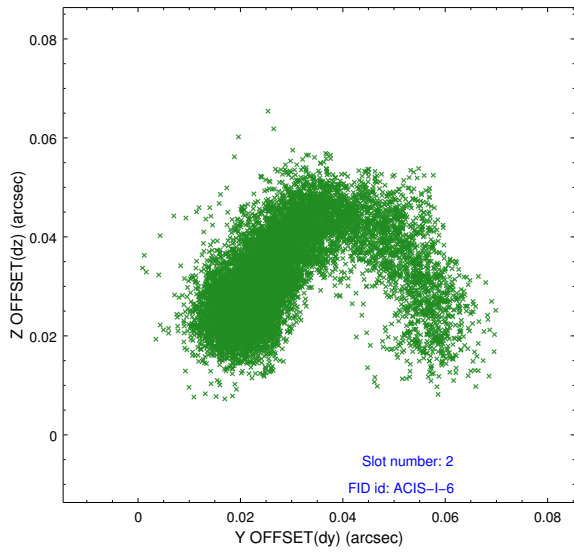
### 2.5.1 Slot 0



## 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)	2013.01.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	43.13331

## A.2 Comments

Roll constraint not satisfied, misses by less than one degree.